



# 2022 - 2023 Newsletter

Friends of EbA (FEBA) is a global collaborative network of organizations with a shared interest in advancing awareness, understanding and uptake of nature-based solutions in adaptation and resilience efforts around the world.

FEBA prioritizes collaboration and knowledge sharing across organizations and sectors, convening the global adaptation community around expert working groups, joint publications, technical workshops, and high-level events, with the belief that by working together we can accelerate global efforts on nature and adaptation.

More than 100 government ministries and sub-agencies, UN bodies and conventions, NGOs, research centers, and other institutions make up the Friends of EbA. IUCN serves as the FEBA Secretariat. Visit <a href="http://www.friendsofeba.com/">http://www.friendsofeba.com/</a> and follow @FriendsofEbA on Twitter to learn more.

The enclosed information was assembled by IUCN with support from the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV).



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# **FEBA Working Groups**

The FEBA network hosts a number of revolving expert working groups to facilitate member collaboration around key thematic areas. These thematic working groups are an integral way for FEBA members from diverse organisations to share knowledge, exchange best practices, enhance mutual learning, and generate new knowledge. These groups collaborate to develop knowledge products and events on EbA, including position papers, technical publications, and webinars to synthesize this collective knowledge and to influence international policy and practice. Learn more about the FEBA Working Groups here.

### **Nature-based Solutions in Humanitarian Contexts**

Growing disaster risk, driven in part by large-scale environmental degradation, threatens to exceed the humanitarian sector's capacity to respond in the coming decades. With over 20 million people a year displaced by climate-related natural hazards there is an urgent need to find new approaches to reducing risk and saving lives. The environment in which people live and work is essential for their health, well-being, and recovery from crisis, yet it is often overlooked within humanitarian crises. Environmental degradation exacerbates disaster risk and undermines humanitarian and development gains.

Nature-based solutions provide for human wellbeing and protecting the environment. They are a tangible solution that can build immediate and long-term resilience for those affected by crises. This cross-network working group convenes stakeholders across FEBA, the Environment and Humanitarian Action Network (EHAN) and the Partnership for Disaster Risk Reduction (PEDRR) networks for shared research, learning and advocacy to transform how humanitarian aid and development is done in order to better consider nature-based solutions and environmental safeguarding as a core component and strategy.

In April 2023 at the Humanitarian Networks & Partnerships Weeks (HNPW) 2023, the working group will launch the "Nature-based Solutions for Climate Resilience in Humanitarian Contexts – A Sphere Unpacked Guide". This Unpacked Guide focuses on NbS for resilience in humanitarian contexts, including for disaster risk reduction and climate change adaptation. Developed in partnership with Sphere, the guide was informed by the contributions of two Sphere focal point stakeholder roundtables and by the contributions of Working Group members and a broad range of experts. It: (1) Outlines how NbS can provide sustainable solutions to humanitarian challenges; (2) Identifies relevance to Sphere's technical chapters: water, sanitation and hygiene; food security and nutrition; shelter; and health; (3) Identifies best practices for planning, designing, implementing, and monitoring NbS approaches in affected communities as part of preparedness, response, and early recovery resilience strategies; and (4) offers practical tools and resources for applying NbS in humanitarian contexts.

Learn more about this working group and previous working group activities here.

Contact Jenn Hoffman, Delilah Griswold and Veronica Ruiz Garcia for more information about this work and how to get involved.

### **Expert Working Group on One Health and Nature-based Solutions for Climate & Biodiversity**

Chaired by the World Health Organisation, this working group will work to develop guidance and tools to support the operationalisation of One Health approaches and Nature-based Solutions by: (1) identifying co-benefits and trade-offs for human and ecosystem health, (2) strengthening social and ecological resilience and (3) supporting a healthy, green and just recovery from COVID-19. The working group works to examine the relationships between biodiversity, ecosystem degradation, climate and (infectious and noncommunicable) disease emergence; evaluate climate change as a cross-cutting driver and amplifier of ecosystem degradation, biodiversity loss and ill health; and develop policy guidance to maximize the health co-benefits of ecosystem-based adaptation and mitigation efforts. The working group aims to support decision-makers in integrating health co-benefits of nature-based climate solutions, enhance multi-stakeholder coordination, and advocacy across a range of stakeholder groups.

In 2023, the working group will produce the report "Designing Nature-based Solutions for Health: Integrating Biodiversity Climate Change and Health Outcomes" as a first-of-its-kind consolidation of knowledge on how NbS for adaptation and resilience can inform health outcomes, targeted to health practitioners. The report will cover the design, implementation, governance and financing of NbS for health, with concrete guidance and tools to take forward NbS for health interventions, while sharing inspirational proven case studies of NbS for health in practice.

Learn more about the working group here. Contact Cristina Romanelli for more information.

### **Global Green-Gray Community of Practice**

FEBA is a founding member of the Global Green-Gray Infrastructure Community of Practice, led by Conservation International, a forum for collaboration across the conservation, engineering, finance, and construction sectors to generate and scale green-gray climate adaptation solutions. Green-gray infrastructure combines conservation and/or restoration of ecosystems with the selective use of conventional engineering approaches to provide people with solutions that deliver climate change resilience and adaptation benefits. By blending "green" and "blue" conservation with "gray" engineering techniques, communities can incorporate the benefits of both solutions while, through a hybrid approach, minimizing the limitations of using either individually. The Green-Gray Community of Practice aims to leverage near-term infrastructure investments to fundamentally shift the practice of civil engineering and construction towards designing and building with nature, using a hybrid green-gray infrastructure approach.

Recent Green-Gray Community of Practice publications include:

- The Practical Guide to Implementing Green-Gray Infrastructure, available here.
- Green-Gray Infrastructure Funding and Finance Playbook, available here.
- Mangrove-Seawall Engineering Guidance, available here.
- Engineering Guidelines for the 21st Century, available here.

Read more about the work of the Global Green-Gray Infrastructure Community of Practice here. Contact Rod Braun and Emily Corwin for more information about how to get involved.

### **Previous Working Groups**

Since 2015, the FEBA network has been a hub for organization and agencies involved in Ecosystem-based Adaptation working jointly to share experiences and knowledge, enhance mutual learning, and to build a stronger and more strategic learning and policy influence on EbA through collaboration around diverse thematic areas and priority topics. Some of these working groups are timebound around particular knowledge products or strategic policy engagement. Read more about previous working groups and view their outputs below:

**EbA** in the Global Goal on Adaptation – developed the brief *Nature-based Solutions the Global Goal on Adaptation*, (available here).

**EbA** and Loss & Damage – developed the brief Loss & Damage, Ecosystem Integrity and NbS (available here)

Monitoring and Evaluation of EbA – supported the development, consultation and review of the Guidebook for Monitoring and Evaluating EbA Interventions (available in English | Spanish | Portuguese)

**EbA in National Adaptation Plans** – supported the development, consultation and review of the UNEP *Guidelines for Integrating EbA into National Adaptation Plans* (available here) as well as the NAP Global Network report *Building Resilience with Nature: Maximizing EbA through National Adaptation Plan Processes* (available here).

**Urban EbA** – produced the publication *Climate Justice for People and Nature through Urban EbA* (available here) **EbA and the Sustainable Development Goals** – developed the report *EbA and the Implementation and Achievement of the SDGS* (available here).

If you are interested in joining a FEBA working group, or in chairing a new working group, please contact Delilah Griswold to learn more.

# 2022 in Review

# **Events, Meetings, & Courses**

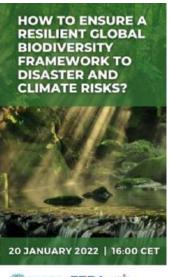
# Ensuring a Resilient Global Biodiversity Framework to Disaster and Climate Risks 20 January 2022

This event, co-convened by FEBA with the Partnership for Environment and Disaster Risk Reduction (PEDRR) and the Geneva Environment Network, focused on the importance of integrating resilience in the Global Biodiversity Framework – together with the need for greater alignment with the Sendai Framework for Disaster Risk Reduction 2015-2030, the Paris Agreement and the new Glasgow Pact --prior to the final face-to-face negotiations of the Post-2020 Global Biodiversity Framework.

### The event covered:

- Increasing disaster and climate risks globally and how they impact biodiversity and ecosystems, and the importance of integrating resilience in the new Global Biodiversity Framework;
- Country level experiences on how biodiversity and ecosystem-based approaches have been successfully applied to reduce disaster risks and support climate change adaptation;
- Proposed recommendations for incorporating disaster and climate resilience in the new Global Biodiversity Framework.

Event details and recording are available here.





### 6<sup>th</sup> International EbA Community of Practice Workshop

### 25 – 26 January 2022

The International EbA Community of Practice aims at knowledge and experience sharing and mutual learning beyond projects, institutions and regional boundaries on EbA. During this annual workshop, a combination of facilitated discussions on emerging issues of common interest as well as practical experiences on applied EbA approaches, methods and tools and/or the functioning of the community itself are addressed.

View key insights in the event documentation here, which includes summaries of all sessions, exciting additional information on the workshop as well as the links to all available recordings. Contact Harald Lossack for more information

### **Definition of Nature-based Solutions Agreed at UNEA-5.2**

### 28 February – 2 March 2022

Hosted by the UN Environment Programme, the United Nations Environment Assembly (UNEA) brings together representatives of the 193 Member States of the UN, businesses, civil society and other stakeholders to agree on policies to address the world's most pressing environmental challenges. At UNEA 5.2, governments formally agreed on a definition of nature-based solutions, and recognized the important role they can play in the global response to climate change and its social, economic and environment effects -- representing the first time that the concept has been discussed and agreed by states in a multilateral forum.

The UNEA resolution formally adopted the definition of nature-based solutions as 'actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services and resilience and biodiversity benefits.' The definition builds on the definition adopted by IUCN members in 2016.

Read more about the outcomes of UNEA 5.2 here and the 14 adopted resolutions here.

UNEP/EA.5/Res.5: "Nature-based solutions for supporting sustainable development" is available here.



### Strengthening Linkages Between Faith Communities & Nature-based Solutions 1 March 2022

This UNEA Side Event showcased successful stories from the field, focusing on the perspective and role of faith actors by looking at case studies and best practices that could be replicable.

The event recording is available here. Contact Oscar Ivanova for more information.



Participants of the workshop @ MAATE

# First EbA LAC Cooperation Workshop in Manabí: synergies towards climate change adaptation

16 March 2022

The first local cooperation workshop in Manabí organized by the EbA LAC Program in Ecuador aimed to explore synergies among diverse stakeholders and the contributions of ongoing efforts at the landscape level to adaptation goals focused on natural and water heritage, and agriculture and livestock sectors. Representatives from local governments, NGOs, universities, and cooperation institutions participated in this space to promote a joint vision on EbA.

Read more about the event here.

Contact Carla Gavilanes and Erik Camelos for more information.

# Climate Justice for People and Nature through Urban Ecosystem-based Adaptation 30 March 2022

Hosted by the FEBA Urban EbA Working Group at the Nature of Cities festival, this session built on the publication "Climate Justice for People and Nature through Urban EbA: A focus on the Global South" to approaches to identifying and integrating climate justice into adaptation efforts across cities in the Global South. Speakers presented the social principles of ecosystem-based adaptation identified by the report, and discussed how these principles are implemented in their work around the world. The session convened actors across environment, social development, urban planning and more with the shared goal of building more resilient, sustainable, just and livable cities.

Learn more about the outcomes of The Nature for Cities Festival here. For information on the Urban EbA working group, please contact Wendy Atieno.

# Nature-based Solutions training sessions in six Western Balkan economies: Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Kosovo and Serbia

March to November 2022

As part of the ADAPT initiative, a set of capacity-building activities and training events on the role of Nature-based Solutions for climate change adaptation and community resilience were held in Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Kosovo, and Serbia from March to November 2022. Over 120 representatives from 60 relevant governmental institutions and bodies, civil sector and international organizations, local communities, and academia participated in these three-day training sessions.

The workshops aimed at sharing experiences, strengthening knowledge, and sensitizing relevant national and local stakeholders to the role of Nature-based Solutions for climate change adaptation and increased community resilience to reduce disaster risks. The workshops covered the fundamentals of the NbS approach, pathways for mainstreaming NbS into decision-making and policy processes, stepwise guidance on the planning, design and implementation aspects for effective NbS interventions, monitoring, evaluation and verification, overview of financial and investment opportunities and mechanisms suitable for NbS, and guidance on designing strategies for sustainability and upscaling.



NbS training session in Serbia, ©IUCN ECARO

Read more about the sessions, together with broader NbS efforts in the Western Balkans through the ADAPT project, here.

For more information, contact Vesja Bjedov.

Strengthening transboundary cooperation to manage human wildlife conflict in the Himalayan Kangchenjunga Landscape in Nepal, India, and Bhutan.

19 April 2022



Human—wildlife conflict, an issue common to all Hindu Kush Himalaya range countries, is emerging as a global challenge for conservation. It is also a transboundary issue where greater regional cooperation is needed for both mitigation actions and for enhancing wildlife habitats and corridors. In 2018, within the Regional Cooperation Framework (RCF), ICIMOD facilitated the Siliguri Dialogue which recommended several actions. A HWC Regional Task Force is now in place and some actions related to literature review, hotspot mapping, data updates, and capacity development are in progress.

Read more about the event and ICIMOD's work in the Kangchenjunga Landscape here. For more information, please contact Kesang Wangchuk and Tashi Dorji.

Establishment of the Kenyan National Mangrove Management Committee: Towards coordinated mangrove actions in Kenya for synergy amongst partners and facilitated reporting on progress and against national targets

April – December 2022

As part of the Save Our Mangroves Now! initiative, a series of joint workshops by International Union for Conservation of Nature (IUCN), The Nature Conservancy (TNC), Wetlands International, Kenya Forest Service (KFS), and Kenya Marine and Fisheries Research Institute (KMFRI) in 2021 and 2022 were held with the overall goal of strengthening coordination for all mangrove actions in Kenya and implementation of the National Mangrove Management Plan 2017-2027. This led to the establishment of the National Mangrove Management Committee (officially launched during the World Mangrove Day 2022) and County Management Committees that will act as an advisory body to the Kenya Forest Service on all mangrove conservation and management matters and streamline stakeholder actions.

For more information about the Kenyan National Mangrove Management Committee, contact Francis Okalo.



### Seminar Series: Monitoring and Evaluating Ecosystem-based Adaptation Interventions: Spotlight on Indicator Development April – May 2022

In April and May 2022, the Global Project Mainstreaming EbA implemented an online seminar series on monitoring and evaluating EbA interventions, building on the *Guidebook for Monitoring and Evaluating EbA Interventions*. To help practitioners involved in designing M&E systems for EbA interventions, this seminar series explored the development of indicators for results-based M&E. The seminar series introduced in-depth considerations and recommendations related to defining outcome-oriented indicators; but importantly, it also provided an opportunity for participants to share their own challenges in identifying, selecting and monitoring indicators.

Contact Harald Lossack for more information about the seminar series.

# Social valuation of the provision of perceived benefits from nature from the perspective of land-users of selected landscapes in Costa Rica 21-22 March 2022

As part of the EbA LAC Program, this event collected the perceptions of land users from selected landscapes on the changes suffered with respect to climate and its impact on their livelihoods and communities, which benefits of nature and landscape management (i.e., ecosystem services) are recognized by land users and should be maintained or improved.

Validation of risk analysis with stakeholders and land users and identification of adaptation measures in Costa Rica

12-13 May 2022

The event was organized as part of the planning process for the identification of EbA measures in selected landscapes as part of the EbA LAC Program. The main activities carried out were, 1) presentation and validation of risk maps, 2) identification of key climate change threats and 3) identification of adaptation measures to address climate-related risks through biodiversity and sustainable management.

# Training on the production of biological inputs for livestock farmers in Costa Rica 17 November 2022

This training, organized as part of the EbA LAC Program, aimed at providing livestock farmers with innovative options to implement practices in a greener and more environmentally friendly manner while increasing production efficiency. This event was held in collaboration with the National Institute for Innovation and Transfer of Agricultural Technology (INTA), the Ministry of Agriculture and Livestock (MAG), the Caribbean Agro-industrial Cluster, the Livestock Corporation (Corfoga) and the Chamber of United Caribbean Ranchers. Read more about the outcomes of this training here.





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# Workshop for the prioritization of national and subnational financial mechanisms for the implementation of EbA in Guatemala *May 2022*

As part of the EbA LAC Program, this workshop aimed to prioritize financial mechanisms for the implementation of EbA and to establish follow-up pathways. There was broad participation from the government, academic, private, NGO and civil society sectors. The workshop on agribusiness models and financial mechanisms generated important discussions on the prioritization criteria such as social sustainability as well as aspects such as the adoption of measures to improve livelihoods, cultural relevance, and safeguards. Two financial mechanisms were prioritized: "mid-term development bank financing" and "financing beneficiaries for self-sustainable projects". The later one has a high potential to include youth from rural areas and establishing synergies with the MAGA extension model and other cooperation programs.

### **Strengthening Capacities in EbA in Guatemala**

This process was carried out as part of the EbA LAC Program aimed at strengthening individual, institutional and organizational capacities of 'EbA multipliers' who work in rural livelihoods; the teaching-learning modality allows participants to build the capacities of land users and vulnerable rural communities for increased climate resilience. Read more here.

Contact Rafael Ávila and Neftali Calel for more information.



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### Knowledge Consolidation Webinar Series: Developing a shared understanding of the Far Eastern Himalayan Landscape April, July and August 2022

The Landscape Initiative for Far-Eastern Himalayas (HI-LIFE), together with partners, hosted a series of three webinars for scientists, policymakers, practitioners, and funding agencies who have worked in or have a future interest in the landscape. The objectives of the series included:

- Share the current understanding of biodiversity, ecosystems, and socioeconomic aspects, and deepen the overall understanding of the landscape;
- Inform policymakers, Protected Area managers, development workers, and conservation practitioners about new technologies, tools, approaches and best practices in ecosystem management and sustainable development;
- Identify gaps and emerging areas for regional collaboration to achieve the goals of the CBD post-2020 Global Biodiversity Framework;
- Strengthen and widen partnerships and regional cooperation for the conservation and sustainable development of the Far Eastern Himalaya Landscape

### Learn more about the seminar series below:

Episode 1: Exploring future investment in biodiversity research and monitoring - concept and outcomes

Episode 2: Strengthening biodiversity conservation - concept and outcomes

Episode 3: Nature-based solutions for conservation and sustainable development - concept and outcomes

Contact Srijana Joshi Rijal with any questions.

### **Voices from the Field: Nature-based Solutions in Humanitarian Contexts** 5 May 2022

In this session at the Humanitarian Networks & Partnerships Week, organizations involved in the implementation of nature-based solutions in humanitarian contexts shared experiences and lessons learned from the field. The session discussed the need for strong partnerships, science-based evidence and hybrid strategies to protect vulnerable communities around the world.

### **Nature-based Solutions in Humanitarian Contexts: Objectives and Guidance for Transformative Integration** 12 May 2022

Building on the outcomes of a HNPW 2021 session hosted by the FEBA-PEDRR-EHAN Working Group on NbS in Humanitarian Contexts and its key messages document, this session highlighted the importance of nature-based solutions in humanitarian contexts. The session centered on the Working Group's efforts to transform humanitarian action through the integration of nature-based solutions and environmental considerations as a key component and strategy for achieving humanitarian objectives. It discussed the development of technical guidance on NbS in humanitarian contexts, included as part of the Sphere Handbook and standards.

Learn more about the working group here. The working group will host an event 26 April 2023, 14:00 - 15:30 CEST (UTC+2) Humanitarian Networks & Partnerships Weeks (HNPW) 2023 where they will launch the guidance developed in partnership with Sphere, entitled "Naturebased Solutions for Climate Resilience in Humanitarian Contexts - A Sphere Unpacked Guide"

Contact Sarah Henly-Shepard, Jenn Hoffman, and Veronica Ruiz Garcia for more information about this work.



Virtual event | Thursday, 5 May 2022 15:00 - 16:00 Geneva | 09:00 - 10:00 DC





In-person in Geneva with remote participation Thursday, 12 May 2022 16:00 - 17:30 CEST









# Ecosystem Soil – Bringing nature-based solutions on climate change and biodiversity conservation down to earth

10 May 2022

In May 2022, the GIZ Global Project Mainstreaming EbA hosted an online session, which featured an overview of the new guidebook 'Ecosystem Soil – Bringing nature-based solutions on climate change and biodiversity conservation down to earth'. The online session also gave a brief introduction on soil governance and soil in national climate policies.

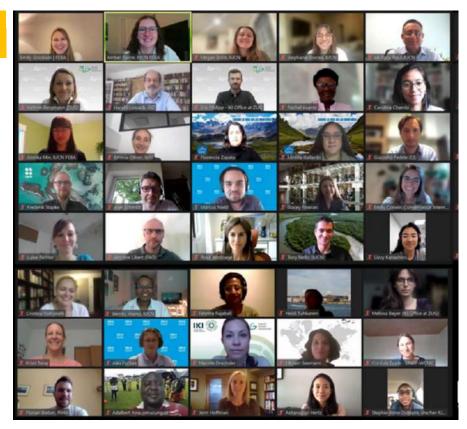
The event recording is available here. The guidebook is available here. Contact Harald Lossack for more information.

# **2022 Friends of EbA Members' Meeting** 25 May 2022

The Friends of Ecosystem-based Adaptation (FEBA) Members' Meeting is an opportunity for our network to come together to share updates on their EbA work, to make connections on upcoming opportunities for collaboration, to discuss gaps and identify thematic priorities for the following year, and to receive highlights and updates from working groups, the FEBA Secretariat as well as other key speakers. Last Members' Meeting year's report available here. This year's meeting is the third consecutive virtual FEBA member's meeting. 84 colleagues representing 42 FEBA members and partner institutions across 26 countries attended.

View the complete documentation here and the slides from the FEBA Member Updates and FEBA Working Group Updates here.

Contact Ali Raza Rizvi and Delilah Griswold for more information.



# First National Workshop on Yak and Chauri promotion in Nepal 27 – 28 May 2022

In collaboration with the Nepal National Livestock Resource Management and Promotion Office under the Department of Livestock Services, Ministry of Agriculture and Livestock Development and National Agricultural Research Council, ICIMOD organized a two-day consultation meeting on the formation of a national network of yak herders and strengthening yak value chains in Nepal. The meeting will bring together yak herders, development agencies, policy makers, and other relevant stakeholders to discuss approaches to the formation of the network and identify priority action areas for yak value chain development.

More information about the workshop outcomes is available here. Contact Tashi Dorji for more information.

# 8<sup>th</sup> Annual EbA Knowledge Day : The Future of Ecosystem-based Adaptation 2 June 2022

The EbA Knowledge Day is a yearly meeting for EbA policy makers, practitioners, donors and researchers, organized by GIZ and IUCN under the Friends of EbA Network. 2022's theme was The Future of Ecosystem-based Adaptation: Enhancing cross-sectoral collaboration and identifying new opportunities for long-term resilience The 8th EbA Knowledge Day focused on analyzing the latest, cross-sectoral developments related to EbA in policy, practice, research and financing. Participants discussed outlooks and priorities for EbA, identified opportunities for capitalizing on EbA action to date, and explored innovative avenues for maximizing adaptation benefits in the future. The day included inputs by high-level officials, a panel discussion, and several interactive thematic sessions.



The summary report of the event is available here and the recording is available here.

The 9<sup>th</sup> Annual EbA Knowledge Day will be planned for June 2023. Contact Harald Lossack and Delilah Griswold with any questions.

### Adaptación en los Andes – Adaptation in the Andes Community of Practice

Launched in June – August 2022

The Adaptation in the Andes platform aims to contribute to the creation of enabling conditions that improve climate resilience in the Andean region through ecosystem-based approaches. The platform was launched in 2022 and the first three modules of the community of practice took place between June and August:

Módulo 1: Los ecosistemas andinos, sus servicios y estrategias de adaptación

Módulo 2: Los impactos, adaptación y vulnerabilidad de los ecosistemas andinos y estrategias de adaptación al cambio climático

Módulo 3: Salvaguardas, opciones de política y gobernanza inclusiva

Read more about the event here and session outcomes here.

Contact Ana Becerra for more information.

### Kailash CAFE 2.0: Sharing knowledge of a sacred transboundary landscape across China, India and Nepal 14 – 17 June 2022

The Kailash Consortium of Academics and Researchers for Experience-sharing (Kailash CAFE) is a digital platform that brings together researchers working across multiple disciplines within the Kailash Sacred Landscape across China, India and Nepal. The UN has declared 2022 as the International Year of Sustainable Mountain Development. In line with this, Kailash CAFE 2.0 highlighted thematic topics related to mountain ecosystems and sustainable development of the Kailash Sacred Landscape. Special focus will be on the themes of regional cooperation, biocultural diversity, and post-pandemic recovery. The second iteration of Kailash CAFE brought together researchers from the Kailash Landscape and highlighted thematic topics related to mountain ecosystems, sustainable development, regional cooperation, biocultural diversity, and post-pandemic recovery.

Contact Srijana Joshi Rijal, Janita Gurung, and Sushmita Kunwar for more information.

# Why working with nature pays off – interactive launch of a new brief on arguments for Ecosystem-based Adaptation

23 June 2022

In June 2022, the GIZ Global Project Mainstreaming EbA hosted an online session on 'Why working with nature pays off — interactive launch of a new brief on arguments for Ecosystem-based Adaptation'. The Global Project and ECO Consult compiled arguments, facts and practical examples on why EbA pays off in a series of briefs in the water sector, in agriculture, in cities, and in general. These briefs showcase why Ecosystem-based Adaptation offers a range of sustainable and cost-efficient solutions to adapt to climate change while also providing additional economic, environmental and social benefits.

The session recording is available here.

Contact Harald Lossack for more information.

# We have all comments the searching for sustainable and cost-efficient solutions to help you to adapt to climate change while also providing additional benefits, this brief offers you one clear option: Exosystem-based Adaptation We HAVE ALL COME TO LEARN ... that dimate change is with figured as and more tapidly than many seaved. The period of 2011-2000 has been the surrect should not be the season of the surrect should not be the season of the

# **Nature-based Solutions Conference 2022, Oxford University – NbS in Humanitarian Contexts** 5 – 7 July 2022

At the Oxford Nature-based Solutions Conference, the NbS in Humanitarian Contexts Working Group presented a poster on how integrating NbS in humanitarian contexts —before, during and after disasters — can reduce vulnerability and increase the resilience of communities; reduce the likelihood and impact of natural hazards; and reduce exposure to natural hazard events. It also highlighted how NbS can contribute to the humanitarian imperative of preventing and alleviating human suffering arising out of disasters and conflicts. It profiled the NbS in Humanitarian Contexts Working Group, a cross-network working group of the FEBA, EHAN, and PEDRR networks. It also profiled the Working Group's draft guidance for best practices for planning, implementing, and monitoring NbS approaches in humanitarian contexts to improve preparedness, response, and early recovery resilience strategies.



Learn more about the working group here. The working group will host an event Wed 26 April 2023, 14:00 – 15:30 CEST (UTC+2) Humanitarian Networks & Partnerships Weeks (HNPW) 2023 where they will launch the guidance developed in partnership with Sphere, entitled "Nature-based Solutions for Climate Resilience in Humanitarian Contexts – A Sphere Unpacked Guide" Contact Nathalie Doswald and Jenn Hoffman for more information.

# First Hindu-Kush Himalayan Regional Workshop on advancing collaborative springshed management 12 – 15 July 2022

To address the issue of drying springs and evolving threats to water security across the Hindu Kush Himalayan (HKH) region, ICIMOD is collaborating with the Advanced Center for Water Resources Development and Management (ACWADAM), Indian Institute of Technology Roorkee, People's Science Institute, and other government and non-government partners, to implement an initiative to advance scientific knowledge and evidence, strengthen capacity building, and develop a user-friendly decision support system for springshed management in the Indian Himalayan Region. The initiative is part of the Swiss Agency for Development and Cooperation's (SDC) project on Strengthening State Strategies for Climate Action in India. This workshop brought together policy and decision makers, practitioners, academics, and development partners from Bangladesh, Bhutan, India, Nepal, Pakistan and Switzerland to identify good practices and opportunities for implementing and scaling gender-responsive springshed management in the HKH region.

Read more about ICIMOD's work on springshed management in the Himalayas for water security and climate resilience here.

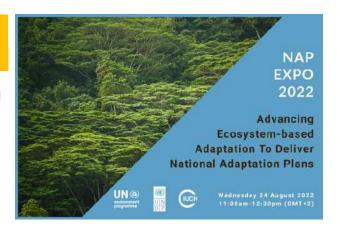
Contact Sanjeev Bhuchar for more information.

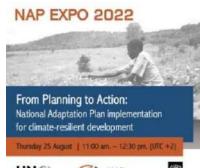
NAP Expo Workshop: Advancing Ecosystem-based Adaptation to Deliver National Adaptation Plans

24 August 2022

Co-organized by UNEP, UNDP and IUCN, this session of the NAP Expo explored ways to nurture and advance the practice of ecosystem-based adaptation through its integration in National Adaptation Plans (NAPs).

Read more about the event here. Contact Marcus Nield for more information.





NAP Expo Workshop: From Planning to Action: NAP implementation for climateresilient development

25 August 2022

Co-organized by UNEP, UNDP and the NAP Global Network, this session of the NAP Expo engaged in a participatory dialogue with NAP practitioners and stakeholders to develop a better understanding of what NAP "implementation" entails and highlight barriers, solutions and opportunities for enabling effective NAP implementation.

Read more about the event here. Contact Marcus Nield for more information.

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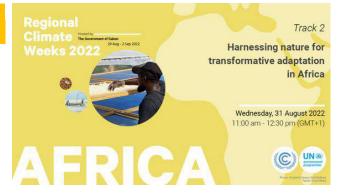




# Harnessing Nature for Transformative Adaptation in Africa 31 August 2022

This session of the African Climate Week discussed the potential for nature-based solutions and its enabling environment in Africa, while exploring ways to nurture and advance NbS.

Read more about the event here. Contact Oscar Ivanova for more information.



Virtual course 'Nature-based solutions for sustainable and resilient development in Peru' 12 September to 12 October 2022

This virtual course was part of the 'Ecosystem-based approaches to adaptation: strengthening the evidence and informing policy' IKI Project, co-implemented by IUCN, MINAM and SERNANP. It focused on strengthening capacities and sharing knowledge and lessons learned on NbS and EbA among a wide variety of stakeholders, based on experiences of Peru and other countries in South America. It had the valuable support from 30 representatives of initiatives (past and ongoing) and organizations who contributed with their inputs and experiences on EbA. It covered concepts, tools, practical cases, as well as a diversity of reading and audiovisual resources, as a basis for building a bigger network of individuals and institutions contributing to the sustainable and resilient development in Peru.

Read more about the virtual course in Peru here and here.

More information about the Scaling Up Mountain EbA project is available here.

Contact Karen Podvin, Lizzy Kanashiro and Nathalie Suárez with any questions.

# Addressing climate change through ecosystem-based adaptation in the Arab Region 15 September 2022

Climate change is already affecting the function and composition of ecosystems. At the same time, forest and landscape restoration can support climate change mitigation and adaptation action. Ecosystem restoration can provide natural protection against climate extremes, reduce vulnerability by providing livelihoods, and improve health by regenerating ecosystem services.

Under the umbrella of the UN Decade on Ecosystem Restoration, co-led by FAO and the United Nations Environment Programme (UNEP), and in collaboration with the Lebanon Reforestation Initiative, this webinar "Addressing Climate Change Through Ecosystem-based Adaptation" highlighted the role of ecosystems approaches for addressing climate change mitigation and adaptation. It also highlights success stories and lessons learnt in the application of EbA principles in practice and in planning in the Arab region. It discusses examples of EbA in the Arab region such as forest and landscape restoration and drylands management.

### View the webinar and read about event outcomes here.

FAO and UNEP are implementing a series of webinars as part of the UN Decade on Ecosystem Restoration, aimed at increasing awareness and understanding of ecosystem restoration in the Near East and North Africa region and discussing country expectations in terms of ecosystem restoration. **Contact Theresa Wong (FAO) for more information.** 

### Bambutón in Manabí-Ecuador: promoting EbA through restoration with bamboo 16 September 2022

As part of the EbA LAC Program, 100 producers, authorities, academics and volunteers were part of a capacity building session on ecosystem restoration with bamboo; through this practical session, 500 segments of bamboo were planted in approx. 3 hectares. Bamboo is a fast-growing species with various ecological functions; it is key for restoration and protection within EbA efforts, and has diverse benefits for its use, such as productive infrastructure, housing, and handicrafts that can contribute to diversifying local livelihoods.

**Read more about this session here.** These joint restoration efforts and practical capacity building sessions will continue taking place in Chone and other parts of the Manabí province of Ecuador, as part of the EbA measures co-implemented with the diverse stakeholders in the landscape.

Contact Carla Gavilanes and Karen Podvin for more information.



Participant of the Bambutón in Manabí © GAD Chone

### Field visit of natural resources management stakeholders from Nepal to India 18 – 28 September 2022

This cross-learning programme aims to build the capacity of stakeholders in natural resource management through a field visit from the Kailash Sacred Landscape – Nepal to the Kanchenjunga Landscape – India. Participants from Nepal will visit the Lachen and Lachung valleys of Sikkim, India, where the traditional system of resource management, called *dzumsa*, is practiced by the local communities. As part of the Kangchenjunga Landscape Conservation and Development Initiative (KLCDI), G.B. Pant National Institute of Himalayan Environment's Sikkim Regional Centre is supporting the Kailash Sacred Landscape Conservation and Development Initiative (KSLCDI) in organizing this event.

Read more about the training and ongoing ICIMOD work in this region here. Contact Binaya Pasakhala and Janita Gurung for more information.

Webinar: Connecting the dots: climate change and biodiversity interlinkages in Asia-Pacific, from science to policy and practice 22 September 2022

Both terrestrial and marine biological diversity is rapidly declining putting ecosystems and people that depend on them at risk. At the same time, the impacts of rising temperatures due to climate change are visible everywhere in the world but the worst impacts are felt by vulnerable communities. There is growing scientific and policy-making recognition that biodiversity and climate change are inextricably intertwined, however, often still discussed, researched and negotiated in silos. This regional webinar aimed to provide scientific, policy and field perspectives on interlinkages between climate change and biodiversity and showcased NbS/ EbA projects breaking existing silos by jointly addressing these issues.



This was the 3<sup>rd</sup> webinar (out of a series of four) organized by APAN in 2022. Read more about the webinar here. Contact Helen Marre and the APAN Secretariat for details.

Regional media workshop on reporting environmental issues in Bam-e-Dunya in Afghanistan, China, Pakistan and Tajikistan 20 – 21 September 2022

This workshop aimed to build the capacity of journalists from Hindu Kush Karakoram Pamir Landscape (HKPL) member countries – Afghanistan, China, Pakistan, and Tajikistan – on environmental reporting. Prominent environmental experts, climate journalists, and academics from renowned international institutes will share their technical knowledge and expertise to help journalists expand their quality coverage of environmental issues affecting the HKPL (also known as 'Bam-e-Dunya' in Persian, meaning 'roof of the world').

Read more about the workshop here and view session outcomes here.

Contact Ghulam Ali and Sushmita Kunwar for more information.

# Rethinking tourism for resilient mountain development in the Hindu Kush Himalaya region 27 September 2022

On World Tourism Day, ICIMOD hosted a symposium in collaboration with the Nepal Mountaineering Association (NMA), and Community Homestay Network (CHN) to highlight the sustainability of tourism in mountain regions as a critical contributor to the Sustainable Development Goals and climate action agendas, and innovative solutions as an important lever in building the resilience of mountain destinations, businesses, and services in the Hindu Kush Himalaya (HKH) region.

Read more about the symposium here and view session outcomes here.

Contact Anu Lama for more information.



### Launch of E-learning course 'Ecosystem-based Adaptation: Working with nature to adapt to a changing climate' Launched October 2022

This free, self-paced e-learning course was launched in October 2022. While EbA guidebooks, case studies and principles have contributed toward standardizing the EbA approach, there is a clear need for further training opportunities to strengthen EbA implementation across diverse sectors while ensuring rights-based approaches, gender equity and better outcomes for biodiversity and ecosystems are achieved. This EbA e-learning course, developed by partners IUCN, GIZ, and IISD for a global audience, will equip learners with transferable and replicable skills in designing and implementing EbA initiatives by offering targeted training on key principles, risk assessments, monitoring, and governance.

Offered as a massive open online course (MOOC), a key aim of the course is to increase EbA knowledge outside of the environmental conservation community and help participants integrate EbA into other sectors, including water, agriculture and in urban environments. The course is available in both English and French, online here. Contact Alanna Evans with any questions.

# Ecosystem based Adaptation (EbA) Capacity Building Material and Policy and Property Advanced Advanced

The trainers Sylvia Wicander and Luise-Katharina Richter together with Ika Rachmawati Suratno, advisor in the commissioning project of the training (Climate and Biodiversity, GIZ Indonesia)

### **EbA Mainstreaming Training in Indonesia** 3 – 7 October 2022

In October 2022, the Global Project Mainstreaming EbA implemented a five-day training on Mainstreaming EbA into policy and practice in Indonesia. Around 30 practitioners from relevant ministries and implementing agencies participated in the training, which focused upon the EbA mainstreaming process from planning over prioritising, implementing and monitoring EbA measures. The training furthermore contained a field trip to a mangrove site in the city area of Denpasar, Bali. The content of the training will be used for a follow-up EbA training in Bahasa Indonesia, project implementation as well as for further policy making on adaptation in Indonesia.

Contact Harald Lossack with any questions.



Closing Event of the EbA Approaches Project in Peru ©IUCN South
America

Closing event of the 'Ecosystem-based approaches to adaptation: strengthening the evidence and informing policy' Project in Peru

13 October 2021

The closing event of the project was held in Lima, Peru with around 70 participants in person and online who completed the virtual course 'Nature-based Solutions for sustainable and resilient development in Peru'. Authorities from MINAM and SERNANP, and representatives of the partner organisations who collaborated with the course were also present. The milestones of the project were recalled as well as the importance of generating evidence of the effectiveness of EbA for adaptation to climate change in Peru.

Read more about the event here and here. Contact Karen Podvin and Lizzy Kanashiro for more information.



NbS for sustainable and resilient development in Colombia Virtual Course ©IUCN South America

Virtual course 'Nature-based solutions for sustainable and resilient development in Colombia'

19 October to 16 November 2022

This virtual course was created in the context of the second phase of the 'Scaling Up Mountain EbA: Building evidence, replicating success, and informing policy' IKI Project, co-implemented by UICN and the Minister of Environment and Sustainable Development of Colombia. It focused on strengthening capacities and sharing knowledge and lessons learned on NbS and EbA among a wide variety of stakeholders, based on experiences of Colombia and other countries of South America. It had the valuable support from 16 representatives of initiatives (past and ongoing) and organisations who contributed their inputs and experiences on EbA. It covered concepts, tools, practical cases, as well as a diversity of reading and audiovisual resources, as a basis for building a bigger network of individuals and institutions contributing to the sustainable and resilient development in Colombia.

Read more about the virtual course in Colombia here; more information about the Scaling Up Mountain EbA project is available here.

Contact Karen Podvin, Jairo Cárdenas, and Nathalie Suárez with any questions.

# Costa Rica, Ecuador and Guatemala exchange experiences on Ecosystem-based Adaptation - EbA LAC Program

October 19-25, 2022

15 decision-makers from Costa Rica, Ecuador and Guatemala representing national and subnational governments as well as the EbA LAC team met in Heredia (Costa Rica) to discuss the project's progress and reflect on how to strengthen the cooperation among countries. Within the context of each country, participants identified achievements of the ongoing efforts, as well as exchanged experiences and lessons learned on diverse topics such as governance, cooperation environment, implementation and success factors for scaling-up EbA. On the last day of the workshop, a field trip took place in the bio-corridor of the cloud forest "Paso de las Nubes" to visit the local water user association. This was the first encounter as a milestone for regional exchange and cross learning among EbA practitioners and political partners.

The next regional workshop will take place in Guatemala in October, 2023. For more information, contact Astrid Michels (GIZ).



@GIZ

# Adaptation Action Days II in the Latin America and the Caribbean Region 25 – 27 October 2022

Adaptation Action Days are a series of events hosted by the UNEP Office for Latin America and the Caribbean focused on building a dialogue on progress and challenges for adaptation in the region. The sessions focused on:

- (1) Nature-based solutions for climate resilience at the sub-national and national levels;
- (2) Engagement of the private sector in adaptation actions; and
- (3) Key messages from Latin America and the Caribbean for COP27

Download the final report here. Contact Marta Moneo with any questions.

Launch Event: Synergies between adaptation, biodiversity, and mitigation: How Ecosystem-based Adaptation can build bridges between Nationally Determined Contributions and the new Global Biodiversity Framework

26 October 2022

The IKI-funded and GIZ-implemented Global Project Mainstreaming EbA hosted an online launch event for the publication 'Synergies between adaptation, biodiversity and mitigation: How Ecosystem-based Adaptation can build bridges between Nationally Determined Contributions and the new Global Biodiversity Framework'. Building synergies between climate and biodiversity policies can increase the possibility of international support for implementing and upscaling ecosystem-based approaches and policies. After some general considerations on the role of EbA in building bridges that bring multiple benefits for adaptation, mitigation, biodiversity, society and human well-being, the authors of the study apply this perspective to three cases (Pakistan, Jordan and Costa Rica), exploring synergies of ecosystem-based approaches in the water, agriculture and urban sectors.

Read more about the event outcomes and view the session recording here. For further information, contact Harald Lossack.



Forum of the UN Ecosystem-based Adaptation for Food Security Assembly 27 October 2022

The main objective of the Forum was to provide an overview of EBAFOSA's main activities, achievements to date and next steps, and to invite new external stakeholders to join the network and form new partnerships, as well as to initiate discussions with all these stakeholders before COP27 on how an ecosystem-based approach can help Africans adapt to climate change.

Read more about the event here. Contact Oscar Ivanova for more information.

### **Outcomes of the 2022 United Nations Climate Change Conference: UNFCCC COP27**

6 – 18 November 2022, Sharm el-Sheikh, Egypt



At the COP27 conference, several significant developments on adaptation, resilience, loss & damage, and nature were realised:

### Formal Recognition of Nature-based Solutions

At COP26 in Glasgow last year, UNFCCC Parties had – for the first time – recognized 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" (Decision 1/CP.26, preamble) – but they fell short of explicitly referencing Nature-based Solutions. That gap was bridged in Sharm el-Sheikh, where both the COP27 and CMA4 cover decisions explicitly encouraged UNFCCC Parties "to consider, as appropriate, nature-based solutions or ecosystem-based approaches, taking into consideration United Nations Environment Assembly resolution 5/5 for their mitigation and adaptation action while ensuring relevant social and environmental safeguards" (Decision 1/CP.27, para 48 and Decision 1/CMA.4, para 81).

In addition to the significant adoption of a formal definition of NbS at UNEA, recognition of NbS at COP27 was advanced through several regional and national-level announcements that were made in the immediate lead up to and at the COP. These included, for example, the Nordic Ministerial Declaration on Nature-based Solutions (2 Nov 2022), the US Roadmap for Nature-based Solutions launched by the Biden Administration (8 Nov 2022) and the G20 Bali Leaders Declaration (16 Nov 2022).

### **Adaptation and Resilience**

On adaptation, governments agreed on the way to move forward on the Global Goal on Adaptation (GGA), including by developing a structured framework for the GGA to be undertaken in 2023, taking into account the IPCC Sixth Assessment WGII Report on Climate Impacts, Adaptation and Vulnerability. Notably, NbS was included in the decision taken by UNFCCC Parties under the 'Glasgow—Sharm el-Sheikh work programme on the global goal on adaptation (GGA)' at COP27 (Decision / CMA.4, para 10c) as one of the cross-cutting elements under the structured framework for the GGA that also included potential themes of terrestrial and freshwater ecosystems, oceans and coastal ecosystems, and biodiversity.

New pledges, totalling more than USD 243 million, were made to the Adaptation Fund at COP27. The COP27 Presidency also announced the 'Sharm el-Sheikh Adaptation Agenda', aimed at enhancing the resilience of people living in the most climate-vulnerable communities by 2030, in collaboration with the High-Level Champions and the Marrakech Partnership. The Adaptation Agenda, which specifically aims to rally global action around 30 adaptation outcomes to achieve a resilient world by 2030, is intended to accelerate transformative actions by countries, regions, cities, businesses, investors and civil society to adapt to the acute climate hazards facing vulnerable communities.

### Loss & Damage

For the first time, governments took the ground-breaking decision to establish new funding arrangements, as well as a dedicated fund, to assist developing countries in responding to the loss and damage associated with the adverse effects of climate change. Governments also agreed to establish a 'transitional committee' to make recommendations on how to operationalize both the new funding arrangements and the fund at COP28 next year. Financing pledges for loss and damage were also announced by some individual countries. The majority of these were to support insurance programmes and early-warning systems for extreme weather events. These included, for instance, the 'Global Shield against Climate Risks', an initiative for pre-arranged financial support in times of climate disasters, launched by the Vulnerable 20 Group of Finance Ministers (V20) and the Group of Seven (G7) led by Germany. COP27 also witnessed progress in operationalizing the Santiago Network on loss and damage, aimed at providing technical support on this issue.

### FEBA Issue Briefs for the UNFCCC COP27:

Loss and Damage, Ecosystem Integrity, and Nature-based Solutions – This brief outlined the state of the negotiations on Loss & Damage with a focus on how ecosystem integrity and the implementation and financing of Nature-based Solutions can contribute to averting, minimising and addressing loss and damage.

Nature-based Solutions and the Global Goal on Adaptation – This brief focused on how NbS for adaptation offer a critical pathway to define and implement an effective Global Goal on Adaptation and drive and enhance countries' adaptation actions, with an emphasis on ensuring the incorporation, implementation, monitoring and financing of Nature-based Solutions within the GGA.

FEBA and partners hosted a number of events at COP27, listed below in the newsletter. View the FEBA Journey at COP27 for a comprehensive summary of FEBA member engagements at the COP27 conference.

### The Future of Nature-based Solutions for Adaptation & Resilience: Driving Ambition and Action 12 November 2022



From L to R: Jessica Troni, UNEP; Nady Mahmoud, Climate Champions: Ali Raza Rizvi, IUCN; Dr. Mohamed Ahmed, GCF-UNDP Project Manager; Angela Andrade, IUCN CEM; Sandeep Chamling Rai; WWF; and Dr. Ulf Jaeckal, BMUV

This COP27 side event convened experts from the Friends of EbA Network, the Global EbA Fund, IUCN, UNEP, and the COP27 Presidency to celebrate success stories of nature-based solutions for adaptation from the ground in the last decade, hear from ministers around the world showcasing how their countries are implementing and scaling up these strategies, and together, set commitments to continue working together to accelerate global progress on working with nature to build climate resilience. Key messages of the event included the need to focus on priority areas for investment and urgently scale up; that there is a need for increasing funding, as well as strengthening monitoring and evaluation; Indigenous and Science-based knowledge should mainstreamed; and robust standards such as FEBA's EbA Qualification Criteria and IUCN's Global Standard on NbS should be employed to create impact while adhering to social and ecological safeguards.

Read more about the event here and here.
Contact Norah Ngeny for more information.

### Launch of the *Mangrove Breakthrough* as part of the Sharm El Sheikh Adaptation Agenda 12 November 2022

At COP27, The Global Mangrove Alliance in collaboration with the UN Climate Change High-level Champions launched the Mangrove Breakthrough to accelerate a global approach to mangrove conservation. The Breakthrough is a science-based, measurable, and achievable goal for non-state actors and governments to collectively restore and protect mangroves at the scale needed to secure the future of these vital coastal forests. This will be achieved by catalysing financial flows to broadly activate proven solutions and mobilise action on the ground as part of the Sharm El Sheikh Adaptation Agenda—a key roadmap to deliver on the Race to Resilience.

The Mangrove Breakthrough aims to secure the future of 15 million hectares of mangroves globally by 2030 through collective action on halting mangrove loss, restoring recent losses, and doubling the protection of mangroves globally by achieving an investment of 4 billion USD by 2030 to conserve and revitalise these coastal ecosystems.

More information about the Mangrove Breakthrough is available here and here.

For more information about how to join the Mangrove Breakthrough, contact Luz Gil and Ignace Beguin.

### Oceans & Land Day at the 4<sup>th</sup> Annual Paris Committee on Capacity-building Hub 14 November 2022

Oceans & Land Day, hosted by the Paris Committee on Capacity-building, explored the capacities needed to mainstream and scale up Nature-based Solutions and ecosystem-based approaches – across geographies, ecosystems, and themes - into climate adaptation plans and resilience-building. The Oceans and Land Day sought to respond to the mandate from the Conference of the Parties to constituted bodies to integrate and strengthen ocean-based action in their existing mandates and work plans, as well as highlight capacity-building efforts related to the Warsaw Framework for REDD+ and the Koronivia Joint Work on Agriculture. In this context, there is a need for knowledge systems that include scientific, traditional, local, and indigenous knowledge to support decision-making. Sessions sought to address capacity-building gaps to better integrate these knowledge systems into the implementation of the three Rio Conventions and the Paris Agreement for effective stewardship of oceans and land. This thematic day explored the capacities needed to mainstream and scale up Nature-based Solutions and ecosystem-based approaches into climate adaptation plans and resilience-building.

Oceans and Land Day was hosted by IUCN in its role as the FEBA Secretariat. Read more here.

# **Doing It Better: Unpacking Evidence from the Field and Lessons Learned from NbS for Adaptation** 14 November 2022



From L to R: Rod Braun, CI Green-Gray Infrastructure Community of Practice; Ali Raza Rizvi, IUCN; Ariane Steins-Meier, Rare; Mirella Gallardo, Instituto de Montaña; Emily Goodwin, FEBA

Nature-based solutions for climate adaptation have the potential to provide vulnerable countries with valuable protection against climate change hazards, reducing the intensity of climate hazards by 26 percent, representing protection against the economic cost of climate change by USD 104 billion by 2030 and USD 393 billion by 2050 (IFRC & WWF, 2022).

In this session hosted by the FEBA network at the PCCB Hub, speakers presented three inspirational case studies of completed NbS for Adaptation projects from around the world, focused on (1) the implementation of ecosystem-based adaptation in the Peruvian Andes from 2011-2021 through the Mountain EbA project by the Instituto de Montaña, (2) empowering fisheries-dependent communities in Asia Pacific to adapt to climate change through the Fishing for Climate Resilience project by Rare, and (3) scaling hybrid green-gray infrastructure with engineers around the world through the Green-Gray Community of Practice hosted by Conservation International. The speakers reflected on the accomplishments, lessons learned, return on investment, and impact of their projects on the ground.

Common threads that defined success for implementation of NbS for Adaptation included: the importance of community-led conservation and bottom-up solutions, promoting cross-sectoral solutions; strengthening local capacities and knowledge; incorporating traditional management practices into formal regulatory frameworks; and ensuring long-term ecological resilience by improving access to finance and economic resilience in the short-term (e.g. savings, credit, and government services).

Read more about the event on the PCCB Hub website here. The event recording is available here.

# Leveraging local adaptation knowledge to scale up nature-based solutions 14 November 2022

In this session as part of Oceans and Land Day at the PCCB Hub, speakers explored how traditional ecological knowledge can support climate change adaptation, with the recognition that ecosystem-based climate action cannot be conducted without the meaningful engagement of indigenous & local people. To make progress, indigenous communities need to be equal partners in the design of solutions to the climate crisis. The traditional knowledge that they hold, when integrated with scientific knowledge, will help propel us forward. We must ensure that climate finance goes to the people on the ground protecting and sustainably managing our ecosystems. In addition, we should promote knowledge exchanges and connect communities to share adaptation strategies and how it works. It is not only important to integrate different knowledge forms but also to support the leadership of IPLC in adaptation policies and plans in both formulation and implementation.



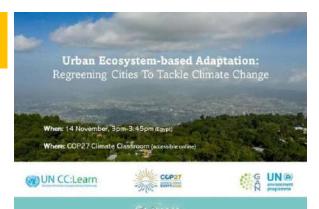
Read more about the event on the PCCB Hub website here; the event recording is available here. Contact Giacomo Fedele for more information.

# **Urban Ecosystem-based Adaptation: Regreening Cities to Tackle Climate Change**

14 November 2022

This event at the COP27 Climate Classroom explored how the use of nature-based solutions and ecosystem restoration can help cities adapt to the impacts of climate change, particularly by drawing on practical examples.

Read more about the event here. Contact Anna Kilponen for more information.



# Nature-based Solutions for Climate Change and Human Health 16 November 2022

Hosted by the FEBA network, IUCN and WHO at the WHO Health Pavilion, this session focused on how ecosystem health is critical to human health and well-being. Ecosystem health provides resilience to climate change, attenuates risks posed by extreme weather events, helps regulate pests and disease, supports food security, access to freshwater, and mental health, and underpins livelihoods. Investing in Nature-based Solutions to protect, conserve and restore natural ecosystems can offer a catalytic opportunity for health, climate and conservation actors to work together to address common challenges and drive improved health outcomes. With speakers across climate, health, and humanitarian sectors, this dialogue focused on the health-environment-climate nexus supported the health arguments for accelerating climate action, and how this can be taken forward within the community, national and global levels.

Read more about the session here. The session recording is available here (starting at 4:00).

Read more about this work in the WHO Health Argument for Climate Action and Guidance on mainstreaming biodiversity for nutrition and health.

Session outcomes will be incorporated into a 2023 report "Designing Nature-based Solutions for Health: Integrating Biodiversity Climate Change and Health Outcomes", which will be shared with the FEBA network for consultation in due course.

Contact Delilah Griswold and Cristina Romanelli with any questions.

### Ecosystem-based adaptation in vulnerable rural communities – experiences from Haiti, Cuba and the Dominican Republic 17 November 2022

This COP27 side event presented the 'Resilient Caribbean Communities' project, implemented by Welthungerhilfe and OroVerde – Tropical Forest Foundation together with five partner organisations in the Caribbean Biological Corridor since 2019, as part of a joint panel at COP27. In addition to introducing the concept and status quo of the project, the main focus was on highlighting the relevance and potential of ecosystem-based adaptation to climate change as well as promoting faster implementation of EbA projects on a broad basis. On the podium: Johannes Horstmann (OroVerde), Yulissa Álvarez (Centro Naturaleza), Dr. Ulrike Krauss (Caribbean Biodiversity Fund), Toa Lange (Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV)) and Michael Kühn (Welthungerhilfe).

The recording of the panel session is available here. Contact Johannes Horstmann with any questions.

# Launch of the COP27 Presidency "Enhancing Nature-based Solutions for an Accelerated Climate Transformation" (ENACT) Initiative

16 November 2022

Launched at COP27, the ENACT initiative aims to accelerate collective global efforts to address climate change, land and ecosystem degradation, and biodiversity loss through Nature-based Solutions. ENACT will serve as a hub for Party and non-state actors working on NbS, to support collaboration between existing technical partnerships and initiatives working on different areas of NbS, and collectively foster an enabling environment for NbS across the Rio Conventions. The ENACT Partnership sets out to:

- Bring coherence to and strengthen collaboration between existing partnerships and initiatives working on different areas
  of NbS.
- Amplify and support accelerated implementation of current and new partners' NbS commitments through documenting, profiling, and promoting promising practices and success stories as well as challenges to be overcome.
- Facilitate NbS policy dialogue to inform negotiations across the Rio Conventions.
- Build a united, collective narrative of the global value and impact of NbS, including through the publication of an annual State of Nature-based Solutions report for the COP Presidencies.

ENACT is co-chaired by the governments of Egypt and Germany, with IUCN serving as Secretariat. FEBA played a critical role in the incubation, development and launch of the initiative, and will be deeply involved in the development and consultation of the inaugural State of Nature-based Solutions Report chapters on adaptation and resilience.

Read more about the ministerial launch "From Global Commitments to Local Action on Biodiversity and Climate" here. A recording of the event is available here (starting at 03:17:25).

Read more about the partner session "Catalyzing Nature-based Solutions for Climate and Biodiversity Action" at the UNFCCC Pavilion here. A recording of the event is available here.

Read full details about the ENACT Partnership here and here.

Contact Delilah Griswold and Ali Raza Rizvi with any questions.



Speakers at the launch of ENACT included (from left to right): Nigel Topping, UN Climate High Level Champion; Brenda Mallory, Chair of the Council on Environmental Quality, Executive Office of the President, United States; Razan al Mubarak, IUCN President; Virginijus Sinkevičius, European Commissioner for the Environment; Espen Barth Eide, Minister of Climate and the Environment of Norway; Yasmine Fouad, Minister of Environment of Egypt; Steffi Lemke, Minister of Environment of Germany; Eisenhower Nduwa Mkaka, Minister of Natural Resources and Climate Change of Malawi; and Stewart Maginnis, Deputy Director General of IUCN.

# 7th International EbA Community of Practice Workshop 23 – 25 November 2022

In November 2022, the BMU-IKI funded and GIZ-implemented Global Project Mainstreaming EbA welcomed a group of 60 Ecosystem-based Adaptation practitioners to the 7th International EbA Community of Practice Workshop. For two days, participants came together to look back, take stock and discuss the future of the EbA Community of Practice at its final EbA CoP workshop. At the heart of the workshop was the formal and informal exchange between participants, including a range of in person formats such as a marketplace, fireside talks as well as different group exercises and breakout sessions.

Links to all presentations and recordings are available here. For further information, contact Harald Lossack.

### Adoption of the Global Biodiversity Framework at the 2022 UN Biodiversity Conference (CBD COP15)

7 to 19 December 2022

At the CBD COP15, chaired by China and hosted by Canada, nations of the world agreed on a landmark agreement to address the dangerous loss of biodiversity and restore natural ecosystems. COP15 marked the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF) on the last day of negotiations. The GBF aims to address biodiversity loss, restore ecosystems and protect indigenous rights, with concrete measures to halt and reverse nature loss, including putting 30 percent of the planet and 30 percent of degraded ecosystems under protection by 2030. It also contains proposals to increase finance to developing countries.



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Nature-based solutions were recognized in the GBF – a first in the CBD - after years of advocacy from many partners including the FEBA network (see the 2020 brief "Promoting NbS in the Post-2020 Global Biodiversity Framework" here and 2021 "PEDRR/FEBA Recommendations on the 1st Draft of the Global Biodiversity Framework" here), building hope for a future of enhanced coherence between the CBD and the UNFCCC and accordingly, actions on biodiversity loss and climate change. NbS were mentioned in Target 8 and Target 11:

**TARGET 8:** Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solutions and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.

**TARGET 11:** Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as regulation of air, water, and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.

Other targets of the Kunming-Montreal Global Biodiversity Framework include:

- Effective conservation and management of at least 30% of the world's lands, inland waters, coastal areas and oceans, with emphasis on areas of particular importance for biodiversity and ecosystem functioning and services.
- Have restoration completed or underway on at least 30% of degraded terrestrial, inland waters, and coastal and marine ecosystems;
- Reduce to near zero the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity;
- Cut global food waste in half and significantly reduce over consumption and waste generation;
- Reduce by half both excess nutrients and the overall risk posed by pesticides and highly hazardous chemicals;
- Progressively phase out or reform by 2030 subsidies that harm biodiversity by at least \$500 billion per year, while scaling up positive incentives for biodiversity's conservation and sustainable use;
- Mobilise by 2030 at least \$200 billion per year in domestic and international biodiversity-related funding from all sources public and private;
- Raise international financial flows from developed to developing countries, in particular least developed countries, small
  island developing States, and countries with economies in transition, to at least US\$ 20 billion per year by 2025, and to at
  least US\$ 30 billion per year by 2030;

Read more about the outcomes of the CBD COP15 here. Read the final text of the Global Biodiversity Framework here.

WHO Side Meeting at CBD CO15: Workshop on Health, Climate and Biodiversity: Mainstreaming biodiversity and climate solutions for sustainable and healthy food systems

6-7 December 2022

Biodiversity and well-functioning ecosystems provide goods and services essential for human health. At CBD COP15, in the first of a series of regional capacity building workshops jointly convened by WHO, IUCN and WHO regional offices, this workshop focused on food security, nutrition, and noncommunicable diseases, with an emphasis on Nature-based Solutions and One Health. Governments, representatives of Ministries of Health, and experts from the health, environment and related sectors convened to:

- Discuss mainstreaming of biodiversity-health linkages into the environment and public health policies, plans and projects;
- Strengthen national capacities on biodiversity, climate and human health interlinkages, with particular focus on Sustainable and Healthy food systems, Nature-based Solutions and One Health;
- Exchange best practices and lessons learned for the integration of biodiversity, climate and health linkages in the PAHO region and in SIDS countries of the Caribbean;
- Promote the integration of human health and biodiversity linkages into national health strategies, national health strategies and national biodiversity strategies and action plans (NBSAPs), health national adaptation plans and other relevant national reporting instruments.
- Provide inputs and select case studies for a special report on the integration of health in the "Nature-based Solutions for Health" report being developed in collaboration with the Expert Working group on Biodiversity, Climate, One Health and Nature-based Solutions;
- Support the mainstreaming of health in the new Global Biodiversity Framework.

On 15 December, WHO and IUCN, together with FEBA, hosted a COP15 side event on Nature-based Solutions for Health, convening cross-sectoral experts in a dialogue on the health argument for accelerating biodiversity and climate action, and how these solutions can be taken forward within the CBD COP15 decisions.

The workshop outcomes, in the form of a draft "Montreal Roadmap for Biodiversity, Climate and Health" were reported as part of the 5th Science Policy Forum for Biodiversity at COP 15.



Read more about this work in the WHO *Guidance on mainstreaming biodiversity for nutrition and health*. Session outcomes will be incorporated into a 2023 report "*Designing Nature-based Solutions for Health: Integrating Biodiversity Climate Change and Health Outcomes*", which will be shared with the FEBA network for consultation in due course.

Read more about this workshop here.

Contact Delilah Griswold and Cristina Romanelli with any questions.

**EbA LAC Ecuador strengthens capacities with a gender perspective as a cross-cutting theme for adaptation to climate change** *7 December 2022* 

In coordination with the Ecuador National Plan for Adaptation to Climate Change (PLANACC) initiative and the Ministry of Environment, Water and Ecological Transition (MAATE) of Ecuador, the EbA LAC Program organised a workshop on "Gender and Climate Change" in Manabí. It aimed to strengthen the 85 participants' knowledge in the gender approach, share views on these topics, and contribute to an inter-institutional articulation for gender mainstreaming in adaptation processes.

Read more about the workshop here. For more information, contact Carla Gavilanes and María José Azúa.



Participants of the Workshop on Gender and Climate Change © María José Azúa, EbA LAC

### Launch Event: Climate Justice in Ecosystem-based Adaptation – The new Publication Collection December 1 2022

The IKI-funded and GIZ-implemented Global Project Mainstreaming EbA hosted an online launch event for the new collection of publications on 'Climate justice in Ecosystem-based Adaptation'. In early 2022 the Global Project together with FAKT Consult launched a process to assess and contribute to bridging the gap between theory and practice of justice-based EbA. The outcomes of this process have been used to develop a collection of publications which hold knowledge and can provide guidance to bridge the gap towards justice-based EbA on the ground. The launch event provided an overview of the process, the outcomes and the publications & tools that have been developed, including:

- Defining Climate Justice in Ecosystem-based Adaptation
- Climate Justice in Ecosystem-based Adaptation A Policy Paper
- Climate Justice in Ecosystem-based Adaptation: The case of Indigenous municipalities in the province of la Mosquitia, Honduras
- Climate Justice in Ecosystem-based Adaptation: The case of Soc Trang coastal zone, Vietnam
- Guidance on Integrating Justice Issues into the Monitoring and Evaluation of Ecosystem-based Adaptation Interventions
- Guidance on Integrating Justice Issues into the Planning of Ecosystem-based Adaptation Interventions

View the full library of publications here. Read more about the launch event here. For any questions, contact Harald Lossack.

# Sharing research and promoting dialogue on the contributions of biodiversity in achieving the SDGs in Nepal 22 December 2022

ICIMOD organised an outreach event to help policymakers and local government representatives from Nepal understand the contributions of biodiversity in achieving the SDGs. The event – conducted in Jhapa, Nepal, on 22 December 2022 – aimed to highlight the intricate links between biodiversity and ecosystems to human well-being, as evidenced by ground-level research in Nepal, and encourage the integration of biodiversity conservation into development interventions designed to achieve socioeconomic goals.

Read about the outcomes of the event here. Contact Nakul Chettri for further information.

### **Integrating Health into Nature-based Solutions at the Prince Mahidol Award Conference 2023**28 Jan 2023

Co-hosted by WHO and IUCN in collaboration with the FEBA network, this session emphasised opportunities on embedding ecosystem health, biodiversity and climate change in One Health policies, plans and projects, and driving knowledge exchange on the environmental and social determinants of health, while systematically integrating health co-benefits in the development, design and implementation of Nature-based Solutions to climate change.

Session outcomes will be incorporated into a 2023 report "Designing Nature-based Solutions for Health: Integrating Biodiversity Climate Change and Health Outcomes", which will be shared with the FEBA network for consultation in due course.

Read more about the session, and view the recording, here.

Contact Cristina Romanelli with any questions.

# **Caribbean Biodiversity Fund (CBF) Ecosystem Restoration Workshop** 15 – 17 February 2023

The CBF Mangrove and Coral Restoration Workshop took place in Punta Cana and Bayahibe, Dominican Republic, from February 15th to 17<sup>th</sup>, 2023. It provided an opportunity for CBF beneficiaries and partners to discuss and observe best practices of ecosystem restoration and exchange lessons learned. The Workshop was jointly funded by the CBF EbA Facility, co-financed by the International Climate Initiative (IKI) of the German Federal Ministry for Environment, Nature Conservation, Nuclear Safety, and Consumer Protection, through KfW, and the CBF Caribbean Regional Architecture for Biodiversity (CRAB), with funding from the Agence Française De Développement (AFD) and the French Facility for Global Environment (FFEM).

Read more about the Caribbean Biodiversity Fund here. Contact Ulrike Krauss with any questions.



Left: The Caribbean Biodiversity Secretariat Team paused to pose for a group photo on Day 2 of the inaugural Coral and Mangrove Restoration Workshop held in Punta Cana, Dominican Republic.

Right: Environmental Manager at Fundación Grupo Puntacana Susanne Leib explains how corals are propagated in their nursery before being transplanted into the sea.

### **Publications and communications**

Find the full library of FEBA knowledge products here: https://friendsofeba.com/kps/

### Adaptation, Resilience & EbA

### Climate Change 2022: Impacts, Adaptation and Vulnerability

IPCC Sixth Assessment Working Group II

The Working Group II contribution to the Sixth Assessment Report assesses the impacts of climate change, looking at ecosystems, biodiversity, and human communities at global and regional levels. It also reviews vulnerabilities and the capacities and limits of the natural world and human societies to adapt to climate change. Drawing on more than 34,000 studies with 270 authors from 67 countries, it provides one of the most comprehensive examinations of the intensifying impacts of climate change and future risks, particularly for resource-poor countries and marginalised communities. The 2022 IPCC report also details which climate adaptation approaches are most effective and feasible, as well as which groups of people and ecosystems are most vulnerable, exploring and assessing a range of actions including Nature-based Solutions to strengthen nature's and society's resilience to these impacts. "Nature-based Solutions" are mentioned 457 times over the report's 3675 pages.

For more information about the key takeaways from the report, view the WRI Article "6 Big Findings from the IPCC 2022 Report on Climate Impacts, Adaptation and Vulnerability", available here. For more information on the recognition of NbS in the report, view the Oxford Nature-based Solutions Initiative article "New IPCC Climate Report on Impacts, Adaptation and Vulnerability released", available here.

Read the full IPCC report and summary for policymakers here.

Find the report factsheets here, including "Biodiversity", "Food and Water", "Mountains", "Sea Level Rise" and more. View the accompanying report video and video trailer.

# Harnessing Nature to Build Climate Resilience: Scaling Up the use of Ecosystem-based Adaptation By UNEP and the Global EbA Fund



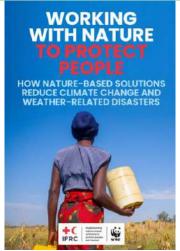
Ecosystem-based adaptation has the potential to significantly enhance the resilience of society to climate change and could be a key part of national and global adaptation efforts. However, despite growing interest among policymakers, donors, scientists and practitioners, the current pace and scale of EbA implementation falls far short of its potential. The aim of this report is to highlight the opportunities for scaling up the use of EbA to help put the world on a more climate-resilient and nature-positive pathway. The report assesses:

- The role of EbA in helping society adapt to climate change, while also contributing to biodiversity conservation, climate mitigation and sustainable development
- Current state and trends in EbA implementation
- Barriers that are currently slowing the widespread application of EbA in policy and practice.

It also provides a set of recommendations on how to enhance the scale and pace of EbA implementation to more fully harness the potential of ecosystems to deliver adaptation benefits. Based on in-depth analysis and discussions with EbA experts from around the world, the report suggests five broad categories of action that could help overcome many of the current barriers to EbA and ramp up the pace and scale of EbA implementation globally.

Download the full report here. The executive summary is available in English, French and Spanish. Contact Norah Ngeny for more information.

# Working with Nature to Protect People: How Nature-based Solutions Reduce Climate Change and Weather-Related Disasters By IFRC and WWF



This flagship report from the IFRC and WWF highlights how the power of nature to protect people is being overlooked. It shows how nature-based solutions can reduce the likelihood of climate change and weather-related events occurring. And how they can save lives by preventing exposure to these hazards and supporting vulnerable communities to adapt to and withstand the dangers of a warming world. Key results from the report include:

- Nature-based solutions could reduce the intensity of climate and weather-related hazards by 26%
- Nature-based solutions could provide developing countries with valuable protection against the economic cost of climate change, saving at least US\$104 billion in 2030 and US\$ 393 billion in 2050
- Over 3.3 billion people live in places that are highly vulnerable to climate change
- From 2010 to 2019 alone, sudden-onset climate change and weather-related disasters killed more than 410,000 people

Read the press release here. Download the report (available in English, French, Spanish and Arabic) here. Contact Nathalie Doswald for more information.

# Adaptation Gap Report 2022: Too Little, Too Slow UNEP

UNEP's *Adaptation Gap Report 2022: Too Little, Too Slow* finds that the world must urgently increase efforts to adapt to these impacts of climate change. The report looks at progress in planning, financing and implementing adaptation actions. At least 84 per cent of Parties to the UNFCCC have established adaptation plans, strategies, laws and policies — up 5 per cent from the previous year. The instruments are getting better at prioritising disadvantaged groups, such as Indigenous peoples. However, financing to turn these plans and strategies into action isn't following. International adaptation finance flows to developing countries are 5-10 times below estimated needs and the gap is widening. Estimated annual adaptation needs are USD 160-340 billion by 2030 and USD 315-565 billion by 2050

Implementation of adaptation actions – concentrated in agriculture, water, ecosystems and cross-cutting sectors – is increasing. However, without a step change in support, adaptation actions could be outstripped by accelerating climate risks, which would further widen the adaptation implementation gap.

The report looks at the benefits of prioritising actions that both reduce greenhouse gas emissions and help communities adapt, such as nature-based solutions, and calls for countries to step up funding and implementation of adaptation actions. Additionally, the report discusses adaptation effectiveness and looks at adaptation-mitigation linkages and cobenefits.

Read the report here.

**Contact Maarten Kappelle for more information.** 



### Oxford Nature-based Solutions Initiative: Collection on NbS for Adaptation & Resilience

Nature-based Solutions Initiative

# Harnessing the potential of nature-based solutions for mitigating and adapting to climate change *Seddon (2022)*

Although many governments, financial institutions, and corporations are embracing nature-based solutions as part of their sustainability and net-zero carbon strategies, some nations, Indigenous peoples, local community groups, and grassroots organisations have rejected this term. This pushback is fueled by (i) critical uncertainties about when, where, how, and for whom nature-based solutions are effective and (ii) controversies surrounding their misuse in greenwashing, violations of human rights, and threats to biodiversity. To clarify how the scientific community can help address these issues, I provide an overview of recent research on the benefits and limits of nature-based solutions, including how they compare with technological approaches, and highlight critical areas for future research. View the paper here.

Contributions of nature-based solutions to reducing people's vulnerabilities to climate change across the rural Global South Stephen Woroniecki, Femke A. Spiegelenberg, Alexandre Chausson, Beth Turner, Isabel Key, Haseeb Md. Irfanullah & Nathalie Seddon (2022)

Despite growing evidence that NbS can reduce vulnerability to climate change impacts in general, understanding of the mechanisms through which this is achieved, particularly in the Global South, is lacking. To address this, we analyse 85 nature-based interventions across the rural Global South, and factors mediating their effectiveness, based on a systematic map of peer-reviewed studies encompassing a wide diversity of ecosystems, climate impacts, and intervention types. **View the paper here.** 

# Biodiversity outcomes of nature-based solutions for climate change adaptation: Characterizing the evidence base Key IB, Smith AC, Turner B, Chausson A, Girardin CAJ, Macgillivray M and Seddon N (2022)

While understanding of ecosystem health outcomes of NbS for climate change mitigation has developed in recent years, the outcomes of those implemented for adaptation remain poorly understood. To address this, we systematically reviewed the outcomes of 109 nature-based interventions for climate change adaptation using 33 indicators of ecosystem health across eight broad categories (e.g., diversity, biomass, ecosystem composition). We showed that 88% of interventions with reported positive outcomes for climate change adaptation also reported benefits for ecosystem health. **View the paper here.** 

The Role of Nature-Based Solutions in Supporting Social-Ecological Resilience for Climate Change Adaptation

Beth Turner, Tahia Devisscher, Nicole Chabaneix, Stephen Woroniecki, Christian Messier, Nathalie Seddon (2022)

Social-ecological systems underpinning nature-based solutions must be resilient to changing conditions if NbS are to contribute to long-term climate change adaptation. We develop a two-part conceptual framework linking social-ecological resilience to adaptation outcomes in NbS. View the paper here.

### Ensuring Nature-based Solutions support both biodiversity and climate change adaptation

While research has helped to improve our understanding of how nature-based interventions for climate change mitigation affect ecosystem health, we still do not understand the outcomes of interventions aimed at addressing climate change adaptation. To address this, we systematically reviewed the outcomes of 109 nature-based interventions for climate change adaptation for 33 different indicators of ecosystem health. View the report here. Read more about the accompanying policy briefings here.

### Getting the message right on nature-based solutions to climate change.

Seddon and Smith et al (2021).

We urge policymakers, practitioners and researchers to consider the synergies and trade-offs associated with NbS and to follow four guiding principles to enable NbS to provide sustainable benefits to society: (1) NbS are not a substitute for the rapid phase out of fossil fuels; (2) NbS involve a wide range of ecosystems on land and in the sea, not just forests; (3) NbS are implemented with the full engagement and consent of Indigenous Peoples and local communities in a way that respects their cultural and ecological rights; and (4) NbS should be explicitly designed to provide measurable benefits for biodiversity. Only by following these guidelines will we design robust and resilient NbS that address the urgent challenges of climate change and biodiversity loss, sustaining nature and people together, now and into the future. View the paper here.

### Mapping the effectiveness of Nature-based Solutions for climate change adaptation.

Chausson, A, Turner, B, Seddon, D, et al. 2020

Nature-based solutions to climate change currently have considerable political traction. However, national intentions to deploy NbS have yet to be fully translated into evidence-based targets and action on the ground. To enable NbS policy and practice to be better informed by science, we produced the first global systematic map of evidence on the effectiveness of nature-based interventions for addressing the impacts of climate change and hydrometeorological hazards on people. **View the paper here.** 

Find the full library of Oxford NbSI research and reports on nature-based solutions for adaptation and resilience here.

### Why working with nature pays off: The case for investing in Ecosystem-based Adaptation

Lisa Kirtz and Michael Hoppe, Published by GIZ

This series of papers compiles arguments, facts and examples on the evidence of the effectiveness of EbA in the form of short briefs. Looking first at why <u>EbA pays off in general</u>, then at EbA in the <u>water sector</u>, in <u>agriculture</u> and in <u>cities</u>, it showcases why EbA offers cost-efficient solutions for adaptation to climate change while also providing additional benefits for people and nature. Each of the four briefs can also be used as a stand-alone document e.g., when discussing adaptation options with planners and decision makers in water management, land use or urban planning.

Download the report here. For any questions, contact Harald Lossack.

### **EbA Tools Navigator**

The EbA Tools Navigator is a searchable database – continuously updated throughout 2022 - of over 200 tools and methods relevant to EbA. In addition to containing tools and methods specifically designed for EbA, the Navigator content draws on a variety of relevant disciplines, including wider climate change adaptation, biodiversity conservation and sustainable development. The Navigator aims to help EbA practitioners, planners, decision-makers and researchers easily find and understand the tools and methods available to support their work. The Navigator was developed and is maintained as part of two International Climate Initiative (IKI) funded global projects (Ecosystem-based approaches to adaptation (EbA): Strengthening the evidence and informing policy, coordinated by IIED, IUCN and UNEP-WCMC, and Mainstreaming Ecosystem-based adaptation (EbA): Strengthening EbA in planning and decision-making processes, coordinated by GIZ).

Check out the EbA Tools Navigator. Contact Tânia Salvaterra and Charlotte Hicks for more information.



### Ensuring that nature-based solutions for climate mitigation address multiple global challenges

By Donatti, C., Andrade, A., Cohen-Shacham, E., Fedele, G., Hou-Jones, X., and Robyn, B.

The protection, restoration, management, and sustainable use of natural and modified ecosystems to address climate change mitigation have received much global attention in recent years. Those types of actions are, however, often not designed to also address other global challenges, and so they miss an opportunity to provide important non-mitigation benefits and compromise their mitigation potential. Here, we highlight the importance of planning Nature-based Solutions for mitigation while considering the suite of global challenges that societies face, and we propose a set of considerations to ensure that those types of solutions also provide climate adaptation, biodiversity, and/or human well-being benefits. Planning Nature-based Solutions for climate mitigation that can also address other global challenges is very timely because every nature-based effort should grasp the opportunity to address a variety of pressing issues in order to allow for the continued delivery of mitigation and other benefits in this critical decade.

Read the paper here. Contact Camila Donatti for more information.

### Solutions in Focus – Key Themes for Ecosystem-based Adaptation

Edited by Lisa Kirtz, Juanita Schmidhammer and Luise-Katharina Richter, Published by GIZ

This publication intends to inspire policy- and decision-makers as well as practitioners by showcasing a selection of 20 solutions from the PANORAMA platform that have been applied in very different settings and focusing on key aspects and themes that are important for the longevity of EbA. It shows that EbA has 'many faces': it is being implemented successfully in a broad range of countries and ecosystems and it is driven forward by all kinds of people and organisations. At the same time, the publication makes clear that for EbA to be sustainable, projects need to consider cross-cutting topics such as governance and gender; they need to ensure and come up with long-term financing mechanisms and need to aim for the mainstreaming of EbA into other fields such as agriculture and urban contexts.

Download the report here. For any questions, contact Harald Lossack.

### A memorable time – the Global Project Mainstreaming EbA is saying goodbye

Global Project Mainstreaming EbA

In February 2023, the GIZ-implemented and IKI-funded Global Project on Mainstreaming Ecosystem-based Adaptation (EbA) came to an end. The project has been up and running since 2015, and was key to the establishment of the international EbA Community of Practice. Functioning as a knowledge hub on the topic of EbA, the project created spaces for exchange and learning such as the EbA Knowledge Days or many webinars, which are now available online on adaptationcommunity.net and a YouTube channel. It developed a number of publications, implemented EbA trainings worldwide and recently launched an EbA e-learning course. Finally, the Global Project also managed a theme on the website PANORAMA – Solutions for a healthy planet. You can learn more about the work of the Global Project in this short project movie. All products of the project will remain available online. The email account <a href="mailto:eba@giz.de">eba@giz.de</a> will no longer be managed, but points of contact will be given in the autoresponder. The Global Project would like to express its sincere gratitude and the team is excited to see Nature-based Solutions on adaptation unfold over the coming years.

Read more here. For any questions, contact Harald Lossack.

### **EbA** in International Policy

# Nature-based Solutions and the Global Goal on Adaptation *FEBA*



Nature-based Solutions for adaptation - consisting of a wide range of ecosystem management activities, such as the sustainable management of forests, grasslands, and wetlands, that increase the resilience and reduce the vulnerability of people and the environment to climate change - offer a critical pathway to define and implement an effective Global Goal on Adaptation and drive and enhance countries' adaptation actions. This FEBA issue brief, produced for COP27, focused on how NbS for adaptation offer a critical pathway to define and implement an effective Global Goal on Adaptation and drive and enhance countries' adaptation actions, with an emphasis on ensuring the incorporation, implementation, monitoring and financing of Nature-based Solutions within the GGA. The paper explores how current knowledge from adaptation practitioners working on NbS can be leveraged in support of both setting and achieving the Global Goal on Adaptation – across monitoring and evaluation, capacity building and technology transfer, and

increasing finance.

The issue brief is available here. Contact Delilah Griswold for more information.

### Joint Submission: Glasgow Sharm El-Sheikh work programme on the Global Goal on Adaptation

The Nature Conservancy (TNC) and Conservation International (CI) believe that for the Glasgow Sharm El-Sheikh (GlaSS) work programme on the global goal on adaptation to achieve its objectives, it must: Include a significant focus on ecosystem-based adaptation, given the insufficient international support for EbA to date and its unique ability to deliver on adaptation goals under the Paris Agreement.

The joint submission is available here. Contact Kiryssa Kasprzyk for more information.

### Loss and Damage, Ecosystem Integrity, and Nature-based Solutions FEBA and PEDRR

Loss and damage refers to the current and unavoidable impacts of climate change experienced by millions of people across the globe. Ecosystem loss and degradation, exacerbated by climate change, is a major component of loss and damage. The Friends of EbA and the Partnership for Environment and Disaster Risk Reduction (PEDRR) jointly produced an issue brief for COP27 that outlined the state of the negotiations on Loss & Damage with a focus on how ecosystem integrity and the implementation and financing of Nature-based Solutions can contribute to averting, minimising and addressing loss and damage. This issue briefly emphasises how the relationship between climate vulnerability and ecosystem health is reciprocal: while healthy ecosystems enhance climate resilience, the effects of climate change typically reduce the ability of ecosystems to provide these services.



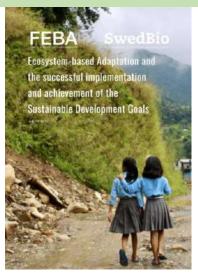
# LOSS & DAMAGE, ECOSYSTEM INTEGRITY AND NATURE-BASED SOLUTIONS

FEBA-PEDRR ISSUE BRIEF FOR UNFCCC COP27

Investment in Nature-based Solutions provides one of the most cost-effective means to create climate resilience for vulnerable and marginalised communities and the ecosystems they depend on, and offers one pathway for averting, minimising and addressing loss and damage. However, in order to maximise the success of NbS it is vital to account for climate change induced losses of ecosystems and their services, and the resulting effect on future risk reduction.

The issue brief is available here. Contact Delilah Griswold for more information.

# **Ecosystem-based Adaptation and the successful implementation and achievement of the Sustainable Development Goals** *FEBA and SwedBio*



Nature-based climate solutions such as EbA have an interconnected role across sustainable development goals – from health, water and nutrition to clean energy, sustainable infrastructure, and equality – with incredible potential to drive progress across the SDGs while building more equitable and resilient societies. This joint technical report, developed by the Friends of Ecosystem-based Adaptation in collaboration with SwedBio, dives into of the connections between EbA and each of the 17 SDGs, with each of the 17 sections addressing threats posed by climate change, ecosystem degradation, and/or biodiversity loss, including how these impede the achievement of a given SDG. Each section subsequently provides an overview of how an effectively implemented EbA approach can underpin successful achievement of a given SDG. The full bibliography provides context and information for expanding this knowledge base.

Download the report here. Contact Wendy Atieno for more information.

Synergies between adaptation, biodiversity, and mitigation: How Ecosystem-based Adaptation can build bridges between Nationally Determined Contributions and the new Global Biodiversity Framework

Ulrich Kindermann, Erinda Pubill Panen, Thora Amend and Lili Ilieva, Published by GIZ

Building synergies between climate and biodiversity policies can increase the possibility of international support for implementing and upscaling ecosystem-based approaches and policies. After some general considerations on the role of EbA in building bridges that bring multiple benefits for adaptation, mitigation, biodiversity, society and human well-being, the authors of the study apply this perspective to three cases (Pakistan, Jordan and Costa Rica), exploring synergies of ecosystem-based approaches in the water, agriculture and urban sectors. The paper also addresses maladaptation risks and the need to move away from silo mentalities and towards more system thinking, always including a social justice perspective.

Download the report here. For any questions, contact Harald Lossack.

### Options for strengthening action on the ocean and coasts under the UNFCCC



Climate change mitigation and adaptation needs have historically not included the needs, as well as the solutions, from the ocean. Yet there are numerous opportunities to strengthen ocean-climate action at the national and international level. This options paper summarises some of the key entry points within existing UNFCCC processes and ongoing negotiations where management actions concerning coastal and marine ecosystems can play a productive role in climate action. The paper identifies specific steps and recommendations for advancing ocean action under the UNFCCC, in response to the invitation for "relevant work programs and constituted bodies under the UNFCCC to consider how to integrate and strengthen ocean-based action in their existing mandates and work plans and to report on these activities within the existing reporting processes, as appropriate" (1/CP.26).

The ocean holds a suite of solutions—both for mitigation and adaptation—if implemented coherently and sustainably. The relationship between ocean and climate was specifically referenced in the United Nations' Intergovernmental Panel on Climate Change (IPCC) Working Group II Sixth Assessment Report (AR6) published in February 20222 which highlighted the current state of knowledge on the importance of coastal and marine ecosystems for climate adaptation and mitigation. Earlier versions of this options paper have been published prior to SB 56 and COP 26. This updated version reflects the latest developments and opportunities under ongoing UNFCCC processes .

Download the report here. Contact Jill Hamilton for further information.

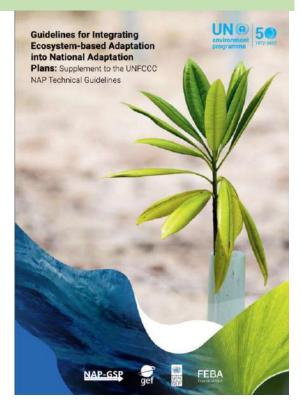
# **Guidelines for Integrating Ecosystem-based Adaptation into National Adaptation Plans** *UNEP, under the NAP-GSP implementing by UNEP and UNDP, in collaboration with FEBA*

The Guidelines aim to guide adaptation practitioners at national and local levels on how to take different steps when factoring ecosystems functions and services into countries' NAP processes and instruments. The Guidelines detail the multiple benefits as well as the challenges of adopting ecosystem-based approaches to climate change adaptation; what information to collect and generate; what expertise to seek; and which stakeholders to engage for successfully integrating EbA into NAP formulation, implementation and review processes.

The Guidelines have been developed in collaboration with the FEBA network, under the National Adaptation Plan-Global Support Programme (NAP-GSP), implemented jointly by United Nations Environment Programme and United Nations Development Programme that supports the Least Developed Countries (LDCs) in advancing their NAPs.

The Guidelines are available to download here and an accompanying web story is viewable here.

Read more about FEBA's engagements on EbA in National Adaptation Plans here.



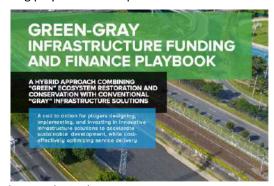
### Green - Gray Infrastructure and EbA

### **Green-Gray Infrastructure Funding and Finance Playbook**

Global Green-Gray Infrastructure Community of Practice

The fight for increased climate resilience, restored biodiversity and sustainable economic growth is one that humanity cannot lose. Green-gray infrastructure has a vital role to play, by channelling a key driver of economic growth — namely infrastructure — to chart a more sustainable, climate, and nature-positive path. To do this, we need more financing for green-gray infrastructure, more projects in the pipeline, and to bring new private sector financing players into the space.

Given the urgent need and growing opportunity for green-gray infrastructure's role in more sustainable and resilient development, The Playbook defines strategies to advance green-gray projects more quickly around the world — starting now. As green-gray infrastructure projects demonstrate their cost-effectiveness, resilience, and diversify revenue streams, projects will gradually shift from grant and public finance to commercial finance that expect a greater focus on risk-adjusted returns. Achieving this transition will require improvements to the enabling environment, proving the case of individual projects, and gradually building project developer and investor confidence to mainstream green-gray infrastructure into the engineering and infrastructure finance world. The Playbook defines the roles, responsibilities, and replicable



funding and financing models required to develop green-gray infrastructure at scale — and win the game.

The report is available here. Read more about the work of the Global Green-Gray Infrastructure Community of Practice here. Contact Rod Braun and Emily Corwin for more information.

### **Engineering Guidelines for the 21st Century**

Global Green-Gray Infrastructure Community of Practice



The current approach to evidence-based decision making for nature-based solutions is at best – project, region, or problem specific. At worst, it is non-existent or proprietary. This paper proposes a path forward by collaborating across disciplines and geographies to design a modern data sharing platform for users to input technical knowledge and data about nature-based solutions projects. The platform would be open-access – making data and resources broadly and equitably available – while providing a real-time feedback loop from practitioners to designers, planners, and financiers. The **resulting Natural Infrastructure Engineering Hub** would become a resource internationally for how to design, build, monitor, measure, maintain and adaptively manage nature-based engineering solutions.

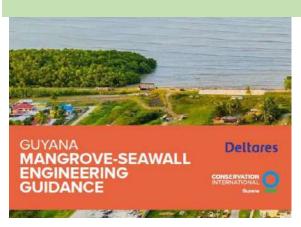
Download the publication here. Read more about the work of the Global Green-Gray Infrastructure Community of Practice here.

Contact Rod Braun and Emily Corwin for more information.

# PIEVC Green Protocol — Integrating Ecosystem-based Adaptation into Infrastructure Climate Risk Assessments Stephanie Austin and Wolfram Lange, Published by GIZ

The process set forth by the **PIEVC Green Protocol** is designed to aid practitioners in characterising the risk of infrastructure to impacts of climate change while considering the influence of the broader social-ecological system, and potential subsequent impacts to the social-ecological system should the infrastructure be disrupted or damaged. Climate risk assessment is within a broader context of climate proofing (a methodological approach aimed at incorporating climate change into project planning and development).

Download the report here. For any questions, contact Harald Lossack.



### **Mangrove-Seawall Engineering Guidance**

Global Green-Gray Infrastructure Community of Practice

Guyana is among the countries most profoundly threatened by climate change induced sea level rise, with 90% of the population and 75% of agricultural production situated on the low-lying coastal plain. To mount a response to this existential threat, Guyana needs to harness the same natural processes that created the North Brazil Shelf's coastal plain – a flux of Amazonian soil particles transported along the coast and captured in the roots of mangroves. This Engineering Guidance is divided into two main outputs:

- Recommendations for practical Engineering Guidelines for the assessment, development, and implementation of green-gray infrastructure along Guyana's coast, including the identification of site specific green-gray interventions; and
- 2. A technical resources document providing the theoretical background for the guidelines.

The report is available here. Read more about the work of the Global Green-Gray Infrastructure Community of Practice here.

Contact Rod Braun and Emily Corwin for more information.

### Building Coastal Resilience with EbA

Innovative Approaches for Strengthening Coastal and Ocean Adaptation: Integrating Technology and Nature-based Solution By FEBA, IUCN, UNFCCC TEC and the NWP Expert Group on Oceans

Produced in collaboration between the Friends of EbA network. IUCN, the UNFCCC Technology Executive Committee and the UNFCCC Nairobi Work Programme Expert Group on Oceans, this policy brief provides an overview of the value of innovative adaptation approaches that integrate technology and nature-based solutions in oceans and coastal ecosystems and communities as well as the challenges and opportunities to increase their uptake and scaling. Building on knowledge shared during the collaborative event series in 2021, the policy brief highlights examples of innovative approaches and their ability to provide multiple benefits for people and nature. The brief identifies pathways and recommendations for scaling up integrated adaptation solutions, including through interdisciplinary and crosssectoral approaches based on partnerships; supportive policy and regulatory frameworks; sustained, innovative and accessible financing; and use of evidence-based targets.

Innovative Approaches
for Strengthening
Coastal and Ocean
Adaptation
Integrating Technology
and Nature-based Solutions

The United Nature-based Solutions

The United Nature-based Solutions

The United Nature-based Solutions

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UNITEC Natural Work Programming BLARGC) Technology Executed Committee (TEQ, the
UNITED SOLUTION, and the French of Ecosystem-based
Adaptation (FEBA) Network

United Nations
Climate Change

The policy brief is available to download on the TEC website here.

Further information on the event series, including recordings and outcomes documents, are available on the TEC events page and the FEBA events page.

Contact Ali Raza Rizvi for more information.

### Fishing for Climate Resilience – Lessons Learned Report

Healthy coastal ecosystems are critical to ecological, social, and economic resilience of local communities. The alignment of the small-scale fishery sector with sustainable natural resource management and climate change adaptation plans is needed to protect ecosystem integrity. With the closure of the Fishing For Climate Resilience project in 2023, this report will highlight the main achievements and lessons-learned of the Fishing for Climate Resilience project. Over a period of nearly five years the project led by Rare, the Micronesia Conservation Trust and the Global Island Partnership (GLISPA), mainstreamed Ecosystem-based Adaptation measures into the Small-Scale Fisheries Sector in Indonesia, the Philippines, Palau and the Federated States of Micronesia. The report will take stock of the project's impact and reflect on behaviour-centred approaches to EbA in coastal communities in support of local resilience and implementation of NDCs and Green Recovery strategies.

The report will be launched in March 2023. Read more about the project and find the upcoming lessons learned report here. Contact Frederik Stapke for more information.

### Podcast: Mangroves for Community and Climate: adapting in harmony with nature at WWF

Doug Parsons, America Adapts; with Shaun Martin and Karen Douthwaite, WWF US; Pilar Jacobo and Alejandra Calzada, WWF Mexico; Dr. Siddarth Narayan, East Carolina University; Dr. Catherine Lovelock, University of Queensland and others
In episode 179 of the America Adapts podcast, World Wildlife Fund explains the critical role mangrove forests play in coastal adaptation and the work WWF is doing through their Mangroves for Community and Climate project. You'll learn how WWF is applying its three core adaptation strategies: ecosystem-based adaptation, nature-friendly adaptation, and climate-smart conservation. Journey to the Yucatán in Mexico to speak with mangrove experts from around the world - Mexico, Madagascar, Colombia, Fiji, Australia and the US – all coming together to share their expertise and knowledge to help people and mangroves thrive in a changing climate.

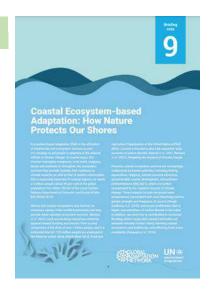
Listen to the podcast here. Contact Doug Parsons (America Adapts) or Shaun Martin (WWF) for more information.

# **Briefing Note: Coastal Ecosystem-based Adaptation – How Nature Protects Our Shores** *UNEP*

This briefing note explores the strategy of EbA on coasts. It includes two case studies from Tanzania and Madagascar. In coastal areas, EbA can involve managing mangroves, coral reefs, seagrass, dunes and wetlands to strengthen the ecosystem services they provide, building their resilience to climate impacts, as well as that of nearby communities. EbA is especially important in coastal regions, as nearly 2.5 billion people (about 40 percent of the global population) live within 100 km of the coast (UNDESA 2019). Marine and coastal ecosystems also harbour an enormous variety of the world's biodiversity, and they provide many valuable ecosystem services.

The briefing note is part of a larger series of EbA Briefing Notes, which you can find here.

Download the case study here (available in English, Spanish, French and Portuguese). For any questions, contact Marcus Nield.



### Saving Our Mangroves in Kenya, Tanzania, Mozambique, and Madagascar

Save Our Mangroves Now! (WWF, IUCN and Wetlands International)



This report offers an overview of the work by the Save our Mangroves Now! (SOMN) initiative in the Western Indian Ocean to date, bringing together data on extent, loss and gains, and the socio-economic value of mangroves in the region, as well as governance challenges and policy opportunities. The authors hope this will support national efforts and inform the development of a regional mangrove action plan in the Western Indian Ocean region, enabling coordinated and collective action on mangrove conservation and restoration. In addition, we created the guiding principles on sustainable mangrove ecosystem management and aspire for them to guide the design of collective action at the national and regional level in the Western Indian Ocean region and beyond.

Download the report here. Contact Laura Puk and Ineke Sass with any questions.

#### Roots of Hope: Stories from Mangrove Leaders in the Western Indian Ocean

Save Our Mangroves Now! (WWF, IUCN and Wetlands International)

Around 745,000 ha of mangrove forests decorate the coastlines of the Western Indian Ocean region. They protect 40 million people living along the coast from cyclones and tsunamis and provide livelihoods through fishing, beekeeping, tourism and conservation efforts. If mangroves were lost, the consequences for food security, biodiversity and our climate would be severe. Meet the people dedicated to conserving these #RootsofHope.

#### **Roots of Prosperity**

Zulfa Hassan Monte is the chairperson of the Mtangawanda Mangrove Restoration Women Group in Lamu County, Kenya. Ever since the women started planting the first hatchlings in 2018, they have planted more than 61.000 mangroves and were able to restore an additional 100 hectares through natural regeneration. The improvement to the whole community was tremendous. "Crab numbers were affected due to the degradation," Zulfa said. "Nowadays, fishers tell us that they pass by our plantations and see crabs sleeping." Due to her success, she is called "Mama Mikoko" (Mother Mangrove). Now she wants to encourage other women to engage in conservation.

#### Roots of Community.

Justin Rakotomanahira grew up going fishing with his mother on the coastline of Madagascar, while his father would go out to the sea. Living in harmony with nature was his daily life, a healthy ocean and coastal biodiversity the basis for the livelihood for his family. Today, the 40-year-old father of seven is president of the grassroots community "Analamaitso tsy ho gnan'olo" (The Green Forest that is ours), to make sure that the next generation benefits from the same richness of nature as he did. Over the past 15 years, the organisation was able to restore 56ha of mangroves in Kivalo, western Madagascar. Today, the community serves as a leading example of nature conservation that benefits both the environment and the people.

#### Roots of Living.

When Célia Macamo was young, she dreamed about being a doctor. Today she says she is thankful that she failed the entrance exam for medicine because it allowed her to pursue her passion for nature and teaching. Célia is is a lecturer and researcher at the Eduardo Mondlane University in Mozambique. Her field of research is in mangrove forests ecology, management and conservation. What gives her hope is that she has noticed a visible increase in interest for mangrove conservation. Many communities have decided to restore mangroves by themselves. It's exciting when you go into a community, thinking you are going to teach them, but in the end you are the one who is learning.

#### Roots of Change.

In Tanzania, "A large percentage of mangrove conservationists come from the fishing community" is Kaitira Benard's conviction. Mangroves are breeding ground and habitat for fish and crabs, so preserving the ecosystems is important for preserving livelihoods. But fishing is not the only way coastal communities can benefit from conserving mangroves. Kaitira Benards has worked with many communities in his position as an Aquatic scientist and Co-Founder of Agua-Farms Organization (AFO). Beekeeping, mangrove planting, tourism or blue carbon projects are all opportunities for mangrove conservation to generate direct gains for the local communities.

The full collection of stories is available here.

View the #RootsofHope video here.

Contact Laura Puk and Ineke Sass with any questions.



Zulfa Hassan Monte Conservationist

Kenya



Justin Rakotomanahira

Community Leader

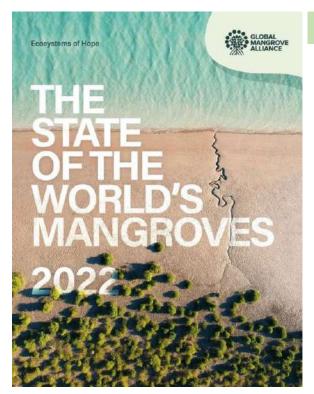
Madagascar



Célia Macamo Biologist Mozambique



Kaitira Benard Nyahuro Aquatic Scientist Tanzania



### State of the World's Mangroves

Global Mangrove Alliance

The annual report of the Global Mangrove Alliance, *The State of the World's Mangroves 2022* is a compilation of the most current information available on what we know about mangrove forests and what's being done to reverse the downward trends impacting the coastal trees and the local communities who depend on them. The report has been produced with the help of over 100 mangrove science, finance, and policy experts from around the world, highlighting benefits, stories, and global trends. The GMA is a joint effort of more than 30 organisations working to accelerate mangrove conservation and restoration efforts around the world.

"The 2022 edition of The State of the World's Mangroves describes a surge in our understanding of mangroves globally and multiple points of hope: mangrove loss is declining, we know more about protecting these ecosystems than ever before, and partnerships and global awareness are ever stronger. The tide has yet to turn on loss but we are dedicated to maintaining momentum to support mangrove forests to minimize the impacts of irreversible climate change and the wider biodiversity crisis." - Mark Spalding, Senior Marine Scientist for The Nature Conservancy.

Download the 2022 State of the World's Mangroves Report here.

Contact Marice Leal and Luz Gil for more information.

#### Integrating Mangrove Ecosystems into NDCs with the Global Mangrove Watch

Luz Gil and Emily Goodwin, Global Mangrove Alliance

The Global Mangrove Alliance launched two policy briefs that detail how national policymakers can integrate mangrove ecosystems into climate and wetlands policy frameworks. These briefs lay out specific, actionable opportunities to apply the Global Mangrove Watch as a tool for target-setting, monitoring, and reporting on mangrove ecosystems. The Global Mangrove Watch is an online platform that provides remote sensing data and tools for global monitoring of mangroves, in scientific collaboration with Wetlands International, Aberystwyth University, soloEO, TNC, JAXA, NASA and a host of partners.

#### Integrating Mangrove Ecosystems into NDCs with the Global Mangrove Watch, available here.

This brief explores how the Global Mangrove Watch can support countries in the process of implementing, updating or revising their Nationally Determined Contributions under the Paris Agreement and move towards ratcheting up national and collective ambition on the potential of blue carbon ecosystems for climate action.

#### Supporting the implementation of the Ramsar Convention through the Global Mangrove Watch, available here.

This brief details how the Global Mangrove Watch can be used to support Ramsar Contracting Parties, in particular those lacking their own national mangrove monitoring system, through data on their mangrove resources in support of national wetlands inventories, developing Information Sheet on Ramsar Wetlands (RISs), monitoring sites ecological character, mangrove management, and restoration, and reporting to Ramsar and other international agreements as part of National Reports.

Read more on the Global Mangrove Alliance website here. An accompanying brief on NBSAPs is in production for launch in 2023. Contact Luz Gil for more information.

### Lessons Learned: Climate Adaptation in Tanzania with Ecosystem Restoration & Flood Defence Infrastructure *UNEP*

In 2012, the Government of Tanzania secured funding from the Adaptation Fund and the Global Environment Facility's Least Developed Country Fund to reduce the negative impacts of climate change on vulnerable communities in coastal areas. The country is facing the impacts of climate change on the coasts through rain-induced flooding and sea-level rise. In all components of the project, key lessons were learned for best practices for monitoring and evaluation, sustainability and upscaling, EbA implementation and project design.

Download the report here. Contact Marcus Nield for more information.

#### Investing for Ocean Impact - a podcast on innovative ways to finance ocean conservation

By IUCN's Blue Natural Capital Financing Facility



Investing for Ocean Impact is a podcast from IUCN's Blue Natural Capital Financing Facility presenting the business case for investing in our ocean. When it comes to tackling climate change and the biodiversity crisis, the ocean and the world's coastlines offer many solutions. Yet these solutions don't receive anywhere near enough money to realise them. We need private investments in Nature-based Solutions if we are to reach the goals of the Paris Agreement, the new biodiversity targets as well as sustainable development.

In Investing for Ocean Impact, we are exploring how ocean restoration and protection can be integrated into sustainable businesses and projects and how investors of all sizes can invest in our ocean. Across multiple episodes, we're talking to leading experts, global policymakers, and

investment movers and shakers. We're also diving into real life examples of Nature-based Solutions, from seaweed farms to large-scale infrastructure projects, to show how these projects are creating a profit, for people and the planet.

New episodes are released every second Wednesday. Listen now on your preferred podcast platform and learn more here.

### **EbA** and Agriculture

#### Five Key Messages on How to Implement Agroecology as a Systemic Adaptation Response

Jes Weigelt, Fergus Sinclair, Harald Lossack, Friederike Mikulcak, Lina Staubach and Erinda Pubill Panen, Published by GIZ

To ensure the long-term survival of the growing world population while staying within planetary boundaries, systemic and crises-responsive approaches to produce sufficient and high-quality nutrition are urgently needed. The purpose of this brief is to suggest one such approach: implementing agroecology to enhance Ecosystem-based Adaptation in the agricultural sector. This policy brief outlines five key messages for decision-makers on how to strengthen agroecology as an EbA approach in the agricultural sector. The central idea behind this paper is to synergise the achievement of multiple national-level targets and commitments, including food security, climate adaptation, biodiversity protection, as well as sustainable land and water management.

View the key messages here. For any questions, contact Harald Lossack.

### Briefing Note: Ecosystem-based Adaptation in Agriculture – A Path to Climate-resilient Food Systems

By UNEP

This briefing note explores the strategy of EbA in agricultural systems. It includes two case studies from Cambodia and Sudan.

Conventional agriculture has been the major driving force of increased yields over the past decades and still makes up most agricultural production practices. However, this food production system and a significant amount of associated waste (approximately 30 percent of global production, according to FAO no date) has come at a cost, depleting or polluting bodies of water, replacing natural ecosystems, and eroding the rich ecosystem underlayer supporting microorganism biodiversity, the basis of soil fertility. To compensate, more ecosystems are continually converted to agricultural or grazing land.

The briefing note is part of a larger series of EbA Briefing Notes, which you can find here

Download the briefing note here (available in English, Spanish, French and Portuguese). Contact Marcus Nield for more information.



#### Agroecology: Making Ecosystem-based Adaptation Work in Agricultural Landscapes

Jes Weigelt, Fergus Sinclair, Polina Korneeva, Sarah Zitterbarth, Olivia Riemer, Mary Crossland, Menuka Udugama and Lina Staubach; TMG Research, ICRAF World Agroforestry, and HFFA Research GmbH commissioned by GIZ

The central idea of this report is that the blending of Ecosystem-based Adaptation with agroecological approaches can increase the organisational capacity and resources devoted to translating national commitments on food security, climate, biodiversity conservation and sustainable land management into action on the ground.

Read the white paper "EbA in Agriculture: How Agroecology Can Contribute to Tackling Climate Change" here. The full report will be available in early 2023. For more information, contact Harald Lossack.

### Lessons Learned: Ecosystem-based Adaptation and an Integrated Resilient Rice Model in Madagascar By UNEP

In Madagascar, deforestation for agricultural land is leading to widespread erosion from run-off, resulting in the loss of topsoil, depletion of soil nutrients, and landslides. The project therefore also applied an ecosystem-based adaptation approach to protect the ecosystem services that benefit rice production. The pilot investments in the Alaotra-Mangoro region have the potential of being upscaled at the national level, and two other regions — Itasy and Vakinankaratra — were selected for upscaling the MIRR approach. In all components of the project, key lessons were learned for the implementation of the Integrated Resilient Rice Model (MIRR), agroforestry, reforestation, monitoring and evaluation, sustainability, and more.

Download the report here. Contact Marcus Nield for more information.

### Ecosystem Soil: Bringing nature-based solutions on climate change and biodiversity conservation down to earth Dr. Andrea Beste and Neomi Lorentz, Published by GIZ

This guidebook aims to demonstrate the importance of sustainable soil management (SSM) for adaptation to climate change, biodiversity conservation and the achievement of long-term food security. By adopting nature-based solutions such as ecosystem-based adaptation, farmers can dramatically increase their productivity while adapting to climate risks.

Download the report here. For any questions, contact Harald Lossack.

### **EbA** and Forests



Primary lowland tropical forest in Kalimantan, Indonesia ©FAO/Kenichi Shono

### Forest-based adaptation: transformational adaptation through forests and trees

Libert-Amico, Antoine; Duchelle, Amy E.; Cobb, Annika; Peccoud, Virginie; & Djoudi, Houria

Forest-based adaptation is an ensemble of climate actions that employ forests and trees in support of climate change adaptation and resilience, including sustainable forest management, forest conservation and restoration, reforestation and afforestation. Forest-based adaptation can help address the gaps between current adaptation actions and the adaptation needed for reducing climate-related risks and impacts, while contributing to most of the Sustainable Development Goals and promoting strong synergies with mitigation.

This FAO technical paper unpacks the concept of forest-based adaptation and describes policy spheres that could bolster the role of forests and trees in providing adaptation and resilience benefits. It introduces a set of 10 principles for using forests and trees to promote transformational adaptation, which were developed with leading experts from the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) and other partners. It describes the policy implications of each principle and draws on examples from diverse forest ecosystems and management practices to illustrate their application in practice.

Download the report here.

For any questions, contact Antoine Libert-Amico.

### **Briefing Note: Ecosystem-based Adaptation and Forestry** *By UNEP*

This briefing note explores the strategy of EbA in forest ecosystems. It includes two case studies from Mexico and the Gambia. Forests are important ecosystems for adaptation efforts, being home to some 300 million people and most of the planet's terrestrial biodiversity, including plants, fungi, and both vertebrate and invertebrate animals. These organisms form complex ecosystems whose services provide clean air and water, food, timber, and other resources to humans, supporting some 1.6 billion livelihoods. Over millennia, forests have also moderated changes in climate by sequestering carbon and serving as carbon sinks. However, a range of human activities leading to deforestation and forest degradation have eliminated forest ecosystems across vast areas of the planet, releasing large quantities of greenhouse gases into the atmosphere and compounding threats from climate change to forests and the services they provide.

The briefing note is part of a larger series of EbA Briefing Notes, which you can find here.

Download the briefing note here (available in English, Spanish, French and Portuguese).

**Contact Marcus Nield for more information.** 

**Forestry in the Gambia: A Climate Adaptation Case Study** *By UNEP* 

The UN Environment Programme is helping the government of Gambia to adapt to climate change with a major project, titled Large-scale Ecosystem-based Adaptation in The Gambia: developing a climate-resilient, natural resource-based economy. Funded by the Green Climate Fund, the project aims to restore 12,788 hectares of degraded forests, savanna, and mangroves, and 3,000 hectares of farmland to increase the resilience of rural villages to storm surges and floods — a practice known as 'ecosystem-based adaptation.'

The case study can be downloaded here. Contact Marcus Nield for more information.



Adopting a Human Rights-based Approach to Ecosystem-based Adaptation

By UNEP

Human rights-based approaches (HRBAs) seek to analyse inequalities that lie at the heart of development problems, and redress discriminatory practices and unjust distributions of power that impede development progress. Many developing countries and marginalised populations are experiencing disproportionately severe effects from climate change on their economies, livelihoods, and cultures.

This publication examines the potential of Ecosystem-based Adaptation – the use of nature-based solutions to build climate resilience – to meet sustainable development and human rights-based goals, drawing out lessons from UNEP's experience to enhance and scale up EbA implementation. The report identifies seven types of human rights-based approaches adopted to varying degrees by UNEP and partners that further the inclusion of human dimensions into EbA practices.

Adopting a Human Rights-based Approach to Ecosystem-based Adaptation

A Contribution To Sustainable Development

**Ecosystem-based Adaptation** 

and Forestry



The report is available here. Contact Marcus Nield for more information.

#### Climate Justice in Ecosystem-based Adaptation – The new Publication Collection

Published by GIZ

The IKI-funded and GIZ-implemented Global Project Mainstreaming EbA presents the new collection of publications focused on the topic of climate justice in Ecosystem-based Adaptation. Find the collection below:

#### **Defining Climate Justice in Ecosystem-based Adaptation**

EbA needs to promote integrated and inclusive system-oriented solutions based on equity and climate justice to reduce risks and enable climate-resilient development, as stated in the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC AR 6). Therefore, the definition of justice-based EbA set forth in this publication builds on the recognition and implementation of human rights principles and procedures to ensure equitable, transparent and fair outcomes for all stakeholders. The definition of climate justice in EbA was produced in collaboration with FEBA.

Download the brief here.

#### Climate Justice in Ecosystem-based Adaptation – A Policy Paper

Christine Lottje, Erinda Pubill Panen and Mario Donga, Published by GIZ

The objective of this policy paper is to provide knowledge on how to support justice-based implementation of EbA projects and programmes. It describes the international context, highlights key challenges for practical implementation and proposes leverage points where development actors can foster climate justice in EbA implementation.

Download the paper here.

### Climate Justice in Ecosystem-based Adaptation: The case of Indigenous municipalities in the province of la Mosquitia, Honduras

Mario Donga and Erinda Pubill Panen, Published by GIZ

The case of Honduras / La Mosquitia illustrates the importance of integrating justice issues into projects during the early stages of planning. It is especially important to integrate these issues into governance structures and processes in the project area, although project management needs to consider them as well. Entry points for anchoring justice issues strategically include the project concept, steering structure, monitoring and evaluation (M&E) system and the staff concept. Integrating the various dimensions of justice – recognition justice, procedural justice and distributive justice – through these entry points is a key prerequisite for justice to be considered in project implementation.

Download the publication here: EN | ES

#### Climate Justice in Ecosystem-based Adaptation: The case of Soc Trang coastal zone, Vietnam

Mario Donga and Erinda Pubill Panen, Published by GIZ

The case of Vietnam / Soc Trang illustrates the importance of climate justice as a precondition for successfully and sustainably protecting mangrove forests. Mangrove forests protect the coast and people from storms and flooding. Additionally, the ecosystem provides other co-benefits, like the increase of income through fisheries by providing nursery grounds, food, shelter and habitat for a wide range of aquatic species. The case highlights how a justice-based implementation approach strengthened equal participation and benefits of a co-management approach, which actively promoted different dimensions of climate justice.

Download the publication here: EN | ES

# Guidance on Integrating Justice Issues into the Monitoring and Evaluation of Ecosystem-based Adaptation Interventions Mario Donga, Christine Lottje and Erinda Pubill Panen, Published by GIZ

This tool provides practitioners and project planners with concrete entry points for anchoring justice in M&E systems of EbA projects. It gives guidance on project objectives, results framework and project indicators and explains key steps how to best involve stakeholders in setting up the M&E system. To that end, the main objective of the guidance is to demonstrate two key steps:

- Integrating aspects of justice into the objectives envisaged and respective results framework of a project as well as into the selection of suitable indicators;
- Designing the M&E process with project participants during conceptualization and implementation of the M&E system in such a way as to foster justice.

Download the publication here.

Guidance on Integrating Justice Issues into the Planning of Ecosystem-based Adaptation Interventions

Christine Lottje, Mario Donga and Erinda Pubill Panen, Published by GIZ

This guidance document provides an overview of the considerations and process for integrating justice issues into project planning for EbA interventions. It is primarily aimed at practitioners and planners who design and implement EbA on the ground, offering them guidance on how to integrate justice aspects into the planning phase of an EbA project.

Download the publication here.

### Stocktake Report – Climate Justice in the Implementation of Ecosystem-based Adaptation

Christine Lottje, Published by GIZ

The GIZ Global Project on Mainstreaming EbA commissioned this stocktake as part of its overall work on climate justice in EbA. The information presented here was collected through a literature review. The objective is to frame the topic of climate justice in EbA, capture main developments in international frameworks, summarise key challenges documented and reported during the workshop series on climate justice, and identify entry points and strategies that different actors have described and employed in addressing this topic.

Download the report here.

For any questions on this collection, contact Harald Lossack.

### Supporting Resilience in Mountain Ecosystems with EbA

### **Biodiversity and Climate Resilience in the Hindu Kush Himalayas**

A collection of publications by ICIMOD

### Ecosystem services as systemic enablers for transformation in the Hindu Kush Himalaya: an analytical synthesis Purnamita Dasgupta and Bandana Shakya

An assessment of the existing evidence on ecosystem services establishes that substantial benefits and values can be gained by nurturing the relationship between ecosystems and socioeconomic systems. Find the paper here.

#### Protected Areas in the Hindu Kush Himalaya: a regional assessment of the status, distribution, and gaps

Chaudhary S, Uddin K, Chettri N, Thapa R and Sharma E

Protected areas (PAs) are a key strategy for conserving areas of outstanding biodiversity value and promoting sustainable development. Significant efforts have been made toward establishing PAs over the last few decades across the globe. However, an assessment of PAs in mountain regions, including in the biodiversity rich Hindu Kush Himalaya (HKH), is lacking. We assessed the status, trend, and distribution of PAs and the ecological representativeness in the PA network. **Find the report here.** 

### Implementation of the Convention on Biological Diversity in the Hindu Kush Himalayan countries: A retrospective analysis of Aichi Targets

Chaudhary S, Chettri N, Uddin K

The Strategic Plan for Biodiversity (2011–2020), formally adopted by COP in 2010 in Aichi, Japan provided an overarching global framework on biodiversity whose vision is to value, restore, and conserve biodiversity for the benefit of all people by 2050. This retrospective analysis of progress against the 20 Aichi Targets based on the Sixth National Reports and the National Biodiversity Strategy and Action Plans (NBSAPs) provides a comprehensive overview of the efforts made by HKH regional member countries in implementing the Strategic Plan for Biodiversity. **Find the report here.** 

# Contribution of Traditional Ecological Knowledge on Biodiversity Conservation—A Retrospective from the Hindu Kush Himalaya Chettri N, and E Sharma

The HKH region is in the limelight for biodiversity and cultural diversity. Clustered in diverse bioclimatic zones and micro-climate, the region is known for traditional practices, culture, and local knowledge systems adopted and practised contributing to biodiversity conservation. However, such knowledge systems are scattered, poorly documented, and understood at a larger scale such as the HKH. In this chapter, we tried to retrospect some key contributions of the traditional knowledge system in biodiversity conservation. **Find the report here.** 

### Invasive alien species in the Hindu Kush Himalaya – status and management challenges Joshi S, Chettri N,

Invasive alien species (IAS) are one of the five major drivers of global biodiversity loss. Globally, the growth of international trade and travel has led to a rapid increase in the dispersal and number of invasive species. The costs of managing these invasive species runs into billions of dollars each year. Mountains were generally considered to be less vulnerable to invasions. However, that has changed with greater connectivity, movement of goods and people, and more importantly, climate change. **Find the report here.** 

### Poster: Agrobiodiversity in the Hindu Kush Himalayan region

In the Hindu Kush Himalaya (HKH), one-third of the population is food insecure. The erosion of agrobiodiversity and traditional practices here has deep implications for long-term agro-ecosystem health and food and nutrition security. Global communities must push for collaboration and investment to preserve agrobiodiversity-rich landscapes. Find the poster here.

For any questions, or to learn more about ICIMOD's work in the Himalayas, contact Nakul Chettri.



# Using Ecosystem-based Adaptation to Enhance Livelihoods and Improve Resilience in Mountain Ecosystems: Lessons learned from the *Scaling Up Mountain EbA* project

**IUCN** 

In transboundary mountain ecosystems across Nepal, Bhutan, Peru, Colombia, Kenya, and Uganda, IUCN and partners have worked from 2017 - 2022 to implement ecosystem-based adaptation approaches to increase climate resilience and reduce vulnerabilities of local communities and the ecosystems they depend on. The 'Scaling-up Mountain Ecosystem-based Adaptation' project has extracted local to global evidence across six countries in the Himalayas, the Andes, and Mount Elgon; built local capacity to replicate these approaches; and informed local, national, and international adaptation plans and policies. The impacts of this work on the ground are demonstrated in a web story available here.

Find more information about the work in each country in the project briefs:

Nepal	Peru	Kenya
Bhutan	Colombia	Uganda

#### **Catalogue of Ecosystem-based Adaptation Measures in Mountains**

Mountains are at the frontline of climate change, exacerbating existing vulnerabilities and socio-economic inequities for both mountain communities and those downstream. However, mountain communities have the capacity to adapt to these changes and mitigate the impacts of climate change. By utilising the opportunities created by ecosystem services, mountain communities can build climate-resilience, resource security and consistent livelihoods. This catalogue presents the experiences using Nature-based Solutions to build climate resilience in three mountain ranges: the Andes, the Himalayas, and Mt. Elgon in East Africa. Its main objective is to provide practical information on these experiences to inform NbS practitioners, decision-makers, project designers and managers, researchers and local communities. The experiences illustrated within this publication include first-hand accounts and knowledge from project implementers as well as testimonies from local beneficiaries in the 3 flagship and 3 expansion countries, highlighting the EbA measures that led to increased climate resilience, adaptive land management and secure water resources. **Find the report here.** 

#### Handbook System for the Design and Implementation of EbA

This handbook system was created to guide the process of designing, setting up, implementing, monitoring and up-scaling EbA interventions under the project. This document takes the EbA practitioner through the 7 stages of the EbA cycle, from selecting suitable sites for EbA interventions to supporting the process of mainstreaming EbA. Each stage is summarised and supported by resources and forms, helping with decision making processes and ensuring consistency and comparability for particular aspects of EbA across interventions in different project sites. **Find the handbook system here.** 

Read more about the outcomes of the Mountain EbA project on the project website here and the project StoryMap here.

Contact Adriana Vidal and Zoe Jafflin for more information.

### Nature's contributions to people and the Sustainable Development Goals in Nepal

Adhikari, B., Prescott, G.W., Urabach, D., Chettri, N., Fischer, M.

This study is a systematic synthesis of the literature to determine the state of Nature's Contribution to People (NCPs) and their contribution to the SDGs in Nepal. The study finds that NCPs directly contribute to 12 of the SDGs, but are declining across Nepal. It suggests integrating Indigenous knowledge and local practices to improve the provision of NCPs and contribute to improving livelihoods at local scales, and taking more integrative measures through Nature based Solutions to achieve the SDGs in Nepal and similar countries.

The launch of the study was profiled in the newspaper article "Nepal must protect its biodiversity: For prosperity and well-being" which summarised the need for Nepal to protect biodiversity, not only for the sake of nature, but also for its people, who directly depend on the contributions provided by healthy and functioning ecosystems.

Download the study here. For any questions, contact Biraj Adhikari.



A man carries firewood to a yarshagumba collection campsite in Byas, Darchula, far-western Nepal. Nearby alpine pastures are home to this valuable medicinal herb. As non-timber forest products (considered crucial for the health and income of most rural communities) decline, they foreshadow a colossal crisis for Nepal and its developmental aspirations if they are not dealt with urgently. Credit: Jitendra Raj Bajracharya/ICIMOD.

#### **Ecosystem restoration in the mountains**

Fabio Parisi, Yuna Lee, Jessica Bitsch, Genevieve Schmoeker, Estefania Quenta Herrera, Jiayi Wang, Thomas Hofer, Robert Marchant, Nakul Chettri and Hanspeter Liniger

Mountains play a crucial role for both the highlands and lowlands, but are particularly vulnerable to climate change and human interventions. This policy brief focuses on ecosystem restoration in the mountains. It highlights the role of healthy mountain ecosystems and their services and provides recommendations to help design effective restoration plans. It also reflects the achievements made during the last 20 years.

Download the policy brief. For any questions, contact Nakul Chettri.



### **EbA** in Cities

#### **Better Forests, Better Cities**

By Sarah Jane Wilson, Edith Juno, John-Rob Pool, Sabin Ray, Mack Phillips, Scott Francisco, Sophie McCallum

Better Forests, Better Cities is the first-of-its-kind comprehensive resource on the connection between cities and forests. Synthesising hundreds of research papers and reports, Better Forests, Better Cities explores the diverse suite of benefits to human health and well-being, water, climate mitigation, and biodiversity that forests and other nature-based solutions at all spatial scales provide to cities and their residents. It also includes recommendations on what cities can do to conserve, restore, and sustainably manage those forests.

Download the publication here. Contact Maria Santarelli for more information.

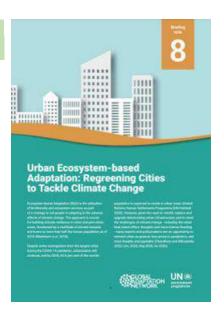


Caption: Better Forests, Better Cities publication.
Credit: World Resources Institute

### **Urban Ecosystem-based Adaptation – Regreening Cities to Tackle Climate Change UNEP**

This briefing note explores the strategy of EbA in urban environments. It includes two case studies from Thailand and a project in Latin America and the Caribbean. Ecosystem-based adaptation is crucial for cities and peri-urban areas, threatened by a multitude of climate hazards and home to more than half the human population as of 2018. Despite some outmigration from the largest cities during the COVID-19 pandemic, urbanisation will continue, and by 2035, 62.5 percent of the world's population is expected to reside in urban areas. However, given the need to retrofit, replace and upgrade deteriorating urban infrastructure, and to meet the challenges of climate change, including the urban heat island effect, droughts and more intense flooding, many experts and policymakers see in these demands an opportunity to reinvent cities as greener, less prone to pandemics, and more liveable.

The briefing note is part of a larger series of EbA Briefing Notes, which you can find here. Download the briefing note here (available in English, Spanish, French and Portuguese). Contact Marcus Nield for more information.



### Integrating Nature-based Solutions into City Planning in Latin America and the Caribbean *UNEP*

This report highlights the importance of nature-based solutions for adapting to climate change. It compiles good practices and recommendations from the CityAdapt which is being implemented by UNEP to scale up NbS in 3 Latin American and Caribbean cities: Xalapa (Mexico), San Salvador (El Salvador), and Kingston (Jamaica). **Download the report here.** 

UNEP has also produced accompanying methodological guidelines for applying nature-based solutions to create resilient cities in the Latin America and the Caribbean region, which are now available in English.

Download the guidelines here.

**Contact Marta Moneo for more information.** 

### Case Studies from Around the World

Nature-based solutions for sustainable and resilient development in Colombia

By Nathalie Suárez, Érika Arias, and Karen Podvin, IUCN South America

Module I describes the umbrella concept of Nature-based Solutions from its conceptual basis and principles, as well as the different approaches of ecosystem protection, restoration, and sustainable management to address diverse socio-environmental challenges. **Download the module here.** 

Module 2 reviews the climate change regulatory, political and management framework in Colombia, and how these integrate NbS and EbA. **Download the module here.** 

Module 3 analyses experiences and practical cases of the implementation of NbS and EbA in Colombia to increase climate resilience of communities in high mountain lagoon ecosystems, high mountain paramos, swamps and Andean mountain ecosystems. **Download the module here.** 

Module 4 analyses experiences and practical cases of the implementation of NbS and EbA in Colombia to increase climate resilience in Amazon, mangrove-forest, swamps and Andean ecosystems. **Download the module here.** 

Contact Karen Podvin and Nathalie Suárez for more information.



### Nature-based solutions for sustainable and resilient development in

By Nathalie Suárez and Karen Podvin, IUCN South America





© IUCN South America

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Module 4 analyses experiences and practical cases of the implementation of NbS and EbA in Peru to increase climate resilience in cities, agroforestry systems and 'lomas' ecosystems. **Download the module here.** 

Module 5 reviews the importance of climate financing and scaling of NbS and EbA in Peru. **Download the module here.** 

Contact Karen Podvin and Nathalie Suárez for more information.

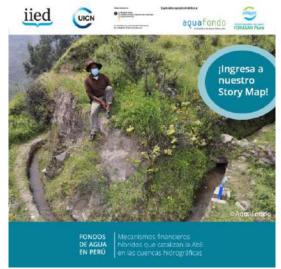
# Water Funds in Peru: Hybrid financial mechanisms that catalyse EbA across watersheds

By Nathalie Suárez and Karen Podvin, IUCN South America

Story Map of the Peruvian Water Funds analysed in this case study - AquaFondo and FORASAN Piura - show how these hybrid financial mechanisms with both public and private funds can catalyse EbA adoption and scaling-up across watersheds.

The story map is available in both Spanish and English.

Contact Karen Podvin and Nathalie Suárez for more information.



© Aquafondo



© ICLEI, WRI, INTERACT-Bio, Cities4Forests

#### **Natural Infrastructure for Water in Campinas and Region**

By Vitor Tramontin, Rafael Feltran-Barbieri, Leonardo Barbosa, Mariana Oliveira, Marcelo M. Matsumoto, Lara Caccia, Luciana Alves, Roberto Rüsche

Cities4Forests, WRI Brazil, and ICLEI released a publication on natural infrastructure around Campinas, Brazil showing how investment in forest conservation, management, and restoration in Campinas' source watersheds could result in significant annual savings in water treatment for the Brazilian city and nearby municipalities while improving the population's water quality.

Download the publication here. Contact Maria Santarelli for more information.

# Video: Back To Cooperation With Nature – The 'Resilient Caribbean Communities' project in the Dominican Republic WHH Welthungerhilfe in cooperation with Centro Naturaleza

Video introduction giving insights into the implementation of the 'Resilient Caribbean Communities' project (Comunidades Caribeñas Resilientes – CCR) in the project region of Centro Naturaleza in the North-West of the Dominican Republic. It informs about the current situation there, shares observations and experiences on climate and biodiversity changes and highlights initial steps to implement ecosystem-based adaptation measures undertaken to cushion these. Since 2019, the CCR project has been carried out by Welthungerhilfe and OroVerde – Tropical Forest Foundation together with five local partner organisations in Cuba, Haiti and the Dominican Republic. The video was launched at UNFCCC COP27 in Sharm El-Sheikh, Egypt. The video is available here. For any questions, contact Johanna Maass and Johannes Horstmann.

# Nature-based Solutions scoping studies for Serbia and Bosnia and Herzegovina: The role of ecosystems in disaster risk reduction and climate change adaptation

Popovicki, Tanja | Kapović Solomun, Marijana | IUCN

Two national scoping studies on NbS in the Western Balkans - in Bosnia and Herzegovina and Serbia - were prepared in 2022 within the IUCN Eastern Europe and Central Asia /ADAPT initiative focused on mainstreaming NbS in the Western Balkans. These scoping studies map the main climate risks and hazards and their causes, provide a stakeholder analysis of relevant existing projects using Nature-based Solutions, and set out recommendations for deploying Nature-based Solutions at the national level in the related economies. The publications were prepared by national NbS Field Experts, Tanja Popovicki for Serbia and Marijana Kapović Solomun for Bosnia and Herzegovina.



Enhancing Nature-Based Solutions in Bosnia and Herzegovina by Marijana Kapović Solomun is available here.

**Enhancing Nature-Based Solutions in Serbia**, by Tanja Popovicki is available here.

For any questions, contact Vesna Bjedov.

Integrating Nature-based Solutions into policies for climate change adaptation and disaster risk reduction: A regional comparative policy analysis in the Western Balkans

Bisaro, Alexander | Meyer, Kristin

The study covers the six Western Balkan economies and provides insight for policymakers and on the status of Nature-based Solutions and how this approach is captured in existing policies along with opportunities for advancing NbS into these policies. The detailed comparative policy analysis was conducted from November 2021 until March 2022. The framework for the policy analysis is based on the IUCN Global Standard for Nature-based Solutions<sup>TM</sup> and its eight criteria, which were broken down and interpreted in a policy context to derive 21 dimensions of policy analysis relevant to climate change adaptation and disaster risk reduction in the Western Balkans.

Download the policy analysis here. For any questions, contact Vesna Bjedov.

# **Story: Locals lead adaptation efforts in drought-stricken Cambodian forests** *By Climate Change News*

Cambodian villagers are planting drought tolerant trees and implementing irrigation systems to cope with variable rainfall. Through reforestation, the planting of drought-tolerant rice varieties, and the use of effective irrigation systems like pumps and tanks, villagers have been able to adapt and mitigate against the worst impacts of climate change and the influence of anthropogenic activity. The project has largely focussed on ecosystem-based adaptation activities by planting multi-use native tree species – providing food, erosion control, timber, and medicine – and rice types which need little water, to overcome years with longer drought seasons.



Read the story here. Contact Marcus Nield for more information.

### South-South Cooperation for Upscaling Nature Based Solutions for Climate Adaptation: Technology Transfer through Long-term Research of Pilot Projects in Mauritania, Nepal and Seychelles

By Global Environment Facility

This brief covers the outcomes of the SCCF project, recognized as a flagship initiative for South-South cooperation, enabling an exchange of technology transfer, capacity-building, policy support or fundraising between countries in the Global South. The project catalysed global and regional collaboration on Ecosystem-based Adaptation, especially sharing China's experience and research know-how in ecological restoration and climate change adaptation.

Nature-based solutions for climate adaptation were piloted in key vulnerable ecosystems, like deserts in Mauritania, mountains in Nepal, and coasts in Seychelles. The project demonstrated various best practices, such as collaborating with local universities on long-term research, which resulted in the publication of many research papers that share key lessons from pilot EbA in three countries. In addition, the project produced a wide range of tools and knowledge products to encourage nature-based solutions for adaptation through South-South cooperation. As a result, 450 ha in the deserts of Mauritania and 20 ha of mangroves in Seychelles are going to be restored ecologically once the trees have matured; 840,000 seedlings were planted in Nepalese watersheds to increase water supplies and reduce soil erosion; 34 technical reports and research papers were developed; and almost 4,900 people were reached through public awareness activities.



The report is available to download here. Visit the project website here. Contact Atifa Kassam for more information.

### Financing Sustainable Watershed Management in Ethiopia: Exploring Innovative Financing Strategies for Nature-Based Solutions

By Francesca Battistelli, Jemal Ahmed Tadesse, and Lizzie Marsters

Financing Sustainable Watershed Management in Ethiopia: Exploring Innovative Financing Strategies for Nature-Based Solutions presents three innovative finance mechanisms — (1) water funds to protect artificial and natural reservoirs, (2) payments for ecosystem services involving hydropower dams in catchment conservation, and (3) debt-for-nature swaps to protect forests — that offer promising avenues for accelerating conservation in Ethiopia and promoting more sustainable and diverse funding sources for NBS, with a focus on water-related benefits.

Download the publication here. Contact Maria Santarelli for more information.

# **Story: The Race to Save Zambia's Wetlands** *By UNEP*

The Lukanga Swamp is under attack. Across the wetlands, which are home to many endangered species, climate change is driving heatwaves and extreme weather events, like floods and droughts. Parts of the swamp that remain wet throughout the year are increasingly hit by flooding, while drier areas are only getting more parched. To help change that, the government of Zambia is executing a new four-year project to help communities near the Lukanga and Bangweulu wetlands in the Central and Luapula provinces of the country.



The web story is available here, together with an accompanying video. Contact Alex Forbes for more information.



### **Story: How nature can help Africa adapt to the climate crisis** *By UNEP*

The Ecosystem-based Adaptation for Food Security Assembly is a UNEP initiative that works to scale up the practice of ecosystem-based adaptation in Africa. It partners with diverse stakeholders, encouraging investments and leveraging critical enablers, especially those within the agricultural value chain.

The story is available here, together with an accompanying video. Contact Oscar Ivanova for more information.

# Story: Farmers adapt to climate crisis on Burundi's precarious hillsides By UNEP

A United Nations Environment Programme (UNEP) project funded by the Adaptation Fund is helping Ntaciyica and 2,000 farmers like him to adopt nature-based solutions to adapt to less predictable weather in Burundi. As Ntaciyica's experiences show, protecting and harnessing nature upstream pays dividends for people downstream. In all, the livelihoods of 45 million people across Burundi, Rwanda, Uganda, Tanzania and Kenya rely on the natural resources of the Lake Victoria Basin, which climate change is putting under ever-greater pressure.



The story is available here, together with an accompanying video. Contact Marcus Nield for more information.

# **Factsheets: UNEP's Ecosystem-based Adaptation Projects** *By UNEP*

Over the course of 2022, the following ecosystem-based adaptation project factsheets were developed:

- Factsheet: Ecosystem-based Adaptation in Rwanda 2016-2022 link
- Factsheet: Urban Ecosystem-based Adaptation in Nepal 2019-2022 link
- Factsheet: Ecosystem-based Adaptation in the Mediterranean Region 2019-2022 link
- Factsheet: Ecosystem-based Adaptation in Bangladesh 2020-2024 link
- Factsheet: Ecosystem-based Adaptation in Mozambique 2019-2023 link
- Factsheet: Ecosystem-based Adaptation in Mauritania 2017-2022 link

Contact Marcus Nield for more information.

# Projects and initiatives

### **Global EbA Fund** 2021 – 2028

The Global EbA Fund is a funding mechanism for catalytic and innovative projects that aim to create enabling environments for the implementation, mainstreaming and scaling up of EbA. The Fund is implemented by IUCN and UNEP with the support of the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV). In 2022, the Fund announced its approval of a total of US\$5,579,039 worth of grants over the next three years, awarded to twentythree projects, making up its first two cohorts. Collectively, the twenty-three projects will work to increase the uptake, scalability, and replicability of ecosystem-based adaptation to climate change interventions across diverse ecosystems in eighteen countries, spanning five continents. The overview of the projects selected available the under First and Second cohorts. While selection of grantees is being finalised for the third and fourth cohorts, the Fund has announced its fifth cut-off date set for 28 April 2023.

Following the experience of the Fund over the last two years some important changes have been made to streamline the application process.

- First, the Fund will be replacing its two-stage application process, in which successful concept stage applicants were invited to submit a full proposal, with one single-stage application.
- Second, the Fund now includes three new Action Pillars. Previously, applicants would align their proposed interventions with one of three Strategic Objectives. In addition to this, projects must now clearly indicate their relevance to a maximum of two of three new Action Pillars (see Grants Procedure Manual).
- Third and final, the Fund is excited to announce that alongside the general EbA project proposals track, the Global EbA Fund is introducing a rotating track for thematic project submissions, beginning with "EbA in Urban Environments". All other aspects of the application, as well as two cut-off dates a year, remain the same.

Read more about the Global EbA Fund, funding cycle tracks and deadlines, and how to apply here. Contact the Global EbA Fund Secretariat for more information.



Group picture at the 7th international EbA Community of Practice Workshop, GP Mainstreaming EbA



### **International EbA Community of Practice** 2015 - 2023

The Global Project Mainstreaming EbA initiated the international EbA Community of Practice, which aimed at sharing knowledge and experiences and mutual learning beyond projects, institutions and regional boundaries on Ecosystem-based Adaptation (EbA). Its purpose was to jointly develop harmonised approaches, evidence-based lessons learned and best practices for how to plan and implement effective EbA to help people adapt to the adverse effects of climate change through a collaborative learning process. The international EbA Community of Practice is coming to a close and will therefore no longer be facilitated; however, the experiences and connections made through the project will live on. The email account <a href="mailto:eba@giz.de">eba@giz.de</a> will no longer be managed, but points of contact will be given in the autoresponder.

Read more about the history and outcomes of the EbA Community of Practice here. Contact Harald Lossack for more information.

#### **Ecosystem-based Adaptation Support Facility**

2021 - 2023

The EbA Support Facility is coming to an end. It was facilitated by the Global Project Mainstreaming Ecosystem-based Adaptation and supported multiple projects. Projects on EbA or EbA relevant issues had the opportunity to access bespoke technical and strategic guidance and backstopping at critical stages along their planning, implementation and evaluation process with the focus on any of the following topics:

- Climate Risk Assessment (ENG, ESP, RUS)
- Valuation of EbA measures (ENG, ESP)
- Monitoring & Evaluation (ENG, ESP)
- Climate Justice (ENG)

Read more about the EbA Support Facility here. Contact Harald Lossack for more information.

### **Typology and matrix of nature-based solutions for climate adaptation** *Available as of Feb 2023*

Conservation International and the Oxford Nature-based Solutions Initiative worked together to prepare a **typology of Nature-based solutions** (NbS) for climate adaptation that identifies specific nature-based solutions (e.g., restoration with native species, assisted migration of plant species, fire management) implemented in specific ecosystems shown to be effective in reducing specific climate impacts (e.g., freshwater flooding, coastal erosion, drought) and a matrix that presents that information.

The typology of NbS for climate adaptation was prepared as a need to further specify the suite of NbS effective in reducing the effects of specific climate impacts, as presented in the paper "Mapping the effectiveness of nature-based solutions for climate change adaptation" (Chausson & Turner et al 2020). The information presented in the matrix can help practitioners, policy makers, non-governmental and governmental organisations and researchers to implement specific NbS that are likely to deliver desirable climate adaptation outcomes. The typology and matrix represent the first global systematic map of evidence on the effectiveness of nature-based solutions for addressing the impacts of climate change and hydrometeorological hazards on people.

View the typology and matrix here. Contact Camila Donatti for more information.

#### Cities4Forests

Ongoing. Launched in 2018 by the World Resources Institute and partners.

Cities4Forests is an alliance of more than 90 cities, representing more than 297 million residents, acting to conserve, restore and sustainably manage nature for human well-being. Cities4Forests' work spans from inner forests, such as expanding urban green spaces, to nearby forests, such as leading conservation work in wetlands that protect a city's water resources, and faraway forests, such as minimising human footprint in tropical forests. The initiative regularly engages with member cities and delivers results that advance water security, urban resilience, and disaster risk reduction. Cities4Forests supports cities in mobilising political action for nature; it offers high-quality technical assistance on local NBS strategies, programs, and tools; and it advises on ways to unlock finance for large-scale nature investments. In addition to cities, Cities4Forests works closely with water and power utilities, multilateral development banks, public and private financial institutions, companies, civil society organisations, and local community and Indigenous groups.

Read more about Cities4Forests here. Contact Maria Santarelli for more information.



Cities4Forests advances nature conservation, restoration, and sustainable management at the local and global level to enhance people's well-being.

### Caribbean

### Caribbean Biodiversity Fund (CBF) Ecosystem-based Adaptation Facility 2016 - 2027

The CBF established the Ecosystem- based Adaptation Facility to further the use of biodiversity and ecosystem services for effective climate change adaptation measures within the Caribbean region. These measures will help people in the region adapt to adverse effects of climate change, reduce disaster risk, as well as, build resilient ecosystems and economies. The EbA Facility resources are composed of a 45 Million Euro contribution from the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety and Consumer Protection through KfW, the German Development Bank.

In early 2023, the 4<sup>th</sup> call for proposals sought applications for projects that utilise EbA approaches to assist in climate change adaptation efforts within the marine and coastal zones of eligible countries in the insular Caribbean. Eligible countries were Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, Montserrat, Saint Lucia, and St. Vincent and the Grenadines. Proposals for regional projects can also involve Antigua and Barbuda, The Bahamas, Barbados, St. Kitts and Nevis, and Trinidad and Tobago. Up to USD 14 million may be available for quality projects (USD 250,000 to 2 million per project) that are being selected in a highly competitive process.

Read more about the Caribbean EbA Facility here and supported projects here. Read more about the 4<sup>th</sup> Call for Proposals here. Contact Ulrike Krauss for more information.

### Resilient Caribbean Communities – Strengthening vulnerable communities through bottom-up EbA approaches

2019 - 2027

The 'Resilient Caribbean Communities' project (Comunidades Caribeñas Resilientes – CCR) has been carried out by

Welthungerhilfe and OroVerde – Tropical Forest Foundation in cooperation with five local partner organisations in Cuba, Haiti and the Dominican Republic since 2019. Being based on a multiactor partnership governance structure, it is implemented in six project regions along the Caribbean Biological Corridor. At its core, the programme is designed to identify and develop a wide range of appropriate ecosystem-based adaptation measures in order to preserve and restore biodiversity whilst simultaneously reducing the vulnerability of the population in the project regions by providing climate-adaptive agricultural solutions.

After an initial phase of comprehensive EbA diagnostic studies including vulnerability analyses, the seven CCR partner organisations are set to elaborate and apply strategic EbA plans during 2023. Their development is based on a participatory process as well as the very diverse settings found in the different regions. Regardless of this, the main focus is on EbA measures that make smallholder farmers' livelihoods more climate resilient, such as sustainable agroforestry systems, the planting of kitchen gardens or the installation of beehives to improve family income. Appropriate land use techniques, restoration measures, wood lots on erosion prone slopes and more climate adaptation action will also have a positive impact on biodiversity and ecosystem connectivity along the CBC countries throughout the coming years. Currently, the project is developing its own website, where project information, updates, publications, and an interactive map will be some of the available features. The CCR project is part of the International Climate Initiative (IKI), with the support of the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) of the Federal Republic of Germany.



Establishing a coffee agroforestry system / Dominican Republic, 2022 / ©OroVerde – K. Osen



Fertile kitchen gardens helping improve family incomes / Dominican Republic, 2022 / ©OroVerde – K. Osen

Read more about the project here. Contact Johannes Horstmann and Johanna Maass for more information.

### Mexico and Central America

### Nature4Cities: 13 Latin American Cities Join Forces to Adapt To Climate Change 2021-2024

The regional project, known as Nature4Cities, is helping 13 Latin American cities across 7 different countries to draw on the natural defences that urban ecosystems such as forests and rivers provide against floods, droughts, storms and other climate-related impacts. The 13 cities supported by the project are Camagüey and Manzanillo (Cuba), Santiago de los Caballeros (the Dominican Republic), Santo Domingo (Ecuador), Guatemala City (Guatemala), La Lima and El Progreso (Honduras), Bocas del Toro, Colón, Arraijan, and the municipal area of Boquete-Dolega-Gualaca (Panama), and Rivera and Durazno (Uruguay).

In January 2023, the Government of Panama officially launched its participation in a project to protect Latin American cities from the impacts of climate change through the restoration and conservation of nature.

Read more here. Contact Marta Moneo for more information.





Conservation work in Xalapa, Mexico. © WRI Mexico

### Xalapa's Local Water Utility Institutes a Voluntary Water Fee for Natural Infrastructure Solutions in Mexico 2021-2022

In Mexico, Cities4Forests supported the water-stressed city of Xalapa to design and develop a local payment-for-ecosystem services scheme for the deployment of nature-based solutions. As a result of this engagement, Xalapa issued a 2% voluntary water tariff that has already raised \$250,000 for watershed restoration efforts, enhancing water security and urban resilience for all city residents.

Read more about the project here. Contact Maria Santarelli for more information.

### Salvador, Brazil's first ever public rain garden Launched in 2022

In Salvador, Brazil, Cities4Forests and partners helped design and establish the city's first ever public rain garden to alleviate flooding, setting the foundation for wider replication. The NBS implementation promotes sustainable rain drainage, contributes to the reduction of flooding, water filtration and water table recharge, with multiple cobenefits for local residents and biodiversity.

Read more about the project here. Contact Maria Santarelli for more information.



Cities4Forests helps establish Salvador, Brazil's first ever rain garden to alleviate urban flooding. © WRI Brazil

### South America

#### Democratizing cross-border watershed management in the Andes

August - December 2022

At the end of 2022, Protos Andes, in cooperation with the Peruvian National University of Loja, the National University of Jaén, and 'Nature and Culture International Peru and Ecuador', and with the financial and technical support of Join For Water, concluded the implementation of the 'Binational Water School', which was elaborated within the framework of the project "Cuidar; derechos de agua y resiliencia" ("Care; water rights and resilience"). The initiative is a pioneer in cross-border education and social articulation for the democratic governance of binational watersheds. Over the course of five months, 97 participants have studied four thematic modules in in-person courses at the universities of Jaén and Loja. Apart from the courses, the cooperating partners organised 2 binational meetings about water diplomacy and socio-environmental conflicts, in which the students had the chance to share their experiences and agree on joint lines of actions to maintain and better the protection of and the access to water in the related ecosystems.

Read more about the project here. Contact Marcelo Ordóñez Rodas for more information

Mobilizing Finance for Ecosystem-Based Adaptation through Integrated Landscape Investment: Testing scalable tools and strategy in the San Martin Region of Peru

October 2022 - October 2024

By collaboratively developing financing strategies for coordinated landscape-scale investment for Ecosystem-Based-Adaptation in San Martin, Peru, the project seeks to facilitate funding for key priority activities defined by local stakeholders. This project is being developed in close coordination with Conservation International, Peru. To develop these strategies, the project will identify priority activities from previously developed regional climate change plans, build capacity for key stakeholders on EbA and integrated landscape finance, identify investable entities and potential sources of finance, and begin the design of finance mechanisms if needed. The tools, materials, and lessons generated in this project will be disseminated through the landscape and financial networks of 1000 Landscapes for 1 Billion People, a global initiative aiming to scale integrated landscape management worldwide.

Read more about the project here. Contact Aaron Bruner for more information.

### Asia & Pacific

### Kawaki, a Community-Led Tree-Based Intervention for Climate Resilience in India



One of Kawaki intervention sites across Kochi, India © WRI India

Cities4Forests and WRI India partnered with the heatstressed city of Kochi, India to launch a community-led urban greening project called Kawaki, which means "to make a grove" in Malayalam. The aim of the project is to actively engage with the local community to plant hundreds of trees across the city to improve climate resilience and create a template for scalable urban restoration.

Read more about the project here. Contact Maria Santarelli for more information.

#### **Fishing for Climate Resilience**

Sept 2018 - March 2023

Healthy coastal ecosystems are critical to ecological, social, and economic resilience of local communities. The alignment of the small-scale fishery sector with sustainable natural resource management and climate change adaptation plans is needed to protect ecosystem integrity. Over a period of nearly five years the project led by Rare, the Micronesia Conservation Trust and the Global Island Partnership (GLISPA), mainstreamed Ecosystem-based Adaptation measures into the Small-Scale Fisheries Sector in Indonesia, the Philippines, Palau and the Federated States of Micronesia. Small-Scale Fishers were empowered to identify and adopt Ecosystem-based-Adaptation measures, and local leaders were trained in behavioural change methodology and technical trainings to ensure that capacity stays within the communities and enables replication.

With the closure of the Fishing For Climate Resilience project, a lessons learned report is currently in production and will be launched in March 2023. The report will highlight the main achievements and lessons-learned of the Fishing for Climate Resilience project. The report will take stock of the project's impact and reflect on behaviour-centred approaches to EbA in coastal communities in support of local resilience and implementation of NDCs and Green Recovery strategies.

Read more about the project and find the upcoming lessons learned report here. Contact Frederik Stapke for more information.

### Eastern & Southern Africa

### Mozambique: Building Resilience in the Coastal Zone Through Ecosystem-based Adaptation in the Greater Maputo Area 2022-2025

The Republic of Mozambique is located in South-eastern Africa, with over 2,500 kilometres of coastline. The Greater Maputo Area, which includes the nation's capital, is home to over 3 million people. Mozambique is rich in natural resources, including mangroves, wetlands, forests and mineral resources. A project is aiming to reduce the vulnerability of urban and periurban communities in the GMA to climate change impacts by restoring and protecting key ecosystems — a strategy known as 'ecosystem-based adaptation'. The project is implementing EbA solutions in 7 pilot communities, along with building institutional capacity to implement EbA in future, developing local adaptation plans, promoting climate-resilient livelihoods, building rainwater harvesting systems, and more.

Read more about the project here. Contact Jessica Troni for more information.



The Greater Maputo Area of Mozambique

### Regenerative seascapes for people, climate, and nature in the Western Indian Ocean 2023 - 2026

Mission inclusion and IUCN, with funding from Global Affairs Canada, will conduct an international cooperation project to reduce the physical and socio-economic vulnerability of East African coastal communities to the devastating effects of the climate change.

The Regenerative Seascapes for People, Climate, and Nature project will be implemented in coastal and marine regions of the West Indian Ocean, in Kenya, Tanzania, Mozambique, Madagascar and the Comoros. Biodiversity loss and fish stock depletion caused in large part by the climate crisis are major challenges for these communities. The project will directly benefit 350,000 people, including 225,000 women and 12,500 people in vulnerable and marginalised situations, and includes three major objectives: improving biodiversity conservation, implementing sustainable and effective management of marine protected areas for climate adaptation, and economic empowerment of women in the blue economy, i.e., sustainable use of marine and coastal resources. This will demonstrate the role of integrated approaches – biodiversity conservation and social development – in addressing the climate crisis.

Read more about the project here. Contact Wendy Atieno for more information

#### **Ecosystem-Based Adaptation and Mitigation in Botswana's Communal Rangelands**

*June 2022 – June 2030* 

The Project, funded by the GCF, will simultaneously reduce degradation of Botswana's rangelands while improving the condition of livestock to increase the resilience of Botswana's most vulnerable populations and the local economies where they live. The Project activities will also result in significant emissions reductions by increasing the carbon sequestration potential of the landscape and by reducing enteric emissions from livestock through improved management and fodder. Finally, the Project will generate significant co-benefits for biodiversity, ecosystem health, water conservation, and overcoming barriers to move towards an inclusive and diversified climate resilient economy for Botswana

Contact Letlhogile Modisa and Camila Donatti for more information.

#### South African Rangeland Restoration for Climate, Community & Water Natural Climate Solutions March 2022 - 2025

In this project, Conservation International, will conserve rangeland in cooperation with local communities with the goal to improve the living standards of residents by improving the quality of livestock farming and conserving water resources.

Read more about the project here. Contact Rosanne Stanway for more information.

### Twin Rivers: Research and Exchange between Uganda and Belgium

August - December 2022

In Uganda, Join For Water and its local partners JESE and NRDI, with the support of the province of Flemish Brabant (Belgium), are working on various activities to improve access to water, restore wetlands, and strengthen the resilience of the landscape and its inhabitants to the effects of climate change. Just as twin cities exist, a 'twin river link' has been set up between the Mpanga river basin in Uganda and the Getes river basin in Flanders. Within this initiative, the exchange of knowledge and experiences on the protection and conservation of rivers and riparian zones was central. These zones can act as nature-based solutions to mitigate the impacts of floods and droughts, but are often severely degraded. Even though the context and environment are different for both river basins, comparing policy and legislation on how these zones can be better managed resulted in new insights and frameworks for future work.

Read more about the project here. Contact Kim Vercruysse for more information.

# Restoring nature and peace threatened by climate change: monitoring human security benefits of EbA in Kenya February 2022 – December 2023

In the Chyulu Hills of south-eastern Kenya, this project will work with indigenous Maasai communities to restore 11,000 hectares of grasslands to improve pastoral livelihoods and explore the connections between climate adaptation, ecosystem restoration and human security through evaluation of the potential of grassland restoration to reduce human-human and human-wildlife conflict driven by climate change. With support from the Global EbA Fund, Conservation International will support complementary research on conflict sensitivity and climate resilience. The project will demonstrate the linkages between grassland restoration and conflict resolution, identify climate-resilient and conflict-sensitive practices to inform the improvement of land management plans and grassland restoration, and increase the awareness and support of local NGOs, local communities, traditional local authorities, and national and international decision makers on those linkages and practices.

Read more about the project here. Contact Camila Donatti for more information.

# Plans for 2023

### **Events Planned in 2023**

2023

### 28 February - 2 March | Coordination workshop: Opportunities to promote EbA and Green finance for climate change adaptation in Manabí - Ecuador

The EbA LAC Program in Ecuador is organising this multi-stakeholder space with representatives from the public, private, academic and civil society sectors of the intervention areas in Manabí; it aims to socialise the progress of the program, as well as to identify opportunities to strengthen local governance for EbA scaling-up. A second workshop will aim to strengthen the local financial cooperative sector through awareness-raising sessions on green finance and EbA. Representatives from financial cooperatives, municipality directors of productive and economic development and public institutions will participate in the event. More intensive training cycles will follow with these cooperatives for scaling-up EbA solutions such as agrobiodiversity and agroforestry systems, sustainable and resilient livestock, landscape restoration, ecosystem protection and sustainable bamboo management.

For more information, contact Carla Gavilanes and Erik Camelos.

1 March 2023

### Risk reduction through sustainable ecosystem management: science, technology and nature-based solutions in Uruguay

This session in Punta del Este, Uruguay will explore what are the necessary elements to build effective solutions based on ecosystems, and will discuss the aspects that favour the meaningful participation of various actors in the construction of NbS for risk reduction.

Read more here. For more information, contact Maria Abogado.

2 - 3 March 2023

### Mozambique National Dialogue Platform on Environment, Climate Change and Territorial Development – Mangrove forests as key climate resilience areas

Under the leadership of the Minister of Land and Environment, IUCN Mozambique is co-organizing the National Dialogue Platform which aims at creating a systematic dialogue space, involving Government, civil society and development partners on pertinent issues linked to biodiversity, climate resilience and nature-based solutions. For Mozambique, a country with the largest mangrove area in the region, coastal mangrove forests are essential to promote resilience, income and safe nutrition. This opening Dialogue session will launch a series of debates that will contribute to updating the NDC and inform the National Sustainable Development Council, CONDES, on key activities, lessons learned, and challenges and opportunities on environment and climate change, from policy to implementation.

The national dialogue will continue with multiple sessions throughout 2023. For more information on how to get involved, contact Isabel Ramos.

18 March 2023

#### Fostering Blue Economy Seminar for Zanzibar's High-level government officials

This seminar is part of the second phase of Save Our Mangroves Now!. It is an awareness seminar preparing Ministers, Directors, and Principal Secretaries for debating the proposed Zanzibar Fisheries Act (2022) which include provisions on mangrove management, hence "Ensuring that mangrove ecosystems, as part of land and seascapes are conserved, restored and sustainably used to the benefit of people and nature locally and globally". WWF through SOMN 2.0 project in collaboration with SWIO SBE Project will facilitate the seminar, which will take place in Zanzibar. Among others, the seminar will highlight important policy reform documents to enhance proper governance in the Blue Economy process with focus on the following: (i) The Marine Resource Conservation Act of 2022, (ii) The Zanzibar

Fisheries Act of 2022, and (iii) The Zanzibar Fisheries and Marine Resources Research Institute Act of 2022.

For further information, contact Mr. January Ndagala and Eng. Omar Muhamed.

20-24 March 2023

#### Western Indian Ocean Mangrove Network Regional Stakeholders Workshop

This workshop is split into three sessions and focuses on the organisational development of the WIOMN as well as the Regional Mangrove Vision and associated roadmap for the development of the Regional Mangrove Action Plan. The first session's objectives (20th – 21st March 2023) are: (i) Revision of Draft WIOMN Strategic Plan 2023-2027, (ii) Revision of Elaborated Options for Regional Mangrove Vision (RMV) and roadmap for development of Regional Mangrove Action Plan (RMAP). The objectives of session two (22nd–23rd March 2023) include: (i) Revision of WIOMN Administrative Manuals (operation procedures), (ii) Revision for input of country-level information in WIOMN Website, (iii) Brainstorming on the establishment of WIOMN Country chapters. The third session (25<sup>th</sup> March 2023) will be a WIOMN's Board of Trustees meeting. The objectives of the meeting are: (i) Endorsement of WIOMN tools including WIOMN Strategic Plan 2023 – 2027, Administrative manuals (operation procedures), and WIOMN Website (ii) Discuss WIOMN's annual plan of work, (iii) Discuss the development of a regional publication on mangrove conservation and restoration efforts for climate resilience.

For more information, contact Dr. Mwita Mangora and Mr. January Ndagala.

21 March 2023

#### Celebration of the International Day of Forests in Latin America

The event aims to celebrate the International Day of Forests, to recognize the work being done in the Latin American region to protect the forests and launch a drawing contest on EbA. This will take place as part of the EbA LAC Program.

For more information, contact Diana Ramírez.

22 - 24 March 2023

#### **UN Water Conference 2023**

The UN 2023 Water Conference in March must result in a bold Water Action Agenda that gives our world's lifeblood the commitment it deserves.

Read more about the UN Water Conference here.

22-24 March 2023

# International conference on mountain ecosystems – Biodiversity and adaptation under climate change scenarios

Mountain ecosystems have ecological, aesthetic, and socioeconomic significance, not only for people living there, but for those living beyond—especially those in the lowlands who benefit from the ecological services mountains provide. Mountains represent unique areas for detecting climate change and assessing climate change impacts. Increasing awareness on climate change impacts the mountains, mountain ecosystems, and mountain communities.

Read more about the conference here. Contact Anita Pandey and Nakul Chettri for further details.

27 March 2023

#### NAP Expo 2023

Hosted in Santiago, Chile in 2023, the NAP Expo is an annual outreach event organised by the Least Developed Countries Expert Group (LEG) under the UNFCCC, in collaboration with various bodies and organisations, to promote the exchange of experiences and foster partnerships between a wide range of actors and stakeholders on how to advance National Adaptation Plans (NAPs).

The NAP Expo provides opportunities for everyone to conduct technical sessions, training, demos, exhibitions, and other special activities toward the objective and theme of the event.

Read more about the NAP Expo here.

26 April 2023

# Humanitarian Networks & Partnerships Weeks (HNPW) 2023: Nature-based Solutions for Climate Resilience in Humanitarian Action

Too often, humanitarian crises evolve into multi-generational communities that struggle with shocks and stresses, while having limited pathways out of poverty towards self-reliance. A commitment to a

paradigm shift toward long-term landscape-scale responses that integrate nature, risk reduction and affected peoples into the response strategy can enable us to build immediate and long-term resilience. Coinciding with the celebration of the 25th anniversary of the Sphere standards, this session launches new guidance on the role of nature in promoting climate resilience in humanitarian response: "Nature-based Solutions for Climate Resilience in Humanitarian Contexts — A Sphere Unpacked Guide", produced by the FEBA-PEDRR-EHAN NbS in Humanitarian Contexts Working Group.

Learn more about the working group on the FEBA website here.

Contact Jenn Hoffman, Delilah Griswold and Veronica Ruiz Garcia with any questions about the session and how to get involved.

May 2023; Q3 2023

#### Training of trainers in Costa Rica and Guatemala on Ecosystem-based Adaptation

This training —as part of the EbA LAC Program— will strengthen the climate planning capacities of stakeholders, The ToT is aimed at individuals from public institutions, civil society with interest/competence in natural resource management. This will take place as part of the EbA LAC Program.

As part of the capacity building component, this course aims to strengthen capacities on EbA among representatives from public and private sector institutions working on climate change adaptation. The methodology ToT aims for participants to transfer the knowledge on EbA to land users in rural areas.

Contact Arlene López and Carol Peña for further details about how to get involved in Costa Rica.

Contact Rudy Cabrera and Rafael Ávila for further details about how to get involved in Guatemala

5 - 15 June 2023

#### 58th Sessions of the UNFCCC Subsidiary Bodies (SBSTA 58)

The 58th sessions of the UNFCCC Subsidiary Body for Implementation (SBI) and Subsidiary Body for Scientific and Technological Advice (SBSTA) are scheduled to take place in June 2023 in Bonn, Germany.

At the Ocean-Climate Dialogue at SBSTA 58, FEBA and the CI Global Green-Gray Community of Practice plan to launch a joint policy brief on the inclusion of green-gray infrastructure in NDCs and NAPs. This builds on a history of collaborative work on green-gray approaches to adaptation, and publications such as the *Practical Guide to Implementing Green-Gray Infrastructure* and the UNFCCC Technology Executive Committee brief *Innovative Approaches for Strengthening Coastal and Ocean Adaptation: Integrating Technology and Nature-based Solutions.* This new brief sets out recommendations to help countries set ambitious green-gray infrastructure goals for adaptation in their national planning, as well as offering strong examples of relevant language across existing NDCs.

More information on SBSTA 58 is available on the UNFCCC website here.

For more information about the Green-Gray Infrastructure in NDCs Brief and the Ocean-Climate Dialogue, contact Jill Hamilton.

May - June 2022

#### 9th EbA Knowledge Day

The 9<sup>th</sup> annual EbA Knowledge day will take place in May or June 2022 on the periphery of the SBSTA 58, in a virtual or hybrid format. In 2023, the event will be jointly organised by UNEP and IUCN. The event will provide a platform for policy makers, practitioners, and researchers to discuss current opportunities and challenges on EbA.

Find the documentation of the last EbA Knowledge Day here. Contact Delilah Griswold for further information.

May - June 2022

#### Friends of EbA Members' Meeting

The Friends of Ecosystem-based Adaptation (FEBA) Members' Meeting is an opportunity for FEBA members to share events, knowledge product and project highlights from the past year, and to discuss priority points for the coming year.

Further information and announcements related to this year's FEBA Members' Meeting will be posted on the FEBA website. Find last year's meeting report here and the slides from the FEBA Member Updates and FEBA Working Group Updates here.

Contact Delilah Griswold for more information.

#### 28 August - 1 Sept 2023

#### 8th Asia-Pacific Climate Change Adaptation Forum (APAN Forum)

Considered Asia-Pacific's largest and longest-standing gathering of adaptation practitioners to share information, knowledge and best practices in adaptation and resilience-building, the APAN Forum is the biennial flagship event of the Asia Pacific Adaptation Network Secretariat, hosted within the UNEP Regional Office for Asia and the Pacific.

More information on the APAN Forum is available here. Contact the APAN Secretariat for further details.

#### 5 - 19 September 2023

#### 78th Session of the UN General Assembly (UNGA 78)

The 78th Session of the UN General Assembly will take place from 5-19 September 2023.

More information will be available here closer to the date.

#### 2 - 6 October 2023

#### **Adaptation Futures 2023**

The Adaptation Futures Conference series is the premier international conference devoted entirely to climate change adaptation, bringing together researchers, policymakers, practitioners, industry representatives and communicators to present their work on adaptation, discuss emerging and cutting-edge issues, learn what others are doing, and build networks.

More information on the Adaptation Futures conference is available here.

#### 30 Nov - 12 Dec 2023

#### **UN Climate Change Conference 2023 (UNFCCC COP 28)**

The 28th session of the Conference of the Parties (COP 28) to the UNFCCC will take place in the United Arab Emirates. FEBA will be actively involved in events on nature-based solutions for adaptation throughout COP.

Read more about the COP28 on the UNFCCC website here. More details on FEBA's engagements will be published on the FEBA website and shared with the FEBA network in due course. Contact Delilah Griswold for more about FEBA's engagement at the COP28.

# Publications and communications planned in 2023

## Nature-based Solutions for Climate Resilience in Humanitarian Contexts – A Sphere Unpacked Guide Jenn Hoffman, Highwatermark, Sarah Henly-Shepard, Disaster Resilience L.L.C

Growing disaster risk, driven in part by large-scale environmental degradation, threatens to exceed the humanitarian sector's capacity to respond in the coming decades. With over 20 million people a year displaced by climate-related natural hazards there is an urgent need to find new approaches to reducing risk and saving lives. The environment in which people live and work is essential for their health, well-being, and recovery from crisis, yet it is often overlooked within humanitarian crises. Environmental degradation exacerbates disaster risk and undermines humanitarian and development gains.

Nature-based solutions provide for human wellbeing and protecting the environment. They are a tangible solution that can build immediate and long-term resilience for those affected by crises. This Unpacked Guide focuses on NbS for resilience in humanitarian contexts, including for disaster risk reduction and climate change adaptation.

Developed in partnership with Sphere, was informed by the contributions of two Sphere focal point stakeholder roundtables and by the contributions of Working Group members and a broad range of experts. It:

- Outlines how NbS can provide sustainable solutions to humanitarian challenges.
- Identifies relevance to Sphere's technical chapters: water, sanitation and hygiene; food security and nutrition; shelter; and health.
- Identifies best practices for planning, designing, implementing, and monitoring NbS approaches in affected communities as part of preparedness, response, and early recovery resilience strategies.
- Offer practical tools and resources for applying NbS in humanitarian contexts.

The guide will be launched on 26 April 2023, 14:00 – 15:30 CEST (UTC+2) at an event at the Humanitarian Networks & Partnerships Weeks (HNPW) 2023. Contact Jenn Hoffman and Sarah Henly-Shepard for more information about the guide.

Learn more about the working group and joint efforts on this theme at the FEBA website here. Contact Delilah Griswold and Veronica Ruiz Garcia for information about the working group.

# Designing Nature-based Solutions for Health: Integrating Biodiversity, Climate Change and Health Outcomes WHO, IUCN and FEBA

The flagship report on **Nature-based Solutions for Health** will be a first-of-its-kind consolidation of knowledge on how NbS can inform health outcomes, targeted to health practitioners. The report will cover the design, implementation, governance and financing of NbS for health, with concrete guidance and tools to take forward NbS for health interventions, while sharing inspirational proven case studies of NbS for health in practice. The report will (1) examine the relationships between biodiversity, ecosystem degradation, climate and (infectious and noncommunicable) disease emergence, with a view to maximising health co-benefits of sustainable ecosystem management and restoration; (2) assess the role of environmental, social and economic determinants of health and develop tools to strengthen cross-sectoral collaboration, policy coherence and the operationalization of the One Health Approach; and (3) Evaluate climate change as a cross-cutting driver and amplifier of ecosystem degradation, biodiversity loss and ill health, and developing policy guidance to maximise the health co-benefits of ecosystem-based adaptation and mitigation efforts.

This report will be a product of the joint working group on Biodiversity, Climate, One Health and Nature-based Solutions. The content has been developed through a series of meetings and joint events on NbS and Health throughout 2022, including:

- UNFCCC COP27: Nature-based Solutions for Climate Change and Human Health
- CBD COP15: Mainstreaming Biodiversity and Climate Solutions for Sustainable and Healthy Food Systems;
- Prince Mahidol Award Conference 2023: Integrating Health into Nature-based Solutions

Contact Cristina Romanelli and Delilah Griswold for further information. Learn more about the EWG here.

#### Policy Brief: Integrating Green-Gray Infrastructure in NDCs

FEBA and the Global Green-Gray Infrastructure Community of Practice

At the Ocean-Climate Dialogue at SBSTA 58, FEBA and the CI Global Green-Gray Community of Practice plan to launch a joint policy brief on the inclusion of green-gray infrastructure in NDCs and NAPs. This builds on a history of collaborative work on green-gray approaches to adaptation, and publications such as the *Practical Guide to Implementing Green-Gray Infrastructure* and the UNFCCC Technology Executive Committee brief *Innovative Approaches for Strengthening Coastal and Ocean Adaptation: Integrating Technology and Nature-based Solutions*. This new brief sets out recommendations to help countries set ambitious green-gray infrastructure goals for adaptation in their national planning, as well as offering strong examples of relevant language across existing NDCs.

Contact Jill Hamilton and Rod Braun for further information. Learn more about the Green-Gray CoP here.

#### **Adaptation Gap Report 2023**

By UNEP

The Adaptation Gap Reports represent one of the UNEP's flagship reports. The report's primary objective is to inform the negotiators of the UNFCCC Member States, and the broader UNFCCC constituency, about the status and trends within climate adaptation at global and regional levels. The AGR also provides a set of science-based options to policymakers and decision-makers to increase ambition in adapting to climate change across key climate-sensitive sectors.

View the 2022 Adaptation Gap Report, "Too Little, Too Slow - Climate Adaptation failure puts world at risk" here.

Contact Marcus Nield for more information.

#### Inagural "State of Nature-based Solutions Report" of the ENACT Partnership on NbS

Enhancing Nature-based Solutions for an Accelerated Climate Transformation (ENACT) Initiative

Launched at COP27, the ENACT initiative aims to accelerate collective global efforts to address climate change, land and ecosystem degradation, and biodiversity loss through Nature-based Solutions. ENACT will serve as a hub for Party and non-state actors working on NbS, to support collaboration between existing technical partnerships and initiatives working on different areas of NbS, and collectively foster an enabling environment for NbS across the Rio Conventions.

One objective of the ENACT partnership is to build a united, collective narrative of the global value and impact of NbS through the publication of an annual **State of Nature-based Solutions** report for the COP Presidencies.

ENACT is co-chaired by the governments of Egypt and Germany, with IUCN serving as Secretariat. FEBA played a critical role in the incubation, development and launch of the initiative, and will be deeply involved in the development and consultation of the inaugural State of Nature-based Solutions Report chapters on adaptation and resilience.

Contact Delilah Griswold for more information.

#### How Digital Technology Will Help The World Adapt To Climate Change

**UNEP** 

UNEP's Foresight Briefs highlight a hotspot of environmental change, feature an emerging science topic, or discuss a contemporary environmental issue. They provide a systematic way of examining possible alternative futures and outcomes of emerging environmental issues that can support strategy and policy and also inform decision-making today.

**Contact Marcus Nield for more information.** 

### Governance for Ecosystem-based Adaptation: CLIMA – The evaluation tool

Alejandro Iza; Rocío Córdoba-Muñoz.

To effectively achieve its objectives, EbA must be based in science and anchored in policies and laws.

CLIMA is a practical tool for assessing governance for EbA and its different components. It guides the user through the identification of gaps, and deficiencies in the policy, legislation, institutional set up, and processes, providing indicators for their evaluation, as well as recommendations for their improvement. CLIMA is based upon over two decades of learnings in project implementation in Latin America, and the theoretical underpinning contained in the report *Governance for Ecosystem-based Adaptation* (Iza, 2019).

The CLIMA tool will be launched in 2023. For any questions, contact Facundo Odriozola.

### Policy brief series on Protection and Conservation of freshwater resources: How to establish sustainable solutions for people and nature?

Join For Water

At Join For Water, we take on the mission to protect and conserve freshwater resources to help ensure long-term access to water for people and nature. Finding a balance between environmental protection and human needs for natural resources is essential. Yet, no one-size-fits-all nature-based solution exists. Join For Water aims to establish sustainable mechanisms to support long-term protection and conservation of freshwater resources, with explicit consideration for people and the environment. How we aim to do this financially, technically, socially or politically in 8 different countries and ecosystems will be presented in this policy brief series.

Contact Dr. Kim Vercruysse for more information.

### Implementing Nature-based Solutions for Urban Adaptation: a Latin America and Caribbean perspective UNEP

This publication aims at providing information and practical tools to guide urban planning processes in order to integrate climate risks and plan for medium and long-term urban resilience. Additionally, this resource will improve the understanding of the financial landscape and opportunities to mobilize and access sustainable finance to invest in and ensure the maintenance of NbS interventions.

The report will be available at www.cityadapt.com once published. Contact Ophelie Droualt for more information.

### MOOC on Urban Nature-based Solutions in LAC UNEP

In the framework of the Nature4Cities Readiness project implemented by UNEP in Latin America and the Caribbean, a Massive Open Online Course will be launched in 2023 in Spanish. The course's main audience will be decision-makers and key professionals working on urban planning in LAC cities, aiming at building their capacities in the implementation of NbS for climate adaptation and the integration of this innovative focus in urban plans. The course will be available on the project website during the fall of 2023.

The MOOC will be available at www.cityadapt.com in August 2023. Contact Ophelie Droualt for more information.





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