





ACTION PLAN FOR THE UN DECADE ON ECOSYSTEM RESTORATION, 2021-2030

Version August 2022

FOREWORD

Ecosystems are the web of life on Earth. From a grain of soil to the entire planet, every interaction and each living organism is indispensable to enable key ecosystem functions and processes that we all depend on. As long as the world continues to lose forests, pollute rivers, drain peatlands and overfish the oceans, we are continuing to jeopardize the priceless benefits that ecosystems provide. These include clean air, water, food, raw materials, but also protection from global threats such as food insecurity, water insecurity, climate change, and global pandemics.

With a growing world population and rising demand for resources, nature is under increasing pressure. We are using the equivalent of 1.7 Earths to maintain our current lifestyle – with stark inequalities between and within countries and regions. The people who are least responsible for resource overexploitation are most often those who suffer the worst consequences. Humanity is facing a triple planetary crisis – climate change, pollution, and biodiversity loss - an unprecedented dilemma that brings unknown scenarios. Only by stepping forward together and uniting the strength of the entire world will we be able to address this challenge.

Parts of the planet are flooding while other parts are in flames. We are experiencing record droughts, famines and diseases, and millions of people displaced from their homes. This is a climate crisis created by humans. To rein in a climate catastrophe and mass extinction, nature must be repaired. Time is running out, but there is still so much we can do. We look to the future with determination, enthusiasm, and resolve. Beyond the grim scale of current ecosystem degradation, there is an inspiring truth: incredible progress is already being made to conserve and restore ecosystems on the ground.

The UN Decade on Ecosystem Restoration 2021-2030 represents a rallying call to action across the world. It is a call to everyone: from regional, national to local governments; from Indigenous Peoples and local communities – guardians of most of the world's ecosystems – to private companies; financial institutions, from elders to youth. Researchers, farmers, civil society, decision-makers, women, and every single player is needed to preserve and revitalize life on Earth.

This Action Plan is the invitation for concrete action, to join forces, and take leadership to achieve the objectives set by the UN Decade on Ecosystem Restoration up to 2030.

We already have the knowledge and tools we need to halt degradation and restore ecosystems. Willingness is necessary, and long-term success will depend on our ability to catalyse a global movement that outgrows and outlives the 10-year timeframe.

We, humanity, are called to heal nature's wounds and restore the balance of every ecosystem. Let's take action now; the present and future generations depend on us.

Lucy Mulenkei

Co-Chair, Advisory Board

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ABBREVIATIONS AND ACRONYMS

CBD	Convention on Biological Diversity
СОР	Conference of the Parties
COVID-19	Coronavirus Disease 2019
CSO	Civil Society Organisation
FAO	Food and Agriculture Organization of the United Nations
FERM	Framework for Ecosystem Restoration Monitoring
GDP	Gross Domestic Product
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
MPTF	Multi-Partner Trust Fund
NAP	National Adaptation Plan
NBSAP	National Biodiversity Strategies and Action Plan
NDC	Nationally Determined Contributions
NGO	Non-governmental Organisation
OECD	Organisation for Economic Co-operation and Development
SDG	Sustainable Development Goal
SER	Society for Ecological Restoration
SOP	Standards of Practice
SEEA	System of Environmental Economic Accounting
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar

INTRODUCTION

Today we are faced with a challenge that calls for a shift in our thinking, so that humanity stops threatening its life-support system. We are called to assist the Earth to heal her wounds and in the process heal our own.

Wangari Maathai (2004 Nobel Peace Prize Laureate)

Ecosystems are the foundations of the planet – they sustain life on Earth. Protecting and restoring the world's ecosystems is critical to tackling biodiversity loss and climate change, while supporting livelihoods and wellbeing.

Healthy ecosystems provide food and clean water, mitigate climate change, support the pollination of crops and soil formation, and hold important recreational, cultural, and spiritual values. Yet from farmlands to forests, from oceans to urban areas, ecosystems are being degraded, driven by the unsustainable use and exploitation of nature. An estimated one million species of plants and animals face extinction, many within decades (IPBES, 2019). Forty per cent of the world's population are already negatively impacted by ecosystem degradation, the most vulnerable groups hardest hit. Every action that halts further damage is essential, and the sooner the better. Restoration offers the tools to recreate a balanced relationship with the ecosystems that sustain people and nature. It is also imperative for the economy; every dollar invested in ecosystem restoration creates up to 30 dollars in economic benefits.

To prevent, halt and reverse the degradation of ecosystems worldwide, the United Nations General Assembly, through Resolution 73/284, proclaimed 2021–2030 the UN Decade on Ecosystem Restoration (hereafter the "UN Decade"). Ecosystem restoration is vital to achieve the 2030 Agenda for Sustainable Development and the post-2020 global biodiversity framework. The Strategy for the UN Decade was developed throughout 2019 and 2020 in an open and collaborative process, built from input from over 1,000 organisations, institutions, governments, businesses and individuals. Since the UN Decade was publicly launched in June 2021, over a hundred and fifty organisations have joined as official partners and thousands of people are taking part in #GenerationRestoration – a science-based global movement for people and nature.

Between now and 2030, actions taken to restore ecosystems on every continent and in every ocean are critical to the mission of the UN Decade. It will only succeed if everyone plays a part. Countries have already committed to restoring a total of at least 1 billion hectares of degraded land by 2030. Protecting and restoring the earth's ecosystems is a mammoth task, with complex political, technical, and financial obstacles to overcome. But we are not starting from zero.

Generations of knowledge from local and indigenous communities, combined with cuttingedge science, can help chart a path toward a healthier, more symbiotic relationship with nature. Across the world, thousands of restoration initiatives, big and small, are underway, offering inspiration and best practices. The Great Green Wall aims to restore 8,000km of land across the entire width of Africa. In Belize, a combination of community-based restoration efforts and new legislation has helped to revive the country's once-endangered barrier reef system (Root, Tik, 2018; UNEP, 2019). In northern Pakistan, assisted natural regeneration of Chilgoza trees is helping to support local livelihoods and reduce pressure on forest resources (UNEP, 2022). Restoration initiatives from around the world will be showcased through the UN Decade's World Restoration Flagships programme and Digital Hub.

PURPOSE AND STRUCTURE OF THE ACTION PLAN

This action plan sets out the next steps to collectively work towards the goals and vision of the UN Decade on Ecosystem Restoration. Moving from strategy to action, this plan aims to mobilise all stakeholders around key priority areas for restoration – the Restoration Challenges - and set in motion a wave of activity to protect and restore ecosystems and make peace with nature.

This action plan is the outcome of consultations with the UN Decade on Ecosystem Restoration partner network in 2021 and 2022 and the collaborative input of the UN Decade core team, Strategy Group, Advisory Board and Task Forces. This is a global action plan encompassing all regions of the world, all its diverse ecosystems and inhabitants, both human and nonhuman. It is aimed at UN Decade partners and everyone who wants to be a part of restoring Earth by 2030. This includes policy makers, businesses, NGOs, civil society, scientists, educators, and donors.

Section 1 will present a background to ecosystem restoration and the vision, goals, and principles of the UN Decade on Ecosystem Restoration. Section 2 will introduce the Restoration Challenges and a framework for action, while Section 3 describes how the action plan will be implemented, covering coordination, communication, and finance.

1. ECOSYSTEM RESTORATION AND THE UN DECADE

1.1. Ecosystem restoration: What is it and why do we need it?

Ecosystems are places where plants, animals and other organisms, in conjunction with the landscape around them, come together to form the web of life. They exist at all scales, from a grain of soil to the entire planet (UNEP, 2021a). The UN Decade focuses on eight broad categories of ecosystems:

- farmlands
- forests
- freshwater
- · grasslands, shrublands and savannahs
- mountains
- · oceans and coasts
- peatlands
- urban areas

In all countries of the world, ecosystems are being degraded, in many cases at an accelerating rate, driving biodiversity loss and climate change. Currently, 75 per cent of the terrestrial environment, 40 per cent of the marine environment, and 50 per cent of streams show severe impacts of degradation (IPBES, 2019).

What drives ecosystem degradation? Ecosystems become degraded as a direct result of human activity (e.g. changes in land and ocean use, resource extraction, pollution, introduction of invasive alien species and emission of greenhouse gases) and natural events (e.g. earthquakes and extreme weather events). Behind these are indirect drivers - economic, demographic, technological, governance and cultural factors – that lead to ecosystem degradation. (IPBES, 2018, 2019). For example, intensified farming techniques, human migration, an unsustainable economic model, and an increasing disconnect between people and nature, are all underlying and interconnected causes of degradation.

Ecosystem degradation, biodiversity loss and climate change are interconnected and must be tackled together. To address this complex challenge requires a massive portfolio of solutions, the collective action of diverse groups of people, and system-wide transformative change. Ecosystem restoration represents one fundamental part of this mission, offering promising opportunities to restore the health and resilience of ecosystems.

Ecosystem restoration refers to "the process of halting and reversing degradation, resulting in improved ecosystem services, and recovered biodiversity" (UNEP, 2021b, p. 7). In the

context of the UN Decade, ecosystem restoration encompasses a wide continuum of activities that contribute to protecting intact ecosystems and repairing degraded ecosystems¹. Examples include assisting natural regeneration, enhancing organic carbon in agricultural soils, increasing fish stocks in overfished zones, green infrastructure, or removing pressures so that nature can recover on its own, for example by controlling invasive species.

Benefits of action. Costs of inaction.

The benefits of investing in ecosystem restoration far exceed the costs. Life on Earth, our societies and economies all depend on healthy ecosystems. Currently, ecosystem degradation is negatively impacting the well-being of about 40 per cent of the global population, pushing the planet towards a sixth mass extinction and incurring losses of more than 10 per cent of the annual global gross product (IPBES, 2018a). If present trends continue, by 2050 the combined effects of land degradation and climate change could see 95 per cent of the world's land becoming degraded, half of the global population living in water scarce areas and the migration of between 50 to 700 million people (IPBES, 2018, 2019).

Restoring ecosystems, on the other hand, can improve access to clean water, enhance food security, provide jobs, reduce carbon emissions and build more resilient ecosystems and communities. Ecosystem restoration makes sound economic sense. More than half of the world's total GDP is dependent on nature (World Economic Forum, 2020) and every dollar invested in restoration creates up to 30 dollars in economic benefits (Ding *et al.*, 2017). Restoring forests, peatlands and mangroves, along with other natural solutions, can contribute to over one-third of the greenhouse gas mitigation needed by 2030 (Griscom *et al.*, 2017).

Restoration for people and nature

Humans are part of nature. People have inhabited and shaped most of terrestrial nature for at least 12,000 years (Ellis *et al.*, 2021). Biodiversity conservation and ecosystem restoration have been a part of life for many indigenous and local communities for centuries, long before these became formal scientific disciplines, fields of practice and global movements. At least 44 per cent of the Earth's terrestrial area, home to 1.8 billion people, has been identified as needing immediate conservation and restoration attention (Allan *et al.*, 2021). Indigenous peoples, who represent approximately 5 per cent of the global population, manage or have rights over about 40 per cent of all terrestrial protected areas and ecologically intact landscapes (Garnett *et al.*, 2018).

This means that efforts to protect and restore nature need to be designed in partnership with local communities. They must take into account social, cultural and economic dimensions such as power relations, inequalities, livelihood impacts and trade-offs. Central to all activities of the UN Decade is the need to recognise the human rights of all people. The

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¹ 'Degraded ecosystems' refers to terrestrial, freshwater and marine systems that have been converted or altered, including in agricultural landscapes and urban environments. 'Repair' encompasses processes and biotic/abiotic components. (UNEP and FAO, 2020)

efforts of the UN Decade will only be successful if indigenous peoples, local communities and women and girls are at the centre; if local wisdom, human rights, and tenure rights are respected and upheld. By learning from local experts, providing support and removing barriers, a generation of restoration champions can play a central role in achieving the UN Decade - from mountain to coastal communities, from city dwellers to rural farmers. Women's meaningful participation in the design and implementation of restoration projects is essential for effective and equitable outcomes. This will involve overcoming barriers so that women can lead restoration activities across grassroots, science and policy levels.

The rationale for taking action to protect and restore ecosystems is abundantly clear. The next section explains the overarching vision and goals that will guide actions under the UN Decade.

1.2. UN Decade goals and pathways to action

The vision for the UN Decade is a world where – for the health and wellbeing of all life on Earth and that of future generations – the relationship between humans and nature has been restored, where the area of healthy ecosystems is increasing, and where ecosystem loss, fragmentation and degradation has been ended.

Three main goals underpin the vision of the UN Decade's Strategy:

Goal 1: Enhancing global, regional, national, and local commitments and actions to prevent, halt and reverse the degradation of ecosystems.

Goal 2: Increasing our understanding of the multiple benefits of successful ecosystem restoration.

Goal 3: Applying this knowledge in our education systems and within all public and private sector decision-making.

By achieving these goals, the UN Decade will assist societies globally to embark on a new ecological, economic, and social trajectory throughout the 21st century and beyond.

The success of the UN Decade relies on the ambitious and collaborative efforts of society, combining diverse approaches, activities, perspectives, and knowledges. To achieve the widespread and meaningful impact that is needed, the UN Decade aims to catalyse and support a peer-driven, participatory global movement. The movement (branded #GenerationRestoration) self-organises and self-orchestrates in a decentralised way but follows clear guiding principles on appropriate ecosystem protection and restoration activities (see the principles for ecosystem restoration in section 1.4).

Barriers to progress

The UN Decade will address six primary barriers to catalysing a global movement that promotes and implements large-scale restoration. These barriers relate to public awareness, political will, legislative and policy environments, technical capacity, finance, and scientific research.

Barrier 1 - Public awareness: There is a great lack of awareness of the negative effects that ecosystem degradation is having on the well-being and livelihoods of billions of people, the financial costs of this degradation, and the profound societal benefits that would come from major investments in ecosystem restoration.

Barrier 2 – Political will: Despite the economic benefits that restoration investments would bring societies, the pressure on decision-makers in public and private sector to invest in long-term ecosystem restoration initiatives is relatively small compared with the pressures to invest in other sectors like health care, manufacturing, education, and defence.

Barrier 3 – Legislative and policy environments: There is a scarcity of legislation, policies, regulations, tax incentives and subsidies that incentivise a shift in investments towards large scale restoration and production systems, value chains and infrastructure that do not degrade ecosystems.

Barrier 4 – Technical capacity: National governments, local governments, local NGOs and private companies possess limited technical knowledge and capacity to design and implement large-scale restoration initiatives.

Barrier 5 – Finance: There is a lack of finance to invest in large scale restoration because of the perceived and/or real risks involved in such investments.

Barrier 6 – Scientific Research: Limited investment in long-term research, including social as well as natural sciences, that focusses on innovation to improve restoration protocols through time, is a barrier to progress.

Aside from these six primary barriers, participants in the global movement will encounter a range of barriers along the way, from local ecological, economic, and social factors within specific landscapes to global geopolitical factors and economic forces.

To overcome these barriers and achieve its vision, the UN Decade will work through three pathways:

Pathway I: Global movement

Through a peer-driven, participatory global movement this pathway seeks to increase the intent of societies worldwide to restore degraded landscapes on a large scale. It will do this by raising awareness of the benefits of ecosystem restoration, showcasing the economic returns, and spreading knowledge to shift behaviours to reduce ecosystem degradation.

Pathway II: Political will

By empowering leaders in the public and private sectors to champion restoration and building on the momentum of the global movement, Pathway II focuses on fostering political will for ecosystem restoration. UN Decade partners and the core team will engage with

government ministries and departments to mainstream restoration into national budgets, development plans and climate change strategies and amend legislative, regulatory and policy frameworks to halt fragmentation and degradation of ecosystems and catalyse large-scale ecosystem restoration.

Pathway III: Technical capacity

Pathway III aims to generate the technical capacity that is needed to effectively restore ecosystems at scale. It will do this by providing institutions and practitioners the best available methods for designing, implementing, monitoring and sustaining ecosystem restoration initiatives. The aim is to upscale ecosystem restoration globally by strengthening the role of science, indigenous knowledge and traditional practices and applying best technical knowledge and practice while building the capacity of a wide range of stakeholders.

1.3. Ecosystem restoration at the centre of local and global environmental action

The UN Decade is designed to complement and enhance existing environmental policies, goals, and commitments at local, national, regional, and international level. Specifically, it contributes to the Sustainable Development Goals (SDGs) and the 2030 Agenda, the post-2020 global biodiversity framework under the Convention on Biological Diversity, the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC), Land Degradation Neutrality targets under the United Nations Convention to Combat Desertification (UNCCD), and the Bonn Challenge target of restoring 350 million hectares of degraded land. There are synergies with other international initiatives, among them the Global Mangrove Alliance and the Blue Carbon Initiative, which aim to conserve and restore mangrove habitats and coastal and marine ecosystems, respectively.

Governments around the world have already committed to restoring a total of nearly **1 billion** hectares of degraded land by 2030 (Sewell, van der Esch and Löwenhardt, 2020). Ecosystem restoration, complementing conservation, can make a significant contribution to all 17 Sustainable Development Goals, in particular life below water (SDG 14) and life on land (SDG 15), as well as ending poverty (SDG 1), hunger (SDG 2), good health and well-being (SDG 3) and clean water and sanitation (SDG 6). The post-2020 global biodiversity framework aims to halt the loss of biodiversity by 2030, and achieve recovery and restoration by 2050, with key targets for restoration and conservation by 2030 (targets 2 and 3)².

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² The wording of the targets is yet to be agreed. The draft framework includes "Target 2. Ensure that at least 20 per cent of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems." and "Target 3. Ensure that at least 30 per cent globally of land areas and of sea areas, especially

At regional level, increasing restoration targets are emerging through legal frameworks and voluntary initiatives. Examples include the Nature Restoration Law of the European Union, Initiative 20x20 in Latin America and the Caribbean, the African Forest Landscape Restoration Initiative, AFR100, and the Middle East Green Initiative. At national level, the UN Decade aims to mainstream restoration into national budgets, development plans and biodiversity and climate strategies. To ensure actions are translated to the local context, action plans are being developed by regional offices such as Latin America and the Caribbean.

There are opportunities for collaboration across the UN, linking with the UN Decade of Ocean Science for Sustainable Development (2021–2030) and the UN Decade of Family Farming (2019–2028), and the International Decade of Indigenous Languages (2022-2032).

Restoration is complementary to, not a replacement for, conservation and climate action

Ecosystem restoration is not a substitute for conservation, but they go hand in hand. Conservation is vital to prevent further degradation and biodiversity loss, while restoration can help recover endangered species and enhance ecosystem services. Close to half of the Earth's land has been identified as needing immediate conservation and restoration attention (Allan *et al.*, 2021). Restoration gains will be most effective when combined with the conservation of remaining natural ecosystems (Strassburg *et al.*, 2020) and it is often more cost-effective to conserve intact ecosystems rather than restore degraded ones (OECD, 2019). As such, the UN Decade has a dual focus on protecting as well as restoring ecosystems, so that shared goals and trade-offs are identified, and priorities are decided on jointly between conservation and restoration policy makers and practitioners. Likewise, while ecosystem restoration can contribute to climate mitigation, much more is needed to achieve net zero targets. Restoration can only be successful, in the long term, in the context of a wider socio-economic transition towards a nature-positive economy, by decarbonising economic activity and redesigning systems to put wellbeing at the centre (FAO *et al.*, 2021, OECD, 2022).

1.4. Principles for ecosystem restoration

What makes good restoration? The <u>principles for ecosystem restoration</u> underpin all of the restoration activities that are part of the UN Decade and are committed to by all UN Decade Partners. They are applicable across all sectors, biomes, and regions.

areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes." (CBD, 2021)

The principles are complementary and should be read and considered altogether by those implementing restoration activities. Regardless of the type of land ownership and the types of stakeholders engaged, these principles can improve restoration outcomes for all types of projects, programmes and initiatives.

Principle 1: Ecosystem restoration contributes to the UN Sustainable Development Goals and the goals of the Rio Conventions

Principle 2: Ecosystem restoration promotes inclusive and participatory governance, social fairness and equity from the start and throughout the process and outcomes

Principle 3: Ecosystem restoration includes a continuum of restorative activities

Principle 4: Ecosystem restoration aims to achieve the highest level of recovery for biodiversity, ecosystem health and integrity, and human well-being

Principle 5: Ecosystem restoration addresses the direct and indirect causes of ecosystem degradation

Principle 6: Ecosystem restoration incorporates all types of knowledge and promotes their exchange and integration throughout the process

Principle 7: Ecosystem restoration is based on well-defined short-, medium- and long-term ecological, cultural and socio-economic objectives and goals

Principle 8: Ecosystem restoration is tailored to the local ecological, cultural and socioeconomic contexts, while considering the larger landscape or seascape

Principle 9: Ecosystem restoration includes monitoring, evaluation and adaptive management throughout and beyond the lifetime of the project or programme

Principle 10: Ecosystem restoration is enabled by policies and measures that promote its long-term progress, fostering replication and scaling-up

TEN PRINCIPLES THAT UNDERPIN ECOSYSTEM RESTORATION





















Figure 1: Ten principles that underpin ecosystem restoration

Source: FAO, IUCN CEM & SER. 2021. *Principles for ecosystem restoration to guide the United Nations Decade 2021–2030.* Rome, FAO.

2. THE UN DECADE FRAMEWORK FOR ACTION

Section 2 of the Action Plan outlines the framework to guide restoration actions under the UN Decade. It introduces the Restoration Challenges, which will be led by UN Decade partners, and lays out the action framework to guide partners and collaborators. Finally, it describes how everyone can take part in the UN Decade.

2.1. Restoration Challenges

Ecosystem restoration is an immense challenge, with possible paths and actions to take. So, where to begin? The Restoration Challenges break down the mandate of the UN Decade and the UN Decade strategy into key priority areas. They aim to unite and mobilise partners and all stakeholders around ambitious calls to action to achieve the outcomes of the Decade, contributing to the 2030 Agenda and other national, regional and international commitments, as described in Section 1. The overarching target of the Action Plan will align with targets 2 and 3 of the post-2020 global biodiversity framework.

UN Decade partners will come around and coordinate on challenges and one or several challenges lead(s) will be nominated. They are invited to empower others in their

contributions and makes use of the existing UN Decade architecture, e.g. Task Forces. The co-leading agencies of the UN Decade, UNEP and FAO, invite UN Decade partners to submit their expression of interest to lead or co-lead one (or more) challenge(s). Because ecosystem degradation affects all countries and sectors of society in different ways, restoring the web of life can only be achieved through wide collaboration across disciplines, economic sectors, societal groups and geographical borders. These include national governments, cities and local authorities, research and education institutions, the private sector, donors and financial institutions, NGOs and CSOs, individuals and communities. Everyone reading this action plan is invited to consider how you can (or already do) contribute to these restoration priorities. Gather your colleagues, friends and associates to build connections and tackle these challenges together.

The Restoration Challenges have been developed through consultations in 2021 and 2022 with the <u>UN Decade partner network</u>. In response to evolving priorities, feedback and experiences, the challenges may evolve and will be reviewed at key milestones throughout the decade (see 3.9). Ecosystem restoration can be more than these focus areas and if restoration work goes beyond these initially proposed twelve challenges, then even better.

Each of the proposed twelve restoration challenges is presented on the following pages, accompanied by a list of sample actions directed at key stakeholder groups. These are indicative rather than prescriptive actions, which will be expanded and elaborated on by challenge teams. All restoration actions should follow the Principles of Ecosystem Restoration and be embedded within the three pathways of the Decade (building a global movement, generating political will and building technical capacity). Each of the challenges will be featured in global campaigns as part of #GenerationRestoration throughout the decade and are considered for the Secretary-General's report on the UN Decade at the 81st session of the UN General Assembly. Challenge teams are encouraged to find synergies across thematic areas, on a joint mission to restore Earth and humanity's relationship with nature.

Restoration Challenges - Please note that the below challenge goals are only examples. Specific, measurable goals for each thematic challenge should be proposed by the challenge leads.

- Restoration Challenge Biodiversity; e.g. Restore a specific area as part of preventing 60 per cent of expected species extinctions by 2030 and halt biodiversity loss by 2030
- 2. <u>Restoration Challenge Business</u>; e.g. create 11 million jobs and USD 450 billion in business opportunities in ecosystem restoration and avoided degradation by 2030
- 3. <u>Restoration Challenge Climate;</u> e.g. scale adaptation efforts and contribute to a third of the climate mitigation needed by 2030
- 4. Restoration Challenge Cities; e.g. restore urban ecosystems in 1,000 Cities by 2030

- 5. <u>Restoration Challenge Communities</u>; e.g. lead on the development of a strategy and on its implementation for and together with indigenous peoples, local communities, and/or women
- 6. <u>Restoration Challenge Education;</u> e.g. embed ecosystem restoration into education systems globally by 2030
- 7. <u>Restoration Challenge Finance;</u> e.g. mobilise USD one trillion in investments in ecosystem restoration
- 8. Restoration Challenge Food; e.g. restore and regenerate X Mio ha of productive ecosystems to achieve zero hunger by 2030
- 9. <u>Restoration Challenge Human-Nature Relationship</u>: e.g. restore the relationship between humans and nature (UNESCO leading human-nature bond panel)
- 10. Restoration Challenge Marine & Freshwater; e.g. define and implement a 'Bonn challenge' to revive healthy coastal, marine and/or freshwater ecosystems by 2030
- 11. <u>Restoration Challenge Protection</u>; e.g. help the establishment of X protection areas to conserve at least 30 per cent of land and sea areas by 2030
- 12. <u>Restoration Challenge Youth</u>; e.g. restore 10,000 school yards and reach 1Mio. posts with #GenerationRestoration

Vision: a world where – for the health and well-being of all life on Earth and that of future generations – the relationship between humans and nature has been restored, where the area of healthy ecosystems is increasing and where ecosystem loss, fragmentation and degradation has been ended.

been ended.						
PAT	HWAY 1:		PATHW	/AY 2:	PATHW	AY 3:
GLOBAL	MOVEMENT		POLITICA	L WILL	TECHNICAL (CAPACITY
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establishe	d that catalyses	S	capability in pr	rivate, public	individua	ls and
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political w	ill, exchange of	: ţ	policy reform to support and		sectors and	scales to
knowledge a	nd cross secto	ral	provide ince	entives for	effectively plan, implement,	
collaboratio	n for ecosyste	m	ecosystem re	storation, to	monitor and ຣເ	ıstain large-
res	toration.	(catalyse invest	ments and to	scale ecosysten	n restoration
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		ef	fective restora	tion actions on	Results are doci	umented and
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		v	vithin Flagship	programmes.	and reporting of	f biophysical
					and socio-e	conomic
					elements of s	ustainable
					ecosystem rest	toration and
					influencing ac	ctivities for
	ecosystem restoration.					
Ove	rarching goal: r	estore 20	per cent of de	graded priority e	cosystems by 20	30
1 D.		12	* Restoration C	Challenges:		
	odiversity					
	ısiness					
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	ommunities					
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	nance					
	ood	. . 4				
	ıman-Nature R		p			
	10. Marine & Freshwater					
	11. Protection					
12. Youth						
UN Decade	UN Decade Lead Agencies, Collaborating Agencies and Partners (global partners, supporting					
partners, restoration implementers, actors, voices, funding partners)						
Stakeholders						
National	Local	Private	Research	Donors and	Civil society	Individuals
governments	authorities	sector	and	foundations	organisations	
	and cities		education			
10 Principles of Ecosystem Restoration						

 $Table\ visualising\ the\ connection\ between\ vision,\ pathways,\ challenges\ and\ calls\ to\ action$

1. RESTORATION CHALLENGE – BIODIVERSITY:

Restore ecosystems to prevent 60 per cent of expected species extinctions and halt the biodiversity crisis by 2030

The goal of the Restoration Challenge for Biodiversity is to restore ecosystems to prevent 60 per cent of expected species extinctions, contributing to halting the biodiversity crisis by 2030. Around one million plant and animal species are threatened with extinction (IPBES, 2019). Ecosystem restoration has the potential to prevent 60 per cent of these extinctions by restoring 15 per cent of converted lands in priority areas (Strassburg *et al.*, 2020). This challenge aims to inspire a range of interventions to restore biodiversity including re-introducing species, converting degraded ecosystems, enhancing connectivity and restoring or conserving ecosystem processes that support biodiversity.

Sample fields of action	Stakeholder(s)	
Address and include ecosystem restoration into National Biodiversity Strategies and Action Plans (NBSAP)	National governments	
Sub-national governments share experiences, knowledge and commitments towards achieving national and global biodiversity targets through initiatives such as Regions with Nature and Cities with Nature.	Cities and local authorities	
Support nature-friendly food production through innovation, training and incentives.	All stakeholders	
Learn about rewilding and start your own rewilding project. Join the Rewilding Academy.	 Individuals and communities 	
Identify and channel investments to priority areas for conservation and restoration.	 Donors and financial institutions Research and education institutions National governments Cities and local authorities Private sector 	
Ensure cross-sector collaboration to align restoration with biodiversity conservation and climate action.	Private sectorNational governments	

2. **RESTORATION CHALLENGE - BUSINESS:**

Create 11 million jobs and USD 450 billion in business opportunities in ecosystem restoration and avoided degradation by 2030.

The goal of the Restoration Challenge for Business is to create 11 million jobs and USD 450 billion in business opportunities in ecosystem restoration and avoided degradation by 2030 (World Economic Forum, 2020). This challenge invites entrepreneurs, innovators and all stakeholders to embrace the huge economic and livelihood opportunities offered by restoration.

Sample fields of action	Stakeholder(s)	
Create the conditions for a system-wide circular economy, through research, technology, policies and behaviours to reduce the drivers of degradation and regenerate nature.	All stakeholders	
Create business models that are profitable and environmentally and socially beneficial, while updating training and curricula with the skill sets and values needed for ecosystem conservation and restoration.	 Research and education institutions Private sector 	
Invest in and support local and regional conservation and restoration initiatives and include ecosystem restoration and avoided degradation in nationally determined contributions (NDCs).	National governmentsCities and local authorities	
Channel innovation and technology to find scalable solutions to ecosystem challenges, seek out new markets and boost the restoration economy.	Private sectorResearch and education institutions	
Engage in jobs and business opportunities in ecosystem restoration and avoided degradation, especially for youth from marginalised backgrounds.	 Individuals 	
Join the <u>Green Jobs for Youth Pact</u> to accelerate young skills and talent for green jobs, in key countries and in high-impact sectors, such as ecosystem conservation and restoration.	All stakeholders	

3. **RESTORATION CHALLENGE - CITIES:**

Restore urban ecosystems in 1,000 cities by 2030.10

Urban areas are responsible for over 75% of global carbon emissions, as well as habitat loss and ecosystem degradation (World Economic Forum and Alexander von Humboldt Institute, 2022). The goal of the Restoration Challenge for Cities is to restore urban ecosystems in 1,000 cities across the world by 2030. This challenge invites innovative solutions to transform urban areas and improve the wellbeing of urban residents by conserving existing natural habitats, re-naturing degraded areas and greening infrastructure.

Sample fields of action	Stakeholder(s)	
Ecosystem restoration helps cities to become resilient and climate neutral. Include restoration goals in territorial and urban development plans and create the enabling frameworks and incentive for all stakeholders to act. Join UNFCCC's Race to Zero and FAO's Green Cities Initiative.	 National governments Cities and local authorities 	
Form public-private partnerships to boost the restoration economy, create jobs and position cities as hubs of innovation for ecosystem restoration. Businesses can lead by example by using their operation sites to restore and protect biodiversity.	 National governments Cities and local authorities Private sector 	
Join or start activities to restore and rewild urban spaces, such as community gardens, urban food forests and volunteer tree planting initiatives.	Individuals and communities	
Create or restore green and blue corridors linking town centres with surrounding rural areas and raise awareness across the population about the importance of healthy ecosystems and urban green spaces.	Cities and local authorities	
Establish ecosystem restoration plots in or near school grounds and train teachers in restoration.	Research and education institutions	

4. **RESTORATION CHALLENGE – CLIMATE:**

Scale adaptation efforts and contribute to a third of the climate mitigation needed by 2030

The goal of the Restoration Challenge for Climate is to scale adaptation efforts to avoid damage and degradation of critical ecosystems and ecosystem services and contribute a third of climate mitigation needed by 2030 (Griscom *et al.*, 2017). This challenge invites dual climate adaptation and mitigation solutions. Conservation, protection, and restoration of all priority ecosystems, together with targeted management to adapt to unavoidable impacts of climate change, will enhance ecosystem resilience and reduce vulnerability to climate change (IPCC, 2022).

Sample fields of action	Stakeholder(s)	
Incorporate nature-based solutions into national adaptation plans (NAPs) and quantified restoration targets or actions into nationally determined contributions (NDCs).	National governments	
Ensure the meaningful participation of grassroots organisations, indigenous peoples and local communities in designing and implementing climate solutions, with rights-based approaches and channelling local and indigenous knowledge.	All stakeholders	
Hold governments, financial institutions and corporations to account by participating in local and international climate movements and advocacy campaigns.	Local communities and individualsNGOs and CSOs	
Create nature-based solutions to reduce the emissions gap and support adaptation	 National governments Private sector Research and education institutions 	
Peatlands are valuable carbon sinks, protect them through the use of protected areas and restoring degraded peatlands. Join the Global Peatlands Initiative.	All stakeholders	

5. RESTORATION CHALLENGE - COMMUNITIES:

Restore equitable land and resource rights to indigenous peoples and local communities, including women, and recognise them as stewards of ecosystem restoration

Indigenous peoples, women and local communities are pillars of conservation and ecosystem restoration across the world. However, in many countries, they face marginalisation, displacement, violence and insecurity. The goal of the Restoration Challenge for Communities is to restore equitable land and resource rights to indigenous peoples and local communities, including women, and recognise them as stewards of ecosystem restoration, aligning with the United Nations Declaration on the Rights of Indigenous Peoples.

Sample fields of action	Stakeholder(s)	
Reform tenure systems for land, freshwater and marine environments to be inclusive, rights-based and incentivise local communities to invest in ecosystem restoration.	National governments	
Advance recognition, reparation and reconciliation efforts as part of the implementation of United Nations Declaration on the Rights of Indigenous Peoples, as a prerequisite to ecosystem restoration.	National governments	
Establish collaborative partnerships with indigenous peoples and local communities to co-design and implement plans and projects that protect and restore ecosystems and respect rights to free, prior and informed consent.	 Private sector Local communities NGOs and CSOs Research and education institutions 	
Support indigenous peoples and local communities to secure their collective lands and territories, strengthen their governance systems and access funding and capacity building for natural resource management and restoration.	 Donors and financial institutions NGOs and CSOs Private sector National governments Cities and local authorities 	
Foster the co-creation of knowledge through collaboration with indigenous and local communities, and guide restoration approaches by indigenous and local worldviews, customary use, and management practices.	 Research and education institutions Local communities 	

6. RESTORATION CHALLENGE - EDUCATION:

Embed ecosystem restoration into education systems globally by 2030

Education is fundamental to empowering a generation of restoration champions. The goal of the Restoration Challenge for Education is to embed ecosystem restoration into formal and informal education systems globally by 2030.

Sample fields of action	Stakeholder(s)	
Join the global network of <u>Nature Positive Universities</u> and assess the impact of your institution on ecosystems, as well as equipping youth with ecosystem restoration skills/intrapreneurship and entrepreneurship mindsets.	Research and education institutions	
Include ecosystem restoration in school curricula of 193 Member States, as well as extra-curricular activities.	Research and education institutions	
Run citizen science programmes to monitor and evaluate ecosystem restoration initiatives.	 Research and education institutions National governments Cities and local authorities 	
Build partnerships between governments, research institutes, NGOs and the private sector to develop restoration plans and projects and fund long-term research programmes to monitor and evaluate restoration initiatives.	 National governments Cities and local authorities NGOs and CSO Private sector 	
Become a restoration investigator. Explore, observe and read up on your local environment and biodiversity, take a course or connect with local elders, stewards and mentors.	 Individuals 	

7. RESTORATION CHALLENGE - FINANCE:

Mobilise one trillion USD in ecosystem restoration by 2030

Over half of global GDP is dependent on nature (World Economic Forum, 2020) and every dollar invested in restoration can reap up to 30 dollars in economic benefits (Ding *et al.*, 2017). However, there is an urgent need to unlock and scale up finance for restoration. The Restoration Challenge for Finance aims to mobilise one trillion USD in investments in ecosystem restoration (UNEP and FAO, 2020).

Sample fields of action	Stakeholder(s)
Establish a policy and regulatory framework and private-public sector cooperation to create a market for restoration and other nature-based solutions.	 National governments Private sector Donors and financial institutions NGOs and CSOs
Develop and adopt innovative financial tools and approaches to promote restoration, such as debt-for-nature swaps and impact investments.	Donors and financial institutions
Connect donors with the people restoring ecosystems on the ground, through the UN Decade Digital Hub and other platforms such as Restor and the World Resources Institute's Global Restoration Initiative.	 Private sector NGOs and CSOs Individuals and communities Donors and financial institutions
Shift incentives from land degradation towards restoration using subsidies and taxes and provide risk mitigating mechanisms to incentivise private investment in restoration (e.g. green, blue, and resilience bonds, credit guarantees). Direct revenues from carbon pricing to protect and restore ecosystems.	 National governments Donors and financial institutions
Harmonise restoration indicators to facilitate greater investment and cost-benefit analysis in ecosystem restoration.	 Research and education institutions NGOs and CSOs
Include ecosystem restoration in national accounting systems and plans (e.g. System of Environmental-Economic Accounting, SEEA) .	 National governments Research and education institutions Donors and financial institutions

8. RESTORATION CHALLENGE - FOOD:

Restore and regenerate productive ecosystems to achieve zero hunger by 2030

The global food system is the primary driver of biodiversity loss and contributes around 30 per cent of total anthropogenic emissions (Benton *et al.*, 2021). Restoration is essential to ensure food security for a growing population. The goal of Restoration Challenge for Food is to restore and regenerate productive ecosystems to achieve zero hunger by 2030.

Sample fields of action	Stakeholder(s)	
Support farmers to shift to agroecological and regenerative practices to protect and restore ecosystems and ensure food security.	 Private sector NGOs and CSOs Research and education institutions 	
Redirect investments and public spending towards regenerative ecosystem management solutions.	Financial institutionsNational governments	
Prioritise land and resources for local food producers and domestic consumption by changing regulatory or fiscal frameworks.	National governments	
Choose foods that are seasonal, local and plant-rich.	Individuals	
Avoid converting land for agriculture and restore native ecosystems on spared agricultural land.	 Private sector National governments Cities and local authorities Local communities and individuals 	

9. RESTORATION CHALLENGE - HUMAN-NATURE RELATIONSHIP:

Restore the relationship between humans and nature

Addressing Earth's environmental crises calls for a transformative shift in humanity's relationship with nature, in particular the economic system driving ecosystem degradation and deepening social inequalities across the world. The challenge to restore the relationship between humans and nature will require a combination of individual and collective actions, as well as systems change.

Sample fields of action	Stakeholder(s)	
Commit to internalising environmental externalities, e.g. research institutes provide tangible guidance on true costs, private sector pledges, labels and/or legislation for a circular economy, campaigns to encourage sustainable consumption behaviours.	All stakeholders	
Transdisciplinary cooperation of scientific, indigenous peoples and local communities, education for sustainable development and the protection of cultural and natural heritage.	 Research and education institutions Communities 	
Collect data about humanity's impact on Nature, socio-ecological systems and identify barriers to behavioural change and possible solutions.	Research and education institutions	
Communicate ecosystem benefits and contributions to people and businesses.	 NGOs, CSOs National governments Cities and local authorities 	
Participate in community-led initiatives to conserve and restore nature, transformative landscape governance networks and awareness campaigns to influence citizen behaviour.	NGOs and CSOsCommunities and individuals	

10. <u>RESTORATION CHALLENGE – MARINE & FRESHWATER</u>:

Revive healthy coastal, marine and freshwater ecosystems by 2030

Wetlands are disappearing 3 times faster than forests, while freshwater biodiversity is declining twice as fast as terrestrial and marine biodiversity (WWF, 2020). The Restoration Challenge for Marine & Freshwater aims to revive healthy coastal, marine and freshwater ecosystems by 2030.

Sample fields of action	Stakeholder(s)
Make restoration commitments to ensure the restoration of coastal, marine and freshwater areas. For example, creating a "Bonn challenge" for freshwater ecosystems.	 National governments Cities and local authorities
Develop and adopt innovative finance mechanisms such as blue bonds and blue carbon credits.	 Financial institutions
Improve industry standards, impact assessments and engage in corporate social responsibility initiatives to reduce pollution and improve water quality.	Private sector
Establish community-based management of coastal, freshwater and marine resources. Invest in capacity development for long term sustainable management. Build on local/indigenous traditions and knowledge.	 Communities Cities and local authorities NGOs and CSOs
Harmonise indicators of global freshwater ecosystems and devise solutions for the control of invasive species. Address and decrease the policy-to-science gap.	 Research institutions National governments Cities and local authorities
Remove dams or other infrastructure that are no longer needed and restore natural river flow.	 Cities and local authorities Private sector Research and education institutions
Get involved in citizen science projects, beach clean ups and other community initiatives to protect oceans, lakes and rivers.	Individuals and communities

11. RESTORATION CHALLENGE - PROTECTION:

Halt ecosystem degradation to reach land degradation neutrality and conserve at least 30 per cent of land and sea areas by 2030

The goal of the Restoration Challenge for Protection is to halt ecosystem degradation to reach land degradation neutrality and conserve at least 30 per cent of land and sea areas by 2030, aligning with UNCCD and the post-2020 global biodiversity framework.

Sample fields of action	Stakeholder(s)			
Redirect fossil fuel, agricultural, mining, forestry and fishing investments and subsidies to protect and restore ecosystems.	National governments			
Adopt agroecological and sustainable aquaculture approaches to reverse ecosystem degradation and improve crop and fish yields.	 Individuals and communities 			
Incorporate measurable targets on ecosystem restoration in the Nationally Determined Contributions (NDCs).	National governments			
Divest from companies and sectors that degrade ecosystems.	 Private sector Financial institutions Research and education institutions 			
Expand protected area networks and improve connectivity and management through rights-based approaches that respect local communities and indigenous peoples.	All stakeholders			

12. RESTORATION CHALLENGE - YOUTH:

Young champions and youth organisations lead restoration initiatives, participate in decision-making and propel the #GenerationRestoration movement.

Sample fields of action	Stakeholder(s)			
Improve capacity building and knowledge among young people on ecosystem restoration, through training courses and awareness building.	Research and education institutions			
Offer micro-financing schemes for youth-led restoration projects	Donors and financial institutionsPrivate sector			
Ensure young people meaningfully participate in environmental policy development and implementation.	 NGOs and CSOs National governments Cities and local authorities Research and education institutions 			
Create a platform for youth around the world to engage in non-partisan political engagement with national governments and the UN on ecosystem restoration.	NGOs and CSOsNational governments			
Join a group or movement – explore the UN Decade Digital Hub.	• Individuals			

2.2. Framework for action

It's time to take action. Below are five steps aimed at UN Decade partners and other interested organisations to kick off on the implementation of Restoration Challenges.

Step 1: Take up the challenge

- UN Decade partners are invited to express interest in leading on one or several challenges. Complete the <u>expression of interest</u> form by **30 September 2022**.
- Challenges can run over several years or the entire decade. Up to three entities are suggested to lead per challenge which are encouraged to represent different partner categories.

Step 2: Challenge teams unite

- Join the multi-stakeholder meeting for your Restoration Challenge. Parallel kick-off meetings will be set up by the designated entity from the expressions of interest.
- If needed, nominate a challenge lead, an organisation responsible for leading on the challenge, and organise supporting organisations and stakeholders into sub-groups.

Step 3: Create a challenge-specific action plan

- After confirmation by the co-leading agencies UNEP and FAO, challenge (co-)leads will be
 invited to present a simple roadmap and concept, including the challenge goal, for their
 respective challenge by 30 November 2022. A template will be shared by the Secretariat.
- Actions can be big and small acts that respond to the challenge and address one or more of the three pathways of the Decade. They can be calls for actions directed to stakeholder groups.
- Identify potential synergies and trade-offs between restoration actions and commitments at the global, regional and national level.
- Teams are provided with plenty of flexibility in designing and implementing the challenges, encouraging them to innovate and use their comparative advantage. To ensure alignment with the overall UN Decade strategy and communication and advocacy work, the Strategy group of the UN Decade will approve the concept notes.

Step 4: Get stuck in

- Register concrete restoration initiatives and share stories, ideas, knowledge and experiences with the entire #GenerationRestoration ecosystem on the Digital Hub.
- If desired, monitor and report on progress using the <u>Framework for Ecosystem Restoration</u> Monitoring (FERM) registry.
- Teams will be asked to provide an update upon invitation by the Secretariat. The reporting
 duties will remain low overall. Opportunities to report and showcase the work in the
 Secretray-General's report in 2025 and 2030 is desired.

Step 5: Review, Adapt and Refine

- Review progress. In both planning and implementation, the challenge leads should work
 closely with, and use the expertise of, the UN Decade Task Forces, as well as the core group
 of the co-leading agencies FAO and UNEP.
- Test, adapt and refine the action plan, learning from what went well and what didn't

2.3. How to get involved

Restoring ecosystems and humanity's relationship with the rest of nature requires the collective effort of people all across the world. Restoration is not only for ecologists or restoration practitioners. The motivation to be part of restoration efforts is often deeply personal³, driven in many cases by a desire for greater connection with nature. The UN Decade calls on all parts of society to take action, including governments, businesses, citizens and organisations of all kinds, from urban areas to mountains, coasts and peatlands, from forests and farmlands to grasslands and savannahs.

There are different ways to get involved – as an official partner, <u>Restoration Implementer</u>, donor or by participating in the global movement.

There are many things ordinary citizens can do. For inspiration, download the <u>Ecosystem Restoration</u> <u>Playbook</u>. A <u>practical guide to healing the planet</u>

Find more about the UN Decade on www.decadeonrestoration.com and on social media by following #GenerationRestoration and sharing your own restoration activities and ideas. What actions are needed? Tell us on social media or write to us at restorationdecade@un.org

Do you work on ecosystem restoration on the ground or know someone who does? Join the UN Decade as a <u>Restoration Implementer</u>.

Organisations are invited to apply as <u>official partner</u> of the UN Decade with long-term commitments. To apply as partner, consult the <u>partner framework</u> and write to <u>restorationdecade@un.org</u>

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³ A <u>survey</u> by UNEP found that 68 per cent of respondents said their interest in restoration is primarily personal.

3. IMPLEMENTING THE ACTION PLAN

Section 3 describes how the Action Plan will be implemented – the coordination between the coleading agencies, partners, and Task Forces, how it will be financed, how progress is monitored, and how knowledge and best practices are gathered and communicated. Finally, a timeline for the UN Decade to 2030 is presented.

3.1. Governance and coordination

UNEP and FAO are the lead implementing agencies of the UN Decade on Ecosystem Restoration. The governance structure comprises a core team, Strategy Group, Coordination Group, Task Forces, Partners, and Advisory Board (see Figure 2).

<u>Five task forces</u> (on Best Practices, Finance, Monitoring, Science and Youth) have been established to connect leading institutions, partners and other external entities. These task forces focus on critical restoration-related topics by executing joint activities, facilitating dialogue, and developing best practices and guidance.

The <u>Advisory Board</u> is the main external body of the UN Decade's governance structure, which includes representatives varying from indigenous peoples, local communities, ecosystem restoration experts, to media and culture workers, private sectors, etc. The Board's main objective is to offer relevant perspectives and schools of thought in response to the challenges for implementing the UN Decade, as well as inspire and amplify the UN Decade's goals through diverse channels and networks.

As described in Section 2, designated UN Decade <u>partners</u> will lead the implementation of the Restoration Challenges, working closely with the rest of the UN Decade governance structure.

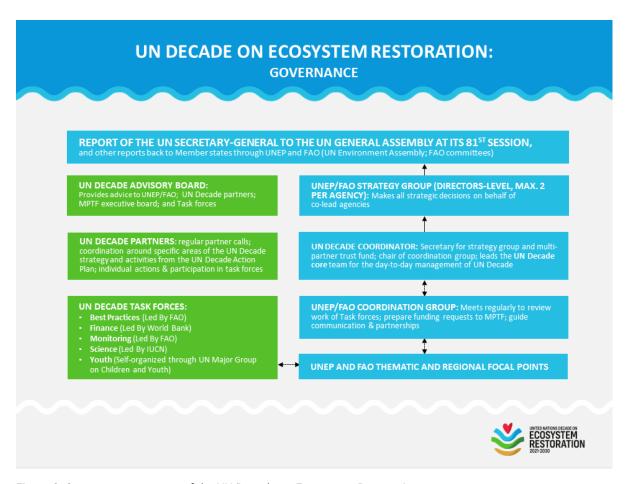


Figure 2: Governance structure of the UN Decade on Ecosystem Restoration

3.2. Financing

To achieve the vision of the UN Decade requires catalysing private and public investments in ecosystem restoration. Governments around the world have already committed to restoring a total of nearly 1 billion hectares of degraded land by 2030 (Sewell, van der Esch and Löwenhardt, 2020). However, the implementation of these commitments is lagging, partly due to a major funding gap (Ding *et al.*, 2017). Financing restoration actions under the UN Decade will require policies and financial mechanisms to overcome existing financial barriers. The **Restoration Challenge for Finance** aims to mobilise investments in restoration over the coming decade. There are a range of potential sources of finance from the private sector - sustainable supply chains, biodiversity offsets, equity impact investing, payment for ecosystem services, voluntary carbon markets, REDD+ and philanthropy (UNEP, 2021c). Meanwhile, public finance can work for restoration through leveraging carbon pricing, climate finance and redirecting incentives towards restoration, among others (Ding *et al.*, 2017).

Within the UN Decade governance structure, the Multi-Partner Trust Fund (MPTF) acts as the catalytic financial mechanism serving the purpose to kick start and facilitate actions supporting World Restoration Flagships, while the **Finance Task Force** provides expert guidance to support and incentivise ecosystem restoration and will work with Challenge leads. The MPTF was established in 2021 by FAO and UNEP. Importantly, the Fund is not designed to be a funding facility that finances all activities needed to implement the full strategy of the Decade; it will rather encourage and support strategic interventions, which contribute to an informed and coordinated movement for turning the

tide of ecosystem degradation. It seeks to provide constructive avenues for actions and routes to overcome barriers.

Larger restoration programmes around the world are funded through national governments, development banks, impact investors, the European Union, the Global Environment Facility and the Green Climate Fund. Major initiatives are implemented and funded by UN Decade partners, like the International Union for the Conservation of Nature (IUCN), the World Resources Institute, the Global Landscapes Forum, the World Wide Fund for Nature, 1t.org and other global and national civil society organisations. These organisations mobilise support for restoration, fund programmes to prevent, halt and reverse degradation of ecosystems, and help remove barriers for restoration. As such, these organisations and their programmes are critical to bringing restoration initiatives to scale. Domestic funding is also increasingly mobilised for restoration such as the watershed restoration programme to secure drinking water for Sao Paulo City in Brazil.

The World Bank chairs the <u>Finance Task Force</u>, which has the following functions and will play a key role in this endeavour:

- 1) provide guidance to reorient subsidies towards ecosystem restoration in an appropriate manner;
- 2) counter economic forces and vested interests that result in ecosystem degradation; and,
- 3) incentivise public and corporate investors to co-invest in ecosystem restoration, including in areas where the benefits from restoration are predominantly public goods.

3.3. Best practices

An FAO-led Task Force on Best Practices, working across more than 110 global leading organisations, has been established to enhance knowledge dissemination and system-wide capacity development efforts. To guide and support restoration initiatives throughout the UN Decade, the Task Force developed ten principles for ecosystem restoration (see section 1.4), and conducted a global capacity needs assessment to identify the key gaps and capacity priorities for restoration. The assessment produced the following recommendations:

- Develop the capacities of individuals and organisations across sectors and scales, namely in areas such as financing, stakeholder engagement, technical capacities and the development of supportive policies for restoration.
- 2. Foster networks, partnerships and collective action mechanisms. Actions need to focus on first, enhancing the capacities of individuals and organisations to establish, sustain and strengthen networks and partnerships; and second, developing and engaging with inclusive multi-stakeholder platforms and mechanisms for pursuing coordination and collective action, and enabling finance mobilisation and the sharing of knowledge, experiences and information.
- 3. Strengthen the enabling environment. Priority actions should support the effective implementation of existing policies across national and subnational levels; foster intersectoral policy coordination; promote meaningful stakeholder engagement and intersectoral discussions in policymaking; promote evidence-based policymaking through the integration of good practices and knowledge; create supportive policies for ecosystem restoration; capacity development opportunities on restoration for policymakers; and establish systems for monitoring the effectiveness of policies.

The Task Force on Best Practices will also develop:

- 1) standards of practice (SoPs) to provide guidance on the application of the ten principles for ecosystem restoration to the planning, implementation, monitoring and maintenance of restoration projects;
- 2) a Capacity, Knowledge and Learning Action Plan for the Decade, that will define, replicate and upscale key knowledge products and capacity development initiatives to address major gaps identified through the global capacity needs assessment; and
- 3) a framework for documentation and dissemination of good practices, that will facilitate exchange of, and access to knowledge among restoration practitioners. For more information on the Task Force on Best Practices, visit the <u>webpage</u>.

3.4. Monitoring progress

Monitoring progress towards the achievement of the Action Plan will be guided by the work of the Monitoring Task Force⁴. Led by FAO and with support from over 330 experts across 110 organisations, the task force is identifying the best options for monitoring global progress of the UN Decade and how to fill current information gaps. To avoid extra reporting burdens, the UN Decade will not establish formal country monitoring and reporting. Instead, it will employ and build on existing data reporting systems within relevant international commitments, conventions and plans, such as the post-2020 global biodiversity framework and the Global Forest Resource Assessment (FRA). The Monitoring Task Force has drafted a first global framework for monitoring and reporting progress in relation to the UN Decade⁵, and a set of headline indicators (Figure 3). The FERM registry will be used to report on global restoration progress as part of the UN Decade and to the CBD post-2020 global biodiversity framework Target 2. It intends to support ecosystem monitoring by all actors, people, communities and countries. The specific objectives of the Monitoring Task Force are to:

- a) Develop and propose a framework (including indicators, available tools/databases, reporting lines and timelines) for operational monitoring and for reporting the progress and achievements on both biophysical and socio-economic aspects of restoration which occur throughout the duration of UN Decade, and advise stakeholders as necessary.
- b) Serve as focal point for providing technical guidance and assistance on restoration monitoring for UN Decade flagships.
- c) Foster collaboration between conventions, frameworks, and emerging monitoring initiatives, which monitor and report elements of restoration in various ecosystems and seek synergies and avoid duplication of effort.
- d) Identify key gaps and areas of critical importance to restoration monitoring which require further research and development and targeted investment to ensure all ecosystems can be adequately monitored through the decade.

⁴ Find more information on the Monitoring Task Force here: https://www.fao.org/3/cb0424en/cb0424en.pdf

⁵ FAO and UNEP, 2022. Global indicators for monitoring ecosystem restoration – A contribution to the UN Decade on Ecosystem Restoration. Rome, FAO: https://www.fao.org/documents/card/en/c/cb9982en

Indicator code [Sustainable Development Goal (SDG³)]	Indicator name	Decade's ecosystem restoration types ²	Update frequency ³	Institution
SDG ³ 1.2.1	Proportion of population living below the national poverty line, by sex and age	All types	Twice a year	World Bank
SDG ³ 2.1.1	Prevalence of undernourishment	All types	Annually	Food and Agriculture Organization of the United Nations (FAO)
SDG ³ 2.4.1	Proportion of agricultural area under productive and sustainable agriculture	Farmlands	Every 3 years	FAO
SDG ³ 6.1.1	Proportion of population using safely managed drinking water services	All types	Every 2 years	United Nations Children's Fund (UNICEF); World Health Organization (WHO)
SDG ³ 6.3.2	Proportion of bodies of water with good ambient water quality	Freshwater	Every 3 years	United Nations Environment Programme (UNEP)
SDG ³ 6.4.2	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	Freshwater; Farmlands; Mountains; Grasslands, Shrublands and Savannahs; Peatlands	Annually	FAO
SDG ³ 6.5.1	Degree of integrated water resources management	Freshwater	Every 3-4 years	UNEP
SDG ³ 6.6.1 (Ramsar ¹ 8.6)	Change in the extent of water-related ecosystems over time	Freshwater; Farmlands; Mountains; Grasslands, Shrublands and Savannahs; Peatlands	Annually	UNEP, RAMSAR ¹
SDG ³ 7.2.1	Renewable energy share in the total final energy consumption	All types	Annually	International Energy Agency (IEA); United Nations Statistics Division (UNSD); International Renewable Energy Agency (IRENA)
SDG ³ 12.b.1	Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability	All types	Annually	United Nations World Tourism Organization (UNWTO)
SDG ³ 13.2.2 (UNFCCC)	"Total greenhouse gas emissions per year" as reported to UNFCCC as part of the enhanced transparency framework (ETF) mechanism	All types	Annually (Annex I Parties); Every 2 years (Non-Annex I Parties)	United Nations Framework Convention on Climate change (UNFCCC)
SDG ³ 14.4.1	Proportion of fish stocks within biologically sustainable levels	Oceans and coasts	Every 2 years	FAO
SDG ³ 14.5.1	Coverage of protected areas in relation to marine areas	Oceans and coasts	Annually	United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC); Bird Life International (BLI); International Union for Conservation of Nature (IUCN)
SDG ³ 14.b.1	Degree of application of a legal/regulatory/ policy/institutional framework which recognizes and protects access rights for small-scale fisheries	Oceans and coasts	Every 2 years from 2018	FAO
SDG ³ 15.1.1	Forest area as a proportion of total land area	Forests	Annually from 2015	FAO
SDG ³ 15.1.2	Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type	Forests; Freshwater; Grasslands, Shrublands and Savannahs; Mountains; Peatlands	Annually	UNEP-WCMC; BLI; IUCN
SDG ³ 15.2.1	Progress towards sustainable forest management	Forests	Annually from 2015	FAO
SDG ³ 15.3.1 (UNCCD)	Proportion of land that is degraded over total land area	Farmland; Forests; Grasslands, Shrublands and Savannahs; Peatlands	Every 4 years from 2018	United Nations Convention to Combat Desertification (UNCCD); FAO; CBD; UNSD; UNEP; UNFCCC
SDG ³ 15.4.2	Mountain Green Cover Index	Mountains	Every 3 years	FAO
SDG ³ 15.5.1	Red List Index	All types	Annually	IUCN; BLI

Notes: UN Decade on Ecosystem Restoration focal ecosystems include: Farmlands; Forests; Freshwater; Grasslands, Shrublands, Savannahs; Mountains; Oceans and coasts; Peatlands; and Urban areas.

Sources: 1 Ramsar, 2021. National Report on the Implementation of the Ramsar Convention on Wetlands. 20 April 2022. https://www.tamsar.org/document/national-report-form-for-cop14-offline-version

United Nations Decade on Ecosystem Restoration. 2022. Types of Ecosystem Restoration: 20 April 2022. https://www.decadeonrestoration.com/pre-secosystem-restoration

Figure 3: Summary of headline indicators for the UN Decade

Source: FAO and UNEP. 2022. Global indicators for monitoring ecosystem restoration – A contribution to the UN Decade on Ecosystem Restoration. Rome, FAO. https://doi.org/10.4060/cb9982en

3.5. Science

The IUCN-led Science Task Force provides an authoritative scientific reference for the UN Decade. It will produce, collate and convey concise information and concepts of terrestrial, freshwater and marine ecosystem restoration based on rigorous evidence. The Task Force aims to address pertinent scientific questions that might arise during the implementation of the UN Decade and provide guidance to all partners.

3.6. Youth

The involvement of youth in the UN Decade and #GenerationRestoration movement is critically important, not only for the sustainability of restoration initiatives beyond 2030 but also for the promotion of intergenerational equity and empowerment of young people. During the UN Decade, the Major Group for Children and Youth through the Children and Youth Organisation accredited to UNEP and SDG 2 Working Group will facilitate the engagement of youth advocates, youth-led restoration initiatives, and a wide range of formal and informal youth groups.

³ United Nations Statistics Division, 2022. SDG Indicators, New York, United Nations Department of Economic and Social Affairs. Cited 20 April 2022. https://unstats.un.org/sdgs/metadata/.

Young people have been engaged in the processes of the UN Decade since its inception. Among other things, this has entailed hosting several on-ground and virtual consultations on the engagement of young people in the UN Decade and the inaugural #GenerationRestoration Youth Assembly alongside the public launch of the Decade in 2021. There have been ongoing internal consultations, working group meetings and mobilisation that garner and advance the meaningful engagement of young people across the pillars of *policy advocacy, knowledge, action and capacity building.*

The UN Decade Youth Task Force and the Youth Focus Group serve as the mandated and self-organised youth mechanism that facilitates young people and is part of the UN Decade governance. The Youth Focus Group, universally structured, allows young people across several constituencies, movements and young individuals to engage with the UN Decade. Young people and youth organisations will continue to play a crucial role in driving action for the UN Decade and engaging across all pillars and activities of this Action Plan.

3.7. Communication

Communication is central to the UN Decade, to mobilise society, increase awareness of the benefits of restoration and the costs of degradation and shift behaviours to scale up restoration around the world.

The **UN Decade's** <u>Digital Hub</u> connects the restoration community. It serves as the central location to register actions, showcase activities, and connect with other participants. The Digital Hub aims to be the **largest single database of ecosystem restoration initiatives**, a platform uniquely focused on the grassroots perspectives and needs of restoration implementers, and lastly, a focal point on the web dedicated to uniting trusted restoration resources. The Digital Hub allows the upscaling and replication of existing restoration projects. Through this digital site, people can access different events, conferences, workshops, training, good practices, monitoring and data platforms, and support to on-the-ground initiatives and activities through a growing network of connectors, partners, funders, and voices.

3.8. World Restoration Flagships

UN Decade Flagships are the **first, best, or most promising examples of ecosystem restoration**, adding value and embodying the ten restoration principles, while inspiring others to undertake or accelerate restoration at significant scale. The first call for flagships received 154 expressions of interest and 73 government-endorsed nominations. Together, they cover 74 countries and represent almost all the major ecosystem types (except urban areas). They represent 96 million hectares of achieved restoration and almost 160 million ha are expected to be under restoration by 2030. With an estimated potential of creating 17 million direct and indirect green jobs such as eco-tourism, restoration project management and monitoring, they are expected to increase the resilience of over 76 million households by 2030. The shortlisted World Restoration Flagships are expected to be announced end of 2022.

3.9 Timeline

	202	202	202	202	202	202	202	202	202	203
	1	2	3	4	5	6	7	8	9	0
UN Decade on Ecosystem Restoration										
Multi-Partner Trust Fund 5-year programme Secretary General's report, UN General										
Assembly Global capacity needs assessment										
World Restoration Flagships		Launch								
Action Plan launch and updates		Launch	Updated Action Plan		Updated Action Plan			Updated Action Plan		
Restoration Challenges and Campaigns		Launch								
UN Decade review and report by UN Secretary General					Mid- term review					Final review
International pro	ocesses	and ever	nts							
SDG Global Report										
CBD COP										
UNFCCC COP										
UNCCD COP										
UN Environmental Assembly										
UN General Assembly										
Conventions on Migratory Species										
UN Ocean Conference										
UN Forum on Forests										
World Urban Forum										
UN Food Systems Summit										
IPCC Plenary Sessions										
IPBES Plenary Sessions										

Figure 4: UN Decade on Ecosystem Restoration – Key Milestones, Events and Reports

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