

UNITED NATIONS DEVELOPMENT PROGRAMME



**NATURE
FOR**

**DISASTER
RISK
REDUCTION**

**NATURE
PLEDGE**

**NATURE FOR DEVELOPMENT
ACTION KITS**

ABOUT THE 'NATURE FOR DEVELOPMENT' ACTION KIT SERIES

This document, "Nature for Disaster Risk Reduction" is one of a series of "Nature for Development" Action Kits, as part of UNDP's Nature Pledge. This series includes "Nature for Water Security," "Nature for Climate Action," "Nature for Food Security," "Nature for Prosperity," "Nature for Health," "Nature for Gender Equality" "Nature for Justice" and "Nature for Peace."

This action kit provides UNDP staff with an overview of the many intertwined relationships between nature and sustainable development. It also provides key facts and figures and talking points, and the programming entry points needed to make the case for investing in nature to achieve development outcomes. This kit, which also provides the tools and information needed to learn more and take action, aims to:

- highlight entry points for implementation of the UNDP Nature Pledge;
- support implementation of the UNDP Strategic Plan 2026-2029 and its four strategic objectives, including prosperity for all on a healthy planet;
- strengthen UNDP policy, advocacy and awareness-raising efforts;
- inform effective national, regional and integrated programming efforts, and support issue-based portfolio approaches in line with national priorities;
- support resource mobilization with traditional and non-traditional funding partners;
- strengthen and forge new partnerships with sister UN agencies, other international development partners; national and local stakeholders in government; the private sector; academia; media; and other civil society groups; and
- leverage and strengthen internal UNDP capacities and expertise at all levels.

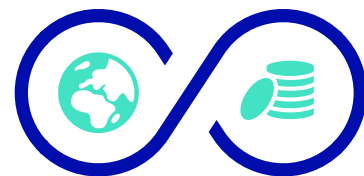
ABOUT UNDP'S NATURE PLEDGE

The Nature Pledge is UNDP's commitment to support more than 140 countries in achieving their ambitious goals under the UN Agreements on Biodiversity (UNCBD), Land (UNCCD), Climate (UNFCCC), Food, Water and Oceans towards achievement of the 2030 Agenda.



VALUE SHIFT

A 'Value Shift' to transform the value we place on nature and drive changes in people's behavior so that we place nature at the heart of development and across sectors including governance, economics, finance, health, and conservation.



FINANCE AND ECONOMIC SHIFT

An 'Economic and Finance Shift' to support a system where decision makers value natural capital, alongside financial, human and man-made capital.



POLICY AND PRACTICE SHIFT

A 'Policy and Practice Shift' to deliver change at scale on the ground - led by governments, and grounded in partnerships with Indigenous Peoples and local communities.

The Nature Pledge provides a pathway to transform our global systems by meeting vital targets to protect and restore our planet, eradicate poverty, reduce gender and other inequalities, protect human rights, and accelerate overall progress on nature-dependent sustainable development goals.

NATURE AND DISASTER RISK REDUCTION

The world is facing an escalating environmental crisis, marked by biodiversity loss, land degradation, and climate change. As humanity crosses critical planetary boundaries, ecosystems vital to life and human prosperity are reaching a tipping point. Over 75 percent of terrestrial and 40 percent of marine environments are now degraded, accelerating the collapse of biodiversity and putting one million species at risk of extinction.

These environmental breakdowns are not only ecological, they are deeply human. Climate change and ecosystem degradation are intensifying the frequency and severity of natural hazards. As forests are cleared, wetlands drained, and coral reefs destroyed, the natural infrastructure that once protected communities is weakened or lost. Nature's ability to absorb floodwaters, stabilize soils, moderate temperatures, and buffer storms and droughts is diminished—leaving communities more exposed. The impacts fall hardest on those already vulnerable: people living in poverty, Indigenous communities, and marginalized populations facing disproportionate losses, displacement, and economic insecurity.

Nature, however, offers a powerful solution. Healthy ecosystems serve as natural buffers against disaster risks: mangroves and wetlands absorb storm surges, forests prevent landslides and erosion, and green spaces in cities reduce heat stress and flash flooding. Restoring degraded ecosystems and scaling up nature-based solutions is one of the most cost-effective ways to reduce disaster impacts while supporting biodiversity, climate mitigation, and human well-being.

Nature-based solutions, such as reforestation, wetland restoration, and sustainable agriculture, offer triple benefits; they reduce vulnerability to hazards, contribute to climate adaptation and mitigation, and enhance livelihoods and biodiversity. These solutions are especially effective when anchored in local knowledge and community stewardship. Around the world, community-led initiatives are restoring watersheds, managing mangrove forests, and applying agroecological practices that reduce risk while generating jobs and food security.

Nature also plays a crucial role in recovery and resilience-building. Restoring hillsides after landslides, rehabilitating coastal ecosystems after hurricanes, and integrating green infrastructure into rebuilding efforts ensures that recovery efforts not only repair damage but also reduce future risk. Embedding environmental assessments into disaster recovery planning helps create resilient systems that can withstand shocks for decades to come.

Investing in nature is also an investment in economic resilience. Ecosystems support key sectors such as agriculture, fisheries, and tourism—industries that provide jobs, ensure food and water security, and drive development. Nature-based solutions prevent costly damages, reduce the burden on public infrastructure, and generate green jobs. For example, coral reef restoration not only shields coastlines from storm surges, but also supports tourism economies and marine biodiversity.

In a world of rising risks, nature is not a luxury, it is a lifeline. Nature-based disaster risk reduction delivers powerful, scalable, and equitable solutions. By protecting and restoring ecosystems, we can safeguard lives and livelihoods, reduce vulnerability, and build more resilient communities—now, and for generations to come.

THE BENEFITS OF IMPLEMENTING NATURE-BASED SOLUTIONS FOR DISASTER RISK REDUCTION

Nature plays a vital role in protecting people from the impacts of disasters. Healthy ecosystems act as natural buffers against floods, droughts, landslides, and storm surges. Forests stabilize soil and prevent erosion; wetlands store excess rainwater; coral reefs and mangroves absorb storm energy. When these ecosystems are degraded, communities become more vulnerable. Nature-based solutions offer cost-effective, long-term strategies for disaster risk reduction—reducing losses, building resilience, and supporting recovery. They also strengthen local economies, protect livelihoods, and promote climate adaptation. Investing in nature can reduce humanitarian need while advancing the Sustainable Development Goals.



Photo credit: Dean Rose UNDP Seychelles EBA



Restoring ecosystems can reduce disaster-related poverty: natural hazards push an estimated 26 million people into poverty each year.



Climate-related disasters, worsened by ecosystem degradation, are responsible for 80% of food crises worldwide. Restoring degraded land can improve food security and reduce vulnerability to droughts and floods.



Environmental changes increase the risk of outbreaks like dengue, malaria, and zoonoses, especially in disaster-prone regions, and more than 60% of emerging infectious diseases originate from animals, linked to habitat disruption and ecosystem degradation.



Women and children are 14 times more likely to die in climate-related disasters, and 4 out of 5 people displaced by disasters are women and girls. Gender-sensitive, nature-based disaster risk reduction empowers women and reduces disproportionate vulnerability.



Forests and wetlands provide water for over 75% of the world's accessible freshwater. Healthy ecosystems reduce flood risk and safeguard water quality, critical during and after disasters.



Investing in nature-based disaster risk reduction could generate over 20 million green jobs by 2030.



Nature-based infrastructure can reduce disaster costs by up to 50% compared to traditional 'gray' infrastructure, and Mangroves alone reduce annual flooding for over 18 million people and prevent \$82 billion in property damage globally each year.



Nature-based solutions could help avoid up to \$3.7 trillion in annual economic losses from climate-related disasters, which are largely borne by those in poverty.



Urban green infrastructure can reduce flood risk by up to 80% in vulnerable city zones. Green roofs, restored wetlands, and permeable urban spaces buffer rainfall and protect communities from urban floods

Photo credits

Row one: Gerardo A Moya UNDP Honduras; Niyi Fagbemi UNDP Nigeria; World Bank

Row two: UNDP Pakistan; UNDP Uganda; UNDP Zimbabwe

Row three: UNDP Viet Nam; Alex Ray, UNDP; Freepik

TRENDS IN NATURE AND DISASTER RISK REDUCTION

As disasters become more frequent and intense, the role of healthy ecosystems in protecting people and infrastructure is becoming increasingly evident. Degraded ecosystems increase vulnerability, while nature-based solutions can offer low-cost, high-impact risk reduction strategies. Below are current and future trends that underscore the importance of investing in nature for disaster resilience.

CURRENT TRENDS

<p>Increased flooding: The last twenty years have seen the number of major floods more than double, <u>from 1,389 to 3,254</u>, while the <u>incidence of storms grew from 1,457 to 2,034</u>. Floods and storms were the most prevalent events.</p>	<p>Cost effectiveness: A comprehensive review found that in more than 80 percent of studies reviewed <u>nature-based solutions are more cost-effective</u> than conventional engineering solutions for disaster risk reduction.</p>	<p>Funding deficit: Only 3% of climate finance is directed to nature-based solutions, despite their high cost-effectiveness, and public international funding for nature-based adaptation accounts for <u>less than 1.5%</u> of total climate finance.</p>
<p>Effectiveness: A review of hazard mitigation studies found that <u>more than two-thirds of nature-based solutions</u> were more effective than engineering-based solutions.</p>	<p>Global Adoption of nature-based solutions for disaster reduction: Over <u>130 countries have already incorporated nature-based solutions</u> into their national climate adaptation plans, reflecting a growing recognition of their role in disaster risk reduction.</p>	<p>Nature-based solutions protect against drought: Protecting forests and wetlands can increase water availability during droughts by up to 30%, <u>regulating water cycles and maintaining supplies</u>.</p>
<p>Escalating frequency of climate-related disasters: Global analysis shows that if current trends continue, the number of disasters per year could rise from around <u>400 in 2015 to about 560 by 2030</u> - a 40 percent increase, driven largely by climate change and ecosystem degradation.</p>	<p>Deepening adaptation and nature finance gaps: Even though nature-based solutions provide major adaptation benefits, <u>they still receive only about 37% of the finance needed to reach global goals</u>, while nature-negative investments remain more than 30 times larger, widening the gap between risk and resilience.</p>	<p>Soaring economic losses from climate and weather extremes: Disaster costs now exceed <u>more than \$2.3 trillion</u> if you account for the cascading impacts and ecosystem costs. This is more than ten times the annual losses reported in official figures, and a more than 30-fold increase since 1970. These costs are set to continue to rise.</p>

EMERGING TRENDS

<p>Rise of 'sponge cities': Cities are beginning to implement <u>'sponge city' concepts can reduce surface runoff by up to 70%</u>. Integrating green spaces and water-absorbing materials mitigates urban flooding.</p>	<p>Increasing view of nature as a protective asset by insurance: Insurers are starting to invest in and insure natural infrastructure, such as mangroves and coral reefs, as cost-effective tools for <u>reducing insured losses from hurricanes, floods, and storm surges</u>.</p>	<p>Use of satellite imagery and AI for ecosystem-based risk mapping: Emerging tools using satellite data, machine learning, and predictive modeling are being used to <u>identify where nature can most cost-effectively reduce disaster risk</u>, such as floodplains and erosion-prone slopes.</p>
<p>Mainstreaming nature-based solutions into disaster policies: Countries are beginning to <u>formally integrate nature-based solutions into national disaster risk reduction strategies</u>, moving from pilots to mainstream budgeting and planning, reflecting growing recognition of nature as core infrastructure for climate adaptation and resilience.</p>	<p>Public-private partnerships for ecosystem restoration and risk reduction: Collaborations between governments, companies, and communities <u>are emerging to co-finance restoration of forests, wetlands, and watersheds</u> that serve as natural defenses against climate risks.</p>	<p>Climate-resilient infrastructure standards that include nature: A growing number of national and international <u>engineering standards are beginning to incorporate natural infrastructure</u> as a requirement or co-benefit—shifting the definition of 'climate-resilient' infrastructure to include ecosystems.</p>
<p>Innovative risk finance that rewards healthy ecosystems: Insurers and governments are piloting <u>parametric insurance and community-based risk-sharing mechanisms</u> that explicitly value ecosystems—such as coral reefs and mangroves—as protective assets, channeling payouts into rapid restoration and long-term nature-based resilience.</p>	<p>Aligning disaster risk reduction, climate and biodiversity agendas around nature-based solutions: <u>New guidance and joint initiatives</u> are emerging to help countries align disaster risk reduction, climate adaptation, and biodiversity commitments, with nature-based solutions positioned as a shared pathway to deliver the Sendai Framework, Paris Agreement, and the Kunming Montreal Global Biodiversity Framework.</p>	<p>Growing global coalitions for 'Eco-DRR' and nature-based solutions: Multi-stakeholder alliances such as the <u>Partnership for Environment and Disaster Risk Reduction (PEDRR)</u> are bringing together UN agencies, NGOs, scientific institutions, and governments to scale up nature-based solutions and provide practical guidance for risk-informed, ecosystem-based planning.</p>

KEY MESSAGES ON NATURE FOR DISASTER RISK REDUCTION

NATURE IS OUR FIRST LINE OF DEFENSE AGAINST DISASTERS

Forests, wetlands, mangroves, grasslands, and coral reefs are natural buffers that absorb the impacts of floods, droughts, landslides, heatwaves and storms. Maintaining and restoring these ecosystems is a proven, cost-effective strategy to reduce disaster risk and build resilience in rural and urban areas. When combined with early warning systems, nature-based approaches can significantly reduce losses, sustain livelihoods, and deliver co-benefits.

DISASTER RISK REDUCTION MUST BE INTEGRATED INTO NATURE POLICIES – AND VICE VERSA

Disaster risk reduction and ecosystem management are often handled separately, but must be integrated to be effective. Countries should embed nature-based approaches into national disaster risk reduction strategies and climate adaptation plans, while ecosystem policies must account for disaster risk. UNDP supports this integrated approach through policy support and system strengthening.

THE CLIMATE CRISIS IS INCREASING DISASTER FREQUENCY AND INTENSITY

Climate-related disasters have increased fivefold over the past 50 years, and further increases are expected. Ecosystem degradation and biodiversity loss reduce natural resilience and increase human exposure to risk. Investing in nature-based solutions is essential to buffer communities from intensifying climate-related disasters.

LOCAL AND INDIGENOUS KNOWLEDGE ARE CRITICAL TO RISK REDUCTION

Many Indigenous Peoples and local communities have developed traditional ecological knowledge and land management systems that reduce disaster risks. These knowledge systems must be respected, supported and integrated into broader disaster risk reduction efforts, especially in contexts of rapidly changing climate and land use patterns.

NATURE-BASED SOLUTIONS ARE COST-EFFECTIVE FOR DISASTER RISK REDUCTION

Ecosystem-based disaster risk reduction offers long-term, low-cost protection. A recent UNDRR report found that nature-based infrastructure can reduce flood damages by over 20% globally, and that restoring mangroves costs one-tenth of building seawalls with similar protective effect. These solutions also bring major co-benefits for health, livelihoods and biodiversity.

URBAN ECOSYSTEMS REDUCE DISASTER RISK IN CITIES

As more people live in cities, urban ecosystems, such as green belts, wetlands, urban forests and permeable surfaces, are vital for cooling, flood control, and water management. Urban nature reduces heat stress, protects infrastructure, and can reduce the impacts of storms and floods, while also increasing mental health and wellbeing. Greening cities is an essential disaster risk reduction strategy.

ECOSYSTEM DEGRADATION INCREASES VULNERABILITY AND RISK

Over 40 percent of the planet's land is degraded, undermining nature's ability to regulate water, stabilize soils, and shield communities. When ecosystems are degraded, natural hazards become disasters. Addressing land degradation and biodiversity loss is essential to reduce risk, especially for the most vulnerable populations.

IMPORTANCE OF STRONG GOVERNANCE AND LOCAL OWNERSHIP

The success of nature-based solutions is shaped as much by governance as by ecological restoration. Clear policy mandates, regulatory integration, and technical capacity are essential for scaling and sustaining restoration efforts. Equally important is early, meaningful community engagement and strong vertical coordination across local, district, and national institutions.

RECOVERY FROM DISASTERS SHOULD BE NATURE-POSITIVE

Disaster response and recovery efforts should aim to invest in ecological restoration and green infrastructure. This can help prevent future risks, generate green jobs, and restore degraded areas. Nature-based recovery strategies contribute to long-term resilience and align with climate, biodiversity and development goals.

EQUITY AND GENDER ARE ESSENTIAL

Women, Indigenous Peoples, and marginalized groups often face the highest climate and disaster risks, yet hold critical knowledge and leadership for ecosystem stewardship. Integrating their perspectives into disaster planning, supporting climate-resilient livelihoods, and ensuring fair access to ecosystem benefits strengthens both social equity and resilience.



Photo credit: UNDP American Samoa

RESOURCES

This section highlights recent publications and tools on the linkages between nature and disaster risk reduction, including resources from both UNDP and partners.

TECHNICAL PUBLICATIONS AND REPORTS



Nature-based Solutions for Drought Resilience

This [13-page brief](#) highlights ways that nature-based

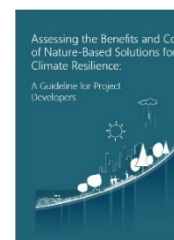
solutions are a foundation for building resilience to droughts.



Nature-Based Solutions to Disasters

This [short issues brief](#) highlights how nature-based solutions can help

increase social and ecological resilience, and decrease ecological and social vulnerability.



Assessing the Benefits and Costs of Nature-Based Solutions for Climate Resilience

This [set of](#)

[guidelines](#) provides an overview of how to calculate the costs and benefits of nature-based solutions for climate resilience.



Nature-Based Solutions for Disaster Risk Management

This [24-page booklet](#) explains the fundamentals

of using nature-based solutions to strengthen disaster risk management.



The Global Value of Mangroves for Risk Reduction

This [12-page brief](#) explores the importance of mangroves in

protecting coastal infrastructure.



Nature-based Solutions: Guidance for Municipalities and the Private Sector

This [43-page guide](#) highlights how cities and the private sector can take action on nature-based solutions for increased resilience to disasters.



Ensuring a Resilient Nature-Positive Future

This [31-page guide](#) provides detailed guidance for

insurers and policy makers on setting priority actions for nature.



Disasters and Ecosystems, Resilience in a Changing Climate Source Book

This [109-page source book](#)

explains the importance of ecosystems for reducing disaster risk, with ample examples and lessons for policy makers.



Making the Case for Ecosystem-Based Adaptation

This [152-page report](#) makes a strong case for ecosystem-

based adaptation in Nepal, Peru and Uganda, with clear policy recommendations for the future.

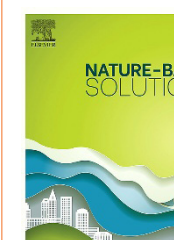
A DEEPER DIVE



A Catalogue of Nature-Based Solutions for Urban Resilience

This [237-page catalogue](#) aims to encourage

an increase in investments in nature-based solutions for disaster resilience.



Nature-Based Solutions – Special Issue on Nature-Based Solutions for Reducing Disaster Risk

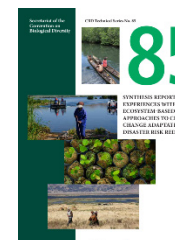
This [collection of 10 open-access articles](#) explores different dimensions of nature-based solutions and disaster risk reduction.



Words into Action - Nature-based Solutions for Disaster Risk Reduction

This [132-page guide](#) provides

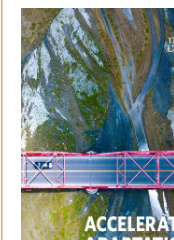
concrete advice on steps to implementing nature-based approach to implementing a strategy for disaster risk reduction.



CBD Technical Series No. 85 – Biodiversity and Disaster Risk Reduction

This [technical series publication](#)

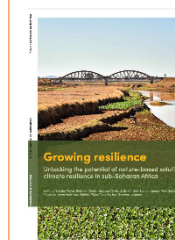
describes how biodiversity and healthy ecosystems are natural buffers against disasters.



Accelerating Adaptation

This [110-page report](#) explores the promise and limitations of nature-based

solutions for mitigating the impacts of floods and droughts.



Growing Resilience: Unlocking the Potential of Nature-Based Solutions for Climate Resilience in Sub-Saharan Africa

This [100-page report](#) identifies strategic actions to increase investment in nature-based solutions to strengthen resilience in sub-Saharan Africa.



From Risk to Resilience – Integrating Nature into Disaster Risk Reduction

This [49-page document](#) explains

why and how ecosystems are critical to effective disaster risk governance.



UNDRR Global Assessment Report on Disaster Risk Reduction

This [comprehensive report](#) connects

ecosystem degradation with increasing disaster risk, and promotes nature-based solutions.

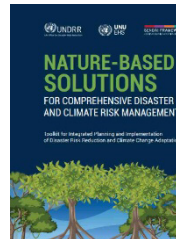


IPCC Sixth Assessment Report (2023) – Impacts, Adaptation and Vulnerability

Chapter 4 and 6 of [this report](#) highlight how intact ecosystems reduce disaster risk from floods, droughts, and landslides.

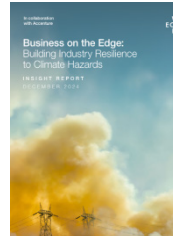
TOOLS AND TOOL KITS

This section highlights recent publications, tools, videos, blogs, photo essays and data on the linkages between nature and disaster risk reduction, including from both UNDP and partners.



Nature-based solutions for comprehensive disaster and climate risk management

This 64-page toolkit provides a comprehensive checklist of steps to take to integrate nature-based solutions into disaster risk reduction.



Business on the Edge: Building Industry Resilience to Climate Hazards

This [77-page report](#) offers a roadmap for businesses and policymakers to use nature-based solutions for resilient societies.



The Nature Navigator Handbook

This [132-page guidebook](#) is a handbook for disaster risk practitioners. The handbook offers options, and a practical toolkit.



Photo credit: Manuth Buth UNDP Cambodia

COMMUNICATIONS – BLOGS AND PHOTO ESSAYS

Blogs

Our nature blogs are written by global experts covering field stories, interviews and insights from around the world examining the ways in which we can meaningfully put nature at the heart of development. For all of our nature blogs, you can find them [here](#).

- Growing Resilience: Unlocking the Potential of Nature-Based Solutions for Climate Resilience in Sub-Saharan Africa: This [GFDRR blog](#) highlights the importance of nature-based solutions in mitigating the impacts of climate change and managing disaster risks.
- Wetland Centers and the Fight Against Climate Change: This [GFDRR blog](#) explores how urban wetlands are central to managing flooding risk in Colombo, Sri Lanka.
- Building Resilience with Nature-Based Solutions in Central Asia and the Caucasus. This [GFDRR blog](#) highlights how planners are using nature to reduce disaster risk in vulnerable, mountainous areas.
- Missing the forest for the trees? This [UNDP blog](#) argues that there is no such thing as a ‘natural disaster,’ and that we must shift our thinking to changing development pathways.

Stories and photo essays

- Solidarity in Disaster: This [UNDP photo essay](#) describes different approaches to strengthening resilience, including through nature-based solutions.
- Our Land. Our future. This [UNDP photo essay](#) showcases how a farming community in Burkina Faso is restoring their land, halting desertification and building drought resilience.
- Beating Drought. This [UNDP photo essay](#) explains how ecosystem restoration in the foothills of Mount Kilimanjaro, Tanzania, is helping prevent drought.
- Engineering with Nature. This [UNDP photo essay](#) explains how nature-based solutions in Peru prevent soil erosion and protect people in Peru from landslides.
- Farming for Life. This [UNDP photo essay](#) shows how climate action in the Seychelles is improving access to water, and protecting communities from flooding.
- Taking Shelter: Building Coastal Resilience in Viet Nam: This [UNDP photo essay](#) describe how Viet Nam is working with coastal communities to build climate resilience with nature as a key partner.

Videos

- Words into Action: A [short video](#) highlighting the need to incorporate nature-based solutions into disaster risk reduction plans.
- Nature’s Solutions to Landslides in Colombia: This [short video](#) highlights how nature can prevent landslides in Colombia.
- Ridge-To-Reef for Ecosystem-Based Disaster Risk Reduction in Haiti: This [short video](#) showcases how conserving ecosystems from mountains to coasts reduces disaster risk in Haiti.
- How Working with Nature Reduces Disaster Risk: This [7-minute explainer video](#) summarizes how nature-based solutions can reduce disaster risk.
- Implementing Nature-Based Solutions to Reduce Systemic Risk: This [4-minute video](#) explains how nature-based solutions are an essential tool to reduce systemic risk.

Other resources

- E-Learning: Nature-Based Solutions for Disaster and Climate Resilience: This [7-week self-paced e-learning course](#) covers the fundamentals of nature-based solutions and their role in strengthening resilience to disasters.

EXAMPLES OF UNDP'S WORK ON NATURE AND DISASTER RISK REDUCTION

UNDP has a growing portfolio of projects that integrate actions on nature and disaster risk reduction, including the following:

STRENGTHENING COMMUNITY RESILIENCE IN SENEGAL

In Senegal, a project on [ecosystem-based adaptation](#) focuses on fostering resilient natural resources and strengthening the livelihoods of agro-pastoral communities in the Ferlo Biosphere Reserve and Plateau of Thies. The project provides climate-resilient green infrastructure that enhances soil water storage, fodder availability and water for livestock; and developing alternative livelihoods which value is derived from the conservation and maintenance of these local forest and savannah ecosystems (e.g. timber and non-timber forest products, native climate-adapted vegetable gardens and eco-tourism).



“MI COSTA:” FOSTERING COASTAL RESILIENCE IN CUBA

This long-term Green Climate Fund-supported UNDP project is restoring more than [11,000 ha of mangroves and 3,000 ha of swamp forests along 1,300 km of Cuba's southern coast](#) to buffer storm surges, reduce coastal flooding and protect 1.3 million people, while supporting climate-resilient livelihoods and freshwater security. This commitment to ecosystem-based resilience is reflected in Cuba's 2019 Constitution and its 2030 National Plan for Economic and Social Development, both of which emphasize environmental conservation and climate action.



MANGROVES – THE LIFELINE AND SAFETY NET OF VIET NAM'S COASTS

Working with the Ministry of Agriculture and Rural Development, [UNDP has supported the rehabilitation of over 4,000 hectares of coastal mangroves](#) and the development of a national mangrove carbon database across 28 coastal provinces. In part because of the strong governance arrangements and multi-level coordination, this work has been effective in strengthening natural defenses against storm surges and sea-level rise while informing DRR-aligned implementation and blue-carbon finance in the country's national climate plans, or Nationally Determined Contributions. This long-term effort is also improving fisheries, stabilizing shorelines, and supporting coastal livelihoods, illustrating how ecosystem restoration can simultaneously reduce risk and advance sustainable development.



TIŠINA MARSH RESTORATION AND JOINT DRR PROGRAMME IN BOSNIA AND HERZEGOVINA

Through the Joint Programme “[Disaster Risk Reduction for Sustainable Development](#)” and the GEF-funded SPA project, UNDP is restoring the Tišina marsh—a ~200 ha protected wetland that stabilizes local hydrology and mitigates flood risk—while using the Climate Action Academy to train policymakers on nature-based solutions for DRR and biodiversity protection. By pairing hands-on restoration with targeted learning, the initiative links local ecosystem management to national DRR strategies and showcases Eco-DRR as a practical pathway for climate-resilient development.



ADAPTING TO CLIMATE CHANGE IN ETHIOPIA

Ethiopia's lowland ecosystems face increasing climate risks that severely affect small-holder farmers and pastoralists, who often lack access to reliable weather information, climate-smart practices, and diversified livelihood options. To address these gaps, UNDP's “[Climate Change Adaptation in the Lowland Ecosystems of Ethiopia](#)” project is strengthening community resilience by supporting the adoption of sustainable, diversified livelihoods that help rehabilitate degraded watersheds. Working across six regions and reaching nearly 60,000 people, the project is enabling communities to better understand adaptation options, develop climate-adaptive action plans, and respond effectively to emerging threats—demonstrating how targeted climate information services and capacity building can reduce vulnerability while advancing sustainable development.



STRENGTHENING CLIMATE RESILIENCE AND FOOD SECURITY IN DJIBOUTI

UNDP, with the support of the Global Environment Facility, is working to [strengthen climate resilience and food security in Djibouti's most vulnerable rural regions](#). Implemented with the Ministry of Environment and Sustainable Development, the project will help communities in Ali-Sabieh, Dikhil, Tadjourah, and Obock confront escalating droughts, floods, and extreme temperatures by improving early warning systems, restoring rangelands and croplands, and securing reliable water supplies through new groundwater access points, micro-dams, and hybrid nature-based solutions. By addressing the root causes of vulnerability and restoring critical ecosystems, the project lays the foundation for more resilient rural economies and stronger disaster risk reduction across Djibouti.



ENHANCING CLIMATE RESILIENCE IN INDIA

India's 6-year “[Enhancing Climate Resilience of India's Coastal Communities](#)” project, implemented by the Ministry of Environment, Forest and Climate Change with UNDP support, aims to strengthen the resilience of vulnerable coastal populations, especially women, by embedding ecosystem-centred and community-based adaptation into coastal planning and governance. The initiative is investing in ecological infrastructure to buffer storm surges, restoring mangroves and coastal watersheds, and supporting climate-resilient livelihoods. By 2023, nearly 98,000 people had received training, over 3,800 hectares of ecosystems had been restored, and community-led co-management structures were in place across key landscapes. The project also convenes a national network to advance integrated coastal management and contribute to India's climate commitments.



PROTECTING LIVELIHOODS AND LAKE ATITLÁN IN GUATEMALA

In Guatemala's drought-prone Sololá district, the [Indigenous-led organization Asociación Natün](#) is revitalizing traditional Mayan agroecological practices to help small-scale farmers, especially women, build resilience to climate change. With support from the UNDP–Adaptation Fund Climate Innovation Accelerator, the organization trains women in seed banking, community gardening, and water-efficient vertical gardens that boost household nutrition and income. Seed banks preserve locally adapted crops, while newly trained women promotoras are emerging as community leaders in climate-adaptive farming. Supported by strong partnerships with government and NGOs, the initiative is expanding its reach and leading a major reforestation effort around Lake Atitlán, strengthening food security, restoring ecosystems, and preserving cultural knowledge.



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United Nations Development Programme (UNDP)

UNDP is the leading United Nations organization fighting to end the injustice of poverty, inequality, and climate change. Working with our broad network of experts and partners in 170 countries, we help nations to build integrated, lasting solutions for people and planet. Learn more at undp.org or follow @UNDP.

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