



# INTERNATIONAL WATERS

Water is the foundation of life on Earth. Over three billion people – some 40% of the world's population – depend on marine and coastal biodiversity for their livelihoods. Meanwhile every person on Earth directly relies on freshwater to survive.

But today, that foundation is under threat. Our climate is changing, as are weather patterns and river flows, affecting water distribution and bringing both flood and drought. Pollution and overfishing are harming aquatic ecosystems. Competition for freshwater is increasing. And degraded waters are seriously affecting human health, food security, social welfare and economic development.

Due to the connectedness of aquatic systems, effective transboundary action is required to address shared water issues. With over 270 transboundary river basins and 200 transboundary aquifers globally, 39 countries have more than 90% of their territory within one or more transboundary river basins and 21 countries lie entirely within shared watersheds, which together are home to 40% of the world's population.

Currently, UN Environment and the Global Environment Facility (GEF) are working together on more than 30 projects, assisting over 50 countries to battle environmental degradation, secure water resources and negotiate and implement the data-based policies needed to ensure a sustainable future for all.

#### CASE STUDY Water policy in paradise

One of the world's most iconic tropical destinations, Mauritius is the very definition of an island paradise. But the former home of the dodo is also emblematic of man's deadly impact on the environment.

While Mauritius has worked hard to protect its remaining flora and fauna, increasing development now endangers both the island's natural environment and the industries that are its lifeblood.

With their limited area and intimate relationship with the sea, Small Island Developing States are especially vulnerable to the impacts of water pollution. In Mauritius, increasing development and growing tourism mean that effective management of the island's water resources – and the waste that threatens them – has become a critical priority for the government.

With support from the Global Environment Facility, UN Environment has been working with the Government of Mauritius on a series of projects to confront these issues and preserve both the island's water resources and its marine environment.

Working with the Mauritius Ports Authority, the Addressing Land-based Activities in the Western Indian Ocean project has developed a comprehensive waste management strategy, enabling long-term improvements in the island's marine environment and associated ecosystems. An incinerator now handles organic waste from ships visiting the port, while waste screens capture run-off pollution, enabling disposal before it reaches coastal waters.

Meanwhile, backed by expertise from UN Environment and the United Nations Development Programme, the Water Resource and Wastewater Management in Atlantic and Indian Ocean Small Island Developing States project has enabled the Government of Mauritius to develop its first national Integrated Water Resources Management Plan, as well as new policy guidelines on industrial wastewater management and the establishment of desalination plants - guarding against pollution and overexploitation of vital groundwater resources.

Together, we are helping to ensure Mauritius remains a vibrant and sustainable home for both its people and the ecosystems that have made it famous.



## The UN Environment-GEF partnership in International Waters

UN Environment and the GEF have been collaborating for over 20 years to support sustainable transboundary management of water resources globally.

Since1996 GEF investment in UN Environment-led projects has reached over \$336 million, with 75 projects completed or underway in 78 countries worldwide.

The UN Environment-GEF International Waters team offers national governments, regional bodies and international partners a range of tools and capacity to drive water strategy and policy. Our work covers all aspects of aquatic ecosystem governance, from source to sea, and includes:

- Identifying key transboundary water-related concerns and quantifying shared water-related issues
- Developing regional strategic programmes of action to address the issues highlighted by transboundary diagnostic analyses and designing action plans for national-level action.
- Strengthening country capacity to sustainably integrate environmental concerns into water resource management and planning
- Working with regional governance bodies and partners in multi-country river basins and large marine ecosystems to catalyze regional and multi-country cooperation
- Developing and demonstrating tools and methodologies for improving water resource management



## Why UN Environment?

Many marine and freshwater systems are transboundary and shared by users across a number of countries. However, the management and governance systems of these waters are often established from national, rather than international perspectives. UN Environment promotes and advances integrated approaches to watershed, coastal and ocean management, enabling countries to jointly manage their transboundary water resources, safeguarding and sharing the ecosystem services they provide, through platforms such as the Regional Seas Conventions and the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities.

#### **Global policy**



The UN Environment-GEF International Waters team takes a lead role in water issues worldwide, both informing and working within the framework of multilateral environmental platforms, including:

 Global Programme of Action for the Protection of the Marine Environment from Land-based Activities: Established in 1995, the Programme is the only global intergovernmental mechanism directly addressing the links between terrestrial, freshwater, coastal and marine ecosystems. UN Environment hosts the Programme secretariat and its three main source platforms, the Global Partnership on Nutrient Management, the Global Partnership on Marine Litter and the Global Wastewater Initiative

#### Regional Seas Programme:

Established by UN Environment in 1974, the Programme brings together 143 countries in 18 Regional Seas Conventions and Action Plans and encompasses action-oriented platforms for marine and coastal environmental management, protection and development, providing an important interface between science and policy and reducing global vulnerability to environmental challenges UN Environment hosts seven of the Regional Seas Convention and Action Plan secretariats: Abidjan Convention, Barcelona Convention, Cartagena Convention, Nairobi Convention, Tehran Convention, Action Plan for the East Asian Seas Region, Action Plan for the Northwest Pacific Region

- IW:Learn: UN Environment is a founding partner of IW:LEARN, the GEF's International Waters Learning Exchange and Resource Network, established to strengthen transboundary water management around the globe through knowledge exchange and capacity building activities
- UN-Water: As a key member of UN-Water, which brings together over 30 UN organizations to deliver coordinated responses to the world's water-related challenges, UN Environment leads on a range of technical activities and global campaigns, as well as Sustainable Development Goal monitoring and reporting

#### Technical expertise and resources

The UN Environment-GEF International Waters team builds on the expertise of UN Environment's regional and technical units working on marine, coastal and freshwater ecosystems. Key areas of expertise include:

- Research and analysis in waterrelated sciences
- Environmental impact assessments, risk assessments and vulnerability analyses
  Transboundary water
- assessments to set priorities for conservation and management
- Modern methodologies and online tools for flood and drought management, enabling access real-time information for transboundary decision-making.
- Development and implementation of Ecosystem Based Adaptation strategies through regional UN Environment offices, Regional Seas Conventions and Action Plans

#### **Project highlights**

- Blue Forests: This project is a global assessment of the value of blue forests (mangroves, seagrass meadows and saltwater marshes), focusing on coastal carbon sequestration and other ecosystem services. In Kenya's Gazi Bay, the project has become the world's first conservation initiative to link mangrove forests to the global carbon market, providing direct benefits to coastal communities for their conservation activities. This model is now set to be replicated across other Blue Forest sites globally from Abu Dhabi to Ecuador, Indonesia, Madagascar and Mozambigue
- Transboundary Water Assessment Programme: The first global-scale indicator-based system for assessing the comparative risks and benefits of environmental management decisions on transboundary water systems, the Programme brings together data on 758 international water systems (aquifers, groundwater systems, transboundary lakes and river basins, large marine ecosystems, and the open ocean) to guide national, regional and global policy and decision making

#### The Caribbean Regional Fund for Wastewater Management:

Focusing on the development of sustainable wastewater management policies, regulations, and practices across 13 Caribbean countries, this partnership with the Inter-American Development Bank has resulted in seven national wastewater development strategies and plans, alongside the ratification of the Land Based Sources of Pollution Protocol of the Cartagena Convention by Jamaica and Costa Rica and the establishment of new multimillion-dollar wastewater management funding mechanisms in Jamaica, Belize and Guyana

Integrated and Sustainable Management of Transboundary Water Resources in the Amazon River Basin:

This project was a first step towards the transboundary management of one of the world's most critical freshwater systems with the formulation of a basinwide Strategic Action Programme. It created a shared management vision for the Amazon basin, filled the knowledge gaps on the root causes of degradation of the basin, and developed the enabling environment for engaging in policy reforms in support of Integrated Water Resources Management

Mediterranean Sea Programme -**Enhancing Environmental Security:** This initiative has brought together partners including UN agencies, development banks, NGOs and national governments to achieve large-scale impacts across the region, including the development of regional Strategic Action Programmes, national Integrated Coastal Zone Management strategies, and National Action Plans on land-based pollution and biodiversity. Over 1,000 tonnes of chemical waste have been disposed of under the programme, and 80 demonstration projects implemented across 13 countries

"The bank has learned a lot from UN Environment ... Working hand in hand, we have been able to put together a project in which the sum of the parts is much greater than each individually."

Sergio Campos, Chief, Water & Sanitation Division, Inter-American Development Bank



### A sustainable future

Human pressure on our planet is increasing at an unprecedented rate and we are only just beginning to appreciate the true value of the ecosystem services provided by our transboundary water systems. Every year, global wetlands provide ecosystem services worth in excess of \$3.4 billion, while our oceans provides us with goods and services conservatively valued at US\$2.5 trillion.

When developing plans to protect these services, it is important to consider the needs of all those involved, from subsistence fisherfolk to national governments. The UN Environment-GEF International Waters team designs projects that include all key stakeholders and explores synergies with other focal areas (i.e., chemicals and waste, climate change, land degradation and biodiversity).

Going forward, our focus will be on emerging issues that are aligned with the objectives of both the GEF and UN Environment and will include:

 Integrated approaches: Using integrated water resource management, ecosystem-based management and marine spatial planning to address the root causes of and coastal natural capital, developing guiding principles for investment, and providing policy advice, awareness raising, and capacity building to support regional blue economy strategies in line with relevant Sustainable Development Goals

- Innovative financing mechanisms: Innovative green financing schemes help attract funding to support sustainable development. We are designing and applying a range of strategies –from targeted impact investments to payment for ecosystem services, fiscal policy reforms, and ecological fiscal transfers – to ensure long-term, financially sustainable change
- Building partnerships: UN Environment is promoting the oceans agenda at the global level by building on partnerships such as the Global Programme of Action on Land-based Sources of Marine Pollution, the Global Partnership on Marine Litter and the Global Partnership on Nutrient Management. Launched in 2017 Clean Seas campaign has united over 30 governments, civil society, the private sector and citizens in the fight against marine plastic litter

All of life on earth depends on water, and the UN Environment-GEF partnership will continue to develop innovative approaches

## 预览已结束, 完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5\_14658

