SUSTAINABLE DEVELOPMENT GOALS

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UNDP SUPPORT TO THE IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT GOAL 14

OCEAN GOVERNANCE

United Nations Development Programme

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SUSTAINABLE DEVELOPMENT

A path towards global prosperity, human well-being and a healthy planet

The world has achieved remarkable gains in human development over the past two decades. Extreme poverty has significantly reduced, access to primary education and health outcomes has improved, and substantial inroads have been made in promoting gender equality and the empowerment of women. The pursuit of the eight Millennium Development Goals has contributed to this progress and enabled people across the world to improve their lives and future prospects. Yet, despite these significant gains, extreme poverty remains a key challenge, with more than 700 million people globally living on less than US$ 1.90 PPP (purchasing power parity) per day. Inequalities are either high or widening, especially within countries. Unemployment and vulnerable employment levels are high in many countries, particularly among youth. Unsustainable consumption and production are pushing ecosystems beyond their limits—undermining their ability to provide services vital to life, development, and their own regeneration. Shocks associated with macroeconomic instability, disasters linked to natural hazards, environmental degradation, and socio-political unrest impact negatively on the lives of millions. In many cases, these shocks hold back, if not reverse, progress already achieved in meeting national and internally agreed development goals. Preserving the gains that have been made and addressing the current development challenges the world faces cannot be solved by tinkering at the margins.

There is an imperative today to foster sustainable development. A vision for what this encapsulates is laid out in the new sustainable development agenda that aims to end poverty, promote prosperity and people's well-being while protecting the environment by 2030. As the UN's Development arm, UNDP has a key role to play in supporting countries to make this vision a reality—putting societies on a sustainable development pathway, managing risk and enhancing resilience, and advancing prosperity and wellbeing.

Building on its core strengths—a large country network in more than 170 countries and territories, a principal coordination role within the UN Development System, and the proven ability in supporting efforts to reduce poverty, inequality and exclusion, and protect vital ecosystems—UNDP has outlined a vision in its Strategic Plan 2014-17 focused on making the next big breakthrough in development: to help countries achieve the simultaneous eradication of poverty and significant reduction of inequalities and exclusion. While ambitious, this vision is within reach and significant inroads can be made in eradicating poverty, reducing inequalities and exclusion, and safeguarding the environment.

In line with this vision, UNDP has worked with the United Nations Development Group(UNDG) in developing a strategy for effective and coherent implementation support of the new sustainable development agenda under the acronym 'MAPS' (Mainstreaming, Acceleration, and Policy Support). The *Mainstreaming* component of MAPS aims to generate awareness amongst all relevant actors and help governments land the agenda at national and local levels; and ultimately to mainstream the agenda into their national plans, strategies and budgets. The Acceleration component focuses on helping governments accelerate progress on Sustainable Development Goal(SDG) targets, by providing tools that will help identify critical constraints to faster progress and focus on those development objectives that are more relevant to the country context. The Policy Support component aims to provide coordinated and pooled policy support to countries working to meet their SDG targets. In this regard, UNDP offers an integrated package of policy support services that align with its programming priorities. These services, as outlined in the prospectus, cover a wide range of areas: poverty reduction, inclusive growth and productive employment, gender equality and the empowerment of women, HIV and health, access to water and sanitation, climate change adaptation, access to sustainable energy, sustainable management of terrestrial ecosystems, oceans governance, and promotion of peaceful and inclusive societies.

Well-equipped with this integrated package of policy support services, UNDP stands ready to support country partners to effectively implement the new development agenda and make long-term economic prosperity, human and environmental well-being a reality.

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Why does this matter?

The world ocean contributes substantially to human development, including to the provision of food security, transport, energy supply, tourism and many of the planet's most critical ecosystem services (carbon and nutrient cycling, climate regulation, oxygen production). The **ocean contributes around US$3 trillion per year to the global market economy**, or about 5 percent of GDP. Estimates of the value of ocean non-market services run at about 63 percent of all such services provided by the planet's ecosystems.

Fisheries and aquaculture contribute US$100 billion per year and about 260 million jobs to the global economy. Women comprise 47 percent of the total workforce dependent on commercial capture fisheries for their livelihoods, including the post-harvest sector. International shipping moves over 90 percent of international trade, is valued at US$435 billion per year and provides 13.5 million jobs. Thirty percent of global oil extraction now occurs in offshore waters, valued at approximately US$900 billion per year and increasing. Tourism represents 5 percent of global GDP and about 6 percent of global jobs; coastal tourism is clearly a major component, with an estimated value of about US$271 billion per year.

The integrity of these key ocean values and services is at significant risk due to a range of **ocean management policy and market failures leading to fisheries overexploitation, pollution (especially nutrients and plastics), invasive species introductions, habitat loss and ocean acidification**. Eighty percent of global fish stocks are fully exploited, overexploited or collapsed. Nutrient loads to the oceans have tripled since pre-industrial times, leading to a geometric increase in coastal hypoxic areas, now numbering over 500. The rapid growth of the shipping industry as the means of transport for over 90 percent of international goods and commodities has led to an explosion of introduced aquatic species, primarily carried via ship ballast water and hulls. 20 percent of the world's coral reefs have already been lost and another 20 percent degraded. Mangroves have been reduced to 30 to 50 percent of their historical cover and 29 percent of seagrass habitats have disappeared since the late 1800s. Of the 300 million mt per year of global plastics production, an estimated 10 million to 20 million mt is entering the oceans and damaging species and ecosystems. Lastly, due to human CO_2 emissions, the oceans are acidifying rapidly, perhaps faster than ever before, with ocean acidity increasing by 30 percent over the last 50 years and already starting to impact the functioning and integrity of ocean ecosystems.

Each year, overfishing costs the world about US$50 billion, coastal hypoxia US$200 billion to US$800 billion, invasive aquatic species US$100 billion and ocean plastics US$13 billion. In the 'business as usual' climate change response scenario, ocean acidification will cost US$1.2 trillion per year by 2100 as ocean acidity increases an additional 250 percent.

The key **policy and market failures driving each ocean externality** include:

- Failure to internalize the cost of 'clean' ballast water in ship design and operation; lack of global legal agreement
- Failure to internalize cost of nutrient damage to marine (and freshwater) ecosystems into price of fertilizer and human and livestock wastewater management policies and practices
- Failure to internalize socioeconomic and environmental costs of overfishing into (sustainable) fisheries management; 'bad' subsidies leading to fisheries overcapitalization
- Lack of internalizing costs of effective plastic 'waste' recovery and re-use
- Failure to internalize environmental and economic damage of ocean acidification by putting a proper price on carbon emissions and removing fossil fuel subsidies

Oceans - Key Facts

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Contribution per year to the world economy

US$ 3 trillion
Contribution of oceans to the global economy

US$ 100 billion
Contribution of fisheries and aquaculture to the global economy

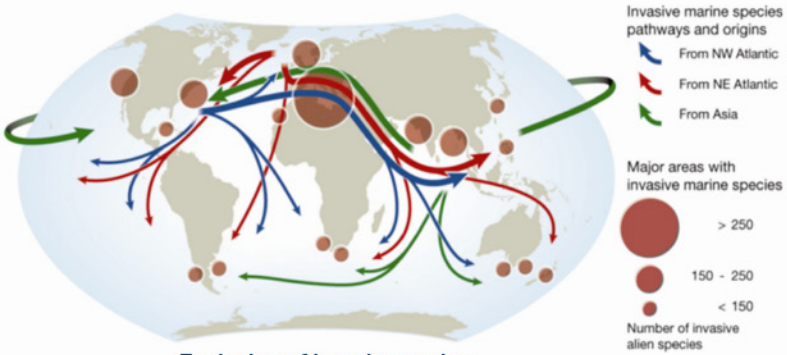
US$ 271 billion
Estimated value of coastal tourism

US$ 900 billion
Value of global oil extraction that occurs in offshore waters

Ocean goods and services are at significant risk

80%
of global fish stocks are fully exploited, overexploited or collapsed

30%
increase in ocean acidity over the last 50 years is negatively impacting ocean ecosystems



Explosion of invasive marine species due to rapid growth of the shipping industry

10-20 million mt
of plastics produced is entering the oceans every year, damaging species and ecosystems

20%
of the world's coral reefs have already been lost and another 20% degraded

500
coastal hypoxic areas have been identified, which result from an increase in nutrient loads to the oceans

Costs per year to the world economy (US$)

CO_2 Ocean acidification: **1.2 trillion***

O_2 Coastal hypoxia: **200-800 billion**

Invasive aquatic species: **100 billion**

Overfishing: **50 billion**

Ocean plastics: **13 billion**

*Projected by 2100

What do we offer?

Through its Ocean Governance Programme, UNDP is working with other UN agencies, the Global Environment Facility, international financial institutions, regional fisheries organizations and others to improve ocean management and to sustain livelihoods at the local, national, regional and global scales through effective ocean governance. UNDP's Ocean Governance Programme is strongly aligned with **Sustainable Development Goal (SDG) 14 on Oceans – Conserve and sustainably use the oceans, seas and marine resources for sustainable development**. The active portfolio and pipeline of UNDP projects and programmes support the majority of SDG14 targets. UNDP also ensures appropriate safeguards are in place to avoid, manage and mitigate potential harm to people and the environment, including ocean resources, through application of UNDP's Social and Environmental Standards and related Accountability Mechanism across all its programming. UNDP provides the following services to countries:

We support the **creation of an enabling policy environment for ocean restoration and protection** through the **development of ocean and coastal management strategic planning tools and methodologies**. UNDP has pioneered the development and application of a suite of tools and methodologies that have proven highly effective at creating an enabling policy environment for ocean restoration and protection, in several cases catalysing substantial public and private financial flows. In some cases, these instruments have helped to shift sizeable ocean industries, such as shipping and tuna fisheries, to a more environmentally sustainable path.

We support the **codification and application of the Global Environment Facility's (GEF) Transboundary Diagnostic Analysis/Strategic Action Programme planning approach** to address aquatic ecosystem degradation. Over 85 percent of the world's fish catch occurs in the 64 Large Marine Ecosystems (LMEs) that ring the world's continents. Most of these LMEs are shared by two or more countries, necessitating multi-country cooperation in their sustainable management. In the mid-1990s, the GEF adopted LMEs as the principle biogeographic planning unit for transboundary marine systems. UNDP responded via codification and application of the GEF's **Transboundary Diagnostic Analysis/Strategic Action Programme planning approach** to over a dozen of the world's LMEs. TDA/SAP is a multi-country, long-term integrated planning approach that helps governments to prioritize issues, identify barriers and agree upon and implement regional and national governance reforms and investments aimed at addressing the root causes of aquatic ecosystem degradation.

We promote bottom-up approaches to maintaining aquatic ecosystem services at smaller planning scales (municipalities, provinces, local watersheds) – Integrated Coastal Management (ICM) and Integrated Water Resources Management (IWRM), complementing the TDA/SAP. Integrated water resources management promotes the coordinated development and management of water, land and related resources to maximize the resultant economic and social welfare equitably without compromising the sustainability of vital ecosystems. IWRM – often characterized by the three E's: economy, equity and environment – promotes

water resources management at the level of watersheds, whether at local, national or transboundary scales. The objective of Integrated Coastal Management (ICM) is to increase the efficiency and effectiveness of coastal governance towards the sustainable use of coastal resources and of the services generated by ecosystems in coastal areas. It aims to do this by protecting the functional integrity of these natural resource systems while allowing economic development to proceed. Increasingly, 'upstream' IWRM is being linked to coastal ICM via 'source-to-sea' approaches that aim to manage the entire linked watershed with the coastal area into which it drains. Given the very clear linkages between upstream watershed management and the welfare of downstream coastal ecosystems, the world's Small Island Developing States (SIDS) are a special case for IWRM and ICM that invites an integration of the two planning methodologies under a 'source-to-sea' approach.

We help **build upon and advance existing or anticipated regional or global multilateral agreements** to address threats to large-scale ocean sustainability. Some environmental and natural resource management issues threaten ocean sustainability at large regional and even global scales; these include over exploitation of highly migratory fish stocks, persistent organic pollutants, ocean acidification, marine plastics pollution and marine invasive species. To take comprehensive regional or global approaches to challenges at this scale, UNDP's approach builds upon and advances an existing or anticipated regional or global multilateral agreement. UNDP-GEF interventions have been designed to provide capacity-building, advisory, awareness-raising and advocacy support that promoted the negotiation, adoption and actual or anticipated coming into force of regional or global conventions. The enhanced public and private sector capacities for and commitment to compliance with the new legal regimes created the necessary enabling conditions that also helped to catalyse public and private financial flows and to measurably transform several major ocean industries on a path towards sustainability.

We support countries in the **creation of new Marine Protected Areas (MPA)** and the strengthening of existing MPAs through the UNDP Ecosystems and Biodiversity programme. This support is provided by building capacity at the individual, institutional and systemic levels for biodiversity management and sustainable development in coastal and marine zones.

We promote **knowledge- and experience-sharing** to improve the management of transboundary water bodies, including ocean ecosystems. Recognizing the commonality of many of the challenges facing the world's transboundary waters systems, the GEF and its agencies in 1998 established the **GEF's first focal area-wide portfolio learning initiative, IW:LEARN, the International Waters Learning Exchange and Resources Network** (www.iwlearn.org), which remains operational up to the present time with UNDP leading overall programme coordination. Over this period, IW:LEARN has piloted and refined a series of **portfolio learning tools**, including technical support services, biennial GEF International Waters Conferences, project learning exchanges, targeted training and the facilitation of regional dialogues. By promoting knowledge- and experience-sharing across the entire GEF International Waters portfolio over the last 15 years, IW:LEARN has made an important contribution to overall global efforts to improve the management of transboundary systems.

We foster **partnerships** that represent a vital component of **UNDP's long-term strategic approach to improving ocean and coastal management**. By leveraging technical, financial, institutional and other resources through partnerships, UNDP's Ocean Governance portfolio has grown and delivered effective responses to most of the major challenges to oceans. Examples of partnerships include: with the **International Maritime Organization** on reducing risk from aquatic invasive species and reducing the carbon footprint of shipping; with UNESCO on transboundary groundwater management; with Pacific CROP agencies (**SPC, FFA**) on advancing IWRM/ICM and promoting sustainable tuna fishing; with **Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)** programme in promoting sustainable ocean and coastal development in the region, including through the demonstration and up-scaling of ICM sites throughout the region; and with **US-NOAA** on a range of LME assessment and management programmes in Africa, Latin America and the Caribbean.

UNDP IN ACTION

Over the last 20 years, UNDP's Ocean Governance Programme has delivered a wide range of impacts, in some cases transformational, on key ocean sectors such as shipping, fisheries and coastal development. These impacts include high-level adoption and implementation of national- and regional-level ocean and coastal management plans and action programmes, negotiation and adoption of regional and international legal agreements, and catalysis of sizeable investments in pollution reduction, habitat restoration and fisheries management. Some examples of key results and outcomes include:

Sustaining Fisheries

12 Large Marine Ecosystem (LME) Strategic Action Programmes involving over 80 countries have now been negotiated and adopted at ministerial level, including commitments by 20 countries to establish (the world's first) three LME Commissions (Guinea Current, Benguela Current, Yellow Sea); in addition, the world's first LME convention, Benguela Current, has been negotiated and adopted and is in force. These LMEs collectively represent about one quarter of the world's total annual fish catch being moved towards sustainable, ecosystem-based management.

The **western and central Pacific Ocean supply nearly half the world's tuna**; in the early 2000s, the countries that fish these waters completed negotiation of the Western and Central Pacific Fisheries Convention (WCPFC), which came into force in 2004. **UNDP-GEF, through a partnership with the Forum Fisheries Agency (FFA) and the Secretariat of the Pacific Community (SPC), has implemented a series of GEF International Waters projects** that supported: the participation of Pacific Island Countries (PIC) in the WCPFC process; the reform, realignment, restructuring and strengthening of their national fisheries laws, policies, institutions and programmes to assist them to discharge the new responsibilities which the Convention requires; and the scientific knowledge base for sustainable management of fish stocks.

Through ministerial adoption of the Yellow Sea SAP in 2009, the **People's Republic of China and the Republic of Korea committed to provide over US$3.64 billion** for ecosystem-based fishery management, to reduce Yellow Sea fishing effort by 25 percent to 30 percent through vessel buy-back and retraining and to continue joint stock assessments. In further support of fish stock recovery, the SAP also included commitments to protect coastal habitats, establish a regional Marine Protected Area network and promote civil society participation (US$1.586 billion).

Greening the Shipping Industry

Since 1998, the **GEF/UNDP/IMO GloBallast Partnerships Programme** has played a pivotal catalytic role in bringing the **Global Convention on Ship's Ballast Water and Sediments** to the adoption stage and to its expected entry into force, possibly as early as 2015. Over 70 countries and several regional bodies have received support to develop legal, policy and institutional reforms for ballast water management. Through the establishment of strategic alliances (such as the Global Industry Alliance and Ballast Water R&D Symposia) with the shipping, ship-building and emerging ballast water treatment industries, GloBallast has also helped to **catalyse a major transformation in the shipping and ballast water treatment industries** as they anticipate the coming into force of the Convention and compliance costs estimated at US$80 billion. A complementary GEF/UNDP/IMO programme, **GloMEEP**, is now underway and aims to lower the **global shipping industry's carbon footprint** through improved energy efficiency in ship design and operations.

Integrating Water and Coastal Management

In 2003, 12 East Asian countries completed development and high-level adoption of the **Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)** and recognition of **PEMSEA (Partnerships in Environmental Management for the Seas of East Asia)** as the regional coordinating mechanism for the long-term implementation of the SDS-SEA. Over nearly 20 years, the GEF/UNDP PEMSEA programme has supported the development and implementation of ICM (Integrated Coastal Management) programmes with 29 local governments. Nine countries have formulated and/or are now in the process of adopting and implementing their respective national ICM or coastal development policies and strategies and ICM programmes now cover approximately 12 percent of the region's coastline. Environmental investments leveraged through PEMSEA-facilitated ICM and subregional programme implementation amount to US$369 million, of which US$79 million came from the private sector and the balance from the public sector.

Through support from a series of GEF-UNDP-UNEP projects, all **34 of the world's Small Island Developing States have advanced on IWRM and/or ICM** policy and planning as well as national IWRM/ICM demonstrations ranging from ecological sanitation to watershed management to groundwater protection. This effort culminated in 2013 with GEF approval of the US$80 million Pacific SIDS Ridge to Reef programme (supporting cross-sectoral, multi-stakeholder efforts to promote integrated land, water, biodiversity and coastal area management across the Pacific Islands.

Reducing Marine Pollution

A series of GEF-financed **UNDP International Waters projects in the Danube River basin and the Black Sea** delivered policy, legal and institutional reforms and identified over 500 priority pollution reduction investments, which created an enabling environment that catalysed over US$3 billion in nutrient pollution reduction investments across the 17 basin countries. These investments **reduced nitrogen and phosphorus loads to the Black Sea by 25,000 and 4,000 mt per year**, respectively, **reversing much of Black Sea's NW Shelf hypoxic zone** and thereby moving strongly toward recovery of the NW Shelf ecosystem.

Through ministerial adoption of the Yellow Sea SAP in 2009, the **People's Republic of China and the Republic of Korea made commitments of over US$5.625 billion** for pollution reduction, including a commitment to reduce nutrient discharges by 10 percent every five years through enhanced wastewater treatment and to reduce fertilizer use and industrial discharges.

Expanding Marine Protected Areas

The UNDP Ecosystems and Biodiversity Programme has **supported the establishment of MPAs in over 35 countries around the world**, including through: the establishment, strengthening and sustainable financing of marine protected areas (MPAs) and PAs in related ecosystems; the integration of biodiversity management considerations into relevant production sectors and national and regional policies; the application of ecosystem-based adaptation in critical marine and coastal ecosystems; and the creation and support of sustainable livelihoods of communities dependent on marine resources through innovative financial tools, such as payment for ecosystems services (PES) and micro-grants. These projects impact 444 protected areas covering nearly 90 million hectares in marine and related ecosystems.

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