Ocean and Coasts

Working towards sustainable use and conservation of marine and coastal ecosystems

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

OCEAN AND COASTS

Working towards sustainable use and conservation of marine and coastal ecosystems

TABLE OT CONTENTS

Ocean and Development

- 1.9 billion people live within 100 km of the coast
- Oceans and coastal areas generate >60% of the World's Gross National Product
- 80% of global trade (70% in value) is generated by maritime transport
- 81.5 million tons of fish and shellfish come from marine capture fisheries, 26.7 million tons are produced by marine aquaculture
- 260 million people are employed in fisheries worldwide
- >3.1 billion people depend on fish as their primary source of protein
- The ocean absorbed 2.5 billion tons of CO2 between 2002–2011, corresponding to 27% of total carbon emissions
- 70% of megacities (with more than 10 million inhabitants) are located in coastal areas
- Approximately 50% of international tourists travel to coastal areas
- Tourism contributes over 40% of GDP in some Small Island Developing States (SIDS)

CONTEXT

The ocean covers over 70% of the earth's surface and more than a quarter of the world's population lives in coastal areas, where also most of the world´s megacities are located. Ocean and coasts are key to economies and livelihoods worldwide and near coast areas generate over 60% of the world's Gross National Product (GNP). Fish is the primary source of protein for over 3 billion people, particularly in developing countries, and fisheries employ over a quarter billion people. Coastal ecosystems such as mangroves, salt marshes and seagrass meadows absorb considerable amounts of carbon. Species richness and productivity is very high in coastal waters and biodiversity hotspots such as coral reefs provide important ecosystem services. Healthy and diverse coastal and marine ecosystems are essential for mankind, providing food security, income, personal wellbeing, coastal protection, climate regulation, and adaptation to climate change.

However, habitat destruction, loss and fragmentation, overexploitation, invasion of non-native species and diseases, pollution, and global climate change severely endanger the integrity and functioning of marine and coastal ecosystems and their services we all depend on. Today, 60% of the world's major marine ecosystems have been degraded or are being used unsustainably. By 2100, more than half of the world's marine species may stand on the brink of extinction, if mankind follows the 'business as usual' approach with continued population growth, unsustainable development, and overexploitation.

Current GIZ projects worldwide
detailed on pages 22–23

Threats and Challenges

- 58% of fish stocks are fully exploited and 31% are overexploited, depleted or recovering.
- Poor fisheries management causes approximately US$80 billion lost economic potential annually.
- Only 45% of the world's coral reefs are healthy, while 19% are destroyed.
- Over 50% of the world's original mangrove forest area has been destroyed.
- Seagrass areas have been reduced by 29% since they were first recorded in 1879.
- Ocean acidification threatens many marine organisms, especially planktonic species at the base of the food web. It may render extensive regions of the ocean inhospitable to coral reefs and other calcifying species, affecting tourism, food security, shoreline protection, and biodiversity.
- Megacities and urbanization in coastal areas will increase drastically by 2025.
- Maritime transport represents 3.5 to 4% of all climate change emissions.
- 5–13 million metric tons of plastic enter the ocean each year.
- Extremely fragile deep sea ecosystems are threatened by mining and oil and gas extraction.

OUR APPROACH

Since 1973, the **Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH** has been supporting partner countries in their efforts to address these challenges and sustainably manage coastal and marine resources. Thereby, we contribute to safeguarding livelihoods of coastal populations and to sustaining ecosystems and their services. Our technical cooperation with partners has evolved with the growing challenges. It aims at building capacities to improve governance in responsible fisheries and aquaculture, marine and coastal protected areas, biodiversity conservation, climate change adaptation, pollution control and marine litter, community based management systems, ecosystem services, tourism and alternative incomes.

Over 100 projects in the marine or coastal area have been implemented or are currently being implemented by GIZ worldwide on behalf of the German government *(Map: Current GIZ projects worldwide)*. We have advanced the sustainable use, conservation and stewardship of coastal and marine ecosystems through multisector approaches and regulatory mechanisms that encourage cross-sector goal setting and new governance approaches, engaging public, private, and non-governmental organizations and coastal communities.

GIZ works at global, regional, national and local scales. We assist the German Government to develop and convey innovative methods and strategies for sustainable coastal and marine development. We aim at effectively combining protection, conservation and use in accordance with international guidelines. GIZ advises regional organizations and governments of partner countries and provides hands-on support to local institutions and communities. We cooperate with leading experts for the development of innovation and new policy and management instruments. Global networking and participating in technical and expert learning and sharing platforms are key to our knowledge management and strategic global partnerships. Our strengths are interdisciplinary teams with a strong focus on technical and advisory capacities, strategic global partnerships with experts and key organizations, and decades of experience in capacity development to facilitate learning and change processes.

For our work around the conservation and sustainable use of marine and coastal resources we are guided by international conventions and frameworks, such as:

International conventions and frameworks

- The **Agenda 2030** and its 17 Sustainable Development Goals **(SDGs)**, particularly **SDG 14 'Life Below Water'**

- The **Convention for Biological Diversity's (CBD) Strategic Plan** (2011–2020) and its **Aichi Targets**, including targets **6 'fisheries'**, **10 'coral reefs'** and **11 'protected areas'**

- The **United Nations Convention on the Law of the Sea (UNCLOS)** Including current discussions on conservation and sustainable management of biodiversity, fisheries and other relevant issues in areas beyond national jurisdiction **(ABNJ)**

- The **Paris Agreement on Climate Change**, especially its coastal and marine topics

- The action plan to combat marine litter, adopted by the **G7** in 2015 in support of the **UN Environment's Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities**

- The **FAO Code of Conduct for Responsible Fisheries** andthe **Voluntary Guidelines for Securing Sustainable Small Scale Fisheries**

Food and Agriculture Organization of the United Nations

- The **10-Point Plan of Action for Marine Conservation and Sustainable Fisheries** of **Germany's Federal Ministry for Economic Cooperation and Development (BMZ)**

- Coastal and marine priorities of the **International Climate Initative** of the **Federal Ministry for the Environment, Nauture Conservation, Building and Nuclear Safety (BMUB)**

Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety of the Federal Republic of Germany

INTERNATIONAL CLIMATE INITIATIVE (IKI)

KEY AREAS OF SUPPORT

Integrated Coastal and Marine Planning and Management

Multiple actors have activities and interests in the coastal and marine realm. Coastal development, maritime transport, fisheries, aquaculture, mining, pollution, land reclamation, tourism and other human activities have greatly increased pressures on coastal and marine resources in recent decades. An integrated approach to planning and management that recognizes different stakeholders' economic, environmental and social concerns is crucial for long-term sustainability. Hence, we promote an ecosystem approach which endorses conservation and sustainable use in an equitable way. Minimizing conflicts and balancing interests in planning and decision-making, as well as capacity building and the development of alternative livelihoods play key roles in our work. We disseminate new methods to key actors and train them to engage multiple stakeholders in a productive and results-driven discussion, balancing different interests and viewpoints.

Marine Spatial Planning in the South-East Atlantic

The Benguela Current Large Marine Ecosystem stretches along the coasts of Angola, Namibia, and South Africa, encompassing about 15 million square kilometres in the South-East Atlantic Ocean. Due to coastal up-welling and resulting high nutrient concentrations it is

classified as one of the world's most productive marine regions. In addition to its unique marine species diversity, the region supports a well-developed commercial fishing industry, is a maritime transport hub, and oil, diamonds and other minerals are mined from the sea floor. Recognising the area's unique natural capital, the governments of Angola, Namibia, and South Africa ratified the Benguela Current Convention (BCC) in 2014, to promote the trilateral management of the marine ecoregion. Financed by the German Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB), GIZ provides advice to the BCC with marine spatial planning and the identification of ecologically and biologically significant marine areas (EBSAs). Spatial plans are being drawn up for selected marine areas at national level and a regional strategy is being produced to ensure coherent transboundary planning. The region's 15 existing EBSAs are being updated and new areas that meet the EBSA criteria as defined by the CBD are identified. Status assessments help in the development of measures to promote the conservation and sustainable use of selected EBSAs and their integration into spatial management plans.

Financed by the Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

Biodiversity Conservation

Coastal and marine biodiversity is threatened by coastal population growth and impacts resulting from unsustainable resource use and long-term climate change. Marine food webs are being changed dramatically by large-scale removal of top predators and other key species. The resulting biodiversity loss decreases the resilience of ecosystems and diminishes their capacity to recover from disturbances. Marine protected areas are proven tools for conserving key ecosystems and species, and safeguard important ecosystem services for coastal populations, such as food provisioning and coastal protection.

However, lack of financial resources, technical capacities and staff, missing cooperation between government agencies and lack of effective legislation and enforcement are major challenges to effective management of MPAs and conservation of marine and coastal resources. We assist our partners in working towards the common goal of achieving effective protection of at least 10 per cent of global marine and coastal ecosystems by 2020 (Aichi target 11, SDG 14.5). We use an integrated approach to marine and coastal conservation, focussing on the protection of key species and ecosystems while ensuring sustainable resource use and the livelihoods of coastal communities. We provide legal and technical advice for MPA design, planning and implementation, capacity building, stakeholder engagement and encourage the replication of good practices that improve conservation and sustainable use. We also help to establish monitoring programs to improve the evaluation of the effectiveness of MPA-management and conservation actions.

PAME – Protected Area Management Enhancement in the Philippines

The Philippines is a megadiverse county with over 39,000 animal and plant species, of which 6,800 are endemic and more than 700 are threatened. To protect and conserve these species, the Philippine government established a set of 240 national integrated protected areas (NIPAS) in the 1990s, covering marine and terrestrial ecosystems of biological importance. The Philippine-German cooperation project PAME is supporting the efforts of the Department of Environment and Natural Resources' Biodiversity Management Bureau to improve the protection of important ecosystems of at least 60 (out of 240) already established NIPAS sites. As a major result, the management effectiveness has improved at most sites. The project also aims to establish at least 100 new protected areas (PA) in various governance forms, including Local Conservation Areas and Indigenous Communities Conservation Areas. As a result, 12 new

protected areas have already been officially declared through local council decisions. 58 are in different stages such as community consultation and drafting of local ordinances, and are on their way to be officially declared as new PAs, covering terrestrial, wetlands, marine and cave ecosystems. Scientific evidence highlights the importance of the interaction and dependencies between small scale MPAs under a network approach. The project applies and scales up this approach which leads to further declaration of new MPA networks. One of the highlights is the declaration of the 7th RAMSAR site in the Philippines (October 2016) and the East Asian-Australian Flyway (January 2017), covering a network of 10 protected mangrove and wetland areas of Negros Occidental province. All in all, PAME aims to support the declaration of at least 4 new networks covering a total of 55 new MPAs in the Philippines.

Financed by the Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

Fisheries and Aquaculture

Currently, 58% of the world fisheries resources are fished at maximum sustainable levels, while 31% are overexploited and 11% are underfished according to the Food and Agriculture Organization of the United Nations (FAO). Reasons for declining fish stocks are unsustainable fishing practices, as well as the destruction of important ecosystems such as coral reefs and mangrove forest. Artisanal fisheries that are fundamental to assuring food and income, especially for the rural poor in most developing countries, are particularly impacted. Support measures therefore have to safeguard food and income security of local communities, while providing decent labour conditions for fishers on a sustainable basis. Policy advice and institutional support must create an enabling environment for the sector. In order to have a lasting effect, we consider on-site capacity development

as essential. Training programs and advice on organizational matters build the skills and expertise that are needed for economically efficient and sustainable management of fisheries resources. We also engage in the development of responsible aquaculture production practices, carefully integrating aquaculture into surrounding ecosystems and land-use patterns, and leveraging its potential to improve livelihoods, particularly in rural areas. We place emphasis on the sector's importance for food security and income generation while promoting both climate change resilient, integrated aquaculture models as well as sustainable market-oriented systems. Our activities focus on the improvement of value chains through capacity building, coordination and harmonization among relevant actors. In dealing with export oriented value chains, our objective is to enable developing countries to adopt sustainable production practices, thereby meeting world market quality and safety standards for aquaculture products.

Sustainable Pangasius Supply Chain Program (SPSP)

In July 2010, GIZ, the Sustainable Trade Initiative (IDH) and Anova Seafood, a leading seafood supplier for the European retail and foodservice sector, initiated the first public private partnership (develoPPP) to support responsible Pangasius producers in Vietnam. Over the three year project duration, the partners worked towards piloting certification of two large Pangasius farming companies in the Mekong Delta. As a first step, farms initially became GlobalGAP certified and in a subsequent step then achieved Aquaculture Stewardship Council (ASC) certification. The project also worked together with Tra Vinh province authorities and the fisheries

Financed by the Ministry for Economic Cooperation and Development (BMZ)

association to engage a group of small scale Pangasius producers in the process towards obtaining GlobalGAP 'Type II' group certification. The project was instrumental for designing the ASC Accelerator, a program that is contributing to a major shift by the Pangasius sector towards ASC certification. Later engagement by WWF, IDH and local partners successfully built on the SPSP pilot and the lessons learned.

Global Sustainable Seafood Initiative (GSSI)

GSSI was set up in 2013 to provide a solution to the proliferation of seafood eco-certification schemes. The multi-stakeholder partnership is made up of seafood companies, including harvesters, producers and retailers, NGOs, experts, GIZ, IDH and the FAO. Together, they have created the GSSI Global Benchmark Tool (launched in 2015) to publicly recognize seafood certification schemes that meet international FAO guidelines, using a transparent, step-by-step process. Two schemes achieved GSSI recognition in 2016 – the Alaska Responsible Fisheries Management (RFM) Program and the Iceland RFM Certification Program. In March 2017, the Marine Stewardship Council (MSC) became the third recognized scheme and major aquaculture schemes have also applied to be benchmarked. Leading buyers worldwide, including Ahold-Delhaize, Darden, Kroger, Metro Group, Morrisons, Sodexo and Walmart have committed to accept seafood from fisheries and aquaculture operations that have been certified by GSSI recognized schemes. More and more sourcing policies set out this pledge as GSSI's transparent benchmark process now provides harvesters, producers, suppliers and retailers with a credible choice of schemes, driving down costs and promoting environmental sustainability.

Financed by the Ministry for Economic Cooperation and Development (BMZ)

Global Knowledge Exchange

Effective knowledge exchange catalyzes innovative thinking and enables learning across geographies. It connects people across the planet and fosters collaboration and information exchange and supports evidence-based decision-making and inspires others to replicate these examples in new contexts. It is a core area for GIZ work and we use a wide range of formats to document experiences, discuss lessons learned, and promote their reapplication in new settings. This includes comparative studies, connecting practitioners and decision-makers together in face-to-face meetings, training courses, publications, online databases and web-based platforms.

Comprehensive Climate Risk Management in artisanal fisheries and aquaculture

The Global Programme on Risk Assessment and Management for Adaptation to Climate Change is facilitating an assessment and exchange on climate change-related risks and trends with regard to potential losses and damages in artisanal fisheries and coastal zones. This geographically three-pronged approach covers the Caribbean, the Pacific, and West Africa. It contributes to a better understanding of climate change risks and effective risk management options in artisanal fisheries, covering coastal small scale and pelagic fisheries and aquaculture. Ecological challenges, as well as the need for in-depth vulnerability assessments in fishing communities, early warning systems, and mainstreaming of climate change into ocean and fisheries governance have been identified.

Financed by the Ministry for Economic Cooperation and Development (BMZ)

Exchanges in the regions furthermore focus on contingency planning, risk transfer, and finance-mechanisms like insurance schemes. Lessons learned are drawn from three sub-regional studies as well as from a follow-up workshop in Saint Lucia to discuss the findings of the regional study in the Caribbean.

Blue Solutions

The Blue Solutions Initiative facilitates global knowledge exchange and capacity development to support practitioners and policy makers in the management and conservation of marine and coastal biodiversity. This contributes to the achievement of marine and coastal Aichi Biodiversity Targets and the Sustainable Development Goals, particularly SDG 14 on 'Life Below Water'. The four project partners GIZ, GRID-Arendal, the International Union for Conservation of Nature (IUCN) and UN Environment (UNE) jointly implement the initiative. Facilitating knowledge exchange is one key element of the project, where successful approaches, or 'solutions', addressing a wide range of topics in coastal and marine management and conservation are collated, documented, and shared. The project works at different scales, from local to international, and from hands-on voluntary agreements to policy development. Over 120 blue solutions have been documented by their implementers and published on the marine and coastal portal of the **PANORAMA – solutions for a healthy planet** platform (http://panorama.solutions/en). Solutions are shared at conferences and provide the basis for exchange workshops,

Financed by the Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

promoting their replication in new contexts. They are also integrated into training courses, social labs and webinars as real-life examples in the capacity development component. Blue Solutions provides learning opportunities around the core themes Integration of Ecosystem Services into Coastal and Marine Planning (Blue IES), Climate Change Adaptation in Coastal and Marine Areas (Blue CCA), and Ecosystem-based Marine and Coastal Spatial Planning (Blue Planning in Practice). In cooperation with various partner institutions, these trainings are offered to practitioners, technical staff and decision-makers from government, civil society, and academia, as well as private sectors engaged in blue economy.

Preventing marine pollution

Marine pollution has become a severe threat to the biodiversity of coastal and marine ecosystems, to the economy (e.g. fisheries, tourism) and to human livelihoods and public health in general. Waste from urban and rural settlements ends up in the ocean through leakage from dumpsites close to waterways, insufficient waste infrastructure, beach littering and other pathways. Run-off of excess-fertilizer and untreated wastewater from industries and households cause pollution and eutrophication in coastal areas. We address these issues by supporting the development of integrated waste and wastewater management systems, by facilitating knowledge exchange and by implementing partnerships with the private sector. We also support public awareness raising campaigns and sustainable port development, including ship waste management.

Ship waste management in line with MARPOL Convention in Thailand

GIZ advised Bangkok Port (BKP) through the 'Sustainable Port Development in the ASEAN Region' project which assisted 12 ports in 7 countries to improve the quality and efficiency of their safety, health and environmental management. BKP conducted an assessment of their current port waste management system to identify areas of improvement. The assessment showed there was no announced system for managing the ships' waste on site, a lack of monitoring of waste handling procedures and local waste contractors and no proper waste notification system. To address these issues, BKP developed a Ship Waste Management Manual and later announced an implementation plan at a Port Waste Stakeholder Workshop, where it was endorsed by representatives from the Marine Department, ship owners association, waste collectors and shipping agents, among others.

Financed by the Ministry for Economic Cooperation and Development (BMZ)

Coastal protection and climate change adaptation

Climate change threatens coastal areas all over the world. Effects include slow-onset climate-induced changes, such as ocean warming, acidifcation and sea level rise as well as more frequent and intense extreme weather events, i.e. heat waves, severe storms and precipitation. Likely results are coastal flooding, sedimentation, erosion and salt water intrusion, eventually leading to residual loss and damage (L&D) of coastal areas and marine resources. For Small Island Development States (SIDS) in the South Pacific Region and the Caribbean, building resilience to these climate change impacts is among their most important development challenges. The substantial loss of territory and damage of coastal and marine resources will significantly affect human mobility atlow-lying small island states and other countries. It is projected that climate change impacts will become one of the major drivers for future humanmigrations.

Reforestation and co-management protect mangroves in Vietnam

A narrow belt of mangroves protects the coastal zone of the Mekong Delta in Vietnam against erosion, storms and flooding. Local communities rely on the resources of mangrove forests as they provide food, fuel wood, employment and income. However, unsustainable aquaculture and destruction of mangroves are threatening the coastal zone and intensify climate change impacts that are already being felt. Work in the Mekong Delta started in

Financed by the Ministry for Economic Cooperation and Development (BMZ)

2007 and covers projects in five provinces. The main focus is the rehabilitation of mangroves through reforestation supported by fence designs that reduce wave energy and trap sediment to minimize the amount of mangrove seedlings being washed away. To ensure long-term success, larger areas of forest are managed jointly by local communities and local authorities through a co-management agreement that was introduced in one of the provinces. This new strategy has proved to be effective in maintaining and enhancing the protective function of the mangrove forest while providing livelihood for local communities, and contributing to better governance at the same time.

Ecosystem Services

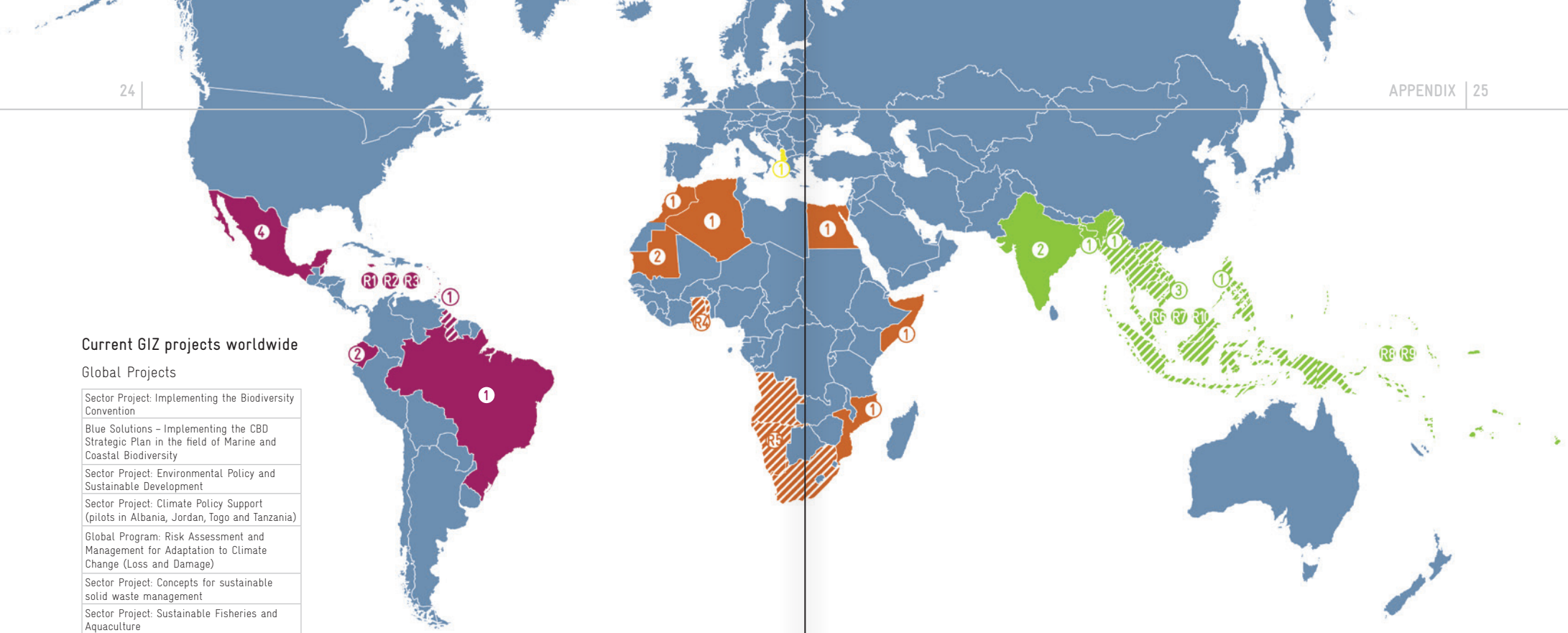
Ecosystem services are 'the benefits people obtain from ecosystems'. Oceans and coasts provide many vital services to mankind including food provision, erosion control, flood protection, carbon sequestration, among others. High population growth in coastal areas, rising living standards and growing need for resources has led to overexploitation and degradation of ecosystem services. We work with decision-makers the general public and other stakeholders to raise their awareness of the important role of ecosystems for human wellbeing. We apply the ecosystem services perspective to highlight nature's contributions to economic activity, disaster risk reduction, combating climate change, culture and heritage, and more. Through capacity building we support our partners to include ocean values in planning processes, policies and management decisions, we highlight how ecosystem services benefit different groups of society, and we demonstrate the potentially extremely high costs of losing vital ecosystem services through unsustainable use, ecosystem degradation and biodiversity loss.

Natural Capital of Coastal and Marine Ecosystems in India

India has a long coastline of over 7,500 km, economically valuable for fisheries, commerce, navigation and recreation. Over 1.5 million people are employed in the marine fisheries sector alone. India's coastal areas also have high biological productivity, which provides a wide range of habitat for over 17,500 species of aquatic flora and fauna.

GIZ is supporting the Indian Ministry of Environment, Forest and Climate Change in implementing "The Economics of Ecosystems and Biodiversity – India Initiative" (TII). Aim of TII is to make the values of biodiversity and linked ecosystem services explicit for consideration and mainstreaming into developmental planning. Among the three prioritized ecologies are coastal and marine ecosystems. Case studies explored the opportunities and economic efficiency of interventions such as eco-labelling, seasonal fishing bans, mangrove regeneration, and the challenge of bycatch in marine fisheries. A valuation study established that planted mangroves provide benefits worth US$ 1.6m annually to the economy of Gujarat state through contribution to commercial fisheries and soil accretion, whereby costs of mangrove plantation are recovered within 15 years. A study on Seasonal Fishing Ban estimated the economic value of the incremental growth of fish due to a fishing ban of 45 - 60 days at US$ 18m in five states. Another case study found a large number of unintended bycatch and juvenile fish in the fishery off the Andhra coast. The social cost of bycatch and juvenile species loss was estimated at US$ 40m per year and measures for promoting sustainable fishing practices were recommended. Results from these studies have been used to draw policy and management recommendations for decision making at different levels and also for raising public awareness on biodiversity and ecosystem services. The draft 'National Policy on Marine Fisheries 2016' has set 'mainstreaming biodiversity conservation in production processes' at the core of the new policy.

Financed by the Ministry for Economic Cooperation and Development (BMZ)



Current GIZ projects worldwide

Global Projects

Sector Project: Implementing the Biodiversity Convention
Blue Solutions – Implementing the CBD Strategic Plan in the field of Marine and Coastal Biodiversity
Sector Project: Environmental Policy and Sustainable Development
Sector Project: Climate Policy Support (pilots in Albania, Jordan, Togo and Tanzania)
Global Program: Risk Assessment and Management for Adaptation to Climate Change (Loss and Damage)
Sector Project: Concepts for sustainable solid waste management
Sector Project: Sustainable Fisheries and Aquaculture
Global Program: Sustainable Fisheries and Aquaculture (country components in Uganda/ Lake Victoria and Mauretania)

Regional Projects

R1	CARICOM: Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines	Improving the Management of Coastal Resources and the Conservation of the Marine Biodiversity
R2		Enhancing the Adaptive Capacity of Rural Economies and Natural Resources to Climate Change
R3		Improving climate resilience of Caribbean island and coastal states through systemic management of aqua-terrestrial resources
R4	Angola, Namibia, South Africa	Conservation and Sustainable Use of the Benguela Current Large Marine Ecosystem
R5	Benin, Togo	Transboundary Biosphere Reserve Mono Delta
R6	Brunei, Indonesia, Cambodia, Laos, Myanmar, Malaysia, Philippines, Singapore, Thailand, Vietnam	Institutional Strengthening of the Biodiversity Sector in ASEAN
R7	Indonesia, Malaysia, Philippines	Support to the Implementation of the Regional Plan of Action of the Coral Triangle Initiative in the Sulu-Sulawesi Seascape Countries (SSME)
R8	Fiji, Kiribati, Solomon Islands, Tonga, Vanuatu	Managing Marine and Coastal Biodiversity in Pacific Island States and Atolls (MACBIO)
R9	Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Republic of Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu and Vanuatu	Coping with Climate Change in the Pacific Island Region (CCCPIR)
R10	Cambodia, Laos, Thailand, Vietnam	Transboundary Water Resources Management in the Lower Mekong Watershed

Country Projects

Brazil	Integrated Coastal Zone Management and Marine Biodiversity
Ecuador	Biodiversity, Climate Change and Sustainable Development (Pro-Cambio)
	Economic reconstruction of small-scale fishery
Grenada	Programme on Integrated Adaptation Strategies in Grenada
Mexico	Protecting and Sustainably Using Marine and Coastal Biodiversity in the Gulf of California
	Assessment of ecosystem services in natural protected areas
	Urban-industrial environmental management
	Energetic utilization of urban waste
Algeria	Solid waste management and circular economy
Egypt	National solid waste management programme
Mauritania	Natural Resources Management Programme
	Protecting the city of Nouakchott against climate change
Morocco	Environmental and climate governance
Mozambique	Adaptation to Climate Change
Somalia	Improved food security through access to fish products in Kismayo
Albania	Integrated Sustainable Development of the Southern Coastal Region
Bangladesh	Sunderbans Mangrove Forest Management for Improving Biodiversity Conservation and Adaptation to Climate Change
India	Sustainable Management of Coastal and Marine Protected Areas
	Conservation and sustainable use of Biodiversity in India
Myanmar	Promoting Sustainable Aquaculture Development
Philippines	Improving protected area management in the Philippines
Vietnam	Integrated Coastal Management Program (ICMP)
	Flood Management and Drainage of Medium Sized Cities
	MECRI – Mekong Delta Climate Resilience Initiative

Imprint

As a federally owned enterprise, GIZ supports the German Government in achieving its objectives in the field of international cooperation for sustainable development.

Published by:
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn

Address
Dag-Hammarskjöld-Weg 1-5
65760 Eschborn, Germany
T +49 61 96 79-0
F +49 61 96 79-11 15

E info@giz.de
I www.giz.de

Editors:
Volker Koch, Mechthild Kronen, Rebecca Lahl, Ilona Porsché, Ronja Schmidt
on behalf of GIZ Task Team Ocean and Coasts

Design/layout, etc.:
now [nau], kommunikative & visuelle gestaltung, www.now-nau.de

URL links:
Responsibility for the content of external websites linked in this publication always lies with their respective publishers. GIZ expressly dissociates itself from such content.

Maps:
The maps printed here are intended only for information purposes and in no way constitute recognition under international law of boundaries and territories. GIZ accepts no responsibility for these maps being entirely up to date, correct or complete. All liability for any damage, direct or indirect, resulting from their use is excluded.

GIZ is responsible for the content of this publication.

Printing:
druckriegel GmbH, www.druckriegel.de

Printed on 100% recycled paper, certified to FSC and EU Ecolabel standards.

Eschborn, May 2017

Photo credits/sources:
Page 3: © GRID-Arendal | R. Barnes
Page 4 und 5: © GRID-Arendal | R. Barnes
Page 10: © GIZ | V. Koch
Page 11: © NACOMA | J.-P. Roux
Page 13: © Haribon Foundation | L. Gacita
Page 14: © GIZ | M. Prein
Page 15: © GSSI | J. C. Alexandre
Page 16: © GIZ | H. Spahn
Page 17: © Blue Solutions
Page 18: © Group picture © Blue Solutions, map picture © GIZ | C. Hoffmann
Page 19: © GIZ | F. Sprong-Wijnreder
Page 20: © GIZ | R. Martin
Page 22: © Central Marine Fisheries Research Institute | S. K. Mohamed
Page 23: © GIZ | R. Sharma
Cover front: © GIZ | V. Koch
Cover inside: © Marine Photobank | R. Week

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Sitz der Gesellschaft / Registered offices
Bonn und Eschborn

Friedrich-Ebert-Allee 36 + 40
53113 Bonn, Deutschland / Germany
T +49 228 44 60-0
F +49 228 44 60-17 66

Dag-Hammarskjöld-Weg 1 – 5
65760 Eschborn, Deutschland / Germany
T +49 61 96 79-0
F +49 61 96 79-11 15

E info@giz.de
I www.giz.de