

Making Waves

Norway's support for
a sustainable ocean

OCEAN REPORT

2021

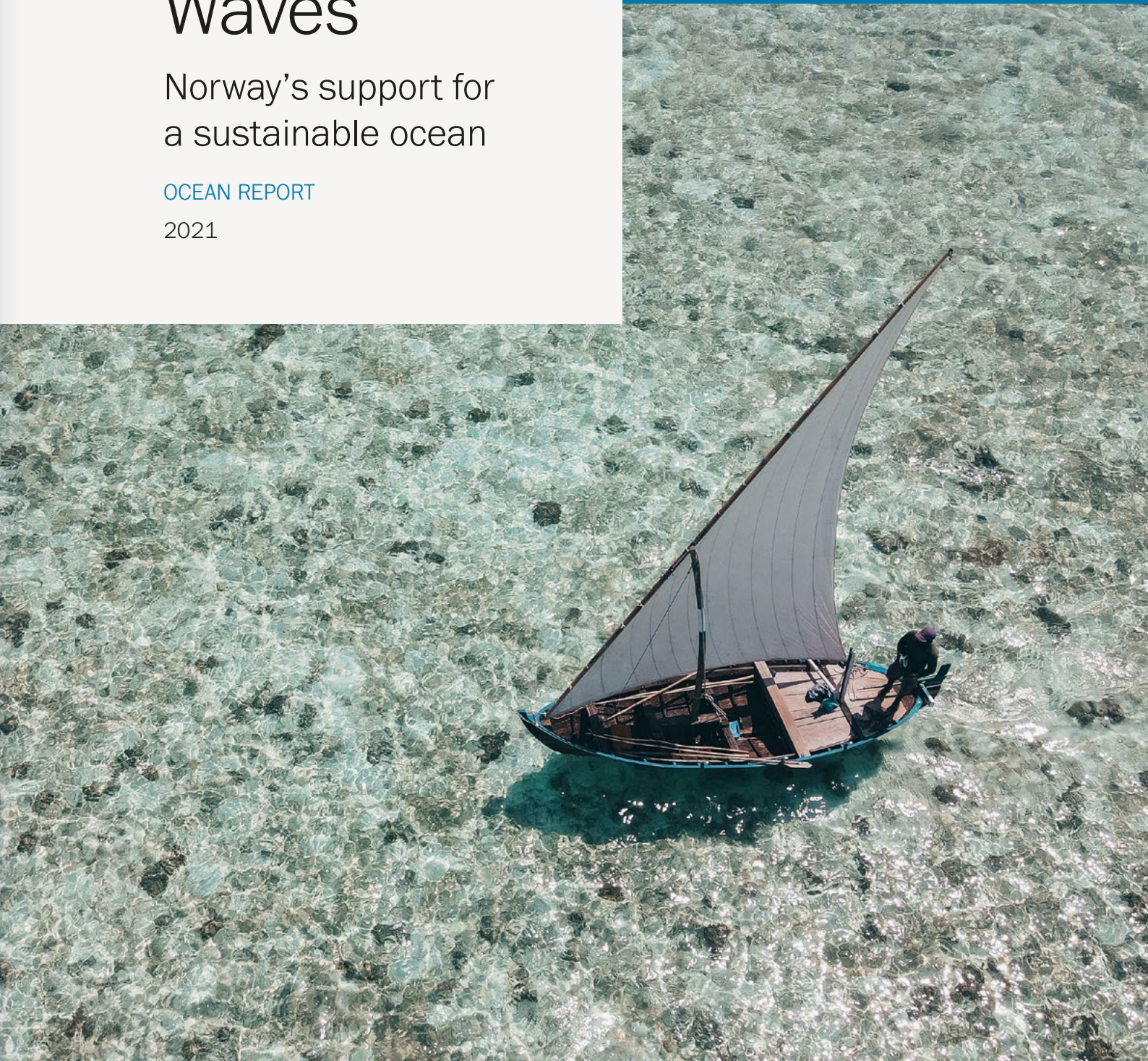


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Preface

A healthy ocean is essential to human survival. It is vital to solving some of the greatest challenges humanity faces – hunger, poverty and climate change. And it is essential if we are to succeed in achieving the Sustainable Development Goals and meet the Paris Agreement. There is vast potential for growth in ocean-based industry sectors, especially in aquaculture, offshore wind energy, fish processing and shipbuilding.

The Norwegian Government gives high priority to promoting a healthy and productive ocean, especially in the context of food security and climate change adaptation. Prime Minister Jonas Gahr Støre co-chairs the High Level Panel for a Sustainable Ocean Economy. The Ocean Panel has demonstrated that we can build an ocean economy where effective protection, sustainable production and equitable prosperity go hand in hand. Capacity development in sustainable and integrated ocean management is widely needed in many ocean and coastal states. We therefore seek to share our experience and expertise through programmes such as Fish for Development and Oceans for Development.

The potential to benefit from the ocean is immense, but the world is also facing enormous challenges. We live in a time of global turbulence and growing inequalities. The recovery of countries from the COVID-19 pandemic is uneven. Inflation is rising, prices of food and energy are skyrocketing due to the war in Ukraine. And the pace of climate change is rapidly increasing. Investing in a sustainable ocean economy is more important than ever. The ocean is part and parcel of food security. Illegal, unreported and unregulated (IUU) fishing poses a significant threat to small-scale fisheries, coastal communities and marine ecosystems. Efforts to combat IUU fishing are therefore a key component in protecting and managing ocean resources. Norway supports the work of FAO in building capacity for implementation of the Agreement on Port State Measures.

The effects of climate change are severe. Rising sea levels and altered climatic conditions are having both global and local impacts. The most recent report by the World Meteorological Organization (WMO), State of the Global Climate 2021, shows that the ocean has never been warmer or so acidic, and that sea levels are rising at a record pace. The ocean is central to reducing global greenhouse gas emissions and global warming, but it is also at risk.

We will increase the focus on climate change adaptation in Norway's development policy, including in ocean-related development assistance.

The historic decision on plastic pollution reached at the United Nations Environment Assembly in Nairobi this year demonstrated the world community's willingness to come together on an important issue for the common good. The international community is able to join forces to safeguard the ocean. Even in a time of international turmoil. Through the Development Programme to Combat Marine Litter and Microplastics, Norway works to reduce the flow of plastic waste to the ocean.

We hope the same spirit of cooperation will guide the discussions at the United Nations Ocean Conference in June. There are a large number of international conferences on ocean-related issues in 2022. It is our hope that the international community will use this momentum to make the right decisions and take the right actions to halt the decline of our ocean.

We are proud to present this second report outlining Norwegian development assistance in ocean-related areas in 2021. From Asia to Africa to Latin America, the ocean is a key area of cooperation between Norway and developing countries.

Anniken Huitfeldt
Minister of Foreign Affairs

Anne Beathe A. Tinnereim
Minister of International Development

Bård Vegar Solhjell
Director General of Norad

Acronyms

ASEAN	Association of Southeast Asian Nations
AU	African Union
BAF	Blue Action Fund
BRS Secretariat	Secretariat of the Basel, Rotterdam and Stockholm conventions
CCP	Container Control Programme
CSE	Centre for Science and Environment (India)
EAF	ecosystem approach to fisheries
FAO	Food and Agriculture Organization
FCWC	Fisheries Committee for the West Central Gulf of Guinea
GEF	Global Environment Facility
GHG	greenhouse gas(es)
IMO	International Maritime Organization
IMR	Norwegian Institute for Marine Research
INTERPOL	International Criminal Police Organization
IOC-UNESCO	International Oceanographic Commission of UNESCO
IUCN	International Union for Conservation of Nature
IUU	illegal, unreported and unregulated fishing
LAC	Latin America and the Caribbean
LDCs	Least Developed Countries
MPA	marine protected area
MCS	monitoring, control and surveillance
MSP	marine spatial planning
NARA	National Aquatic Resources Research and Development Agency (Sri Lanka)
NGOs	non-governmental organisations
NIVA	Norwegian Institute for Water Research
Norges Vel	Royal Norwegian Society for Development
NORHED	Norwegian Programme for Capacity Development in Higher Education and Research for Development
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OECS	Organisation of Eastern Caribbean States
SDGs	Sustainable Development Goals
SIDS	small island developing states
SOP	Sustainable Ocean Plan
SST	Sustainable Seas Trust
TSDF	treatment, storage and disposal facility
UN DOALOS	United Nations Division for Ocean Affairs and the Law of the Sea
UNEA	United Nations Environmental Assembly
UNEP	United Nations Environment Programme
UNDP	United Nations Development Programme
UNODC	United Nations Office on Drugs and Crime
WWF	World Wide Fund for Nature



Introduction

Photo: The Ocean Agency/Ocean Image Bank. Fishing boat in the Seychelles.



The UN 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals (SDGs) provide a framework for all Norwegian development cooperation. The 2030 Agenda is a transformative roadmap for national and global efforts aimed at eradicating extreme poverty and promoting prosperity within planetary boundaries. While SDG 14 (Life Below Water) is important in and of itself, a clean and healthy ocean is crucial to succeed in achieving the other SDGs. Despite its importance, SDG 14 is significantly underfinanced.¹ Investing in this SDG can help accelerate progress to achieve the ambition of the 2030 Agenda (see illustration on p.11), making SDG 14 an important priority for Norwegian development cooperation. As this report will show, many SDG 14-related projects and programmes supported by Norway have taken significant steps forward in 2021.

The last few years have increasingly demonstrated the interdependency and interlinkages among the various dimensions of sustainability – from health and wellbeing and social and economic prosperity to climate and ecosystems. Though vaccines were rolled out in 2021 on an unprecedented scale, the COVID-19 pandemic continued to inflict devastating, unequal health and economic impacts on the world's poorest. For the first time in two decades, extreme poverty is increasing,² and the multiple global crises the world is facing are threatening decades of development gains and further delaying the urgent transition to greener and more inclusive economies. While the world was off track to achieve the SDGs even before the COVID-19 pandemic, this challenge is now even greater. It is within this context that Norwegian ocean-related development assistance has an important role to play – whether it involves fisheries and aquaculture, sustainable management of the ocean, green shipping, or combating marine litter.

The Norwegian prime minister elected in 2021 has continued the leadership of the High-level Panel for a Sustainable Ocean Economy (the Ocean Panel). The Ocean Panel member countries' main commitment is to sustainably manage 100 % of ocean area under their national jurisdiction by 2025, guided by Sustainable Ocean Plans (SOPs). An SOP aims to guide decision-makers on how to sustainably manage a nation's ocean area to advance long-term sustainable economic, social and environmental development. In 2021, the Ocean Panel launched a Guide to SOPs, which will assist member countries in realising this goal. The guide identifies the attributes of an SOP and suggests initial steps that ocean and coastal states can take to get started on, or accelerate, sustainable ocean planning.

There is a great need for data and knowledge about the ocean. It is often said that we know more about the surfaces of the moon and Mars than we do about the deep-sea floor. Ocean data and knowledge are also important to enable ocean-related development assistance to develop and implement initiatives with the most impact. In 2021, the UN Decade of Ocean Science for Sustainable Development (the Ocean Decade) commenced, with the vision of 'the science we need for the ocean we want'. It envisages nothing less than a revolution in ocean science that will trigger a step change in humanity's relationship with the ocean. To achieve the ambition of the Ocean Decade, significant and coordinated efforts will be needed to engage both new and existing partners across countries. In 2021, Norway continued its support to the Intergovernmental Oceanographic Commission (IOC) of UNESCO for its implementation of the Ocean Decade, targeting developing countries. The Norwegian Prime Minister became a Patron of the Ocean Decade Alliance in 2021.

¹ <https://ocean.economist.com/blue-finance/articles/why-we-need-to-tackle-the-ocean-funding-crisis>

² World Bank. 2020. Poverty and Shared Prosperity 2020: Reversals of Fortune. Washington, DC: World Bank. doi: 10.1596/978-1-4648-1602-4. License: Creative Commons Attribution CC BY 3.0 IGO

Through all its ocean-related development support in 2021, Norway has kept a strong focus on knowledge and experience-sharing and collaborative partnerships with civil society and the private sector. To boost support to non-governmental actors on ocean-related issues, Norway in 2021 issued a call for proposals for projects on climate change adaptation in the coastal zone, sustainable seafood systems, sustainable job creation and improved livelihoods. Over the course of

last year, Norway also continued to give high priority to support for multilateral cooperation, while important bilateral cooperation was further developed with specific countries. At the implementation level, many activities that had previously been stopped or slowed down in 2020 were resumed, and other activities were made virtual. As the world continues to adapt to new and challenging times, the ocean remains high on the Norwegian development agenda.

Photo: Uwe Johannsen – WWF





Norwegian ocean-related development assistance's contribution towards the Ocean Panel's goals towards 2030

By 2030...

- Sustainable Ocean Plans are providing a credible basis for safeguarding the long-term health and resilience of the ocean, attracting investment and creating jobs to the benefit of coastal communities and national economies
- Sufficient knowledge and regulations are in place to ensure that any activity related to seabed mining is informed by science and ecologically sustainable
- Decision-making affecting the ocean reflects the value of and impacts on the ocean's natural capital
- Through the UN Decade of Ocean Science ocean literacy has been enhanced worldwide. People understand the value of the ocean and have acquired the skills and knowledge to participate in the sustainable ocean economy
- Shipping investments have effectively accelerated the shift towards zero-emission and low-impact marine vessels
- The ocean is no longer a sink for pollution and ocean dead zones are minimized
- A globally shared data revolution has contributed to sustainable ocean management worldwide
- People have equitable access to ocean resources; benefits are distributed and the most vulnerable are protected from the risk of harm
- Wild fish stocks are restored and harvested at sustainable levels, aquaculture is sustainable grown to meet global needs, and waste is minimized and managed throughout the value chain
- Marine and coastal ecosystems are healthy, resilient and productive, and nature-based solutions are key elements in developing coastal infrastructure
- Innovation and investments in ocean industries have boosted environmentally responsible and inclusive economic growth
- Ambitious climate action has set the world on track to achieve the goals of the Paris Agreement and restore ocean health
- Sustainable ocean finance is accessible for all and drives ecologically sustainable and socially equitable economic growth

Development Programme to Combat Marine Litter and Microplastics

Fish for Development

Ocean for Development

A clean and healthy ocean is crucial to achieve the other SDGs

NO POVERTY

Sustainable ocean growth means sustained growth, which is able to lift and keep people out of poverty.

GOOD HEALTH AND WELL-BEING

Apart from being able to provide more nutritious food, a healthy ocean is the recharging point for billions of people.

GENDER EQUALITY

Increasing gender equality in the ocean economy would empower millions of women.

AFFORDABLE AND CLEAN ENERGY

Expanding the ocean's almost unlimited renewable energy potential is predicted to contribute 10% of the global electricity production increase by 2050.

INDUSTRY, INNOVATION AND INFRASTRUCTURE

Constructing low carbon ports and renewable ocean energy will stimulate innovation and create vital infrastructure.

SUSTAINABLE CITIES AND COMMUNITIES

Constructing blue-green storm protection infrastructure will make cities more sustainable.

CLIMATE ACTION

Growing ocean industries sustainably can contribute up to one-fifth of greenhouse gas savings towards achieving a 1,5 °C future.

PEACE, JUSTICE AND STRONG INSTITUTIONS

In a sustainable ocean economy, a nation's sovereignty over its exclusive economic zone and resources is achieved.



ZERO HUNGER

Farming and fishing sustainably has the potential to produce far more protein than a 2050 population requires.

QUALITY EDUCATION

Lifting marginalized coastal communities out of poverty increases their children's chances for a good education.

CLEAN WATER AND SANITATION

Desalination of ocean water provides drinking water to millions of people. Additionally, improving sanitation can increase coastal water quality.

DECENT WORK AND ECONOMIC GROWTH

Growing the ocean economy sustainably is projected to more than double the current ocean economy.

REDUCED INEQUALITIES

Granting well-defined ocean access rights and sustainable resource use ensures long-term prosperity of marginalized groups.

RESPONSIBLE CONSUMPTION AND PRODUCTION

Solving ocean plastic pollution drives us to build a more circular economy on land.

LIFE ON LAND

Reducing ocean dead zones catalyses land-based reforms towards regenerative precision agriculture.

PARTNERSHIPS FOR THE GOALS

The ocean is a platform for collaboration and strengthens the global partnership for sustainable development.



Ocean ODA in numbers



Photo: Markovina – WCS

There is no internationally agreed definition of the sustainable ocean economy. Consequently, there is no predefined classification system in place for measuring Official Development Assistance (ODA) activities that directly or indirectly contribute to achieving a sustainable ocean economy. This report takes a practical approach to tracking ODA activities that are relevant to the ocean, using the definition and methodology used by the Organisation for Economic Co-operation and Development (OECD)³. Norwegian ocean-related ODA has been measured using the OECD methodology, with some adjustments⁴.

The figures presented in this report are estimates and should be interpreted with caution. The figures include both fully and partially ocean-relevant activities. Furthermore, only earmarked ocean-related activities are included, meaning that core support to multilateral organisations engaged in ocean-related activities is excluded. For instance, the Global Environment Facility is one of the largest providers of ocean-related ODA and receives core support from Norway. This is not included in the figures.

³ <https://oecd-main.shinyapps.io/ocean>

⁴ Some changes were made to the keyword and sector criteria used by the OECD to improve accuracy. Activities financed over Norad budget post 71 – Sustainable oceans and measures to combat marine litter are included. Ocean-relevant activities under the Oil for Development programme are excluded. All identified agreements have been manually screened to exclude non-relevant activities.

Norwegian support to ocean-related development cooperation in brief

782 million NOK

782 million NOK (3 % of earmarked ODA) went to ocean-related activities in 2021.

25 countries

A total of 25 countries received country-specific ocean-related ODA in 2021.

Top 10 list

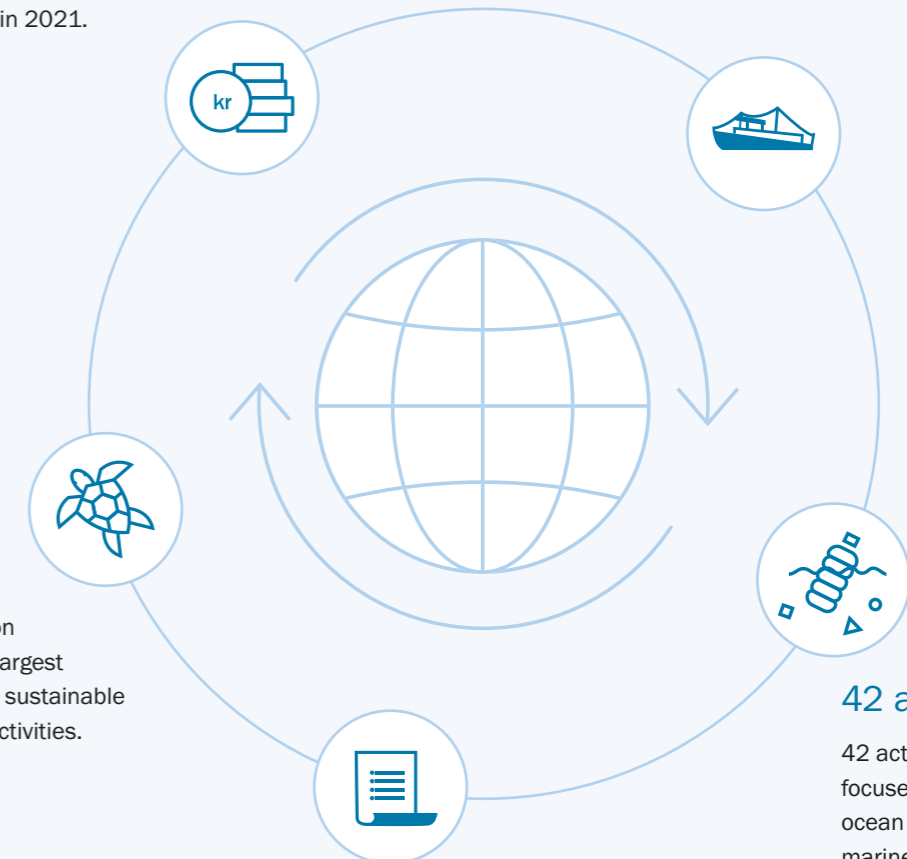
Norway remains on the top 10 list of largest donors globally to sustainable ocean economy activities.

42 active projects

42 active projects in 2021 focused on fisheries and ocean management, and marine litter and microplastics.

15 Norwegian institutions

More than 15 Norwegian institutions contributed with their technical expertise to ocean-related development assistance in 2021.

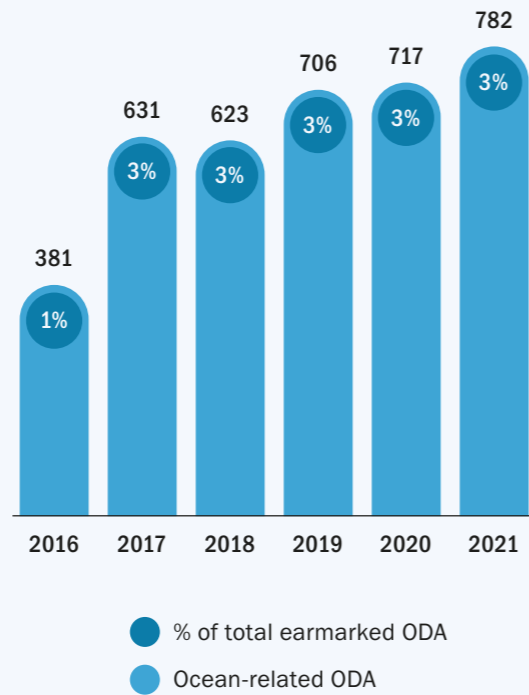




The numbers

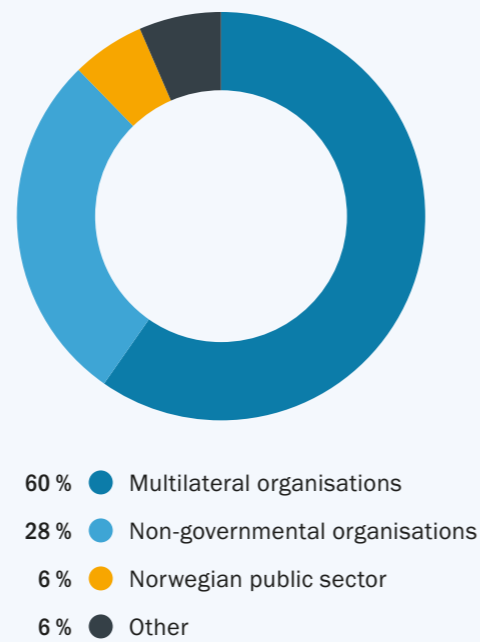
Total ocean-related aid

In 2021, a total of NOK 40.1 billion in Norwegian development assistance was disbursed, of which around NOK 782 million (3 percent of earmarked ODA) went to ocean-related support. Ocean-related development assistance has remained stable at 3 percent of total earmarked development assistance for the last five years, despite the economic shocks of the COVID-19 pandemic.



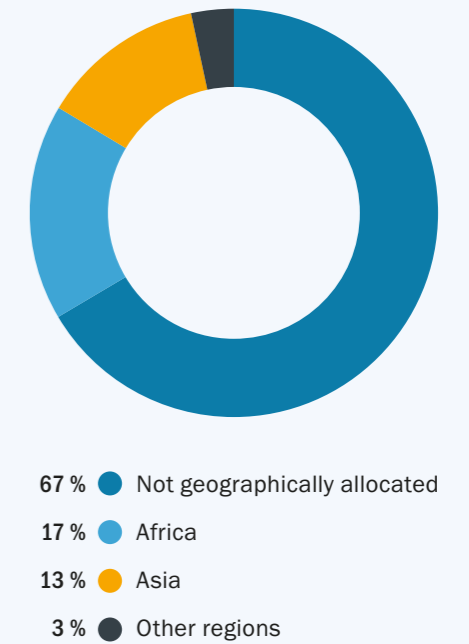
Agreement partners

In 2021, the majority of Norwegian ocean-related ODA was channelled through multilateral organisations, 60 percent, and non-governmental organisations, 28 percent. The largest recipients were FAO - Food and Agricultural Organization of the United Nations (NOK 193 million), IBRD - International Bank for Reconstruction and Development (NOK 82 million) and WWF Norge - World Wide Fund for Nature (NOK 60 million).



Regions

In 2021, the largest recipient regions of geographically allocated ocean-related ODA from Norway were Africa (NOK 134 million) and Asia (NOK 102 million), while 67 percent of ocean-related ODA was geographically unspecified. This includes global and multi-regional activities, programmes, and funds. Examples are support to the EAF Nansen Program, the World Bank's Global Program for the Blue Economy (PROBLUE), Blue Action Fund, and IOC-UNESCO, among others. While the allocation is geographically unspecified, the global programmes channel funds to the country-level, as this report will show.



Main recipient countries

The top recipient countries of Norway's country-allocated ocean-related ODA in 2020 were Mozambique, China and Colombia. A total of 25 countries received country specific ocean-related ODA.

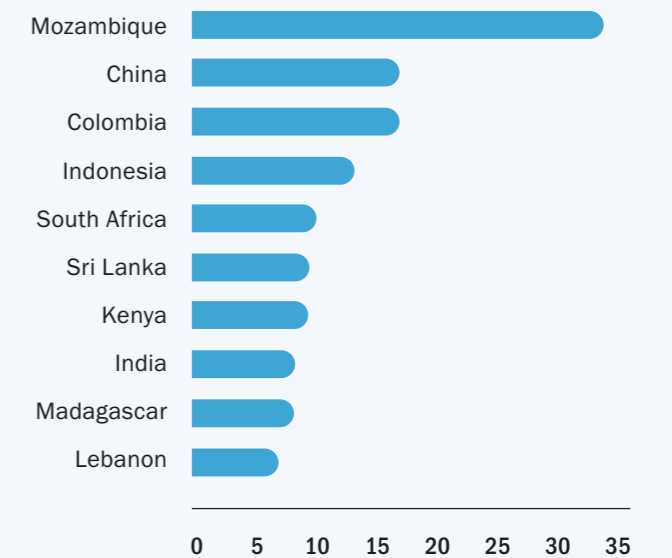




Photo: Srikanth Manneperi – Ocean Image Bank

Norwegian ocean-related development assistance – an overview



Introduction

This chapter provides a broad overview of Norway's ocean-related development assistance by geographic scope. It starts by highlighting Norway's support to initiatives that are global in reach, which is mainly support to multilateral organisations and other multi-donor initiatives. Following this is an overview of Norwegian support in the various regions, highlighting the themes and countries of greatest focus in 2021. As this report shows, the funding went to a variety of partners across the world to support low- and middle-income countries on a broad range of ocean-related issues. This is not an exhaustive overview of all Norwegian ocean-related development assistance, but a selection of key initiatives and projects.

Broadly speaking, much of Norwegian ocean-related development assistance is centred around three main development programmes – the Oceans for Development programme, the Fish for Development programme, and the Development Programme to Combat Marine Litter and Microplastics. Norway also allocates ocean-related funding to other initiatives, as ocean issues are increasingly being integrated into the broader climate and nature agenda.

The **Oceans for Development programme** was established in 2019 to promote a strengthened, sustainable, and inclusive ocean economy in partner countries. The programme puts a strong focus on knowledge and capacity-building through bilateral institutional cooperation and project support to key partners.

The **Fish for Development programme** was launched in 2015. The programme is responsible for coordinating

all development projects supported by Norway in the field of fisheries and aquaculture so that Norwegian competence and expertise can be of greater benefit to developing countries. The programme aims to improve socio-economic development through sustainable fisheries and aquaculture management in partner countries. The EAF-Nansen programme, implemented by the Food and Agriculture Organization of the United Nations (FAO) in collaboration with the Norwegian Institute of Marine Research (IMR), represents a core component of the Fish for Development programme. EAF-Nansen, with its research vessel Dr Fridtjof Nansen, has been supporting coastal developing countries by providing fisheries knowledge and data for more than 40 years. The current phase of the programme has a special focus on African countries and countries of the Bay of Bengal region.

The **Development Programme to Combat Marine Litter and Microplastics** was established in 2018 to promote SDG 14.1, which states that by 2025, the world should prevent and significantly reduce marine pollution of all kinds. The main objective of the programme is to prevent and significantly reduce marine litter from large sources in developing countries. Norway has supported over 40 initiatives so far, many of which have a global focus and are still ongoing. Improving management of plastic waste has been a key focus of many of the projects. The programme has also emphasised the strengthening of global and regional governance to prevent marine litter, and for instance supported the World Wide Fund for Nature's (WWF) project No Plastic in Nature. WWF, together with other partners, played a leading advocacy role in the lead-up to the breakthrough decision reached at the fifth session of United Nations Environmental Assembly (UNEA-5) to start negotiations on a global treaty on plastic pollution.

Global initiatives

While support from Norway is allocated to the global level, the supported projects and programmes channel funds to implementation at the regional or country level. Below, some of the global initiatives are introduced, while concrete examples from specific countries or regions are included in the regional chapters.

Multi-donor initiatives

In alignment with SDG 17 and the Paris Declaration on Aid Effectiveness, it is critical to ensure complementarities and avoid overlaps of ocean initiatives and programmes. As such, donor coordination is seen as an important objective for global ocean-related development assistance. Part of the Norwegian support is therefore channelled through multi-donor initiatives that have a global reach. Support to these spans across the three programmes, as they often have a broad thematic scope.

Since the establishment of the World Bank multi-donor trust fund PROBLUE in 2018, with Norway as one of its co-founders, the fund has provided support to the implementation of SDG 14. The fund promotes the World Bank's twin goals of ending extreme poverty and boosting shared prosperity. PROBLUE's efforts are concentrated around four pillars: 1) improving fisheries and aquaculture governance, 2) preventing marine pollution and litter, 3) promoting the sustainable development of new and traditional oceanic sectors, and 4) strengthening integrated and sustainable management of coastal and marine areas. In 2021, PROBLUE was supported by 11 donor countries, and Norway augmented its contribution in 2021 with an additional NOK 80 million.

Norway also supports ocean-related topics through the Seventh Replenishment (2018–2022) of the Global Environment Facility (GEF). During this period, through the International Waters focal area and the Chemicals and Waste focal area, GEF has focused on strengthening national Blue Economy opportunities to reduce threats to marine and coastal waters, as well as improving

Photo: Martin Colognoli – Ocean Image Bank





management in the Areas Beyond National Jurisdiction, and preventing marine litter and microplastics, including pollution of coastal areas.

With support from Norway and other donors, the International Union for Conservation of Nature (IUCN) has continued to play a key role in ocean and coastal issues in 2021. This includes topics such as the ocean and climate change, ocean acidification, protecting biodiversity, aquaculture, the high seas, and plastic pollution. For the first time, the ocean – including its biodiversity and importance to all life on earth – was a major theme of the IUCN World Conservation Congress held in Marseille in 2021. The commitment of IUCN's partners demonstrated the importance of convening stakeholders to move the conservation agenda forward, and the strong focus on the ocean resulted in several ocean-related IUCN Resolutions adopted at the congress.

Norway has also supported the United Nations Environment Programme (UNEP), contributing in particular to the efforts to combat marine litter and promote the UNEA process of strengthening the international framework on marine litter and plastic pollution.

In 2021, Norway entered into a new partnership with the Blue Action Fund (BAF), which promotes marine conservation and sustainable livelihoods in coastal communities. With support from Norway and other donors such as Germany, Sweden and France, BAF will work to enhance the management and sustainable use of coastal and marine ecosystems, for example through the establishment and implementation of marine protected areas (MPAs).

Other multilateral support

Norway also supports several multilateral organisations carrying out programme- or project-specific initiatives through the following three development programmes:

Oceans for Development

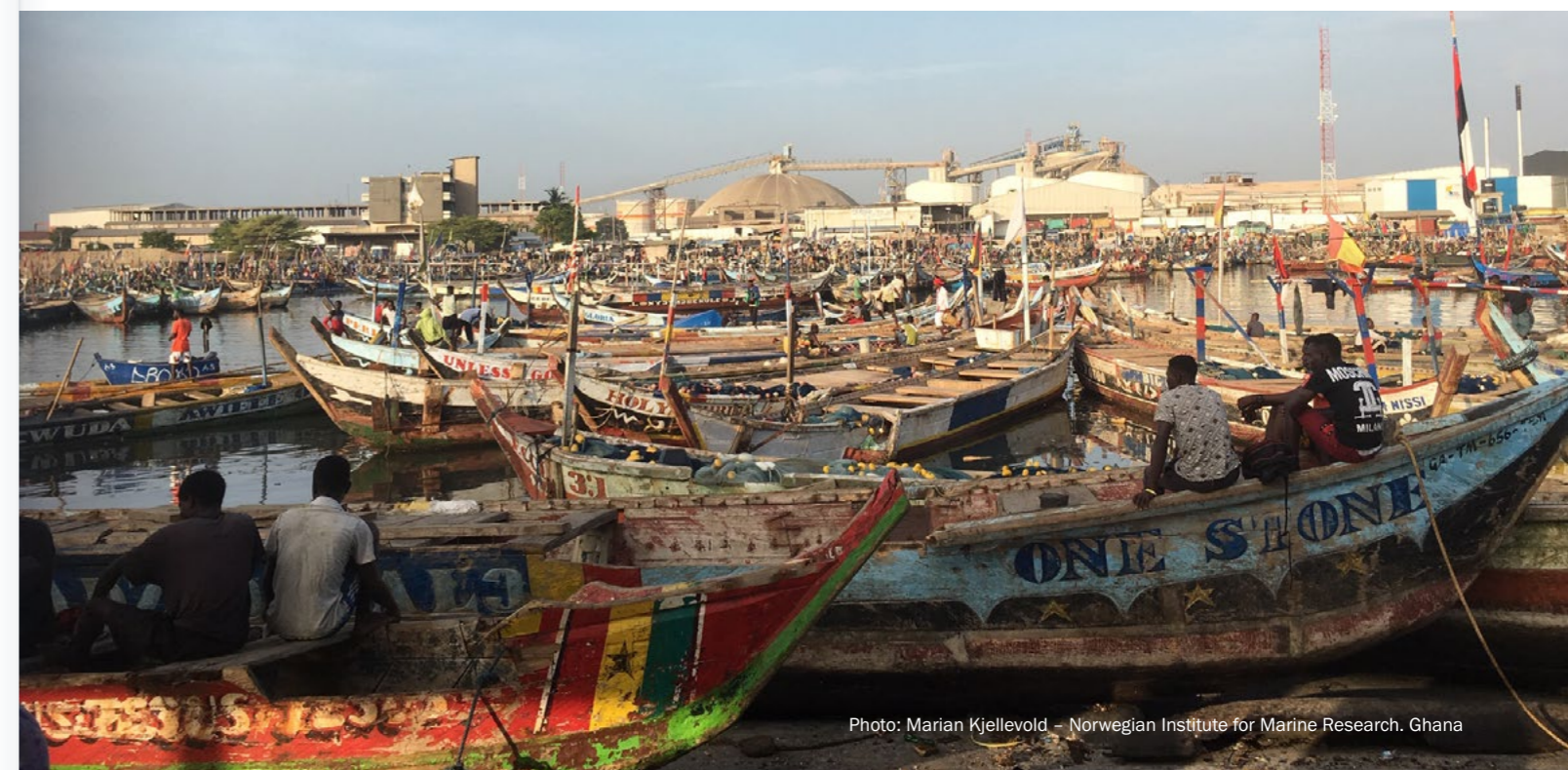
- Norway supports the UN Division for Ocean Affairs and the Law of the Sea (UN DOALOS) in its efforts to strengthen the capacity of developing countries to establish their maritime zones and develop integrated ocean governance approaches within the framework of the United Nations Convention on the Law of the Sea. Such capacity-building is key for countries to benefit more from a sustainable blue economy and to implement the 2030 Agenda. During 2021, UN DOALOS launched ocean governance studies in countries such as Vietnam, Panama, Antigua and Barbuda, and Ghana. Additionally, it conducted a customised training course for Pacific small island developing states (SIDS).
- In 2021, Norway supported IOC-UNESCO in reinforcing its capacity-development activities and coordinating the Ocean Decade. Norway's contribution has ensured a higher level of engagement and inclusivity in the delivery of science and knowledge for sustainable development, for example by scientists, ocean end users, youth, and stakeholders from SIDS. In 2021, the IOC focused on regional enabling activities to facilitate co-design and co-delivery of Decade Actions and supported the flagship action programme of the Decade, the Early Career Ocean Professional Network Programme. The EAF-Nansen programme was selected as a Decade programme in 2021.

Fish for Development

- Norway supports the FAO Global Capacity Development Programme to assist developing states in implementing the Agreement on Port State Measures and related instruments and tools. This includes strengthening national policy and legislative frameworks to combat illegal, unreported and unregulated (IUU) fishing, as well as monitoring, control and surveillance (MCS) enforcement institutions and systems. Norway's support also contributes to i) regional harmonisation, coordination and cooperation, ii) enhancing capacity to improve flag state performance, perform inspections in port and to act more effectively against persons and entities engaged in IUU fishing, and iii) implementation of market access measures such as catch documentation and traceability schemes.
- Illegal fishing is sometimes linked to transnational organised crime in the fishing industry and may include several types of crimes such as money laundering,

tax and customs fraud, document fraud and human trafficking. Norway therefore supports the UN Office on Drugs and Crime (UNODC) FishNET project to help developing countries to more effectively prevent, identify, investigate, prosecute and adjudicate crimes in the fisheries sector. This is done through strengthening the legal and policy frameworks, enhancing the criminal justice and law enforcement response, enhancing the capacity of law enforcement to detect and inspect fisheries crime in containers, and raising awareness at all levels to highlight the serious nature of organised fisheries crime.

- Norway supported the second call for proposals on sustainable fisheries of the UN Development Programme (UNDP) Ocean Innovation Challenge Fund. The fund aims to accelerate progress on SDG 14 by identifying and supporting innovative approaches to solving ocean issues. The first call for proposals on marine pollution reduction was issued in 2020, also with Norwegian support.





Development Programme to Combat Marine Litter and Microplastics

- The International Maritime Organization (IMO) and the FAO have continued to take important steps in 2021 with the GloLitter Partnerships Project to combat sea-based sources of marine plastic litter in developing countries. The project supports countries' efforts to effectively implement and enforce international regulatory frameworks as well as best practice for reduction and control of marine plastic litter from sea-based sources, such as fisheries and shipping. During 2021, the project confirmed the participation of all 30 partnering countries and held bilateral discussions with selected countries to develop the roadmap towards reaching the project objectives on the national level. The project also secured additional funding from other donors to support joint regional activities.

- The Secretariat of the Basel, Rotterdam and Stockholm (BRS) conventions implements two projects to strengthen the capacity of countries to implement the Basel Convention on transboundary movements of hazardous wastes, including the Basel Convention Plastic Waste Amendments of 2019. With Norwegian support, the secretariat has supported pilot projects in over 35 countries. In 2021, the secretariat developed the BRS Plastic Waste Inventory Toolkit, with national data on plastic waste.

- Under the Marine Pollution Enforcement Project Phase II, the International Criminal Police Organization (INTERPOL) aims to strengthen global, regional and national law enforcement responses to prevent and reduce marine pollution crime. The third global law enforcement action 'Operation 30 Days at Sea 3.0' took place in 2021, with more than 30 developing countries participating. It resulted in over 38 000 inspections and 5 000 offences reported, where the illegal discharge of plastic, oil, waste and other pollutants into rivers and other inland waters accounted for most offences reported.



Photo: Naja Bertolt Jensen – Ocean Image Bank



GREEN SHIPPING

Since 2019, Norway has supported the IMO-Norway GreenVoyage2050 project, which has positioned itself as a flagship initiative to transform the shipping industry towards a lower-carbon future and support the implementation of the Initial IMO Greenhouse Gas Strategy. The project is aimed at supporting 12 developing countries in their efforts to reduce maritime emissions. In 2021, the project delivered capacity-building activities on low-carbon shipping and clean ports, including under topics such as sustainable ports, alternative marine fuels, energy-efficient ship operations, and the Ship-Port Interface Guide. Through the project, a study is under way on sustainability criteria and life-cycle GHG emission assessment methods and standards for alternative marine fuels, and a study on the emission reduction potential for container shipping through “Just In Time Shipping”, was initiated in 2021.

In 2021, Norway also supported IMO’s TEST Biofouling Project, which aims to demonstrate technical solutions in developing countries to stop invasive aquatic species and reduce GHG emissions from ships. The project will showcase technological solutions for managing biofouling, such as remotely operated vehicles for in-water cleaning and underwater cameras for monitoring anti-fouling coating status. Additionally, the project will provide capacity-building courses to support the implementation of the IMO Biofouling guidelines.



THE BLUE JUSTICE INITIATIVE AGAINST TRANSNATIONAL ORGANISED CRIME IN THE FISHING INDUSTRY

Norway supports the Blue Justice Initiative, aimed at identifying measures to address transnational organised fisheries crime and supporting developing countries in implementing these. The initiative is a response to the challenges identified in the Copenhagen Declaration against transnational organised crime in the global fishing industry, adopted in 2018. In 2021, the initiative launched the International Blue Justice Tracking Center to assist developing countries with tracking of vessels engaged in fishing activities and sharing of information. To facilitate state-to-state cooperation, this information is shared through the digital platform Blue Justice Community, owned by the Norwegian Government and administered by UNDP.



SUPPORT TO HIGHER EDUCATION AND RESEARCH THROUGH THE NORHED PROGRAMME

The Norwegian Programme for Capacity Development in Higher Education and Research for Development (NORHED) is aimed at strengthening the capacity of higher education institutions in developing countries, including producing higher-quality graduates and high-quality research, and making higher education more inclusive. In 2021, NORHED launched its second phase of the programme – NORHED II, for the period 2021–2026. Under the call 60 projects were initiated, including several with ocean-related topics.



Regional Initiatives

Africa

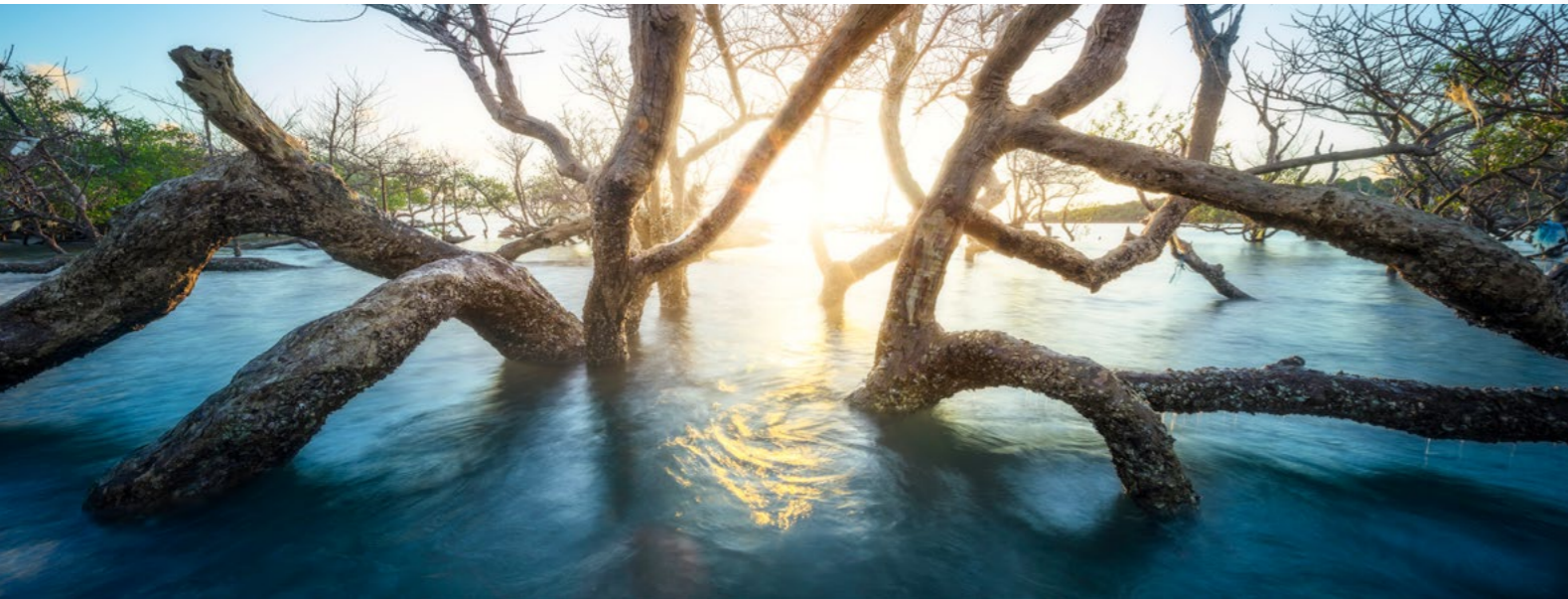


Photo: Gabriel Barathieu – Ocean Image Bank

Background

The African continent has vast ocean resources that can contribute to sustainable development of its countries. The African Blue Economy sectors, which currently generate a value of USD 296 billion with 49 million jobs, are projected to grow substantially, according to the African Union (AU) Blue Economy Strategy. The AU has identified blue economy development as a priority towards achieving the aspiration of 'a prosperous Africa based on inclusive growth and sustainable development'.⁵

Africa is facing a multitude of socio-economic challenges, as well as high vulnerability to the impacts of climate change. The World Bank's recently published Africa's Pulse, No. 25 notes that Sub-Saharan Africa's recovery from the COVID-19 pandemic is expected to decelerate in 2022 amidst a slowdown in global

economic activity, continued supply constraints, outbreaks of new coronavirus variants, climatic shocks, high inflation, and rising financial risks due to high and increasingly vulnerable debt levels.⁶ These factors put heavy pressure on a continent already facing high levels of poverty and food insecurity.

In many African coastal states, marine fisheries generate a significant amount of employment, provide calories, protein, and other essential nutrients, and create livelihoods for women and families in areas where opportunities might otherwise be scarce. In some least developed countries (LDCs) in Africa, small-scale marine fisheries provide employment for up to 20 % of the labour force. In 2009, WorldFish estimated that 400 million Africans rely on fish as an essential component of their diets, while FAO data suggest that fish provide 22 % of animal protein intake in the region. This figure rises to more than half in some poor coastal countries.⁷ This is of particular importance considering that in

⁵ AU-HBAR, 2019. Africa Blue Economy Strategy. Nairobi, Kenya

⁶ Zeufack, Albert G.; Calderon, Cesar; Kabundi, Alain; Kubota, Megumi; Korman, Vijdan; Raju, Dhushyanth; Girma Abreha, Kaleb; Kassa, Woubet; Owusu, Solomon. 2022. Africa's Pulse, No. 25, April 2022. Africa's Pulse; 25. Washington, DC: World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/37281> License: CC BY 3.0 IGO.

⁷ World Bank. 2019. Climate Change and Marine Fisheries in Africa : Assessing Vulnerability and Strengthening Adaptation Capacity. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/33315> License: CC BY 3.0 IGO

2018, Africa accounted for more than half of the global total of acutely food-insecure people, estimated at 65 million.⁸ For future generations, the importance of food from the ocean is likely to increase.

The basis for a thriving ocean economy in Africa is under threat. Climate change and its impacts, including coastal erosion, sea level rise, destruction of coastal ecosystems, and pollution, are having an effect on Africa's coastline. IUU fishing is a significant issue in the region, threatening the sustainability of fish populations and, in turn, food security. The global value of developing countries' financial losses due to IUU and fisheries crime is estimated at USD 9–20 billion annually.⁹ IUU drains countries of capital and income, adversely affecting peoples' livelihoods. Pollution, including marine litter, is destroying ecosystems and can have a negative economic impact on coastal tourism. Africa has not been the largest source of plastic pollution to date, but considering the population and economic growth of the region, mitigation efforts are important. The demand for and use of plastic is expected to increase acutely, and solid waste management is practically non-existent in several countries.

Norway has a number of new as well as longstanding projects and bilateral cooperation projects in Africa working on the issues identified above. This includes support to governments, non-governmental organisations (NGOs) at international, national and local level, multilateral organisations, academic institutions and private companies operating on the continent.

Illegal fishing and crimes in the fisheries sector

Reducing illegal fishing promotes more sustainable fisheries, better economy for those practicing legally, and increased profitability and food security because the value chain operates through formal channels. Norway supports several efforts in Africa to combat illegal fishing. In West Africa, Trygg Mat Tracking and the West Africa Task Force under the Fisheries Committee for the West Central Gulf of Guinea (FCWC) bring together national enforcement authorities, regional organisations and international technical and legal experts. With the main aim of combating large-scale illegal fishing, the initiative facilitates information-sharing and regional cooperation between the FCWC Member States (Benin, Cote d'Ivoire, Ghana, Liberia, Nigeria and Togo). In 2021 the FCWC Regional MCS Centre was established, providing a stable hub for all information-sharing mechanisms and a site for the FCWC Regional Vessel Monitoring System and other key tools, including the preparation of standard operating procedures. In Ghana, regular intelligence relating to high-risk vessels entering the port of Tema led to increased inspection levels.

Norway also supports the FishFORCE programme, which provides training programmes for fisheries law enforcement officers and all actors in the fisheries-related criminal justice system. In line with Nelson Mandela University's strategic decision to develop a strong marine and maritime institutional focus, the Centre for Law in Action, founded in 2002, established the Fisheries Law Enforcement Academy (FishFORCE) – the first ever in Africa. The model promotes the use



Photo: Marian Kjellekvold – Norwegian Institute for Marine Research, Ghana.

⁸ <https://www.worldvision.org/hunger-news-stories/africa-hunger-famine-facts>

⁹ <https://www.norad.no/globalassets/publikasjoner/publikasjoner-2019/fish-for-development-policy-document.pdf>



of traditional policing methods and tools adapted to the specific circumstances affecting the fisheries sector. Although initially limited to a few countries on the southern and eastern coast of Africa, the ambition is for FishFORCE to become a platform for building a network of highly trained fisheries law enforcement officers across developing countries in Africa participating in cross-border activities.

Small-scale fisheries, food security and aquaculture

The importance of small-scale fisheries for food security in Africa cannot be overstated. Norway has collaborated with the FAO since 2015 on the implementation of the Voluntary Guidelines for Small-Scale Fisheries. A second phase of this cooperation was initiated in 2020, and the inception phase was completed in 2021. The initiative is mainly focused on African countries. Achievements of the inception phase included mapping of women's organisations and assessments of their needs, and production of publications and videos on post-harvest best practices. In addition, several training centres were built in Ghana for fish processing, a fish smoking centre was set up in Sierra Leone, and drying racks were installed in Uganda.

As a means of supplementing marine fisheries to increase food and nutrition security as well as incomes, Norway supports the Royal Norwegian Society for Development (Norges Vel) on several inland aquaculture projects in Southeast Africa. This includes CEPAQ, a national centre in Mozambique for aquaculture research and a platform for private investors that produce tilapia for sales in the local market, thereby creating jobs and increasing food security. CEPAQ is a facility that features a breeding programme, fry production and hatchery of tilapia to be sold to fish farmers. It also focuses on the genetic enhancement of the Mozambique tilapia (*Oreochromis mossambicus*). Norges Vel also works with a local enterprise in Mozambique to increase food security through profitable small and medium-scale tilapia farming, domestic market development and establishment of a tilapia aquaculture incubator. In Madagascar, Norges Vel supports smallholder aquaculture, promoting sustainable use of natural and human resources and allowing small and micro-enterprises to be integrated into increasingly competitive value chains. The project on sustainable tilapia value chain development led to an increase in tilapia production from an average of 1 tonne per farmer to 1.6, resulting in an increased income from USD 89



VOCATIONAL TRAINING IN THE AQUACULTURE SECTOR IN ZAMBIA AND TANZANIA:

Norway supports vocational training in the aquaculture sector in Zambia and Tanzania through WorldFish. WorldFish works with vocational training centres to build capacity and design practical and innovative training tools that promote the use of appropriate technologies to support the development of medium- to small-scale entrepreneurs in the aquaculture sector, fish farm workers, and students in Zambia and Tanzania. This project has specifically focused on SDG 5, and amongst several excellent results of the project, the proportion of females enrolling increased from 34 % in 2019 to 57 % in 2021.

per month to 120. The cooperative's production now satisfies the annual fish protein needs of more than 100 000 people in Madagascar.

The EAF-Nansen programme has provided long-term support to developing countries, with a key focus on the four large marine ecosystems in sub-Saharan Africa. Through a broad range of initiatives and activities, the programme helps to sustainably maintain the ocean as a source of food and nutrition. In 2021, the Dr Fridtjof Nansen vessel resumed its research surveys in West

African waters after a considerable delay due to the COVID-19 pandemic. The surveys conducted in 2021 were bottom habitat studies/environmental monitoring off Senegal and Mauritania, as well as an ecosystem survey off Cabo Verde. The programme also continued its support to partner countries, applying an ecosystem approach to fisheries management (EAF). For instance, EAF legal gap analysis reports for all 32 partner countries were finalised in 2021, to be published after formal endorsement by the respective governments.

Photo: Dr. Fridtjof Nansen Research Vessel. Magne Olsen – Norwegian Institute for Marine Research





Bilateral cooperation on ocean-related issues

Norway has both new and longstanding bilateral partnerships in Africa. For instance, the Fish for Development programme works with the Fisheries Commission of Ghana to enhance the socio-economic development of Ghana through sustainable management of the fisheries and aquaculture sectors. Despite delays, some progress was made in 2021, including a final draft of a fisheries management plan for 2022–2026, six stock assessments and data collection webinars to provide input into 2022 activities, a draft guideline for farm data collection for Ghanaian aquaculture, and a zero draft of the Ghana National Aquaculture Development Plan (2021–2025).

The Oceans for Development programme initiated discussions for an institutional cooperation project with Mozambique in 2021 on integrated ocean management, with further progress on defining the scope of cooperation expected in 2022. Preliminary studies on potential cooperation with Kenya and the African Union were also completed under the Oceans for Development programme in 2021.

Marine litter and plastic waste

Several of the global initiatives on marine litter supported by Norway have piloted efforts in Africa. The Secretariat of the BRS Conventions and the Basel Convention Regional Centres are implementing projects with partners targeting the control of transboundary movements of waste, as well as prevention of plastic waste and its environmental impacts. Ghana is one of the countries where capacity to implement the Basel Convention plastic waste amendments is being strengthened through legal and institutional reforms, development of national strategies and training of customs and enforcement agencies. The pilot has

successfully demonstrated a collection and recycling scheme for fishing nets and set up production of reusable bags by economically disadvantaged women.

Through the GloLitter Partnerships Project, IMO and FAO supports Cabo Verde, Cote d'Ivoire, Gambia, Kenya, Madagascar, Mozambique, Nigeria, Senegal and Tanzania as some of the partner countries of the project. As part of the project, the Global Ghost Gear Initiative announced in 2021 the winners of the Joanna Toole GloLitter Partnerships Grant for women-led initiatives in the fishing sector of developing countries to address abandoned, lost and otherwise discarded fishing gear. The grants were awarded to three organisations, two of which are in Kenya. The grants will support the organisations ERACOMA and Women in the Maritime Sector in East and Southern Africa in preventing ghost gear from fisheries at selected sites along the coast.

On a national level, Norway supports the NGO Zero Zbel to build knowledge and raise awareness about the plastic pollution in Morocco and create an informal network to promote efficient solutions to the problem, especially amongst young people. In 2021, the project audited seven river basins and transformed the data into an interactive map to build knowledge about the nature of plastic pollution in Morocco. In South Africa, Norway supports the Sustainable Seas Trust (SST) to assist African countries towards achieving zero plastics to the seas, with an initial focus on Nelson Mandela Bay in Port Elizabeth. SST in 2021 successfully established a baseline of litter on beaches in the bay and submitted these findings to a peer-reviewed journal. The aim is for the methods and techniques being developed to provide proof of concept in the bay for rollout to other countries in the region.



Photos: BRS Secretariat



Photo: Ian Bryceson

Research and higher education

Norway also supports research and higher education in Africa. In late 2021, Norway partnered with the University of Ghana to build and strengthen knowledge on ocean governance and the law of the sea in Ghana and the region.

Through the support to IOC-UNESCO in 2021, IOC initiated actions to stimulate and advance development of the science and monitoring of ocean acidification, including its impacts on marine life and sustainability of marine ecosystems in estuarine-coastal-open ocean environments of Africa. Following a survey of eligible countries and consultations with partners, IOC selected three institutes which were considered the best positioned to benefit from financial and

technical support. These were the Centre de Recherche Océanologique in Abidjan, Cote d'Ivoire, the Institut Halieutique et des Sciences Marines in Toliara, Madagascar, and the Nigerian Institute for Oceanography and Marine Research in Lagos, Nigeria. In combination with the online course on ocean acidification developed by IOC on the OceanTeacher Global Academy platform, hands-on training in regional workshops will develop and sustain capacity for ocean acidification observations in the focus areas, beginning in summer 2022. Also, efforts began in 2021 to facilitate the establishment of a tailored early warning system to detect harmful algal blooms in all relevant African member states.

Several of the NORHED II programme projects in Africa which were initiated in 2021 include ocean-related topics, including aquaculture (fish and environmental health, small-scale infrastructure), sustainable management of coastal ecosystems and resources, marine resource economics, ecosystem integrity, and research capacity related to the sustainability of extraction of energy resources, particularly oil and gas, and the implications for climate change mitigation. The projects will run in Ghana, Kenya, Malawi, Mozambique, Nigeria, Tanzania, Uganda and Zambia.



Asia



Photo: BRS Secretariat

Background

Asia is the largest and most populous of the continents, with a diverse set of cultures, demographics, and social and economic conditions. The continent also represents an immensely rich and diverse nature whose rivers, inland waters, and marine areas hold important ecological, social, cultural and economic value.

In South Asia, the region's marine and coastal areas are categorised as some of the largest and most biologically rich ecosystems in the world, including two of the largest river basins (the Ganges and the Indus).¹⁰ These marine and coastal areas are of key importance for the social and economic development of the region, and are critical for food security and nutrition, livelihoods and employment. In India alone, fisheries and aquaculture provided about 13 million jobs, according to 2017 estimates.¹¹ Similarly, the ocean and its resources are of immense importance to the Southeast Asia region.

Coastal tourism comprises an important component of the national economies of countries such as Indonesia, Malaysia, the Philippines, Thailand and Vietnam. This region possesses rich and unique marine and coastal biodiversity, and is home to many of the world's mangrove forests and coral reef areas.¹² These are key sources of food, as seafood is heavily relied on as a critical source of protein intake. Indonesia, for example, is one of the largest fishing nations in the world.

However, the Asian continent is faced with a number of challenges that have impacts on its coasts and the ocean, as well as the people who depend on them for their livelihoods and wellbeing.¹³ Rapid population increase in coastal areas, marine pollution (including land-based pollution), unsustainable fishing practices, expansive aquaculture, extensive habitat degradation and other stressors are putting increasing pressure on many Asian marine and coastal areas. The negative impacts are further exacerbated by climate change.

¹⁰ South Asia Co-operative Environment Programme (SACEP). 2019. 'Marine and Coastal Biodiversity Strategy for the South Asian Seas Region: Living in Harmony with our Oceans and Coasts'.

¹¹ FAO 2022. Fishery and Aquaculture Country Profiles. India. Country Profile Fact Sheets. Fisheries and Aquaculture Division. Source: Fisheries and Aquaculture - Fishery and Aquaculture Country Profiles - India (fao.org)

¹² Whisnant, R., and Reyes, A. 2015. Blue Economy for Business in East Asia: Towards an Integrated Understanding of Blue Economy. Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), Quezon City, Philippines. 69 p.

¹³ UNEP 2016. GEO-6 Regional Assessment for Asia and the Pacific. United Nations Environment Programme, Nairobi, Kenya.

Therefore, Norwegian ocean-related development assistance has provided support to projects and bilateral cooperation focused on combating marine pollution and plastic waste, improving fisheries resources management and aquaculture, developing integrated ocean management, and promoting green shipping. The partners involved are often international, national and local NGOs, multilateral organisations, academic institutions, companies and governments. Much of Norway's support has gone to South Asia and Southeast Asia. In South Asia, several of these efforts have been directed at India, while some support has also gone to Sri Lanka and Bangladesh. In Southeast Asia, Norway has continued its strong focus on Indonesia, while also supporting several regional projects across the Association of Southeast Asian Nations (ASEAN) region.

Marine litter and plastic waste

Plastic litter and waste, often from land-based sources, are considered major threats to marine and coastal ecosystems in Asia. Norway has therefore provided support to a number of projects aimed at tackling marine litter and plastic waste in the region. In India, the Centre for Science and Environment (CSE) implements

a project to address the land-to-sea pathways of waste. With a mandate to establish model zero-waste cities in Agra and Gurugram, CSE provides technical input to the local bodies on policy and practice. In 2021, CSE entered into memorandums of understanding with the municipal corporations to build capacity on source segregation of waste, landfill management and bulk waste generators. The Afroz Shah Foundation organises clean-ups of beaches, rivers and parks in Mumbai. Seeking to increase awareness on marine litter and its effects on health and the economy, the foundation has trained 160 000 citizens in reducing the generation of plastic waste and has picked up 6 400 000 kg of marine litter.

In Indonesia, the government has announced a 70 % ocean plastic reduction commitment and action plans. Norway supports various initiatives to combat plastic pollution, with a focus on waste management. According to a baseline study of the Banyuwangi region in Indonesia conducted by the CLOCC project under Avfall Norge (a Norwegian waste management and recycling association), less than one third of the villages in the region have a formal collection system and only 22 % of the waste is collected. These numbers highlight



Photo: Avfall Norge Indonesia



the importance of improving waste management in Indonesia. In Bali, SYSTEMIQ has launched a web-based platform¹⁴, featuring an interactive map that allows the users to build and visualise the dynamic waste flow, leakage, waste facilities and stakeholder maps and see results at any geographic level within Bali. The project has also delivered several waste management reports and guidelines, as well as gathered 13 of the most prominent Bali waste management organisations and individuals under an independent forum for solving waste issues. In East Java, SYSTEMIQ supports the development of city partnerships in the coastal towns Muncar in Banyuwangi and in Nguling and Lekok in Pasuruan. In Muncar, 90 000 people have been provided with waste collection services, and the city recycles and composts waste in its two material processing facilities.

Norway has also supported the World Bank's Indonesia Oceans, Marine Debris and Coastal Resources Multi-Donor Trust Fund, aimed at assisting the government in its National Ocean Agenda. In 2021, the project delivered technical assistance on the Indonesia Ocean Policy, an Indonesian marine debris hotspot rapid assessment, and a Plastic Policy Simulator to simulate the impacts of over 30 potential policy instruments that can be applied to over 20 plastic products across the plastic value chain.

As marine plastic litter is a transboundary environmental problem, Norway also supports various regional projects. Through the ASEANO project, the Norwegian Institute for Water Research (NIVA), together with local institutions in three ASEAN countries, aims to provide knowledge and data for monitoring, awareness-raising and efforts to reduce plastic pollution. Mainly focused on Vietnam, Indonesia and the Philippines, in 2021 the project launched a webinar series and online training sessions aimed at building capacity and disseminating information on plastic pollution. The project has conducted important research on, inter alia plastic utilisation and practices of the food service industry located in Dasmariñas City in the Philippines, and the impacts of microplastics in rivers in Indonesia and the Philippines.

Norway also supports a regional UNDP project to source innovative solutions from ASEAN countries for combating plastic pollution. In 2021, two innovation challenges were concluded – one focused on Ha Long Bay in Vietnam and Koh Samui in Thailand and one on Mandalika in Lombok Island in Indonesia and Samal Island in the Philippines. The winners of each challenge are awarded a grant and invited to participate in an accelerator programme where they continue developing their solutions.

Environmentally sound management of non-recyclable plastic waste is technically complicated and costly, and there is a lack of capacity and resources to manage the increasing amounts of this waste. In China, India, Thailand and Vietnam, SINTEF has continued its work to investigate how energy-intensive industries such as cement manufacturing can benefit from utilising the high-energy content of non-recyclable plastic waste. In 2021, together with partners in the private sector and government institutions, SINTEF has investigated the feasibility of using non-recyclable plastic waste from Vietnam's largest paper recycling plant and the feasibility of using waste from shoe/footwear manufacturing as co-fuel at the INSEE Hon Chong cement plant in Kiên Giang province.

Several Asian countries are also combating the illegal trafficking of hazardous waste, and Norway therefore supports the efforts of the UNODC Container Control Programme (CCP) in countering illegal hazardous waste trafficking in Cambodia, Malaysia, the Philippines, Thailand and Vietnam. During 2021, CCP has conducted in-depth technical assessments in these five countries to evaluate the specific needs and carried out national workshops in the Philippines, Malaysia, Cambodia and Thailand. These workshops were also supported by the BRS Conventions Secretariat and the World Customs Organization.

¹⁴ balipartnership.org

Fisheries and aquaculture

Marine and inland fisheries are critical sources of food and protein for the Asian population, but factors such as overfishing and destructive fishing practices undermine the fisheries. In Sri Lanka, Norway supports a project to improve the management of fisheries resources and fisheries data collection, with the Norwegian IMR and the Sri Lankan National Aquatic Research and Development Agency (NARA). In 2021, NARA scientists independently carried out an acoustic survey with the research vessel Samuddrika to measure the abundance of small pelagic fish along the east and south coasts of Sri Lanka. This was a project milestone. The project has also developed a photo-based system for species identification and measuring length of fish, to improve both the quality and volume of sampled data.

Asia is also a large aquaculture producer; the region (predominantly China) has produced around 89 % of the world's aquaculture in the last 20 years.¹⁵ In China, Norway supports a bilateral cooperation project between the Norwegian IMR and the Yellow Sea

Fisheries Research Institute under the Chinese Academy of Fishery Sciences, aimed at making aquaculture a sustainable and larger provider for future food security. In particular, the project has helped to build institutional capacity on aquaculture management tools, as well as strengthened the mutual understanding of research knowledge on management frameworks regulating space for aquaculture development. In 2021, the web-based decision support systems for aquaculture planning and management (the Aquaculture Planning Decision Support System) in Sanggou Bay was presented in a book on spatial planning for marine aquaculture. The project also built capacity to carry out Modelling–Ongrowing fish farms–Monitoring (MOM) assessments. This is a system used to monitor the environmental impact of marine fish farms in Norwegian aquaculture,¹⁶ and through the project it was adapted to Chinese aquaculture environments.



Photo: Ken Opprann – Vietnam

¹⁵ FAO, 2018. The State of World Fisheries and Aquaculture. Sustainability in Action. Source: The State of World Fisheries and Aquaculture 2020 (fao.org)

¹⁶ Norwegian Directorate of Fisheries, 2022. Source: Overvåker miljøpåvirkningen (Monitoring environmental impacts (in Norwegian), fiskeridir.no)



Green shipping

Asia is home to some of the busiest shipping lines and largest ports in the world.¹⁷ Norway therefore supports important IMO-led initiatives targeting Asia. Through the regional IMO project Marine Environment Protection of the Southeast Asian Seas (MEPSEAS), Norway supports Cambodia, Indonesia, Malaysia, Myanmar, the Philippines, Thailand, and Vietnam to reduce the risk of impact of ship-generated pollution on the marine environment and fisheries. The project has spurred efforts to increase uptake of technology solutions to implement the relevant international treaties and will enhance knowledge management and communications to address the high-priority issues related to ships' ballast water, anti-fouling paints, pollutants, and dumping of waste into marine environments. Moreover, it has developed mechanisms for sustainability, and driven ASEAN-wide regional coordination and cooperation by engaging with ASEAN and its ASEAN Maritime Transport Working Group.

Through the global IMO GreenVoyage2050 project, important progress was made in India, as the country is one of the 12 main partner countries of the initiative. The 2021 meeting of the India-Norway Task Force on Blue Economy for Sustainable Development focused on strengthening cooperation on green shipping, and an India pilot project under Green Voyage2050 was started. GreenVoyage2050 also held a high-level stakeholder roundtable with key stakeholders from the maritime public, private and financial sectors in India. The dialogues were facilitated on a number of pilots (installation of innovative waste heat recovery for cement carrier, hybridisation of a tug sector in India, greening of passenger shipping in major Indian inland waterways) and initiation of feasibility studies.

On a national level, with Norwegian support since 2015, IMO has supported Bangladesh in enhancing its national capacities for safe and environmentally sound recycling of ships, in compliance with the Hong Kong Convention. These efforts are now focused on establishing a treatment, storage and disposal facility (TSDf) for the

ship-recycling industry and conducting an environmental and social impact assessment. The government of Bangladesh has awarded an international consulting firm the contract to undertake the assessment. The government has also selected a site for the TSDf and taken necessary steps to secure the land needed.

Bilateral cooperation on ocean-related issues

Norway and Indonesia have since 2017 continued to develop their dialogue on a sustainable ocean economy. During 2021, the two countries have had several informal technical meetings to explore potential areas of broad, long-term ocean cooperation. One already identified area of collaboration between Indonesia and Norway is ocean accounting, where both countries, as Ocean Panel members, have committed to the development of ocean accounting. Both countries have already started pilot projects on this, however the work is still in an early stage in both countries. As such, there is much to learn from each other. Several technical workshops between Norwegian and Indonesian institutions have already been held on this issue.

In the context of the India-Norway Task Force on Blue Economy for Sustainable Development, India and Norway have a productive dialogue on ocean-related issues. Despite the COVID-19 pandemic, in 2021 the cooperation progressed across several areas, including marine litter and green shipping. The cooperation has also focused on integrated ocean management, which is key for countries to reach the potential of a sustainable ocean economy. Through the India-Norway Marine Spatial Planning (MSP) project, implemented by the Norwegian Environment Agency and the Norwegian IMR and their Indian counterparts, Norway is helping to improve the ecological status of marine and coastal ecosystems in India, and to develop model MSPs for two pilot sites in Pondicherry and Lakshadweep. In 2021, the project organised a workshop on future food from the ocean and the role of MSP, contributing to progress in the use of MSP as a tool for integrated ocean management in India.



STRENGTHENING WOMEN'S RIGHTS IN THE INFORMAL SECTOR IN VIETNAM

Norwegian development cooperation with Vietnam dates back 50 years, making it one of Norway's longest partnerships. This has included significant support to the fisheries and aquaculture sector. While this type of support is no longer as necessary in the country, new types of collaborations are emerging, including on marine litter. In Vietnam, UNDP is working with informal waste pickers, particularly women, to enhance their position and capacity in five provincial cities (Quang Ninh, Da Nang, Binh Dinh, Binh Thuan and Binh Duong). During 2021, the project has held 46 capacity-building training courses and workshops with more than 2 000 participants (over half of them women), organised 17 training courses for informal waste workers, and launched five partnership platforms in the five cities. Women make up a disproportionate percentage of workers in the informal sector, including among waste pickers, and as such this support is very important to achieving SDG 5.



PROTECTING THREATENED COASTAL ECOSYSTEMS IN CAMBODIA

With a grant from the Blue Action Fund (BAF), the organisation Fauna & Flora International, together with partners, aims to strengthen the governance and management of the MPAs in Cambodia's Koh Rong and Kep Archipelagos. The MPAs were initially established in 2016, and through the BAF grant the aim is to protect an additional 685 km² of Cambodian waters, as well as improve the management of the existing area and strengthen the livelihoods of coastal communities. This will include protection of coral reefs, seagrasses and mangrove habitats, thereby also promoting both mitigation of and adaptation to climate change and achievement of SDG 13.

¹⁷ IMO, 2022. Asia and the Pacific Islands Region. Source: Asia and Pacific Islands Region (imo.org)



Latin America and the Caribbean



Photo: Hugh Whyte – Ocean Image Bank. Magazine Beach, Grenada.

Background

The Latin America and Caribbean (LAC) region's uniquely productive marine area represents a significant share of global marine biodiversity. The region features more global marine ecoregions than any other region, and has unique environments such as the Galapagos area, unexplored deep underwater trenches, and cold-water reefs. The region has over 3.8 million km² of MPAs, which represents 20 % of the marine area, well above the SDG 14.5 target. An estimated 2.3 million people are directly or indirectly involved in fishing activities, and more than 27 % of the population live by the coast. In the Caribbean region, small-scale fisheries represent about 90 % of catches.¹⁸

To continue harvesting this wealth, however, the region depends on a healthy and productive ocean. Mangrove cover has significantly declined in the region, particularly the Atlantic and Pacific coasts of Central America, where 40 % of the mangrove species present are listed on the IUCN Red List as 'threatened with extinction'. Plastics

have been found to be the most important pollutant in LAC waters, due to several reasons, such as population growth, urban development, tourism growth and high demand for plastic products and production.¹⁹

Norwegian ocean-related development assistance in the LAC region seeks to address these challenges, but also tap into the opportunities identified here. In addition to bilateral cooperation and support to civil society, several of Norway's multilateral partners implement projects in this region, such as PROBLUE, Blue Action Fund and IMO. Considering the importance of small-scale fisheries and the nutritional aspects of seafood in the region, the Fish for Development programme has a particular focus on this in Colombia, its main LAC partner country.

Fisheries and aquaculture in Colombia

Colombia is a focus country in the LAC region for the Fish for Development programme and in December 2021, the first institutional cooperation agreement between Colombia and Norway under the programme

¹⁸ M. Tambutti and J.J. Gómez (eds.), 'The outlook for oceans, seas and marine resources in Latin America and the Caribbean: conservation, sustainable development and climate change mitigation', Project Documents (LC/TS.2020/167), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2020.

¹⁹ Ibid.



Photo: Hanz Rippe – Fondo Accion Colombia

was signed. The programme will support efforts to ensure sustainable fisheries and aquaculture, as well as increase sustainable production of fish and seafood. Competence building is an integrated element of Norwegian fisheries-related development cooperation, and the Norwegian cooperation institutions in this project (Norwegian IMR, Norwegian Veterinary Institute, and Directorate of Fisheries) have extensive experience in this regard.

Norway also supported various civil society projects in Colombia on fisheries and aquaculture in 2021. This includes a project implemented by Conservation International which seeks to reduce poverty of Colombian coastal small-scale fisherfolk through improved fisheries management and production schemes, and strengthen their capacity to sustainably manage the coastal areas. During 2021, the project managed to commercialise over 1 000 kg of sustainably captured fish products, which resulted in a 60 % increase in the incomes of the fisherfolk organisation component of the EcoGourmet programme. A community-led evaluation of the project's results was conducted in 2021, where female members of the fisherfolk organisations stated that the EcoGourmet programme has made them feel empowered and like valuable members of the community.



Photo: Conservation International, Colombia.



Norway supports two Caritas projects on aquaculture in Colombia: one that aims to increase productivity, profitability and sustainability in the tilapia value chain, and one that aims to improve the livelihoods of rural youth and their households in Caquetá department. In the first project, over 400 farm operators have been trained in fish health and vaccination methodologies, and a group of participants have set up a venture to provide fish vaccination services in the region.

Sustainable blue economy

For some Caribbean SIDS, the bulk of their economy is “blue”, so it is crucial to ensure that this is sustainable. Through PROBLUE, Norway supports the Organisation for Eastern Caribbean States (OECS) Commission and member states to identify policy gaps, organisational reforms and capacity needs at national and regional levels within the OECS to improve competitiveness of the blue economy and strengthen the marine and coastal assets on which the region depends.

In Ecuador, the UNEP/GEF Blue Forests Project supported the mainstreaming of mangrove ecosystem services into national policy frameworks, including the Socio Manglar programme, which focused on conserving 41 000 hectares of mangrove forests within the Gulf of Guayaquil while providing direct economic incentives to the local communities that commit to support the programme.

Marine litter and plastic waste

Following a 2019 World Bank study on the state of marine pollution in the Caribbean,²⁰ reducing marine pollution in the Eastern Caribbean became an OECS priority. The study found ‘unprecedented pollution’ in the region, and the OECS countries registered ‘a significant level of agricultural runoff, with solid and liquid waste forming 80 % of marine waste, with the prevalent pollutants being plastics, sewage, oil and chemicals’. Norway is therefore supporting the OECS through the Reduction of Marine Litter and Pollution Project which seeks to build resilience in marine ecosystems.



Photo: Hanz Rippe – Fondo Accion Colombia

²⁰ Diez, S.M., Patil, P.G., Morton, J., Rodríguez, D.J., Vanzella, A., Robin, D.V., Maes, T., Corbin, C. (2019). Marine Pollution in the Caribbean: Not a Minute to Waste. Washington, D.C.: World Bank Group

The project aims to reduce and control marine pollution in the Eastern Caribbean by i) enhancing policy and legislation for effective reduction and management of waste; ii) increasing the awareness of issues relating to marine litter; and iii) undertaking concrete interventions to reduce and control litter in the marine environment.

Norway also supports a bilateral project to combat marine litter in the State of São Paulo, Brazil. The project is implemented by Fundo Brasileiro para a Biodiversidade (Brazilian Biodiversity Fund) and the University of São Paulo. The project has successfully developed a long-term strategy for monitoring and assessment of marine litter (PEMALM) and has improved state-level multisector engagement. PEMALM has since been showcased at national and international events as a success case study on bridging the gap between science and policy in environmental issues and as a benchmark for the establishment of processes to understand and combat marine litter.

PEMALM as well as other reports from the projects were discussed and shared with decision-makers in Brasilia prior to the UNEA negotiations for a global agreement on plastics.

The GloLitter Partnerships Project, referred to throughout this report, supports 30 developing countries, 9 of which are in the LAC region.²¹ The support is to enable these countries to effectively implement and enforce international regulatory frameworks as well as best practice for reduction and control of marine plastic litter from sea-based sources. This is done through capacity-building, policymaking and practical steps.



MPA IN GALAPAGOS ISLANDS (BLUE ACTION FUND)

Colombia, Costa Rica, Ecuador (including Galapagos) and Panama launched a new marine protected area called the Eastern Tropical Pacific Marine Corridor. The new area serves as a thoroughfare for tuna, hammerhead sharks, sea turtles, whales and other animals that use this ocean corridor for feeding and in their reproductive cycle. Granting strong protections to the Eastern Tropical Pacific can help this area thrive again. Numerous funders and projects have contributed to this success. Blue Action Fund provided grants to Conservation International, Island Conservation, MarViva and Fondo Accion.

As part of the above success, the Cocos Marine Conservation Area MPA expansion process, on which discussions began in 2017, completed its public and stakeholder participation phase, resulting in the signing of an Executive Decree for the Expansion of the Cocos Island National Park and the Bicentennial Seamounts Marine Management Area. The MPA expansion of 150 000 km² means that more than 30 % of Costa Rican waters are now protected (up from 3 %).

²¹ Brazil, Costa Rica, Jamaica, Argentina, Colombia, Ecuador, Nicaragua, Panama, and Peru.



Looking ahead

Photo: Ishan Hassan - Ocean Image Bank



It is likely that 2022 will also be viewed as an out-of-the-ordinary year with regards to development assistance, as we are faced with a set of interconnected challenges. The climate crisis remains an overarching and global concern, while the tragic war in Ukraine is having impacts on much of Europe, with critical implications for the world's food systems and energy security. Although many of us are more optimistic with regards to the pandemic in 2022, the economic impacts of COVID-19 on countries and markets are long lasting. At the same time, it is encouraging to see that project activities are ramping up and international travel is increasingly returning to normal.

In this global context, it is essential that we increase the efforts to implement the 2030 Sustainable Development Agenda. Ocean-related development assistance has an integral role to play, and Norwegian competence and knowledge gained over centuries living by and off the sea can contribute significantly. The ocean cover more than two-thirds of our planet, is a key source of food, recreation, livelihoods, economic value and climate regulation, and is at the heart of sustainable development. In June 2022, the world will meet for the UN Ocean Conference in Lisbon, Portugal, to take stock of the progress towards achieving SDG 14. This will be an important milestone in tracking the work on coasts and the ocean, as well as highlighting the importance of the ocean to achieving the other SDGs.

In 2022, the ocean will remain important in Norwegian development policy, and the three Norwegian ocean-related development programmes will continue generating important contributions. Food security, including food from the ocean, is high on the Norwegian development agenda. A new phase of the EAF-Nansen programme will be established in 2022. Ensuring the green transformation of shipping is another area of interest moving forward. With the landmark UNEA 5 decision to initiate the intergovernmental negotiation of a global agreement on marine litter and plastic pollution, it is also important that developing countries are further supported in their fight against plastic pollution. Another key issue for Norway is to support the implementation of the main recommendations from the High-level Panel for a Sustainable Ocean Economy, including the focus on integrated ocean management and the Sustainable Ocean Plans.

We are living in a time of unprecedented challenges, but with the knowledge and technology we have today, we have never been better equipped to solve the complex issues facing us.



Photo: Beth Watson – Ocean Image Bank

