II. Activities, challenges and opportunities for the implementation of SDG 14

1. Status and trends

The role of the ocean as a key factor in stabilizing climate and supporting life and human well-being, and as a resource that needs to be protected and supported, cannot be overemphasized. Sustainable Development Goal 14, Conserve and sustainably use the oceans, seas and marine resources for sustainable development, is particularly relevant in the context of sustainable maritime transport, ship-source pollution control and coastal zone management, as well as fisheries. Since the adoption of the 2030 Agenda, action for the implementation of this goal has been taken in various areas of ocean governance, although much remains to be done. In addition to sustainable fisheries management, some relevant areas where action has recently been taken or is under way are as follows: the reduction of ship-source pollution and protection of the environment by implementing the new IMO 2020 sulphur limit on ship’s fuel; ballast water management; addressing the issue of liability for the shipment of hazardous and noxious substances, pollution from plastics and microplastics; the conservation of coastal and marine areas, including in areas beyond national jurisdiction, as well as climate change adaptation for coastal transport infrastructure. UNCTAD has been conducting related work, following developments, and informing developing countries on developments in these areas.

(a) Fisheries

Fisheries make an important contribution to food and nutrition security, providing over 153 million tons of fisheries and aquaculture products for human consumption. Global fish production in 2017 is estimated at 172.6 million tons supplying around 21 kg/capita per year. Around 59.6 million people are employed in fisheries and aquaculture in 2016 which makes fish and seafood among the most traded commodities. About 35 per cent to 38 per cent of the world fisheries and aquaculture production is exchanged through international supply chains, generating USD 152 billion in 2017. For LDCs as a group, fish and seafood is the seventh largest export group overall and the largest food item exported. Over 50 per cent of trade in fisheries and aquaculture originates in developing countries whose net trade income is valued at USD 37 billion, greater than net trade income of most other agricultural commodities combined. Since the 1960s the share of fish production for human consumption has increased significantly to 88 per cent and currently more than 200 countries report exports and imports of fish or fishery products.

The global demand for fish has led to increasing pressure on the existing fish stocks and some areas such as the Mediterranean and Black Sea have seen significant drops in capture. Projections over the next decade indicate that world capture will fluctuate between 91.3 and 93.7 million tons. The share of fish stocks within biologically sustainable levels decreased from 90 per cent in 1974 to 66.9 per cent in 2015 and most of the most-productive species are fully fished with no potential for increases in volume.

One of the critical issues intensifying overfishing is IUU fishing which has seen rapid increases and has a detrimental effect on global fisheries. Rough calculations indicate that global IUU fishing accounts...
for 11 to 26 million tons of fish every year with a value of $26 to 35 billion annually. IUU fishing can lead to the claps of valuable fisheries, exploits the resources of developing countries, prevents assessment of existing stock and the development of science-based quotas for sustainable exploitation, and leads criminal activities conducted by highly organized and international networks.

There is strong evidence that subsidies that reduce the cost of fisheries operations and those that enhance revenues can contribute to the build-up of excessive fishing capacity and unsustainable levels of fishing, with significant consequences for poverty reduction, employment and nutrition security in developing countries. By recent estimates, subsidies to the fishing industry amounted to around $35.4 billion per year, of which around $22.2 billion were given in forms that tend to enhance fishing capacity (Sumaila et al., 2019). Public support by the OECD Members to the fisheries sector has reached an average of $9.3 billion during the period 2010-2015.

Oceans and wetlands produce half of the oxygen we breath and absorb around 30 per cent of anthropogenic emissions of CO2 and around 93 per cent of the heat arising from human-driven changes to the atmosphere. But this absorptive capacity has reached its limits and rising temperature and increasing acidity of the oceans are severely affecting many ecosystems. Climate change is also having an impact on the oceans-based economic sectors such as fisheries, aquaculture, maritime transport, coastal infrastructure, and tourism.

Climate change has also an impact on fisheries which is likely to lead to significant changes in the availability and trade of fish products. FAO’s Model projections in 13 maritime regions suggest decreases in maximum catch potential between 2.5 per cent and 12.1 per cent by 2050 with the biggest decreases expected in the South Pacific regions. Climate change can also impact food safety, for example through increased incidents of parasites and foodborne viruses. A key concern in fisheries and aquaculture is the ingestion of microplastics by fish and its impact on the fauna and human food safety. It is estimated that the ocean will contain 1 ton of plastic for every 3 tons of fish by 2025, if nothing is done to reduce the 8 million tons of plastics dumped into the oceans every year. In a world rapidly approaching 9 billion people, where agriculture already uses 40 per cent of the Earth’s land surface, increased utilization of the ocean as a human food provider seems inevitable. More detailed information on trends on trade in fisheries and related impacts of climate change and plastic pollution can be found at: https://unctad.org/meetings/en/SessionalDocuments/ditc-ted-03092019-forum-Background-Note.pdf

(b) Maritime transport – legal and regulatory issues

Sustainable and resilient transport is key to sustainable development (a matter recognized inter alia by UNGA Res 69/213 (19 December 2014) and, therefore, is among the cross-cutting issues, of relevance for achievement of progress on several of the sustainable development goals and targets. These include not only Goal 14, but also, for instance, Goal 9, Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation; Goal 13, Take urgent action to combat climate change and its impacts; as well as Goal 1, End poverty in all its forms everywhere, in particular target 1.5, Build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.

Of particular importance for UNCTAD’s mandated work on legal and regulatory issues in the field of maritime transport is target 14c :“Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework
for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want”. Worth noting is the broad and inclusive wording of this target, which directs the international community to implement “international law as reflected in the UN Convention on the Law of the Sea [...] for the conservation and sustainable use of oceans and their resources”. Given the overall aim of target 14.c in the context of SDG 14, the integrated nature of the SDGs and targets, and the fact that in many respects UNCLOS is a framework convention, which requires substantive implementing legislation, it is clear that the reference should be interpreted broadly, as covering a wide range of international legal instruments pertaining to the conservation and the sustainable use - economically, socially and environmentally - of oceans and their resources. This would also seem to follow from the express reference to para 158 of 'The Future We Want', the RIO+20 Conference outcome document. Thus, target 14.c would seem to cover, inter alia, a wide range of international legal instruments adopted under the auspices of the IMO in the field of ship safety and marine environmental protection, as well as international Conventions that were developed and adopted under the auspices of UNCTAD, or that have been the subject of some of the analytical studies and reports such as, for instance, the 1992 CLC and 1992 Fund Conventions, which provide for liability and compensation in respect of tanker oil pollution (for further information, see https://unctad.org/ttl/legal).

The cross-cutting nature of target 14.c is particularly worth highlighting, as is its importance for achievement of progress on SDG 14 as a whole. Laws and regulations are key tools for the effective implementation of public policy objectives; thus, progress on the implementation of target 14.c is likely to significantly advance achievement of progress on other SDG 14 targets.

Research and analysis, as well as technical legal advice, to assist in the understanding of existing international legal instruments, will play a critical role, both in promoting their wide-spread ratification, and in ensuring their effective substantive implementation at national levels, as envisaged in SDG target 14.c. Substantive analytical reports prepared by UNCTAD, of particular relevance for SDG 14, include:

*Liability and Compensation for Ship-Source Oil Pollution: An Overview of the International Legal Framework for Oil Pollution Damage from Tankers* (2012). This report was prepared to assist policymakers in evaluating the benefits of accession to the most modern international legal instruments in the field, which may offer Contracting States substantial compensation in case of an oil spill. The report was prepared with particular reference to the interests of coastal developing states, including SIDS, as their exposure to damage arising from ship-source oil pollution incidents poses a potentially significant economic threat. In the light of the importance of marine and coastal pollution control in the context of SDG 14, regulatory efforts at reducing ship-source pollution, both in terms of prevention and response and in terms of liability and compensation, are likely to continue to be of increasing relevance.


(c) *Sustainable shipping and port operations*
UNCTAD’s work in the field of transportation – a key sector underpinning globalised trade and linking global supply chains – is being aligned with several SDG targets by emphasising the need to balance the economic, social and environmental sustainability. Relevant research and analysis as well as technical assistance and consensus building activities carried out by UNCTAD support countries in formulating informed shipping and port-related policies and ensuring sound decision-making processes. With over 80 per cent of world trade by volume being seaborne, and with developing countries accounting for more than 60 per cent of world cargo loaded and unloaded in ports worldwide, sustainable shipping and port operations are key to the realization of the global sustainable development agenda.

Maritime transport is a sector of extreme relevance to effective implementation of SDG 14, in particular, targets 14.1 and 14.2. Maritime transport activities have a direct impact on marine pollution, including from ships and land-based port operations. They are therefore also relevant for the state of marine and coastal ecosystems in the coastal waters and the exclusive economic zones. Thus, by promoting sustainable maritime transportation (shipping and port operations) and supporting blue growth, UNCTAD contributes significantly to advancing the 2030 ASD. UNCTAD contributes to effective implementation of Target 14.1 and 14.2 by building countries’ capacity to develop and implement efficient, low-carbon, affordable and clean shipping and port operations. UNCTAD’s research and analytical work assessing the implications of maritime transport operations for the sustainability of marine environment and oceans is supported by comprehensive statistics, data and indicators compiled over the years. Insights and main findings are disseminated through various channels including technical assistance programmes, online-statistical databases and recurrent publications, in particular the annual Review of Maritime Transport.

In 2018, UNCTAD disseminated and, in some cases, applied, various tools and instruments that had been developed under its technical assistance project on “Building Capacities of Developing Countries to Shift Towards Sustainable Freight Transport” to support countries’ efforts to implement sustainable shipping and port practices. These include: 1) a methodology to assess gaps and strengthen the capacity to design, develop, and implement sustainable freight transport including maritime transport systems (UNCTAD Sustainable Freight Transport Framework); 2) a training and capacity building package, including on sustainable shipping and port operations in island countries; and, (3) a web portal facilitating information sharing and partnership-building.

In 2018, UNCTAD delivered a tailored capacity building and training workshop in the Caribbean focusing on sustainable shipping and ports in SIDS. It also collaborated with the Caribbean Development Bank to develop a regional sustainable freight transport strategy as well as with the PMCA to establish a Regional Sustainable Logistics Observatory. Data needs and gaps are an important challenge for the region and addressing this problem will enable informed and evidence-based shipping and port related policy making in the region.

2. **Challenges and opportunities**

   (a) **Fish subsidies**

One key challenge that exist in reducing negative incentives to overfishing, overcapacity and IUU fishing is how to reach a multilateral agreement on fisheries subsidies. WTO negotiations, which started
almost two decades ago, still face significant divergences in views on issues such as the geographical scope, the scope of prohibitions, the policy flexibility, Special and Differential Treatment (SDT) (that should incorporate capacity building support), and the disciplines subject to Dispute Settlement procedures.

Negotiations on a WTO Agreement on fisheries subsidies should continue to the greatest extent possible in all areas and particularly on cross-cutting issues such as overfishing, overcapacity including consideration to adopt a hybrid prohibition plus cap-based approach, IUU fishing, and harmful fisheries subsidies. Additionally, while the negotiations should remain ambitious, alternative arrangements for developing countries, especially LDCs and SIDS, should be considered, as well as support mechanisms for fishers during transition periods and cross-country assistance and capacity-building. Any agreement and commitments negotiated should also be subject to a review mechanism, to ensure that they are fit for purpose and fulfil their intended effect.

Although there is currently a political momentum as SDG targets 14.4 and 14.6 deadlines and the WTO Twelfth Ministerial Conference (MC12) are approaching, there is need to accelerate the pace of the negotiations to reach an ambitious WTO agreement on fisheries subsidies with WTO disciplines that are transparent, practical, flexible and enforceable. The outcome of these negotiations will also have important implications on the future of the WTO and the multilateral trade system. More detailed information on proposals on how to move forward can be found in the Chair Summary of the 3rd Oceans Forum - Annex I.

(b) Climate change adaptation for coastal transport infrastructure

As part of its work, UNCTAD has been analysing interlinkages between ocean issues, climate change mitigation and adaptation, and sustainable development. For people living on the coasts, the link between climate change and the ocean is clearly present, including in terms of sea-level rise and extreme weather events, changing weather patterns, rising ocean temperatures and related impacts on fisheries, tourism and coastal infrastructure. An important part of UNCTAD’s related work focuses on the implications of climate change for maritime transport, with special emphasis on climate change impacts and adaptation for ports and other key coastal transport infrastructure.

With an estimated 80 per cent of the volume of world trade carried by sea, international shipping and ports provide crucial linkages in global supply chains and are essential to enable all countries, including those that are landlocked, to access global markets. Ports are likely to be affected directly and indirectly by climatic changes, such as rising sea levels, extreme weather events and rising temperatures, with broader implications for international trade and for the development prospects of the most vulnerable nations, particularly the least developed countries and small island developing States. Given the strategic role of seaports and of other key transport infrastructure as part of the global trading system and the potential for climate-related delays and disruptions across global supply chains, enhancing the climate resilience of key transport infrastructure is a matter of strategic economic importance and one in respect of which UNCTAD research and technical assistance work, as well as the outcomes of a series of UNCTAD expert meetings since 2008, have helped to raise awareness and advance the international debate (for further information, see unctad.org/ttl/legal).

Recent UNCTAD work in support of climate change adaptation for coastal transport infrastructure has included technical assistance and capacity-building with a focus on key coastal transport infrastructure in Caribbean small island developing States, using innovative methodological approaches (for further
information and full documentation, see https://SIDSport-ClimateAdapt.unctad.org). Key project outcomes include the assessment of potential operational disruptions and marine inundation risk to eight coastal international airports and seaports of Jamaica and Saint Lucia under different climate scenarios, as well as a transferable methodology to assist in adaptation planning for small island developing States in the Caribbean and beyond. Some of the main substantive findings and technical details of the methodology developed under the project have undergone scientific peer-review and have resulted in the publication of an original research paper (Monioudi et. al, Regional Environmental Change 2018) which has informed the IPCC report on 1.5 degrees (“Impacts of 1.5 ºC global warming on natural and human systems”), as well as the IPCC 2019 Special Report on Ocean and Cryosphere (Ch. 4 and 5), highlighting substantial increases in risk to critical coastal transportation infrastructure in Saint Lucia and Jamaica from climate changed-induced marine inundation as early as in the 2030s, unless further climate change adaptation is undertaken. Relevant substantive findings are also reflected as part of the UN report World Economic Situation and Prospects 2019 (Ch. 2). In the absence of timely planning and implementation of requisite adaptation measures, the projected impacts on critical transport infrastructure may have broad economic and trade-related repercussions, which may severely compromise the sustainable development prospects of these vulnerable nations. Against this background, better and more targeted data, further research, including detailed technical studies, human capacity building, as well as collaborative concerted action at all levels are urgently required to meet the challenge, as is a major scaling up of technical and financial assistance for SIDS. In this context, UNCTAD and UN Environment, with the financial support of the Government of Germany, are currently implementing a project on climate resilient transport infrastructure for sustainable trade, tourism and development in SIDS.

UNCTAD has also published the findings of a port industry survey on climate change impacts and adaptation, designed in collaboration with global port industry associations and other experts. The survey aimed to improve the understanding of weather- and climate-related impacts on ports, identify data availability and information needs, and determine current levels of resilience and preparedness among ports. Although the majority of respondents had been affected by weather - or climate-related events, including by extremes, the study revealed important gaps in terms of relevant information available to seaports of all sizes and across regions, with implications for effective climate risk assessment and adaptation planning.

The important trade-related implications of weather- and climate-related extreme events were also highlighted by UNCTAD at COP 24, in an online article and as part of an interactive discussion that was co-organized with the International Trade Centre and the United Nations Office for Disaster Risk Reduction as part of the International Day for Disaster Reduction 2018, focusing on the need to reduce economic losses from disasters. Most recently, relevant UNCTAD work included an ad hoc expert meeting on “Climate change adaptation for international transport: preparing for the future”, held in Geneva, Switzerland, on 16 and 17 April 2019. The meeting brought together technical experts, key industry stakeholders and a number of international organizations, with an aim to identify effective ways to support climate change adaptation action, resilience- and capacity-building across closely interlinked transport modes and global supply chains, and to develop policy recommendations to help inform the United Nations Climate Action Summit of September 2019. It also aimed to contribute towards progress in advancing the 2030 Agenda for Sustainable Development and explore options for an informal international transport adaptation forum.
(c) Decoupling maritime transport activity from related negative environmental externalities

The ability of the maritime transport sector to effectively deliver on the sustainability imperative, including with a view to SDG 14 is heavily influenced by developments shaping the sector’s operational framework. A key consideration is the positive correlation between transport activity and economic growth. Demand for maritime transport grows in tandem with the growing world population, consumption needs, industrial activity, urbanization, trade, and economic growth. The challenge for shipping and ports is to continue to service international trade and link supply chains while minimizing adverse environmental impacts, including marine and air pollution from ships and port activities. Other factors heightening the challenge include the rise of mega ships and related implications for port operations, piracy and security concerns. The financing gap associated with ensuring sustainable port infrastructure and services that are necessary to achieving SDG 14 targets is also challenging, given in particular, the important role of developing countries’ ports as major global cargo handling centres.

III. Scaling up ocean action based on science and innovation

To enhance the knowledge and understanding of the linkages between the ocean and climate, more investment in ocean research, monitoring and observation will be needed. The upcoming Decade of Ocean Science for Sustainable Development, 2021–2030 proclaimed by the United Nations General Assembly, which was also the subject of the twentieth meeting of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea, on 10–14 June 2019, could help in this respect, and also mobilize action and support by Governments. Its implementation will be coordinated by the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (www.ioc-unesco.org/). In September 2019, the Intergovernmental Panel on Climate Change finalized the Special Report on the Ocean and Cryosphere in a Changing Climate. Yet, much more needs to be done to strengthen the linkages between ocean-related action and climate-related processes.

With respect to international maritime transport which, as already noted, accounts for over 80 per cent of global merchandise trade (by volume), ocean science plays an import role in providing data and information required to ensure the safety of navigation, effectively monitor compliance with environmental regulations and respond to ship-source marine pollution incidents, among others. In addition, ocean science will be key in developing effective measures for the purposes of coastal protection and coastal zone management, as well as for climate-risk assessment, adaptation and resilience-building for seaports and other coastal transport infrastructure.

UNCTAD has been highlighting the importance of scientific data and evidence-based information in the context of climate change impacts and adaptation for critical coastal transport infrastructure, as well as in the context of disaster risk reduction and response (see above). Among others, ocean science and related human capacity-building, in particular at the local level, have an important role to play in adapting critical transport infrastructure and services to the impacts of climate variability and change and in enhancing their overall climate and disaster-risk resilience. Relevant scientific data are necessary, particularly for monitoring and early warning systems for effective disaster risk reduction and management and effective emergency response; as well as forecasting and effective risk-and vulnerability assessment, to improve levels of preparedness and help take appropriate adaptation response measures.
IV. Development Partnerships

UNCTAD, FAO and UN Environment have presented at the 3rd Oceans Forum a common response to SDG 14 challenges, including through the proposed Inter Agency Plan of Action (IAPoA) on Trade-related aspects of Sustainable Development Goal 14. The IAPoA seeks to improve Member States’ capacity to shift towards a bluer, integrated, resource efficient and sustainable pathway, and implement new fisheries subsidies rules. Achieving SDG 14 targets requires a multi stakeholder and cross-sectoral approach, including through new partnerships with the private sector and the civil society to design, implement and streamline policies, mobilize finance, and apply innovations that integrate best practices. As SDG 14 targets 4 and 6 are due to be achieved by 2020, there is an urgent need for consensus between Members States on SDG 14 to improve fish management systems under an ecosystem approach and to reach a multilateral agreement on fish subsidies. The 3rd Oceans Forum invited donors to support UNCTAD, FAO and UN Environment IAPoA. More detailed information on the IAPoA and other trade-related partnerships can be found in the Chair Summary of the 3rd Oceans Forum found in Annex I.

UNCTAD’s work on sustainable shipping and ports builds heavily on synergies with activities carried out by key stakeholders, including governments and industry, and collaboration and partnerships with varied partners such as the International Maritime Organization; UN regional Commissions, UNEP; World Bank, including through the SuM4All Initiative, Global Maritime Forum, SLOCAT, Getting to Zero Coalition, Port Management Association of the Caribbean (PMAC), the South Pacific University, International Ocean Institute, World Maritime University, International Association of Maritime Economists, Korea Maritime Institute and MarineTraffic.

Worth noting in the context of UNCTAD’s longstanding work on climate change impacts and adaptation for transport infrastructure is extensive interdisciplinary collaboration, including with the main transport industry associations, as well as UNECLAC, UNECE UNDP, UNEP, the Caribbean Community Climate Change Centre, OECS Commission, the ECJRC and international and regional academic experts.

V. Possible themes for interactive dialogue

- Oceans, blue economy, trade, and sustainability
- Sustainable and climate-resilient maritime transport for development
ANNEX I: Chair’s Summary of the Third Oceans Forum on Trade-related Aspects of SDG 14, United Nations Trade Forum (UNCTAD, FAO, UN Environment, UNECE, the Commonwealth Secretariat, the ACP Group, and IOI), 10 September 2019