Achieving the targets of Sustainable Development Goal 14: Sustainable fish and seafood value chains and trade

BACKGROUND NOTE

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Abbreviations

ACP       African Caribbean and Pacific Group of States
CITES     Convention on International Trade of endangered Species
EEZ       The Economic Exclusive Zone
GDP       Gross Domestic Product
GSSI      Global Seafood Sustainability Initiative
IOI       International Oceans Institute
IPOA      International Plan of Action
IUU       Illegal, unreported and unregulated fishing
FAO       Food and Agriculture Organization of the United Nations
LDC       Least Developed Countries
MC 11     The WTO 11th Ministerial Conference
MFN       The Most Favored Nation
NTMs      Non-tariffs Measures
NGOs      Non-Governmental Organizations
OECD      Organization for Economic Co-operation and Development
OETS      Ocean Economy and Trade Strategy
SAMOA     SIDS Accelerated Modalities of Action
SDGs      Sustainable Development Goals
SIDS      Small Island Developing States
SPS       Sanitary and Phytosanitary Measures
SPR       Sao Paolo Round of negotiations on the General System of Trade Preferences
TBT       Technical barriers to trade
UNCLOS    The United Nations Convention on the Law of the Sea
UNCTAD    The United Nations Conference on Trade and Development
UNDP      The United Nations Development Programme
UN Environment       The United Nations Environment Programme
UNFSS      United Nations Forum for Sustainable Standards
WTO       The World Trade Organization
Summary

Fisheries and aquaculture provide food, livelihoods and economic benefits to millions of people in the world. Global fish production was estimated at 171 million tons in 2016, supplying around 20.3 kg/capita per year and 17 per cent of global animal proteins and essential micronutrients. Upstream and downstream activities along the fish and seafood value chain provided significant employment and economic benefits to countries and local coastal communities. As a result, around 59.6 million people were employed in fisheries and aquaculture in 2016 and some 200 million direct and indirect employment opportunities occur along the fish and seafood value chain.

Furthermore, fish and seafood is one of the most traded food commodities. Some 35 to 38 per cent of the world production enters international trade generating US$ 152 billion in 2017. Over 50 per cent of this trade originates in developing countries whose net trade income (export – import), valued at US$ 37 billion in 2013, is greater than the net income of most other agricultural commodities combined. In Pacific Small Island Development States (SIDS), fishing can provide between 30 and 80 per cent of exports– an advantage of the large Exclusive Economic Zones (EEZs) and the economic values they are able to capture from fish species such as tuna. Likewise, the share of fish trade flows for some West African countries can represent between 5 to 12 per cent of GDP.

Unfortunately, the rapid growth in exploiting living aquatic resources during recent decades has been accomplished in several parts of the world in an unsustainable manner leading to overfishing, degradation of fish stocks, habitats ecosystem and biodiversity. The resulting economic loss is estimated at US$ 83 billion per year for fisheries and over US$ 6 billion per year from diseases in aquaculture. Furthermore, there is a serious risk that climate change will have a severe effect on fishing and fish farming communities at global scale because of the increased number of people at risk, especially in coastal and low-lying areas and atolls. This is likely to cause loss of livelihoods, displacement and migration of human populations because of floods, storms or changes in fisheries distributions.

Due to an international recognition of the nutritional and socio-economic importance of fisheries and aquaculture and of the need to revert drastically the trend in oceans health decline, the 2030 Agenda for Sustainable Development has devoted for the first time, a Global Goal on Oceans and Seas. Sustainable Development Goal (SDG) 14 is exclusively dedicated to “conserve and sustainably use the oceans, seas and marine resources for sustainable development.” It has ten targets relating to marine pollution, protecting marine and coastal ecosystems, minimizing ocean acidification, sustainable management of fisheries and ending harmful fisheries subsidies, conserving coastal and marine areas, increasing economic benefits to SIDS and Least Developed Countries (LDCs).

Achieving the trade related targets of SDG 14 requires the catalysis of policies, investment and innovations to restore the productive capacity of the oceans and increase economic benefits to developing countries, in particular SIDS and LDCs. Innovations which integrate best practices for harvesting, value addition in processing and distribution, can benefit greatly from opportunities offered around the concepts of Oceans economy/blue economy, eco-labelling and certification, value chain analysis and seafood clusters.
The critical importance of effective partnerships cannot be emphasized enough to enable collective action with the full participation of all relevant stakeholders. In March 2017, UNCTAD, FAO, UN Environment, the Commonwealth, the ACP Group and the International Oceans Institute (IOI) held the first Ocean Forum on trade related aspects of SDG 14 focusing on the fight against IUU fishing, harmful fisheries subsidies and access to markets and resources by small-scale fisheries. In June 2017, a high-level United Nations Conference to Support the Implementation of SDG 14 was convened at United Nations Headquarters. The Conference underlined the integrated and indivisible character of all the SDGs, as well as the interlinkages and synergies between them, and reiterated the critical importance of being guided in work on oceans by the 2030 Agenda, including the principles reaffirmed therein. The Conference endorsed a declaration entitled “Our ocean, our future: call for action”. This declaration confirmed the commitment of the Member States, Civil Society, international organizations and representatives of the industry to support the implementation of SDG 14. UNCTAD, FAO and UN Environment jointly deposited a set of voluntary commitments at the United Nations Ocean Conference of June 2017 aimed to support member countries with technical assistance, capacity building and information dissemination on the trade-related issues associated with SDG 14. The convening power and expertise of the three agencies provide a strong differential in supporting countries to progress towards achieving trade related SDG 14 targets and to be in a better position to participate in relevant trade negotiations.

This background note reviews current trends and projections of fish and seafood trade, and recent work undertaken to support implementation of the trade related activities of SDG 14, with a focus on the work of UNCTAD, FAO and UN Environment. It flags the main issues encountered and sets the scene for the discussions of the Forum. It draws on the complementary experiences and mandates of UNCTAD, FAO and UN Environment to make recommendations to key stakeholders and propose innovative approaches and tools around the oceans/blue economy, certification and eco-labelling to strengthen the capacity of developing countries in meeting the trade related targets of SDG 14.
1. Introduction

Since ancient times, fisheries and aquaculture have been a major source of food and a provider of employment, recreation, trade, culture and economic benefits to many people throughout the world. These activities attain greater significance along the coastal areas of many developing countries where there are limited opportunities for employment and where access to fisheries and aquaculture resources remains sometimes the only option open for earning a livelihood, improving income and the quality of lives. Unfortunately, there is evidence that easier access to fishery resources has not always translated on the long term into higher incomes and increased well-being of coastal communities. The opportunities certainly exist and they can be used by nations and communities, provided the right economic, institutional and governance policies and partnerships are in place.

Until fifty years ago, the wealth of living aquatic resources was often considered an unlimited gift of nature. However, with increased scientific knowledge, this myth has faded as we realized that these aquatic resources, although renewable, are not infinite and need to be properly managed. The widespread introduction in the mid-seventies of exclusive economic zones (EEZs) and the adoption in 1982 of the United Nations Convention on the Law of the Sea (UNCLOS) provided a good framework for the better management of marine resources. UNCLOS was further strengthened by the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (Compliance Agreement, 1993) and by the United Nations Agreement for the Implementation of the Provisions of UNCLOS relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (Fish Stock Agreement, 1995) (Figure 1). This new legal regime of the oceans gave coastal States rights and responsibilities for the management and use of fishery resources within their EEZs, which embrace some 90 per cent of the world’s marine fisheries. Concurrently and for over 25 years, world fisheries and aquaculture have become a market-driven, dynamically developing sector of the food industry and coastal States have striven to take advantage of their opportunities by investing in modern fishing fleets, infrastructure and services in response to growing international demand for fish and seafood. Novel trade policies and strategies were promoted and trade agreements facilitated. The year 1995 saw the creation of the World Trade Organization (WTO) and several trade agreements were adopted to support a robust and predictable multilateral trade system for goods and services.

Unfortunately, by the late 1980s, it became clear that fisheries resources could no longer sustain such rapid and often uncontrolled exploitation and development, and that new approaches to fisheries management, embracing conservation and environmental considerations were needed urgently. In 1995, the FAO Conference adopted the Code of Conduct for Responsible Fisheries. This Code sets out principles and international standards of behavior for responsible practices along the fisheries and aquaculture value chain with a view to ensure effective conservation, management and development of living aquatic resources, with due respect for the ecosystem and biodiversity. The Code recognizes the nutritional, economic, social, environmental and cultural importance of fisheries and aquaculture and the interests of all those concerned with the sector. Further international instruments, Plans of Action (IPOAs), resolutions and commitments for healthier oceans were made (Figure 1). Concurrently, UNCTAD streamlined sustainability of living aquatic resources in its programmes on trade and development and partnered with FAO and other organizations to support and enable coastal developing countries, in particular LDCs and SIDS, to achieve greater benefits from sustainable fish trade. UN Environment supported this process from an environmental perspective through the generation of policy-relevant analysis on the environmental, economic and social impacts of subsidies, facilitating dialogue between trade and fisheries policy-making communities, and its contributions to the...
international discussion on subsidy reform through a series of workshops, analytical papers and country projects. In recent years, the work of UN Environment focused on the opportunities sustainable fish trade offers to countries’ blue/green economy and the contribution of instruments such as sustainability standards and certification to tap into these opportunities.

Figure 1. Milestones of key instruments and major undertakings in support of sustainable fisheries and living marine resources

Programs, initiatives and projects were implemented to improve fisheries and aquaculture management and conservation and to address emerging issues such as overfishing, Illegal Unregulated and Unreported (IUU) fishing, overcapacity, fisheries subsidies and destructive fishing practices. Despite notable progress achieved in some areas, real progress in addressing the key threats of living aquatic resources has not been substantive. Implementation has been uneven in many countries, and success in meeting the targets set for addressing the key drivers of change in ocean health remained elusive – at great cost to the global economy and particularly to coastal and island developing countries. Yet meeting the commitments the world has made for healthier oceans is doable. The causes for the long-term decline of the health of the oceans are fairly known. The challenge before the global community is not to establish a new treaty or agreements for ocean health, but rather to accelerate efforts to implement those successive commitments to reverse the trend in oceans health decline.

A new opportunity has arisen with the adoption of the 2030 Agenda for Sustainable Development on 25 September 2015 by the 193 Member States of the United Nations. The Sustainable Development Goals (SDGs) of the Agenda represent a set of 17 aspirational objectives with 169 targets expected to guide development actions of governments, international agencies, civil society and other institutions over the
period 2016 – 2030.¹ The 2030 Sustainable Development Agenda calls on countries to express their priorities and commitments, to formulate strategies and plans and adopt policies, programmes and partnerships to achieve their national goals and targets. Although fisheries and aquaculture contribute to several goals, the 2030 Agenda for Sustainable Development adopted, for the first time a Global Goal on Oceans and Seas. SDG 14 is exclusively dedicated to “conserve and sustainably use the oceans, seas and marine resources for sustainable development”. It includes ten targets relating to marine pollution, protecting marine and coastal ecosystems, minimizing ocean acidification, sustainable management of fisheries and ending harmful fisheries subsidies, conserving coastal and marine areas, increasing economic benefits to Small Island Development States (SIDS) and Least Developed Countries (LDCs)

In March 2017, UNCTAD, FAO, UN Environment, the Commonwealth, the ACP Group and the IOI held the first Ocean Forum on trade related aspects of SDG 14 focussing on the fight against IUU fishing, harmful fisheries subsidies and access to markets and resources by small-scale fisheries.² Additionally, UNCTAD, FAO and UN Environment jointly deposited a set of voluntary commitments at the United Nations Ocean Conference of June 2017 aimed to support member countries with technical assistance, capacity building and information dissemination on the trade-related issues associated with SDG 14.³ In June 2017, a high-level United Nations Conference to Support the Implementation of SDG 14 was convened at United Nations Headquarters. The Conference underlined the integrated and indivisible character of all the SDGs, as well as the interlinkages and synergies between them, and reiterated the critical importance of being guided in work on oceans by the 2030 Agenda, including the principles reaffirmed therein. The Conference endorsed a declaration entitled “Our ocean, our future: call for action”. This declaration confirmed the commitment of the Member States, Civil Society, international organizations and representatives of the industry to support the implementation of SDG 14.⁴

As a follow up, UNCTAD, FAO, UN Environment and partners plan to organize a second United Nations Oceans Forum on Trade related aspects of SDG 14 during the period 16-17 July 2018. This Forum aims to review achievements, major undertakings and challenges and accelerate experience sharing. It will also be a key implementation vehicle for dialogue and experience-sharing of the UNCTAD/FAO/UN Environment commitments with partners and other stakeholders. The Forum will focus on the link between fish and seafood trade, with a special attention to the seafood value-chain, related logistical services and the Ocean/blue economy in order to advance SDG 14.

This background note presents an update on trade related aspects of SDG 14 and sets the scene for the discussions of the second United Nations Oceans Forum. More specifically,

- it reviews current trends and projections for trade related aspects of fisheries and aquaculture along the seafood value chain, with a specific emphasis on developing countries and their challenges to meet the SDG 14 targets.
- It flags the main issues on the linkages between fisheries and aquaculture and logistical services within the frame of the ocean/blue economy.
- It analyses how trade can be a driver for value addition, value chain integration and participation, as well as cluster creation by linking both production of goods and provision of related services.

⁴ https://oceanconference.un.org/callforaction
It makes recommendations on how to strengthen the participation of small-scale fishers and aquaculture producers to international fish trade.

It draws on the complementary experiences and mandates of UNCTAD, FAO and UN Environment to propose innovative approaches and tools (value chain analysis, Oceans/blue economy/blue growth, trade in fisheries and related services, market instruments of sustainability) to strengthen the role of developing countries in value addition, assessing trade opportunities, market entry and market access.

It is guided by the SDG indicators, the recommendations of the chair of the first Ocean Forum in 2017, the call for action of the United Nations Oceans Conference, the UNCTAD/FAO/UN Environment voluntary commitments, the WTO Ministerial Decision on Fisheries Subsidies adopted at the 11th WTO Ministerial Conference in December 2017, recommendations by countries at the sessions of the FAO Sub-Committee on Fish Trade and key outcomes of recent meetings and fora on trade and sustainable fisheries and aquaculture.

2. Importance of sustainable fisheries and aquaculture

Fisheries and aquaculture make a significant contribution to food security and livelihoods of millions of people in the world. Global fish production was estimated at 171 million tons in 2016, supplying around 20.3 kg/capita per year and 17 per cent of global animal proteins and many essential micronutrients (Table 1 and Figure 2). Fish and seafood consumption accounted for 20 per cent of animal protein intake for 3.2 billion people about 26 per cent in LDCs, 19 per cent in other developing countries and about 16 per cent in Low Income Food Deficit countries (FAO, 2018a).

Table 1. World fisheries and aquaculture production and utilization

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2026</th>
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<tr>
<td><strong>Production</strong> (in million tons)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Capture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inland</td>
<td>11.2</td>
<td>11.2</td>
<td>11.3</td>
<td>11.4</td>
<td>11.6</td>
<td></td>
</tr>
<tr>
<td>Marine</td>
<td>78.4</td>
<td>79.4</td>
<td>79.9</td>
<td>81.2</td>
<td>79.3</td>
<td></td>
</tr>
<tr>
<td><strong>Total capture</strong></td>
<td>89.5</td>
<td>90.6</td>
<td>91.2</td>
<td>92.7</td>
<td>90.9</td>
<td>91.7</td>
</tr>
<tr>
<td><strong>Aquaculture</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inland</td>
<td>42.0</td>
<td>44.4</td>
<td>46.9</td>
<td>48.6</td>
<td>51.4</td>
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<tr>
<td>Marine</td>
<td>24.4</td>
<td>25.4</td>
<td>26.8</td>
<td>27.5</td>
<td>28.7</td>
<td></td>
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<tr>
<td><strong>Total aquaculture</strong></td>
<td>66.5</td>
<td>70.3</td>
<td>73.8</td>
<td>76.6</td>
<td>79.5</td>
<td>102.1</td>
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<tr>
<td><strong>Total world fisheries and aquaculture</strong></td>
<td>157.8</td>
<td>162.9</td>
<td>167.2</td>
<td>169.2</td>
<td>170.3</td>
<td>193.9</td>
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<tr>
<td><strong>Utilization</strong> (in million tons)</td>
<td></td>
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<tr>
<td>Human consumption</td>
<td>136.9</td>
<td>141.5</td>
<td>146.3</td>
<td>148.8</td>
<td>150.9</td>
<td>177.4</td>
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<tr>
<td>Non-food uses</td>
<td>20.9</td>
<td>21.4</td>
<td>20.9</td>
<td>20.3</td>
<td>19.4</td>
<td>16.3</td>
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<tr>
<td>Population (billions)b</td>
<td>7.1</td>
<td>7.2</td>
<td>7.3</td>
<td>7.3</td>
<td>7.4</td>
<td>8.1</td>
</tr>
<tr>
<td><strong>Per capita food fish supply (Kg)</strong></td>
<td>19.3</td>
<td>19.7</td>
<td>20.1</td>
<td>20.3</td>
<td>20.4</td>
<td>21.6</td>
</tr>
</tbody>
</table>

While fish production from capture fisheries has stagnated at around 88 to 93 million tonnes over the years, the demand for fish and seafood has continued to rise. Consumption has more than doubled since 1973. The increasing demand has been steadily met by a robust increase in aquaculture production, estimated at an average 6 per cent yearly growth during the period 2001-2015, after a double digit yearly growth rate during the period 1980 - 2000 (FAO, 2018a).

**Figure 2. World fish and aquaculture production**

![Graph showing world fish and aquaculture production](source: FAO (2018))

Likewise, around 59.6 million people were employed in fisheries and aquaculture in 2016 and some 200 million direct and indirect employment opportunities occur along the value chain from harvesting to distribution, making the livelihoods of some 660 to 880 million people dependent on the sector (FAO, 2016). Upstream and downstream activities in fishing harbors, landing sites, processing facilities, maritime and logistical services, insurance and other financial services provide significant employment and economic benefits to countries and local coastal communities. Fees from fishing licenses are an important source of government revenue and foreign exchange earnings for several developing countries which have agreements with distant water fishing fleet companies (UNCTAD, 2015).

Fish and seafood is one of the most traded food commodities. Some 35 to 38 per cent of the world production enters international trade. It reached a value of US$ 143 billion in 2016, and US$ 152 billion in 2017 (FAO, 2018a). Over 50 per cent of this trade originates in developing countries whose net trade income (export – import), valued at US$ 37 billion in 2016, is greater than the net trade income of most other agricultural commodities combined (Figure 3).

In Pacific SIDS, fishing can provide between 30 and 80 per cent of exports— an advantage of the large Exclusive Economic Zones (EEZs) and the economic values they are able to capture from high value fish species such as tuna. Likewise, the share of fish trade flows for some West African countries can represent between 5 to 12 per cent of GDP (UNCTAD, 2016b).
There is a serious risk that climate change will have a severe effect on fishing and fish farming communities at global scale because of the increased number of people at risk, especially in coastal and low-lying areas and atolls, causing loss of livelihoods, displacement and migration of human populations from floods, storms and/or changes in fisheries distributions. Additionally, increased levels of Green House Gases concentration in the atmosphere, higher CO₂ absorption by the oceans, changes in temperatures and pH, low levels of oxygen in the seawater, marine pollution and marine litter may severely affect marine biomass and current migratory patterns of many fish species. Due to the international recognition of the nutritional and socio-economic importance of fisheries and aquaculture and of the need to revert drastically the trend in oceans health decline, SDGs have set ambitious, yet legitimate targets that require the catalysis of policies, investment and innovation to restore the productive capacity of the oceans and increase economic benefits to developing countries, in particular SIDS and LDCs. The failures that created the conditions for overfishing and unsustainable aquaculture operations can be reversed if addressed effectively. There are more and more examples of successful reforms in a wide range of countries and contexts. SDG 14 offers the framework for coordinated action around proven solutions for restoring the potential of sustainable fisheries and aquaculture.

2.1 Capture fisheries: decline, future trends and recovery issues

Global capture fishery production in 2016 was 90.9 million tonnes, of which 79.3 million tonnes from marine waters and 11.6 million tonnes from inland waters (Table 1 and Figure 4). For marine fisheries production, China remained the major producer followed by Indonesia, the United States of America and the Russian Federation. The Northwest Pacific remained the most productive area, followed by the Western Central Pacific, the Northeast Atlantic and the Eastern Indian Ocean. With the exception of the Northeast Atlantic, these areas have shown increases in catches compared with the average for the decade 2003–2012. Unfortunately, the situation in the Mediterranean and Black Sea is alarming, as...
catches have dropped by one-third since 2007, mainly attributable to reduced landings of small pelagics (FAO, 2018a).

**Figure 4. Reported global capture fisheries production 1950 – 2016 (million tonnes)**

Source: FAO, 2018a

Projections over the next decade indicate that, unless major transformational changes are effected, world capture fisheries will fluctuate between lows of 91.3 million tonnes in El Niño years and highs of 93.7 million tonnes in the best fishing years (OECD-FAO, 2017). This is a higher maximum level of capture fisheries production than seen in the previous decade and should result from a combination of improved catches in some fishing areas (due to improved management regimes in some cases but increases in fishing effort in others), higher market prices, climate change impacts, and new regulations stimulating reductions in discards and waste from fishing.

As a consequence, there is a wide consensus that over the years, the state of the world’s marine fish stocks has not improved overall, despite notable progress in some areas. Of the total number of fish stocks assessed, the share of fish stocks within biologically sustainable levels (fully fished and underfished) decreased from 90 per cent in 1974 to 66.9 per cent in 2015. In contrast, the percentage of stocks fished at biologically unsustainable levels increased from 10 per cent in 1974 to 33.1 per cent in 2015, with the largest increases in the late 1970s and 1980s. In 2015, maximally sustainably fished stocks (formerly termed fully fished stocks) accounted for 59.9 per cent and underfished stocks for 7.0 per cent of the total assessed stocks. The underfished stocks decreased continuously from 1974 to 2015, whereas the maximally sustainably fished stocks decreased from 1974 to 1989, and then increased to 59.9 per cent in 2015, partly as a result of improved management and enforcement (Figure 5). The ten most-productive species accounted for about 27 per cent of the world’s marine capture fisheries production in 2013. However, most of their stocks are fully fished with no potential for increases in volume. The remainder are overfished with increases in their volume only possible after successful stock restoration (FAO, 2018a).
Overfishing is the result of suboptimal fishing capacity and effort, some of it sustained by subsidies, and IUU fishing. IUU fishing has rapidly accrued and intensified overfishing. It represents severe threats to global fisheries, in particular for fisheries of developing countries lacking the capacity and resources for effective Monitoring, Control, and Surveillance of their EEZ. In 2014, the United Nations General Assembly declared IUU fishing as one of the biggest threats to sustaining fish stocks globally. It occurs not only in the high seas but also within EEZs that are poorly managed and may sometimes be associated with organized crime. Unfortunately, the clandestine nature of IUU fishing prevents a fair estimation of its impact. Rough calculations, however, indicate that IUU fishing across the world’s oceans weighs in at around 11–26 million tonnes of fish each year or a value of US$ 26 to 35 billion (FAO, 2018a).

Fisheries subsidies represent any financial support allocated to the fishing industry by a government. Based on the debates at the ongoing WTO negotiation on fisheries subsidies, the impact of these subsidies can vary considerably, from positive effects on fisheries sustainability (e.g. support to fisheries management and research) to harmful subsidies (contributing to overcapacity, overfishing and to IUU fishing). No complete inventory of fisheries subsidies or a common understanding of their impacts exist yet. As a result, reliable and accurate data on fisheries subsidies remain sparse, partly due to a lack of transparency. In this regard, adherence to transparency initiatives and participation in fisheries governance for the benefit of a more sustainable management of marine fisheries, like the Fisheries Transparency Initiative, supported by FAO, can facilitate data analysis in support of the overall negotiation process on fisheries subsidies.

This information vacuum has largely been filled by broad assumptions and estimates and widely debated, although more on anecdotal evidence. A recent report estimates global fisheries subsidies to be in the region of US$ 35 billion, with over US$ 20 billion in the form of capacity-enhancing subsidies (Schuhbauer et al, 2017). Based on data reported consistently to OECD by 28 countries,
UNCTAD estimated their total public support to fisheries at an average annual US$ 9.3 billion during the period 2010-2015. This period has experienced a growth of 42 per cent in total with a peak of US$ 11 billion in 2012 followed by steady decline (Figure 6). Of this reported support, the majority was devoted to fisheries management, monitoring and control, infrastructure, research and fuel costs. A similar study by the European Union reports around US$ 9.7 billion annually in fisheries subsidies in major non-European Union fishing countries (European Union, 2016).

Figure 6. Global fisheries support estimate, total, 2010-2015

Note: OECD estimates of government support include budgetary and non-budgetary measures. Year totals are calculated using countries for which data were available in each year of the reference period.

This UNCTAD analysis uncovered important insights on general support provided to fisheries by major fishing nations, including its incidence on exports. Figure 7 compares fisheries support, fishery commodities exports and world catch data for these countries. Some major producers and exporters of fish and seafood, such as China and the United States, provide important support to fisheries, averaging 30 per cent of the value of gross exports. In other countries, including Indonesia, this average is relatively small (6.5 per cent). In Japan, a country with a large domestic market, a significant use of fishery support measures (60 per cent) may be motivated by internal market demands rather than export motives.

Fuel subsidies, a prominent type of fisheries support has been studied by UNCTAD through a scenario assessment on marine gasoil retail prices in the world largest ports. The study shows high variability across countries and regions, with many countries selling largely below the global average price for this type of fuel (Figure 8). This may not be a surprise in countries producing oil, such as the Russian Federation, Malaysia or the Bolivarian Republic of Venezuela with dual pricing schemes. In other countries, this suggests the existence of some forms of price support or subsidy maintaining marine gasoil retail prices fairly low in some of the world’s major fishing ports.

It has also been reported that fisheries subsidies fuel unfair competition, particularly between large fleets and individual artisanal fishermen and foster inequality as 84 per cent of all fisheries subsidies tend to benefit large scale fleets (Schuhbauer et al, 2017). The challenge is to eliminate harmful subsidies and convert its funds for investment in fisheries sustainability to reduce pressure on fish stocks.
Figure 7. Weight of fisheries support on fishery commodities exports by major fishing nations (2015)

Source: UNCTAD calculations based on data OECD Fisheries Support Estimates and FAO Fisheries and Aquaculture Statistics, 2018. Note: OECD estimates of government support include budgetary and non-budgetary measures. The figure includes a selection of top 20 economies by wild catch for which data were available.
2.2 Aquaculture: strong growth to meet increasing fish demand

Many millennia after terrestrial food production shifted from hunting to agriculture, fish and seafood production has transitioned from being mainly fishing to mainly fish farming. In 2014, the contribution of aquaculture to the supply of fish for human consumption overtook that of wild-caught fish. With capture fisheries production relatively static since the late 1980s, aquaculture has been responsible for filling the gap between supply and demand of fish for human consumption. China in particular and Asia in general have played a major role in this growth as they represent respectively more than 60 per cent (China) and some 90 per cent (Asia) of world aquaculture production. Likewise, many other countries have seen significant increases in aquaculture production for human consumption, with many doubling their production since 1995 (FAO, 2018a).

Currently, some 591 aquatic species and species groups are farmed worldwide producing 106 million tonnes in live weight, with a total estimated first-sale value of US$163 billion. This total production comprised farmed aquatic animals, aquatic plants and non-food products (pearls and shells). At continent level, African aquaculture growth during 2001-2015 averaged 10.4 per cent, followed by Asia (6 per cent) and Americas (5.7 per cent), whereas aquaculture growth in Oceania and Europe were only 2.9 per cent and 2.5 per cent, respectively during the same period (FAO, 2018a).

In 2015, finfish farming represented the most important aquaculture species in many countries with a contribution between 63-68 per cent during the last two decades. Molluse farming, which used to count for about 30 per cent of the total food fish farming production in 2000, has gradually declined to reach 21 per cent in 2015. In contrast, crustacean farming increased from less than 5 per cent before 2000 to close to 10 per cent in the past decade. Aquatic plants farming represented 27.7 per cent of the total production in 2015. With almost all farmed aquatic animals destined for human consumption,
aquaculture supplied 10.42 kg of food fish for human consumption in 2015, an increase by 0.28 kg from 10.14 kg in 2014.

The significant growth of aquaculture during the last 40 years has raised major concerns over its environmental impact and some of its unsustainable models. Aquaculture sites have often been carved out of important natural coastal habitats with rapid expansion exceeding the capacity of planning controls and oversight. Development in aquaculture of fed species, when poorly managed, has affected key biodiversity and ecosystem functions through mangrove deforestation, excessive nutrient release, chemical pollution and the escape of farmed species and disease agents into the natural environment. Major causes of impact have been associated with feeding and nutritional wastes, the existence and spread of diseases and the interbreeding of wild and selected strains (FAO, 2018a).

Figure 9. World production of farmed aquatic animals and plants (1990 – 2016)

Source: FAO, 2018a.

2.3 The future of sustainable fisheries and aquaculture

The above review of fisheries and aquaculture and the challenges the sector faces confirm the need for a paradigm change to fisheries and aquaculture management to restore the health and sustainability of living aquatic resources. This can be achieved by up-scaling proven solutions, based on strengthened partnership, innovative approaches and investment necessary to restore the productive capacity of the oceans within the framework of SDG 14 and its targets. The potential for sustainable aquaculture development, in particular in coastal developing countries, can help decrease the pressure on wild stocks, produce fish at affordable prices for food security and high value seafood for international markets. However, the current aquaculture production model will need to improve its sustainability performance drastically by minimising negative impact on ecosystems, diversifying feed sources to lessen wild catch inputs, avoiding or reducing the use of antibiotics, and recycling effluents.
Markets have responded to these concerns by requesting certification against sustainability standards and traceability criteria in international fish trade. As a result, Corporate Social responsibility policies of most fish importing companies typically include a sustainability component, with a target for wild-caught fish to be legally fished and certified to an ecolabel. Likewise, fish farming during the last 15 years has seen a significant growth for certification against organic or broader sustainability standards (UNEP, 2013). Some of these schemes already involve comprehensive and reliable traceability systems, which could also be used to ensure fish legality in the supply chain. However, existing schemes have limitations, in particular for developing countries where many fisheries are not covered by certification, traceability of fish products, especially from low-capital fisheries, is very difficult; and mislabelling of fish products is common.

While trade policies of many importing countries contain provisions for consumer and environmental protection, sustainability standards and certification schemes have emerged because of the perception that public policies are not achieving the desired outcomes in terms of fisheries and aquaculture sustainability and management (Washington and Ababouch, 2011). Harmonization initiatives, like the Global Sustainable Seafood Initiative (GSSI), supported by FAO, have the potential to improve transparency in the seafood market, to remove the need for multiple certifications thus lowering certification costs for both producers and processors.

Post-harvest processing, distribution and marketing of fish and seafood should catalyse further economies of scale to promote competitive value chains and sustainable trade. The major players in fisheries and aquaculture should promote common sustainable solutions driven by international trade and innovations. This will require a higher level of cooperation and partnership to share knowledge and experiences to improve policies, innovations (e.g. in best fisheries practices and gears, feed and seed production, vaccine production and animal health protection, value addition, logistics and services to promote marketing and distribution). This can generate important employment opportunities, in particular for the youth and restore fish stocks productivity to its maximum economic yield and thus support countries to shift towards inclusive green economy pathways that result in improved human well-being while significantly reducing environmental risks and ecological scarcities. Achieving the trade related targets of SDG 14 is a unique opportunity to channel these reforms at the local and national levels and the cooperation and partnership on the regional and international scenes.

3. International Fish Trade and the 2030 Sustainable Development Agenda

3.1 Fish utilization and trade

The fisheries and aquaculture sector has experienced a significant globalization over the last 3 decades. Over 1000 fish species are consumed worldwide in one way or another and more than 200 countries have reported trade in fish and seafood. Likewise, nowadays, a fish can be harvested in one country, processed in a second and consumed in a third. Sustained demand, trade liberalization policies, globalization of food systems, improvement of transportation and logistics, technological innovations to meet the rapidly changing consumption habits and consumer preferences have significantly modified the way fish is prepared, processed, marketed and delivered to consumers. The intermingling of these drivers of change has been multidirectional and complex, and the pace of transformation relatively rapid. As a result, the share of world fish production destined for human consumption has increased and diversified significantly, up from 67 per cent in the 1960s to 88 per cent currently. Fresh, live and chilled

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8 http://www.ourgssi.org/
Fish represents some 45 per cent of the fish consumed and is the most preferred and highly priced form, except for high value smoked fish. The rest is processed and distributed as frozen (31 per cent), preserved (12 per cent), cured by smoking, salting or drying (12 per cent) (Figure 10) (FAO, 2018a).

As a result of the high demand and the globalization of utilization and distribution, trade in fish and fishery products has expanded significantly in recent decades. This is manifested most clearly in wider geographical participation in trade (Figure 11). In 2016, more than 200 countries reported exports and imports of fish and fishery products. About 78 per cent of seafood products were exposed to international trade competition (FAO, 2018a). The structure and pattern of trade differs significantly by commodity and by region. China is the main fish producer and the largest exporter of fish and fishery products. It is also a major importer due to outsourcing of processing from other countries as well as growing domestic consumption of species not produced locally. However, in 2015, after years of sustained increases, China’s fish trade experienced a slowdown with a reduction in its processing sector. On the other hand, Norway, the second major exporter, posted record export values in 2015. In 2014, Viet Nam became the third major exporter, overtaking Thailand, which has experienced a substantial decline in exports since 2013, mainly linked to reduced aquaculture shrimp production due to disease problems. Since its creation, the European Union was by far the largest single market for fish imports, followed by the United States of America and Japan. These three markets accounted in 2016 for approximately 64 per cent of the total value of world imports of fish and fish products, or approximately 56 per cent if trade within the European Union is excluded (Table 2). Developing economies, whose exports represented 37 per cent of world trade in 1976, experienced a rise to 54 per cent of total export value and 59 per cent in volume by 2016 (FAO, 2018). In 2016, fishery exports from developing countries were valued at US$ 78 billion, and their fishery net export revenues (exports minus imports) reached US$ 37 billion, greater than most major agricultural commodities (such as meat, dairy, rice and sugar) combined (see Figure 3).
3.2 Fish trade, food security and environment

The issue of the contribution of fish trade to food security is a complex one, with numerous studies attempting to explore the pathways between the economic driver of trade and its impact on food security. Indirectly, domestic and international fish trade can increase food security through employment and income generation, which can be utilized to purchase food commodities, including lower-cost staple foods. Domestic and regional trade also makes fish much more available and accessible to wider populations for consumption. Fish and seafood export can generate foreign exchange as well as create employment and income in the primary and secondary sectors. However, fish exports can also decrease the availability of the exported species for domestic consumption and raise its local price owing to reduced availability.

Figure 11. International fish trade (in US$ billion)

An FAO study examined in 2004 how trade affected food security based on evidence from a global assessment as well as from 11 country case studies (Kurien, 2004). One of the study’s main findings was that, in most cases, international trade in fishery products has had a positive effect on local food security. However, the study did find that trade has placed increased pressure on fish stocks. Preserving
fisheries resources through effective fisheries management was considered a necessary condition to increase food security and sustain international trade in the long term. Therefore, market demand needs to be coupled with a sustainable resource management policy.

With aquaculture, the situation can be different. Exports of farmed products may not have a negative effect on domestic consumers when the production is often planned for export markets (e.g. shrimp export from Bangladesh or India). Imports of fish will tend to increase domestic food supply and, if anything, keep prices stable. Another important consideration is that many developing countries export high-value products and import low-value ones. Thus, countries can be both large exporters and importers of fish, as is the case in Thailand, China, Viet Nam, Nigeria or Egypt. In some instances, the proceeds from exporting high value species can be used to import less-expensive, but equally or more-nutritious, species. Africa, for example, despite its positive net export value of fish, remains a net importer in terms of volume, and is therefore dependent on lower-cost fish imports (small pelagics, tilapia and catfish) for local food security. Again, a major concern for trade-driven development of aquaculture is environmental degradation. Rapid development of aquaculture has caused degradation of natural coastal habitats and affected key biodiversity and ecosystem functions through mangrove deforestation, excessive nutrient release, chemical pollution and the escape of farmed species and disease agents into the natural environment (FAO, 2018a).

Table 2. Top ten exporters and importers of fish and fish products

<table>
<thead>
<tr>
<th>Country</th>
<th>2006 Value (million US$)</th>
<th>2006 Share (per cent)</th>
<th>2016 Value (million US$)</th>
<th>2016 Share (per cent)</th>
<th>APRa (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exporter</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>8 968</td>
<td>10.4</td>
<td>20 127</td>
<td>14.1</td>
<td>8.4</td>
</tr>
<tr>
<td>Norway</td>
<td>5 503</td>
<td>6.4</td>
<td>10 770</td>
<td>7.6</td>
<td>6.9</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>3 372</td>
<td>3.9</td>
<td>7 320</td>
<td>5.1</td>
<td>8.1</td>
</tr>
<tr>
<td>Thailand</td>
<td>5 267</td>
<td>6.1</td>
<td>5 893</td>
<td>4.1</td>
<td>1.1</td>
</tr>
<tr>
<td>United States of America</td>
<td>4 143</td>
<td>4.8</td>
<td>5 812</td>
<td>4.1</td>
<td>3.4</td>
</tr>
<tr>
<td>India</td>
<td>1 763</td>
<td>2.0</td>
<td>5 546</td>
<td>3.9</td>
<td>12.1</td>
</tr>
<tr>
<td>Chile</td>
<td>3 557</td>
<td>4.1</td>
<td>5 143</td>
<td>3.6</td>
<td>3.8</td>
</tr>
<tr>
<td>Canada</td>
<td>3 660</td>
<td>4.2</td>
<td>5 004</td>
<td>3.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Denmark</td>
<td>3 987</td>
<td>4.6</td>
<td>4 696</td>
<td>3.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Sweden</td>
<td>1 551</td>
<td>1.8</td>
<td>4 418</td>
<td>3.1</td>
<td>11.0</td>
</tr>
<tr>
<td>Top ten subtotal</td>
<td>41 771</td>
<td>48.4</td>
<td>74 730</td>
<td>52.4</td>
<td>6.0</td>
</tr>
<tr>
<td>Rest of world total</td>
<td>44 523</td>
<td>51.6</td>
<td>67 824</td>
<td>47.6</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>World total</strong></td>
<td>86 293</td>
<td>100.0</td>
<td>142 553</td>
<td>100.0</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>Importer</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States of America</td>
<td>14 058</td>
<td>15.5</td>
<td>20 547</td>
<td>15.1</td>
<td>3.9</td>
</tr>
<tr>
<td>Japan</td>
<td>13 971</td>
<td>15.4</td>
<td>13 878</td>
<td>10.2</td>
<td>-0.1</td>
</tr>
<tr>
<td>China</td>
<td>4 126</td>
<td>4.5</td>
<td>8 809</td>
<td>6.5</td>
<td>7.9</td>
</tr>
<tr>
<td>Spain</td>
<td>6 359</td>
<td>7.0</td>
<td>7 108</td>
<td>5.2</td>
<td>1.1</td>
</tr>
<tr>
<td>France</td>
<td>5 069</td>
<td>5.6</td>
<td>6 177</td>
<td>4.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Germany</td>
<td>4 717</td>
<td>5.2</td>
<td>6 153</td>
<td>4.5</td>
<td>2.7</td>
</tr>
<tr>
<td>Italy</td>
<td>3 739</td>
<td>4.1</td>
<td>5 601</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Sweden</td>
<td>2 028</td>
<td>2.2</td>
<td>5 187</td>
<td>3.8</td>
<td>9.8</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>2 753</td>
<td>3.0</td>
<td>4 604</td>
<td>3.4</td>
<td>5.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>3 714</td>
<td>4.1</td>
<td>4 210</td>
<td>3.1</td>
<td>1.3</td>
</tr>
<tr>
<td>Top ten subtotal</td>
<td>60 533</td>
<td>66.6</td>
<td>82 275</td>
<td>60.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Rest of world total</td>
<td>30 341</td>
<td>33.4</td>
<td>53 370</td>
<td>39.3</td>
<td>5.8</td>
</tr>
<tr>
<td><strong>World total</strong></td>
<td>90 875</td>
<td>100.0</td>
<td>135 645</td>
<td>100.0</td>
<td>4.1</td>
</tr>
</tbody>
</table>

3.3 Market access requirements

The important development in international fish trade has been facilitated by favorable measures for market access (tariffs) that are not particularly high and have been decreasing slowly since 2011. Recent UNCTAD-World Bank-WTO data suggest that applied tariffs were globally about 4.8 per cent on average for raw fish and fish fillets in 2014, dropping from 6.7 per cent in 2009 (UNCTAD, 2016b). The globally averaged most favored nation (MFN) tariff (tariffs applicable to all WTO members, unless there is a WTO preferential or regional trade agreement) for fish products stood at 11.6 per cent in 2014, a decline of more than 2 percentage points since 2009. However, tariff escalation is commonly found on tariff lines that cover processed fish products among all country groupings. By way of example, European Union tariffs for processed fish and fish products are subject to tariff peaks of 25 per cent for processed tuna, 20 per cent for processed shrimp and 12 per cent for canned sardines. In countries like the Republic of Korea and Thailand, applied MFN tariffs are 20 per cent for tuna preparations. Tariff peaks continue to be applied to certain fish products to ensure some level of local value addition, although developing countries actually resort less to tariff peaks than developed countries do. In terms of average peaks per country, high-income countries have an average of 22 peaks, while the average per country among low-, middle-income and LDCs is less than 7 peaks (UNCTAD, 2016b). It is worthy to note that tariffs apply to both wild capture and aquaculture and do not differentiate the production method.

According to FAO, fish trade between developing countries is expected to increase (FAO, 2018a). To facilitate this trade, the General System of Trade Preferences among developing countries should be reinvigorated. This would be accelerated once the Sao Paulo round of negotiations (SPR) concluded in 2010 enters into effect. This would reduce applied tariffs by at least 20 per cent for over 70 per cent of the national tariffs list. Eleven countries (including four Member States of Mercosur as a single Party) exchanged tariff concessions and adopted SPR. These are: Argentina, Brazil, Paraguay and Uruguay (forming Mercosur), the Republic of Korea, India, Indonesia, Malaysia, Egypt, Morocco and Cuba, of which five have ratified (Argentina, India, Malaysia, Cuba, and Uruguay). Fish products are often included in the schedule of commitments of the SPR. The future rounds of the General System of Trade Preferences should focus the negotiations on goods that contribute to environmental protection and sustainability in order to achieve SDGs targets while creating additional opportunities for South-South cooperation and further integration of value chains among developing countries.

3.4 Market entry requirements or Non-Tariff Measures (NTMs)

The major challenges for fish and seafood exports remain non-tariff measures (NTMs) or market entry measures applied to fish and fish products by importing countries and companies. These measures can be legitimate sanitary and phytosanitary measures to protect the health of consumers, animals and plants or technical standards to protect consumers from fraudulent practices. This can include measures on traceability and catch documentation to ensure that traded fish has been legally harvested and/or has come from well managed fisheries and aquaculture operations.

Basically, these measures find their legitimate origin in two Agreements of the WTO respectively on the Application of SPS measures, and the Technical barriers to Trade (TBT). The SPS agreement, which is specific to agriculture and food including fish, confirms the right of WTO member countries to apply measures necessary to protect human, animal and plant life and health as long as they are consistent with obligations prohibiting arbitrary or unjustifiable discrimination on trade between countries where the same conditions prevail and are not disguised restrictions on international trade. The objective of
the TBT Agreement on the other hand is to prevent the use of national or regional Technical Regulations (TRs) and standards as unjustified technical barriers to trade. The agreement covers standards relating to all types of products including industrial products and quality requirements for foods (except requirements related to SPS measures). It provides that all technical regulations and standards must have a legitimate purpose and that the impact or cost of implementing the standard must be proportional to the purpose of the standard (Washington and Ababouch, 2011).

Unfortunately, the requirements and practices of border inspections are far from being harmonized, fit for the purpose or always aligned with the SPS/TBT principles. Developing countries have regularly pointed to the challenge presented by NTMs that vary from one jurisdiction to another. This multitude of approaches imposes significant costs on exporting countries, unnecessary duplication and represent a severe handicap for export from many developing countries with limited resources and capacity for safety and quality management systems and infrastructures, let alone several different systems to meet diverse import market requirements. The fish sector is highly regulated in most countries, although at a lesser extent in LDCs. Similarly, fish products are generally more exposed to NTMs than non-fish products because of the high incidence of SPS measures on food products that are usually not applied to manufactures. Based on UNCTAD's NTM database, there are on average about 2.5 times more distinct technical measures applicable per Harmonized System (HS) codes for fish products than for HS in manufactures (Fugazza, 2017). For example, 732 SPS measures (whether initiated or in force) applicable to fish and fish products were notified to WTO by 67 members by September 2015. There were also about nine specific trade concerns (e.g. regarding safety, quality and/or import restriction) raised by members to the SPS Committee. In terms of TBT measures applicable to fish and fish products, 524 were notified by 53 members; two specific trade concerns were also raised (UNCTAD, 2015). This growth in the number of NTMs related to trade in fish and fish products calls for improved harmonization and efficiency and clearly demonstrates the challenges that some capacity-constrained exporters may face in accessing markets without commensurate support such as Aid for Trade.

Further complicating the multiplicity of public NTMs, fish exporters have been increasingly subjected to a wide range of private voluntary standards. These relate to a range of objectives, including food safety and quality, animal health, environmental protection, fishery sustainability and social responsibility. The private standards have emerged in areas where there is a perception that public institutions are failing to achieve desired outcomes. These include food safety and quality following major food scares, sustainability and responsible fisheries management, or social and environmental sustainability in the growing aquaculture industry. As a consequence, importing food firms, especially retailers, use their increasing bargaining power vis-à-vis other businesses in the value chain, to impose certification to private standards. The increasing vertical integration and complexity of value chains in fish and seafood has also stimulated the growth of private standards, as business-to-business tools used in the context of procurement contracts. Complex value chains – where raw materials are sourced globally, processed in a second country and retailed in yet another – require sophisticated systems for ensuring traceability and guaranteeing consumer protection from farm/boat to fork. These traceability and chain of custody systems are built into the frameworks included in most private standards schemes.

If implemented in an appropriate manner, sustainability standards can be a valuable tool, facilitating access to international markets and driving environmental improvements upstream in the value chain and hence contributing to resource sustainability. Internationally recognized sustainability standards have become a reality for fisheries and a key feature of the modern seafood trade environment. Likewise, in response to the growing requirement of “greening” the aquaculture business, certification
is gaining more traction in international fish and seafood trade (Washington and Ababouch, 2011, UNEP, 2009).

However, the fragmentation of private standards can represent an additional hurdle that must be overcome if developing countries are to effectively consolidate their market shares and engage with high-value supply chains. A systematic mapping of the existing NTMs, both public and private, and their benchmarking against internationally recognized standards (e.g. Codex standards for food safety and quality, World Organization for Animal Health standards for animal health, FAO guidelines for eco-labelling in fisheries and certification in aquaculture, etc.) is urgently needed. Such a mapping will help raise awareness of the universe of NTMs, particularly those that exert the strongest effect on developing country exports and have the potential to become obstacles to trade, assess their potential discriminatory nature and trade distorting impact. This would help promote sound harmonization and equivalence among trading partners and Aid for Trade schemes or other technical assistance initiatives to facilitate sustainable fish trade (Washington and Ababouch, 2011). Harmonization and benchmarking tools such as the Global Seafood Sustainability Initiative (GSSI) can minimize many of these concerns.

Equally important is the need to determine how private market-based mechanisms fit into the overall governance framework for sustainable fisheries and aquaculture. Many governments, including of developing countries, have recognized the potential of private standards to increase market access for exported products and services (UNFSS, 2016), and how sustainably certified fish products can increase export revenues for countries while helping advance environmental policy objectives (UNEP 2013). Private standards when aligned with technical regulations are not likely to conflict with public regulations. Duplication is more likely to be an issue, including between certification schemes, if not in relation to the content of requirements, then certainly in the compliance assessment and verification (including multilevel documentation). Arguably more problematic than the actual costs of certification is the distribution of those costs. At present, the compliance costs associated with certification to a private certification scheme are borne disproportionately by those upstream in the supply chain rather than those downstream where the demands for certification originates. Yet the most robust evidence of price premiums suggests that the financial benefits accrue to importers and retailers who demand certification. Should these retailers help foot the bill for certification? Is some redistribution of costs possible, and using what levers? These are areas for promising Public Private Partnerships across borders (Washington and Ababouch, 2011). A study by UN Environment (2016) on green trade opportunities in sustainable aquaculture in Viet Nam, which surveyed 55 farms and processors of shrimp and pangasius, found variable environmental and economic benefits. Overall, the economic and environmental impact of certification was positive in shrimp farming, but uncertain or even negative for pangasius. The study highlighted various obstacles for further expansion of a sustainable aquaculture in Viet Nam, including the ability to comply with international standards, and insufficient capacity both in the private and public sectors. Overall, the study emphasized that capacity building will be key towards facilitating a transition to sustainable aquaculture.

4. Achieving SDG 14 targets: challenges and opportunities for sustainable fish trade

International fish trade has clear implications for most SDG 14 targets, the most salient ones being targets 14.4, 14.6 and 14.b. These targets also have high relevance to the mandates of UNCTAD, FAO and UN Environment and are the subject of the discussions of the Second United Nations Oceans Forum on trade related aspects of SDG’s. To help the discussion during the Forum, following is a review of
the relevance of SDG targets for sustainable fisheries and aquaculture and proposals for a way forward to support achieving its fish trade-related targets.

4.1. Sustainable fisheries and trade related SDG 14 targets

The current situation for the international management of fisheries and the oceans is characterized by a myriad of international and regulatory agreements, often implemented in an uncoordinated manner by different agencies. This multitude of governance systems can be streamlined and better coordinated and made more effective by focusing on implementing SDG 14. This Goal and its targets are highly ambitious, and their implementation will face many difficulties. For example, ending overfishing, IUU fishing and destructive fishing practices, and the implementation of science-based management plans to restore fish stocks by 2020 (target 14.4) – will all be challenging.

In the case of the WTO, 14 years of fisheries subsidies negotiations under the Doha Agenda have not yet produced a concrete outcome. In December 2017, the 11th WTO Ministerial Conference could not deliver the desired solution to prohibit certain forms of fish subsidies as mandated by the Doha and Hong Kong mandates and SDG 14.6. Instead of finding an agreement, the Conference ended with a Ministerial decision which has been considered minimalistic.9 The Ministerial decision asserts the will of Member States "to continue to engage constructively in the fisheries subsidies negotiations, with a view to adopting in 2019, an agreement on comprehensive and effective disciplines". It is promising that this decision sets the final deadline for a comprehensive agreement on disciplines to 2019, ahead of the 2020 target set in SDG 14.6. It also aims to attain comprehensive, thus wide-encompassing and effective disciplines that can be enforceable under the WTO Dispute Settlement Body. The Decision also called on Members to renew their commitment to existing notification obligations under Article 25.3 of the WTO Subsidies and Countervailing Duties Agreements. Meeting these obligations by notifying subsidies in a precise manner and providing a minimum set of information in good faith, would improve transparency and understanding of the trade effects of these measures (UNCTAD, 2017).

Following the Ministerial decision on fisheries subsidies, Members are now working under the lead of the Chair of the Rules Committee to address and remove fisheries subsidies in time for the deadline of the Target 14.6. Other multilateral and regional trade approaches can and should contribute to more sustainable fisheries as well. Aligning country strategies to meet the stated objectives of relevant SDGs – with a view to promoting policy coherence – should support this process. UNCTAD, FAO and UN Environment will continue to support countries as required towards building consensus on fisheries subsidies by 2019. The serious challenge ahead is in translating the oceans and fisheries Goal 14 into practical actions. Taking into account the vital role of fisheries for many coastal developing countries, SDG 14 does make specific mention to the need to increase economic benefits for these countries (Target 14.7) and to provide market access to small-scale artisanal fishers (14.b). Financial and technical assistance, as well as technology transfer (14.a), will be important for many coastal developing countries as they look to create and implement national and regional strategies for sustainability, preservation and protection of their fisheries industries. Achieving Goal 14 will also contribute to other SDGs, such as Goal 1 (end Poverty in all its forms), Goal 2 (end hunger, achieve food security and improve nutrition, and promote sustainable agriculture), Goal 8 (promote inclusive and sustainable economic growth), and Goal 12 (ensure sustainable consumption and production patterns).

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With particular reference to Target 14 b, there is a need for policies and strategies that empower small-scale fishing communities to take a more active role in terms of resource stewardship and management. Such fisheries employ 90 per cent of the fishers and produce over 30 per cent of the capture marine fisheries. Therefore, they should be involved in the management of the fisheries resources.

4.2 Sustainable aquaculture and trade related SDG 14 targets

Most work and thinking has focused on the relation between SDG 14 targets and trade of fish and seafood from marine capture fisheries. Comparatively, little work has addressed the relevance and potential of marine aquaculture development to achieve SDG 14 targets. Many reports often make the implicit assumption that fisheries include aquaculture. This has been the practice by many institutions and in many parts of the world. Fish trade statistics for example, based on classification by the World Customs Organization, usually do not distinguish whether the origin of the fish is wild capture fisheries or aquaculture. Also, post-harvest processing technologies are often similar. However, capture fisheries and aquaculture are based on different business models and face different sustainability challenges.

Sustainable aquaculture has the potential to contribute significantly to ‘Oceans/blue economy’ by promoting the socio-economic development of coastal populations in Africa, the Caribbean, Asia and the Pacific. It can increase supply to meet the demand and stabilize fish prices, in particular during the periods of price hikes of other food commodities. The first Ocean Forum concluded in the same direction regarding the relevance of aquaculture. However, this requires the use of best aquaculture practices with minimal environmental impacts on coastal ecosystems. Therefore, sustainable aquaculture development can contribute directly or indirectly to targets 14.1, 14.4, 14.7 and 14 a. A key approach to promote sustainable aquaculture is through robust aquaculture certification schemes. This requires capacity building and technical assistance in coastal developing states where marine aquaculture has great potential for investment and development.

4.3 Trade related SDG 14 and innovative approaches around sustainable oceans/ blue economy

Achieving the trade related targets of SDG 14 requires innovative approaches stimulated by significant development in technology and logistics. Integrating best practices for harvesting, value addition and distribution can benefit greatly from opportunities offered around the concepts of Oceans/blue economy, value chain and seafood clusters.

Oceans and seas hold the promise of significant resources and great potential for boosting economic growth, employment and innovation. They are increasingly recognized as indispensable for addressing many of the global challenges facing the planet in the decades to come, from world food security and climate change to the provision of energy, natural resources and improved well-being and medical care.

The Oceans economy, also referred to as the sustainable blue economy or blue growth, has its origins in the green economy concept endorsed at the Rio + 20 United Nations Conference on Sustainable Development in 2012. UN Environment (2015) defines an inclusive green economy as an economy ‘that improves human well-being and builds social equity while reducing environmental risks and scarcities’. Based upon this, at its core, the sustainable Oceans economy refers to the de-coupling of socio-economic development from environmental degradation (UNCTAD, 2014), with a particular attention to gender, poverty and vulnerable groups, in the context of the oceans. It includes traditional sectors such as marine fisheries, tourism, maritime transport and water desalination, but also new and
emerging activities, such as offshore renewable energy, marine aquaculture, seabed extractive activities and marine biotechnology and bioprospecting. The Oceans economy recognizes the fundamental role of the services provided by ocean ecosystems for which markets do not exist yet. These include carbon sequestration, coastal protection, waste disposal and the protection of biodiversity.

The Oceans economy is relevant to all coastal countries and can be applied on various scales, from local to regional to global. It represents a unique opportunity for coastal LDCs and SIDS, with oceans and seas representing much larger geographic area (over 1,000-fold in various cases) than their inland territory. While stimulating growth in individual oceanic sectors can be comparatively straightforward, it is not always clear what a sustainable Oceans economy should look like and the conditions under which it is most likely to develop. Each country should weigh the relative importance of each sector of the Oceans economy and decide, based on its own circumstances, which ones to prioritize. The contribution of natural oceanic capital to welfare must be properly valued to support the right policy decisions, including with regards to trade-offs amongst different sectors of the Oceans economy. Investment in, and use of the best available science, data, and technology is critical to underpinning governance reforms and shaping management decisions to enact long-term change. Ensuring ocean health will require new investment and targeted financial instruments - including blue bonds, insurance and debt-for-adaptation swaps. The private sector can and must play a greater role in the Oceans economy. Trade in the sectors of the Oceans economy can be boosted by introducing sound regulatory and institutional frameworks to develop ancillary services needed to undertake these activities, including financial, insurance, communications, testing and certification, ports, logistics, and research and development activities (UNCTAD, 2017).

In 2013, FAO launched the Blue Growth Initiative,10 developed from the concept of the green economy, and anchored on the core principles of the Code of Conduct for Responsible Fisheries and other related instruments. The FAO Blue Growth Initiative prioritizes balancing sustainable and socioeconomic management of living aquatic resources, with an emphasis on efficient resource use in capture fisheries and aquaculture, ecosystem services, trade, livelihoods and food systems. It is aimed at reconciling economic growth with improved ecosystems, livelihoods and social equity, and strengthening transparent, reliable and more secure food systems.

An emerging area of the oceans economy is marine bioprospecting. Oceans and seas are the source of a variety of living aquatic resources that have great potential for new food, biochemical, pharmaceutical, cosmetics and bioenergy applications. For example, over 18,000 natural products have been developed to date from about 4,800 marine organisms, and the number is growing at a significant rate every year, driven by increased investments in marine biotechnology research and growing demand for natural marine ingredients (UNCTAD, 2017). The UNCTAD BioTrade Initiative offers promising prospects to promote sustainable bioprospecting. BioTrade includes activities related to the harvesting or production, transformation, and commercialization of goods and services derived from native biodiversity (genetic resources, species and ecosystems) according to criteria of environmental, social and economic sustainability. The objective of the UNCTAD BioTrade Initiative is to contribute to the conservation and sustainable use of biodiversity through the promotion of trade and investment in BioTrade products and services in line with the objectives and principles of the Convention on Biological Diversity (CBD).11 Currently, UNCTAD and the Development Bank of Latin America with the support of CITES Secretariat and the IOI are exploring options to adapt the existing BioTrade

11 https://www.cbd.int/convention/
principles and criteria to the marine ecosystem environment to develop a Blue BioTrade approach for
the trade of marine sourced natural ingredients.

Development of the Oceans economy can further benefit from the concepts of supply and value chain
analysis. A supply chain is a network of enterprises through which products move from the point of
production to consumption, including pre-production and post-consumption activities. In supply chains,
production is focused on efficient logistics and supporting services using upstream and downstream
businesses aimed mostly at pushing products rapidly and efficiently to market. On the other hand, a
value chain is a step further in evolution, as it moves beyond just bringing the product to market and
aims at providing a more mutually beneficial environment for all stakeholders. As the name suggests,
value chains add incremental value to the product in the nodes of a chain either by value addition or
value creation. This value is then realized from higher prices and/or the development of new (niche) or
expanded markets (Bjorndal et al., 2014).

In fisheries and aquaculture, the term value addition is used to characterize adding value in products
through some type of processing method – essentially converting raw fish to a resulting semi-finished
or finished product that has more value in the market place. Value creation is used to characterize fish
and fishery products that have incremental value in the marketplace by differentiating them from similar
products based on product attributes such as: geographical location (e.g. Mediterranean tuna);
environmental stewardship (eco-labelling, BioTrade, fair trade, organic farming); food safety, quality
and branding. Therefore, value chains should be viewed as empowering the fragmented stakeholders as
they recognize opportunities to contribute and increase their product value. Understanding consumer
preferences is key for value chain analysis and development. Factors considered by consumers include
price, convenience, nutritional content, safety, substitutes, tastes, fashion, advertising and expectations.
One of the main underlying ideas of a value chain is the recognition that consumer choices are not
always price driven, as they may be willing to pay more for a value-added product or special products
(Bjorndal et al., 2014).

A value chain approach within the frame of the Oceans economy is an innovative approach for
promoting small-scale fisheries and aquaculture products in lucrative markets (target SDG 14 b). A
study on 14 fisheries and aquaculture value chains in countries from Asia, Africa, Europe, Latin
America and North America, confirmed the potential for value addition and market penetration of small-
scale fisheries and aquaculture products in developing countries (Bjorndal et al., 2014). However, the
distribution of the value chain’s benefits in many developing countries were not equitable. Relative to
other players in the value chain, small-scale fishers and fish farmers received the least economic benefits
from the value addition/creation accrued. Processors and retail markets received more of the
distributional benefits owing to their stronger bargaining power. In some cases, the disparities in terms
of earnings were considerable (over 250 times), pushing small scale fishers to fish more and farmers to
adopt unsustainable practices to make a decent living. The study made strong policy recommendations
to enable equitable distribution of benefits to enable small-scale fishers and farmers to more dignified
livelihoods, commensurate with the key role they are expected to play in sustainability. Increased
governmental, NGO and private-sector support was considered a prerequisite for technical training,
infrastructure, finance, and research and development, with specific emphasis on international market
requirements and certification, hygienic practices and reduced post-harvest losses and wastes. Given
the fragmentations of small-scale fishers and farmers, there is a need to cluster them into larger groups
to increase their negotiation power, to improve skills, share good practices, resources and co-
management. This requires support from governments, protection by legislation and incentivizing
participation in organizational models such as clusters of small-scale aquaculture producers,
private/public partnerships and cooperatives. Documented successful experiences from various countries and regions should be disseminated and up-scaled.

In 2014, FAO members adopted the FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication. It is the first ever international instrument dedicated to small-scale fisheries, representing a global consensus on principles and guidance for small-scale fisheries governance and development. The Voluntary Guidelines encourage governments, fishing communities and other stakeholders to work together and ensure secure and sustainable small-scale fisheries for the benefit of fishers, fish workers and their communities and society at large.

Whatever the organizational model, it would be conducive to upscaling circular economy approaches in fisheries and aquaculture, especially in Africa (e.g. Nigeria) and Asia (e.g. India) where recycling has been second nature for years in many sectors, making effective use of materials and energy. This can be further catalyzed in an environment increasingly enabled digitally to support organized groups of small-scale fishers and farmers, interconnected and symbiotic in sharing knowledge, adopting sustainable practices and significantly decreasing requirements and costs for energy, maintenance of gear and equipment, resources such as seed, feed and fertilizers and reducing seafood waste and loss across the supply chain.

Fishing ports have represented a nodal place for creating seafood clusters that promote sustainable fisheries and aquaculture, improved logistics and services and generate value for the communities. Examples of such seafood clusters have been launched in several developed countries (e.g. Norway and Iceland) and emerging and developing states (Argentina, Chile, Ecuador, Mauritius, Mauritania and Papua New Guinea). Creating a seafood cluster requires building the capacity of stakeholders to plan, design, organize, and promote a cluster that integrates sustainable management of fisheries and aquaculture and related supporting services in the development of competitive seafood value chains with the participation of local actors. It requires a Public-Private Dialogue to develop a common vision for a sustainable seafood cluster and accelerate reforms for its development and to generate and channel investments. It requires improving the handling and processing of the harvest and promoting value addition for export at the seafood cluster and building local suppliers’ and vulnerable groups’ capacities to capture greater benefits from productive and inclusive seafood value chains.

Interest in the trade in fisheries services has increased in recent years. At the request of its members, FAO recently conducted an Expert Consultation to assess the benefits of fisheries services for countries (FAO, 2018b). The Consultation helped clarify definitions, interlinkages and coverages, and the debate on the extent that fisheries access arrangements constitute services or have associated services. The Consultation addressed the importance for developing countries to benefit from trade in fisheries services, including through a more equitable and transparent environment for parties engaged in the trade. The consultation encouraged FAO to strengthen its work in this area to address data scarcity, which hampers correct assessment of the benefits from trade in fisheries and aquaculture services and their equitable distribution.
5. Developments since the first Oceans Forum

The first Oceans Forum provided a good multi-stakeholder platform for a dialogue on policies and actions on trade related aspects of SDG 14. The objective of the forum was to discuss and put forward policy and regulatory options for the implementation of trade related targets under SDG 14 focusing on IUU fishing, subsidies and small-scale fisheries. Participants confirmed that SDG 14 is the global sustainable development goal with the most momentum at the current time. Progress in its implementation will therefore impel the implementation of the others. Annex I presents a review of the main recommendations and commitments made at the first Oceans Forum.

The first Oceans Forum provided direct inputs to the high-level United Nations Oceans Conference to Support the Implementation of SDG 14 that was convened at United Nations Headquarters from 5 to 9 June 2017. It endorsed a declaration entitled “Our ocean, our future: call for action”. This declaration confirmed the commitment of the Member States, Civil Society, international organizations and representatives of the industry to support the implementation of SDG 14. Annex II summarizes main outcomes and political calls made by Member States within the “call for action”.

UNCTAD, FAO and UN Environment played an active role during the United Nations Ocean Conference to advocate, inform, network and facilitate participation of developing countries, in particular SIDS and LDCs. They also joined forces with the Commonwealth Secretariat, the Office of the Pacific Commissioner, CITES, the Development Bank of Latin America and International Oceans Institute in organizing various side events on the economic and trade related aspects of SDG 14. At the 2017 United Nations Ocean Conference, UNCTAD, FAO and UN Environment made a voluntary commitment to support Member States in achieving the trade related targets of SDG 14, namely target 14.4 (fight against IUU fishing, fish stocks management and restoration), Target 14.6 (phasing out certain fisheries subsidies) and Target 14b (access to markets and resources by small scale and artisanal fishermen). Through this commitment, the three Organizations reaffirmed that these SDG 14 targets represent a comprehensive avenue for addressing unsustainable practices in the fisheries sector. They re-asserted that trade and trade-policies can facilitate the transition to sustainable ocean-based economies by increasing resource efficiency, improving the environment, enhancing inclusiveness and creating new ocean/blue business opportunities.

In the context of UNCLOS and other relevant international instruments, UNCTAD, FAO and UN Environment reaffirmed their commitment to work with countries and donors to provide capacity building and technical assistance on fisheries, trade, environment and development. The convening power and expertise of the three agencies provides a unique differential in supporting countries to progress towards sustainable development, by incorporating more sustainable trade policies, and to deliver upon the aforementioned targets.

More recently, UNCTAD, FAO and UN Environment accelerated efforts to streamline relevant SDGs, including SDG 14 and its trade related targets in their work and projects. They have engaged work and resources to implement their commitments at the United Nations Ocean Conference and to follow up on work of relevance to their respective mandates. This work centered around advocacy towards fully embracing the SDGs in national strategies and policies, increasing awareness about SDG 14, resource mobilization, promoting partnerships and providing technical assistance and capacity building to developing countries, including SIDS and LDCs. Advocacy and awareness activities were launched at
their statutory meetings including the 14th Session of the FAO Sub-Committee on Fish Trade (September 2017 and July 2018) and 8th Session of the Sub-Committee on Aquaculture (October 2017), the 2017 WTO Public Forum (September, 2017), ACP coordination meetings (November, 2017), the WTO 11th Ministerial Conference (December 2017), UNCTAD’s Trade and Development Board (June 2018) and other high level meetings.

The advocacy work yielded high visibility in international fora and good media coverage of SDG 14 targets, in particular the necessity to improve fisheries and aquaculture management, to eliminate harmful subsidies, to combat IUU fishing and support small scale fisheries. In November 2017, the United Nations General Assembly resolution called for the observance, on the 5th of June each year, of the international day for the fight against IUU fishing, previously adopted by the 40th Session of the FAO Conference in July 2017. Observance of an International Day against IUU fishing should focus greater attention on the threats posed by IUU to the sustainable use of fisheries resources as well as ongoing efforts to fight these activities. FAO was invited to lead the International day in collaboration with other relevant organizations of the United Nations system.

At the WTO 11th Ministerial Conference (MC 11), UNCTAD, FAO, UN Environment and the Commonwealth Secretariat networked, provided updated information, supported developing countries, LDC and SIDS and organized side events on trade related targets of SDG 14, in particular fisheries subsidies, small-scale fisheries and NTMs. The side event on trade and fisheries subsidies reviewed the socio-economic importance of fisheries, the issues of overcapacity and overfishing and their causes and implications, and the regulatory framework for fisheries management, combatting IUU and ending harmful subsidies. The side event explored platforms and mechanisms to continue discussions on fisheries subsidies and support an agreement on fisheries subsidies.

UNCTAD, FAO and UN Environment have used other opportunities to expand and strengthen their partnership to other institutions and organizations to support the implementation of trade-related SDG targets, to improve coherence, complementarity and to reduce fragmentation and duplication. Resource mobilization was high on their agenda to pursue capacity building and technical assistance, for the benefit of SIDS and coastal LDCs. At the UNCTAD 14 Conference (2016), the Organization obtained a new mandate on oceans and seas. This mandate calls on UNCTAD, in cooperation with other relevant international organizations and other stakeholders, to support developing countries, in particular SIDS, in the advancement of SDG 14. The support should focus on the design and implementation of regional and/or national economic development strategies for the conservation and sustainable use of oceans and their resources, in particular strategies seeking to promote sustainable trade in ocean-based sectors, including through analysis of fisheries subsidies that lead to overcapacity and overfishing and subsidies that contribute to IUU fishing and the challenges they pose to developing countries, particularly in connection with the conservation of marine resources and food security. This mandate will be implemented under the lenses of UNCTAD’s Oceans economy pillars (Table 3) to pursue sustainable and inclusive development, in line with SDG 14, but also technological capacity, innovation, policy and regulatory coherence in areas within and beyond national jurisdiction.
As an example, on the implementation of this mandate, UNCTAD has launched in collaboration with the United Nations Division for Ocean Affairs and the Law of the Sea a project on “Evidence-based and policy coherent Oceans economy and Trade Strategies”. The project aims to support developing countries in one selected region in realizing economic benefits from the sustainable use of marine resources. It will assist coastal developing countries, particularly SIDS and LDCs, in promoting the sustainable trade of products and services in ocean economy-based sectors by analyzing, elaborating and adopting evidence-based and coherent Oceans Economy and Trade Strategies. At each stage of the project, economic and trade issues related to relevant legal and institutional frameworks under UNCLOS and the multilateral trade system will be addressed to support the development of comprehensive national ocean frameworks. This project started in 2018 with the involvement of FAO and the Commonwealth Secretariat in 2018 and is being piloted in three countries: Barbados, Belize and Costa Rica.

In the case of FAO, resource mobilization targeted implementation of the FAO binding and non-binding instruments that can help achieve trade related targets of SDG 14. These instruments address globally agreed best practices and responsibilities for port states, flag states and market states. Port States and Flag States have the obligation to implement respectively the provisions of the FAO Port State Measures Agreement and the Guidelines on Flag State Performance. Market States have the obligation to adopt traceability and catch documentation schemes to keep IUU fish out of mainstream markets. They are also encouraged to promote the International Guidelines for Eco-labelling of Fish from Marine Capture Fisheries, the technical Guidelines for Certification in Aquaculture and The Voluntary Guidelines for Sustainable Small-Scale Fisheries.
Implementation of these instruments aims to deny entry of IUU fish to ports and/or markets, to reward sustainably managed and harvested fish and recognize the specific needs of small-scale fisheries to access resources and markets. They recognize the special requirements of developing states and includes provisions to establish funding mechanisms for implementation by developing countries. Programmes, such as the Global Assistance programme for the implementation of the FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication or the FAO Port State Measures Agreement have been developed to mobilize donor funding for their implementation.

Linking its programmes on sustainable oceans and trade, UN Environment is currently developing a cross-sectional ‘Sustainable Blue Economy Initiative’, to work with countries, Regional Seas and other partners on innovating a ‘decision-support & enabling framework’ (Figure 12). This framework would support environmentally sustainable blue economy policies and strategies, which would in turn help actors to unlock investments and actions for the sound use of marine and coastal ecosystems and services. The goal of the initiative is to facilitate sustainable economic and social development within planetary boundaries of our oceans - ensuring poverty eradication, food security, health, jobs, coastal protection and carbon storage as prerequisites for human well-being and climate resilience. The initiative will span across UN Environment Initiatives on sustainable Oceans and green economy, including the Regional Seas, the Economics of Ecosystems and Biodiversity (TEEB) of Ocean and Coasts, the Environment and Trade Hub, and UN Environment Finance Initiative, among others, as well as environmental, social and economic experts from partner organizations.

Figure 12. UN Environment’s sustainable blue economy framework

In terms of capacity building and technical assistance, UNCTAD, FAO and UN Environment have also carried out several activities at the country and regional levels. These go beyond the remit of this report but can be consulted on their web sites. The second Ocean Forum offers an excellent opportunity to share and disseminate successful experiences and challenges encountered by the three organizations and other participants. For example, FAO is conducting, in collaboration with other agencies, regional workshops to assist SIDS bridge their knowledge gap in the area of assessing the value of fisheries through information sharing and technical assistance, particularly in connection with SDG Target 14.7.1; fisheries subsidies; and trade governance and regulatory framework issues, which are necessary for effective fish trade.
6. The second Oceans Forum: the way forward

At the United Nations Ocean Conference, UNCTAD, FAO and UN Environment made a joint voluntary commitment to support Member States in achieving the trade related targets of SDG 14. Through this commitment, the three Organizations reaffirmed that these SDG 14 targets represent a comprehensive avenue for addressing unsustainable practices in the fisheries sector. They re-asserted that trade and trade-policies can facilitate the transition to sustainable ocean-based economies by increasing resource efficiency, improving the environment, enhancing inclusiveness and creating new sustainable ocean/blue business opportunities. In this context, they reaffirmed their commitment to work with countries and donors to provide capacity building and technical assistance on fisheries, trade, environment and development.

This commitment was well received by Member States and has raised high and legitimate expectations. Together with the support and guidance from Member States, the three organizations are looking forward to respond to these expectations. In order to mobilize support, resources, technical expertise and partnerships, the three agencies propose to develop a **SDG 14 Trade-related Joint Plan of Action** in support of the roadmap committed to at the United Nations Ocean Conference in June 2017.

The Joint Plan of Action would focus on concrete activities to build coherence and structured dialogue on international level, to increase transparency, to create knowledge and analysis, to develop tools and guidelines and to engage in national-level capacity building. It would seek support from donors and partners for its efforts to, inter alia, support members to fully develop and implement international laws and guidelines on fisheries and aquaculture focusing on the trade-related instruments, and to act individually and collectively to phase out harmful subsidies, to combat IUU fishing and to fully involve small-scale fishers in the management of marine resources.

More specifically, such a **Joint Plan of Action** may include the following key components:

1. Expanding current partnerships to improve **data collection, transparency, analysis and sharing** on the state of fish stocks and aquaculture socio-economics;
2. Building dialogue and coherence between the trade community, environmental communities and fisheries management communities to support common approaches to phase out **harmful fisheries subsidies** in WTO negotiations and on the **fight against IUU fishing**, both with specific SDG 14 targets by 2020;
3. Exploring options for modalities for a **database on government support measures to fisheries subsidies by developing countries** based on country reporting to complement efforts by other agencies;
4. Explore options to address tariffs, non-tariff measures and ways and means to enable access to sustainable markets by **small-scale fisheries and aquaculture operators**;
5. Strengthening **harmonization and equivalence of non-tariff measures on seafood and marine based-products** and providing support to overcome barriers that hinder sustainable exports and a more circular economy;
6. Supporting Member States to develop complementary tools and instruments to guide implementation of SDG 14 targets, including guidelines to further national fisheries subsidies reform as well as methodologies to develop **Oceans/Blue Economy Strategies**;
7. Pilot/demonstrate best practices for sustainable **fish trade, value chain integration**, and to upscale proven solutions and successful projects;
8. Providing technical support for improving the capacity of countries to implement sustainable fisheries and aquaculture management plans, fish stock health programmes;
9. Providing clarity and support on trade in fisheries services and the development of fisheries clusters;
10. Promoting uptake of voluntary sustainability standards, Blue BioTrade, eco-labelling, traceability systems and catch documentation schemes, including by small-scale fishers and aquaculture operators;
11. Clearly defining and providing criteria on “sustainable aquaculture” and promoting its development in coastal developing countries;

This Joint Plan of Action would be structured into activities implemented on a short-term (by 2020), mid-term (by 2023 to 2025) and long-term (by 2030) basis. It would also be accompanied by a mapping of potential donors and a resource mobilization plan entailing Aid for Trade and other development funding tools. Likewise, the development of the Joint Plan of Action would include a proposal for expanding the current partnership to other institutions with complementary expertise and mandates to promote coherence and synergy in pursuing the achievement of the trade related targets of SDG 14.

The second Ocean Forum should be an excellent opportunity for countries to agree on a plan of action on the above-mentioned actions and measures and to share local and national experiences and disseminate successful outcomes and issues encountered in implementing SDG 14 targets.

6.3 The role of Member States

As a complement of the Joint Plan Action, Member States should fully integrate Goal 14 and its interrelated targets into national policy, development plans and strategies. This should enable national and local ownership of the process and successful implementation by involving key stakeholders, including national and local authorities, regulators, local communities, as well academia, scientists, civil society organizations, business and industry. National plans and strategies should be inclusive and embrace technological development and innovations that have emerged around the Oceans economy and value chain concepts.

Members should endeavour to fully implement relevant international laws and guidelines on fisheries and aquaculture focusing on the trade related instruments reviewed in this paper. Adoption of the legal instruments should go hand in hand with investment in enforcement capabilities, control, monitoring and surveillance, research and development. Strengthening the science-policy-communication interfaces can reinforce multi-scale linkages of stakeholders. Close collaboration between researchers, fisheries managers, policy makers, stakeholders and communicators is essential. Access to fisheries resources, including through government-to-government or business-to-government access agreements should be fully transparent and based on science and best fisheries management practices. Members should facilitate the participation of local and national stakeholders in the decision-making process related to the transfer of fishing rights, which often have substantial impacts on resources.

Member states should act individually and collectively to phase out harmful subsidies and provide incentives to implement best practices for sustainable management in fisheries and aquaculture. While pursuing the negotiations on fisheries subsidies at the WTO, countries should participate in ongoing platforms for consultation that are building momentum towards advancing the agenda on fisheries subsidies. It may also be important to encourage the implementation of fisheries subsidies disciplines
in other trade agreements, including at the regional and bilateral levels, in a manner that contributes to achieving SDG 14.6.

Small-scale fishers should be fully involved in the management of the resources. Successful co-management schemes that change small-scale fishers from resource users into resource stewards, with a responsibility in sustainability should be duplicated widely with appropriate financing and technical support. There is a need for policies and strategies that empower small-scale fishing communities to take a more active role in terms of resource stewardship and management, in line with the FAO guidelines.

To combat IUU, countries should develop and implement national and regional action plans in accordance with FAO’s International Plan of Action to combat IUU fishing, identify vessels engaged in IUU fishing and deprive offenders of profits accruing from IUU fishing. Parties to the Port State Measures Agreement are obliged to implement its measures in the ports under their control, aiming to detect illegal fishing, stop ill-caught fish from being landed and sold, and ensure information on unscrupulous vessels is shared globally.

Countries should support public-private partnerships, including with international importers and retailers, to promote certification and eco-labelling, best practice for traceability and catch documentation, Fisheries Improvement Programmes and sustainable aquaculture development.

6.4 The role of regional bodies and civil society stakeholders

The Oceans Forum partners aim to foster national and local ownership on successful SDG 14 implementation by involving key stakeholders, including national and local authorities, regulators, local communities, as well academia, scientists, civil society organisations, business and industry. This also includes Regional Fisheries Bodies, Regional Fisheries Management Organizations, and Regional Seas Programmes as the primary bodies responsible for the sustainable management of shared marine resources. Also, industry and retail coalitions such as the Global Food Safety Initiative and the Global Seafood Sustainability Initiative, that have developed best practice codes and benchmarking tools and frameworks, will play a central role. Civil society organisations would play an important role supporting sustainable fish trade through data collection, analysis and dissemination towards promoting sustainable practices at community level, particularly in developing countries with weak institutions and infrastructure. Their role is key to increasing awareness and capacity to adopt eco-labelling, certification and energy efficient technologies and to educate consumers about sustainability, and they will continue to be an important stakeholder in these areas in the future.

6.5 Concluding remarks

The Oceans Forum – held annually by UNCTAD, FAO and UN Environment, UNECE, the Commonwealth, the ACP Group and the IOI - can serve as a platform to facilitate trade policy debate and interaction among all these stakeholders and with governments. It offers the opportunity for countries to share local and national experiences and disseminate successful outcomes and issues encountered in implementing SDG 14 targets. The continuation of dialogues such as the Oceans Forum, together with country level capacity building work and knowledge creation will be key to support countries in effectively delivering upon states’ commitment on SDG 14. Following guidance by governments and other stakeholders, the proposed Joint Plan of Action will outline and provide a means of implementation and a sound basis to effectively support Member States in these efforts.

The First Oceans Forum provided a good multi-stakeholder platform for a dialogue on policies and actions on trade related aspects of SDG 14. The objective of the forum was to discuss and put forward policy and regulatory options for the implementation of trade related targets under SDG 14 focusing on IUU fishing, subsidies and small-scale fisheries. Participants confirmed that SDG 14 is the global sustainable development goal with the most momentum at the current time. Progress in its implementation will therefore impel the implementation of the others.

The Forum recognized that there is an undeniable nexus between the extraction of fisheries resources and conservation and trade. Thus, the opportunity cost of not acting to address harmful fishing subsidies was considered extremely high. The Forum highlighted the urgent need to clearly discipline and prohibit harmful fisheries subsidies, with a sense of urgency for prompt results due to limited time for meeting this target by 2020. It was also confirmed that the forum for negotiations is the WTO and that due consideration of special and differential treatment for developing countries and least developed countries should be an integral part of the negotiations. The key question debated at length was how to close the gaps and secure a final outcome. Pragmatism, realism and a clear view of time lines was considered essential. Several options to prohibit subsidies covered by SDG 14.6 were identified by participants. Such prohibitions would need to be specific, clear, coherent and enforceable in order to be effective. In particular, it was undisputed that subsidies which contribute to IUU fishing shall be eliminated.

The Forum recognized that Oceans economy/blue economy offers important opportunities for the sustainable use and conservation of marine resources. Appropriate capacity building can enable developing countries to seize these opportunities. United Nations specialized departments, agencies and programmes such as UNCTAD, FAO and UN Environment and regional agencies such as the Commonwealth and Africa, Caribbean and Pacific (ACP) Group should play a major role in this regard. Public Private Partnerships framed within national management plans and other cooperation schemes were considered useful to disseminate the most recent technologies and best fishing practices.

The Forum highlighted that challenges affecting small-scale artisanal fisheries must be better reflected in the implementation agenda of SDG 14, leading to the adoption of effective policies to promote their development. The forum stressed that due attention should be given to the "formalization" of this sector at all levels, in particular with regard to non-tariff measures and private standards, both of which require strengthened capacities of small-scale artisanal fishermen so that they can access markets and resources. Cooperation and capacity building, as well as the sharing of best practices to avoid their exclusion. The Forum recognized the important gaps in data and information as well limited capacities, especially in developing countries, to effectively manage stocks.

Developing country participants requested support and technical cooperation to address fish and seafood NTMs and private standards and the exploration of options to increase their participation in the seafood value chain and international trade. Target 14.b was perceived as a positive target as it seeks to enable vulnerable economic actors, such as small-scale artisanal fishers to access both marine resources and markets. This group represents 90 per cent of all those engaged in wild fish captures, but only one third of global output. It was noted that these fishers can also contribute to depletion if they are not included in conservation and management efforts. Building conservation and resource management capacity for small-scale artisanal fishers in developing countries, especially in SIDS and LDCs, was
considered an imperative. In this regard, conservation and sustainable use are as important, if not more important than market access in achieving SDG 14.b by small-scale artisanal fishers.

The Forum recognized the work already accomplished in developing a significant body of binding and non-binding instruments which provide a solid base for state action and responsibility. A clear call was made for increasing the number of ratifications and accessions to the FAO Port State Measures Agreements (2009) to fight, deter and prevent IUU fishing. A business and investment perspective was considered necessary to fast track implementation.

The Forum stressed that fisheries should not only be seen as a "good" but also as an "ecosystem service". In this regard, there is a need to preserve and value ecosystems and invest in maintaining and expanding their viability and productivity. Calls were made for further capacity building and technical assistance to improve science-based fish management policies and systems in developing countries. The potential use of the WTO trade facilitation agreement approach was mentioned. The Forum considered aquaculture as an important sector to bridge the gap arising from lower wild catch supplies and the growing global demand for fish and seafood products, provided environmental and social sustainability are ensured.

Annex II: Main outcomes of the United Nations Ocean Conference (2017)

The high-level United Nations Oceans Conference to Support the Implementation of SDG 14 (5 to 9 June 2017) underlined the integrated and indivisible character of all SDGs, as well as the interlinkages and synergies between them, and reiterated the critical importance of being guided in work on oceans by the 2030 Agenda, including the principles reaffirmed therein. It acknowledged that each country faces specific challenges in its pursuit of sustainable development, in particular coastal LDCs and SIDS. Member States reaffirmed their commitment to achieve the targets of Goal 14 within the timelines, and the need to sustain action over the long term, taking into account different national realities, capacities and levels of development and respecting national policies and priorities. They recognized, in particular, the special importance of certain targets in Goal 14 for SIDS and LDC.

The need for an integrated, interdisciplinary and cross-sectoral approach was stressed, as well as enhanced cooperation, coordination and policy coherence, at all levels. The critical importance of effective partnerships was emphasized to enable collective action with the full participation of all relevant stakeholders. The Conference recognized that the conservation and sustainable use of the ocean and its resources require the necessary means of implementation in line with the 2030 Agenda, the Addis Ababa Action Agenda of the Third International Conference on Financing for Development and other relevant outcomes, including the SIDS Accelerated Modalities of Action (SAMOA) Pathway. Member States stressed the importance of the full and timely implementation of the Addis Ababa Action Agenda and, emphasized the need to enhance scientific knowledge and research, capacity-building at all levels, mobilize financial resources from all sources and facilitate the transfer of technology on mutually agreed terms, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to support the implementation of Goal 14 in developing countries.
The Conference called upon all stakeholders to conserve and sustainably use the oceans, seas and marine resources for sustainable development by taking, inter alia, the following actions on an urgent basis, including by building on existing institutions and partnerships:

a) Approach the implementation of Goal 14 in an integrated and coordinated way and promote policies and actions that take into account the critical interlinkages among the targets of Goal 14, the potential synergies between Goal 14 and the other Goals, particularly those with ocean-related targets, as well as other processes that support the implementation of Goal 14;

b) Strengthen and promote effective and transparent multi-stakeholder partnerships, including public-private partnerships, by enhancing engagement of Governments with global, regional and sub-regional bodies and programmes, the scientific community, the private sector, the donor community, NGOs, community groups, academic institutions and other relevant actors;

c) Dedicate greater resources to marine scientific research, such as interdisciplinary research and sustained ocean and coastal observation, as well as the collection and sharing of data and knowledge, including traditional knowledge, in order to increase our knowledge of the ocean;

d) Enhance sustainable fisheries management, including to restore fish stocks in the shortest time feasible at least to levels that can produce maximum sustainable yield as determined by their biological characteristics, through the implementation of science-based management measures, monitoring, control and enforcement, supporting the consumption of fish sourced from sustainably managed fisheries, and through precautionary and ecosystem approaches as appropriate, as well as strengthening cooperation and coordination, including through, as appropriate, regional fisheries management organizations, bodies and arrangements;

e) End destructive fishing practices and illegal, unreported and unregulated fishing, addressing their root causes and holding actors and beneficiaries accountable by taking appropriate actions, so as to deprive them of benefits of such activities, and effectively implementing flag State obligations as well as relevant port State obligations;

f) Accelerate further work and strengthen cooperation and coordination on the development of interoperable catch documentation schemes and traceability of fish products;

g) Strengthen capacity-building and technical assistance provided to small-scale and artisanal fishers in developing countries, to enable and enhance their access to marine resources and markets and improve the socioeconomic situation of fishers and fish workers within the context of sustainable fisheries management;

h) Act decisively to prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to IUU fishing and refrain from introducing new such subsidies, including through accelerating work to complete negotiations at the WTO on this issue, recognizing that appropriate and effective special and differential treatment for developing and LDCs should be an integral part of those negotiations;

i) Support the promotion and strengthening of sustainable ocean-based economies, which, inter alia, build on sustainable activities such as fisheries, tourism, aquaculture, maritime transportation, renewable energies, marine biotechnology and seawater desalination as means to achieve the economic, social and environmental dimensions of sustainable development, in particular for small island developing States and least developed countries;

j) Increase efforts to mobilize the means necessary for the development of sustainable ocean-related activities and the implementation of Goal 14, particularly in developing countries, in line with the 2030 Agenda, the Addis Ababa Action Agenda and other relevant outcomes.
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