

SUSTAINABLE FISHERIES:
INTERNATIONAL TRADE,
TRADE POLICY AND
REGULATORY ISSUES

BACKGROUND NOTE

UNEDITED VERSION

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Acronyms

AHS	Effectively applied tariff rates
BND	Bound rates
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DDA	Doha Development Agenda (WTO)
EEZs	Economic Exclusive Zones
EMFF	European Maritime and Fisheries Fund
EU	European Union
FAO Compliance Agreement	FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas
FAO IUU Plan of Action	FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing
FMSs	Fisheries Management Systems
GVCs	Global Value Chains
HACPP	Hazard Analysis and Critical Control Point
HS	Harmonized Commodity Description and Coding System
ICCAT	International Commission for the Conservation of Atlantic Tuna
IISD	International Institute for Sustainable Development
IsPOA	Istanbul Programme of Action for Least Developed Countries for the Decade 2011–2020
ITLOS	International Tribunal for the Law of the Sea
IUU	Illegal, Unreported and Unregulated fishing
IMO	International Maritime Organization
LDCs	Least Developed Countries
MFN rates	Most Favoured Nation tariff rates
MPAs	Marine Protected Areas
MSC	Marine Stewardship Council
MSY	Maximum Sustainable Yield
MEAs	Multilateral Environmental Agreements
NAMA	Non-Agricultural Market Access (WTO)
OHI	Ocean Health Index
PICs	Pacific Island Countries
RTAs	Regional Trade Agreements
RFMOs	Regional Fishery Management Organizations
SDGs	Sustainable Development Goals

SIDS	Small Island Developing States
SRFC	West African Sub Regional Fisheries Commission
SPS	WTO Agreement on Sanitary and Phytosanitary
SCM	WTO Agreement on Subsidies and Countervailing Measures
TBT	WTO Agreement on Technical Barriers to Trade
TPP	Trans-Pacific Partnership Agreement
UN Fish Stocks Agreement	United Nations Agreement on the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks
UNCLOS	United Nations Convention on the Law of the Seas
UN FAO	United Nations Food and Agriculture Organization
UN GA	United Nations General Assembly
UNCTAD	United Nations Conference on Trade and Development
UVI	Unique vessels identifiers
WTO	World Trade Organization

Abstract

This note proposes an agenda for sustainable fisheries that promotes the conservation and sustainable use of, and sustained trade in, fish by all and ensures that development benefits accrue to fishing nations and their populations, in developing countries in particular. This agenda is guided by analysis undertaken in this note which provides a stock-taking of the present situation regarding fish, and a forward-looking view on future actions; in particular, those that need to be supported by renewed mandates for action by governments, the private sector and other fisheries stakeholders.

Our stocktaking finds that continuing from mankind's earliest recorded history, to today, fish (wild oceanic species) and other marine species constitute an important natural resource. Uses include for food and nutrition, health, culture, income, employment and trade which can support livelihoods for coastal, as well as in-land, populations. Sustainable fisheries management is therefore intrinsically interwoven with humanity and nature. In the past, these fish resources have been abundant and easily accessible. Unfortunately, this is no longer the case

today. Fish stocks, especially of large predatory fish, have been severely affected and, in some cases, depleted. This tragedy is due to over-and-harmful fishing, often aided by advanced fishing technology, to meet high food demand from growing populations. This has been to the detriment of natural fish habitats, namely oceans, regional seas, lakes, rivers and adjacent coastal ecosystems.

A multitude of national, regional and multilateral/international initiatives, frameworks, regulatory and voluntary code of conducts, standards, and institutions have been developed over the past two decades to rebuild fish stocks, conserve marine species, halt destructive fishing practices, and preserve related ecosystems and oceans. Fishing agreements have also been concluded to facilitate sustainable harvest and trade in fish. Consumers' awareness has also been raised to buy and consume sustainably caught fish which, in turn, is bringing about changes in supermarket chains and restaurants to buy, sell and produce fish products and meals made from sustainably harvested fish. These positive efforts have resulted in some progress, however, overall they have been unable to stop and reverse the deterioration of global fish populations and marine ecosystems.

The expiry of the UN Millennium Development Goals in 2015 and the recent launching of United Nations 2030 Agenda for Sustainable Development includes a specific Goal 14 on conserving and sustainably using oceans, seas and marine resources. The Sustainable Development Goals are accompanied by several management related-targets on fish. They denote the strong aspirations of the global community at the highest political level to prioritize and focus attention on restoring the health and resilience of our oceans and resources including fish over the next 15 years. This accord presents a new opportunity but also some challenges for the international community to mobilize actions. These actions must be considered within the myriad of fishing-related instruments, including fisheries partnership agreements and trade agreements, so as to concretely and significantly arrest the 'tragedy of commons' in fish today and instead transform the situation into a 'triumph of commons' for fish in the future.

1. INTRODUCTION

Fish¹ is important to humanity and the environment in many respects. It is a particularly valuable resource for fishing nations and communities, especially in developing countries and Least Developed countries (LDCs) with sea zones, and in Small Island Developing States (SIDS). However, over successive generations the human race has over-exploited marine resources. This has been particularly so since the dawn of the industrial age and then subsequently since globalisation processes have accelerated. In a business-as-usual scenario, only half the amount of fish harvested in 1970 will be probably available by 2015 and only one-third by 2050.² In contrast, fish consumption can be expected to expand substantially as the global population is predicted to increase from over 7 billion presently to about 9-10 billion by 2050. These trends raise serious questions about the sustainability of the sector globally and related practices.

A new opportunity for robust actions to revitalize sustainable fisheries management practices and ocean health comes from Goal 14 of the recently adopted Sustainable Development Goals (SDGs).³ It commits the United Nations Member States to: 'Conserve and sustainably use the oceans, seas and marine resources for sustainable development.' Prior to the SDGs, a set of internationally agreed commitments on the conservation and sustainable use of fish found expression in the "The Future We Want", the Rio+20 outcome document (para. 111, 113, 168-175); the Samoa Pathway, UN Conference on SIDS outcome document (para. 53 and 58); and recent resolutions of the United Nations General Assembly (UN GA).⁴ It is notable that the language in the SDGs and other international summit decisions focuses on oceanic marine resources. It is equally notable that all these commitments endeavor to seek a balance in addressing, positively, inherent conflicts between the

¹ The term 'fish' in this note refers to wild oceanic fish catch and not to aquaculture fish nor to inland fish unless explicitly stated.

² UNEP, ITC and ICTSD (2012) sustainable fisheries brief, June 2012.

³ UN (2014). Working Group Proposal for Sustainable Development Goals. See <https://sustainabledevelopment.un.org/index.php?page=view&type=400&r=1579&menu=35>

⁴ See UN GA resolutions A/RES/69/109 of 2014 and A/RES/68/71 of 2013.

conservation, rebuilding and restoration of fish stocks and ecosystems services on the one hand, and sustainable use (harvest, trading and consumption) of fisheries resources on the other. Further complicating this 'public good conundrum' of contrasting priorities, is the need to ensure equitable access to marine resources.

The opportunity being presented by the SDGs and the challenge they seek to redress can be summarized in terms of bringing about a transformation from the present situation, which is characterized as a 'tragedy of commons' towards a new dispensation encapsulated in a 'triumph of commons'. In presenting the argument for this change, this note is structured as follows. In Section 1 we review the relevance and importance of sustainable fisheries management. In Section 2 we make reference to the new global agenda on oceans and fisheries, including the 2030 Agenda for Sustainable Development. Further to outlining this overarching framework, in Section 3 we proceed to review market access (tariffs) and market entry regulatory (non-tariff) measures and certification on raw fish and processed fish products; this includes a review of WTO negotiations under the Doha Round to liberalize fish trade and address harmful fish subsidies. In Section 4 we review measures to address destructive fish practices especially illegal, unreported and unregulated fishing. In Section 5 we refer to complementary fish management arrangements. Finally, we conclude with a transformative agenda for future sustainable fisheries and how to turn the current tragedy of the commons into a triumph.

2. FISH IMPORTANCE, DECLINE AND RECOVERY: SOME FACTS

There is a high geographic concentration of fisheries. Around 18 countries account for 76 percent of the estimated total global wild catch.⁵ The most caught species include: Anchovy, Alaska Pollock, Skipjack Tuna, Atlantic Herring, Yellow Fin Tuna and Chub (or Pacific) Mackerel. These

⁵ These countries include: China, Indonesia, The United States, Peru, Russian Federation, Japan, India, Chile, Vietnam, Myanmar, Norway, Philippines, Republic of Korea, Thailand, Malaysia, Mexico, Island and Morocco. FAO (2014).

ten species accounted for around a quarter of the total global marine catch in 2011.⁶ However, most of these species are already fully exploited and some are overfished.

A. Fishes' multi-functional role in development

The fish sector plays a substantial multi-functional role in the development of many developing countries and in particular in LDCs with sea zones and SIDS. First, the contribution of international trade flows in fish (exports + imports) in the gross domestic products (GDP) is especially important for SIDS. This share averages about 3 percent in SIDS, and below 1 percent in LDCs, other developing countries and developed countries (see Figure 1). The share is higher in several countries. In some SIDS and some West African countries, this share ranges from 5 to 12 percent. Second, fishing licensing fees are an important source of government revenue and foreign exchange earnings for developing countries that have concluded such licenses with countries with distant water fishing fleets. For example, in 2010, the eight Pacific Island Countries' parties⁷ to the Nauru Agreement Concerning Cooperation in the Management of Fisheries of Common Interest (The Nauru Agreement) earned approximately USD 90 million from fishing license fees.⁸ They have negotiated substantial increases in the following years. Thus in 2013, the revenue from fisheries licenses of just one member (Kiribati) reached USD 86 million and represented approximately 43 percent of total government revenue.⁹

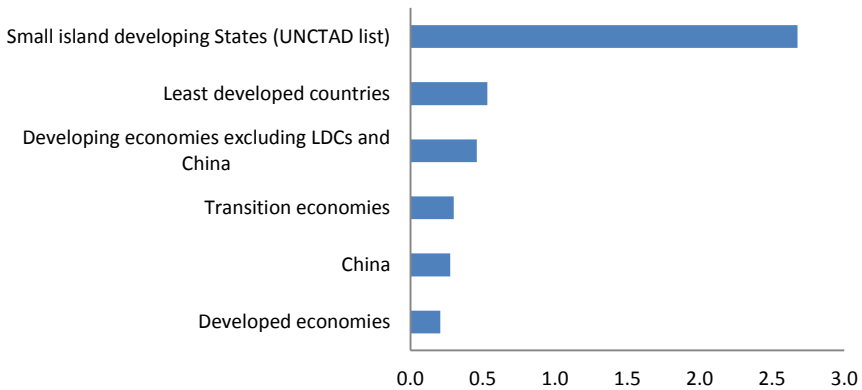
⁶ Ibid.

⁷ The Federated States of Micronesia, Kiribati, the Marshall Islands, Nauru, Palau, Papua New Guinea, Solomon Islands and Tuvalu.

⁸ Fishing News International (2014). *Pacific Islands bump fishing fees by 33 percent*.

⁹ UNCTAD calculations based on: Republic of Kiribati (2014), *Fish Licensing revenue*. IMF (2014). *World Economic Outlook*.

Figure 1. Trade in fish as percentage of GDP (2013)



Source: UNCTAD based on UNCTAD Stats (2015)

Third, over 3.2 billion people live close to coastlines¹⁰ and rely on the oceans and seas and their resources especially fish for their livelihoods. Also, approximately 97 percent of the world's fish folks live in developing countries and over 90 percent are employed in small-scale activities.¹¹ Fourth, about 60 million people are engaged in artisanal and subsistence fishing activities worldwide, of which 15 percent are women.¹²

On the employment front, globally, some 350 million jobs are linked to fisheries, port management and other related activities.¹³ Engaging in transforming raw fish into value added products in processing plants in developing countries can scale up and expand opportunities for employment creation for a broad range of people with limited economic prospects and thus contribute to reducing poverty. Value addition can be

¹⁰ Don Hinrichsen (1999). *The Coastal population explosion*. Trends and future challenges of the U.S. National Coastal policy and Coastal Policy Workshop.

¹¹ World Bank (2010). *The Hidden Harvests the global contribution of capture fisheries*.

¹² FAO (2014). *State of World Fisheries and Aquaculture, 2014*. See <http://www.fao.org/3/a-i3720e.pdf>

¹³ World Bank (2012). *Living oceans*. See <http://go.worldbank.org/A2MYFIUQM0> (accessed 3 August 2014).

supported through both upstream and downstream fish processing activities, including but not exclusively linked to cleaning, cutting, drying, freezing and the processing of fish into oils, seafood like canned fish, meals and fertilizer. Some upstream activities include maritime services, port services, insurance and other financial services attendant to the sector.

The barriers to moving up the fisheries value chain, however, are often formidable. The opportunities for creating value addition industries are not equal amongst developing countries, given that economies of scale, population sizes, and distance from markets appear to favour emerging and middle-income countries, particularly those in Asia and Latin America (e.g. China, Vietnam, Thailand, Mexico, Chile, Peru and Ecuador). The asymmetry between actors within fisheries value chains is increasingly recognised in case-study based global value chain literature. Beyond the establishment of processing facilities which require high capital and knowledge investments, another challenge for many developing countries involves addressing their limited capacity to comply with regulations and private standards linked to the harvesting, processing and packaging of fish, such as the "Hazard Analysis and Critical Control Point" (HACPP).¹⁴

The fisheries sector is critical to food security and nutritional intake in many countries. Fish, molluscs and crustaceans as well as other marine living organisms such as seaweeds form a central component of human diet particularly for coastal populations. And worldwide, according to FAO, the global *per capita* demand for fish has increased from 10 kg of fish *per capita/per year* in 1976 to 23 kg in 2014.¹⁵ In many LDCs and SIDS, fish consumption contributes to or exceeds 50 percent of daily protein intake.¹⁶ Beyond its nutritional value in terms of protein, fish also

¹⁴ UNCTAD (2014). *Fishing Exports and Economic Development of Least Developed Countries: the case of Bangladesh, Cambodia, Comoros, Sierra Leone and Uganda*.

¹⁵ FAO (2015). *The state and trends of the fish world market*. Presentation by Jogeir Toppe and José Estors Carballo. Second Regional Forum, CEIPA, Manta, Ecuador.

¹⁶ FAO (2012). *The State of World Fish and Aquaculture*. For example, fish provides about 50 percent or more of total animal protein intake in some SIDS,

contains vitamins, minerals, and healthy fats such as Omega-3. It is therefore understandable that fish accounted for 16.7 percent of the global population's intake of animal protein and 6.5 percent of all protein consumed worldwide by 2010.¹⁷

B. The precarious situation of global fish stocks and emergence of aquaculture

Though fish is important due to its multi-functional contribution to development, and the consumption of fish is growing as population expands, the supply of wild caught fish is under intense pressure. According to the FAO, 87 percent of the world's marine fish stocks are fully exploited, overexploited or depleted, and this number has been increasing steadily. By way of example, it is remarkable that half the fish stocks off the West African coast are classified as overharvested,¹⁸ meaning they are unable to recover. This underlines the severe deterioration of the overall state of global fish resources. Figure 2 below illustrates the evolution of fish stocks globally between 1974 and 2011.

Another angle to view the critical situation of the fish stocks is that global marine and inland fish catch has remained relatively constant at about 90 million tons since 2007 (of which Marine catch has been about 80 million tons and inland about 10 million).¹⁹ This suggests that wild fish catch may have reached an unsurpassable yield in this decade (see Figure 3).

As indicated above, global marine wild catch in 2013 was estimated at about 80 million tons and total wild catch at 90 million tons. It has been argued that this level of supply demonstrates that a relatively steady maximum sustainable yield (MSY) performance has been reached. MSY is usually defined as the largest sustainable yield (or catch) that can be taken from a species over an indefinite period.

as well as in Bangladesh, Cambodia, the Gambia, Ghana, Indonesia, Sierra Leone and Sri Lanka.

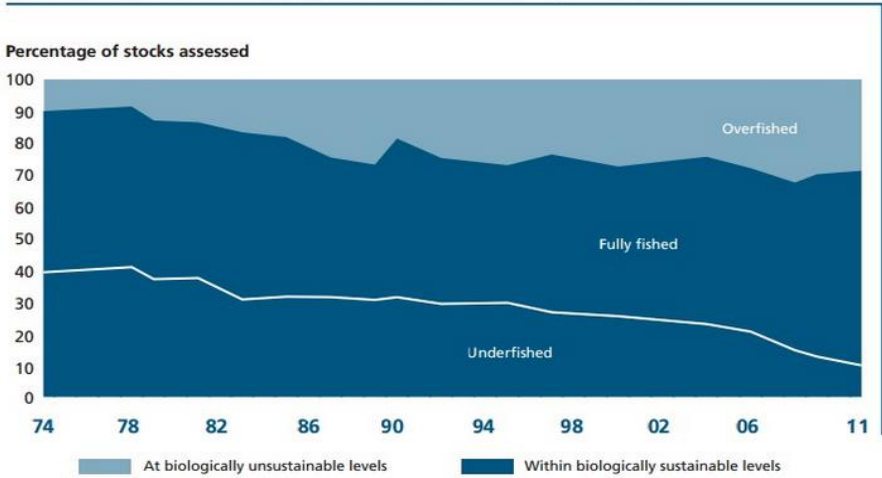
¹⁷ FAO (2014).

¹⁸ Africa Progress Panel (2014). *Grain, fish and Money*.

¹⁹ FAO (2014).

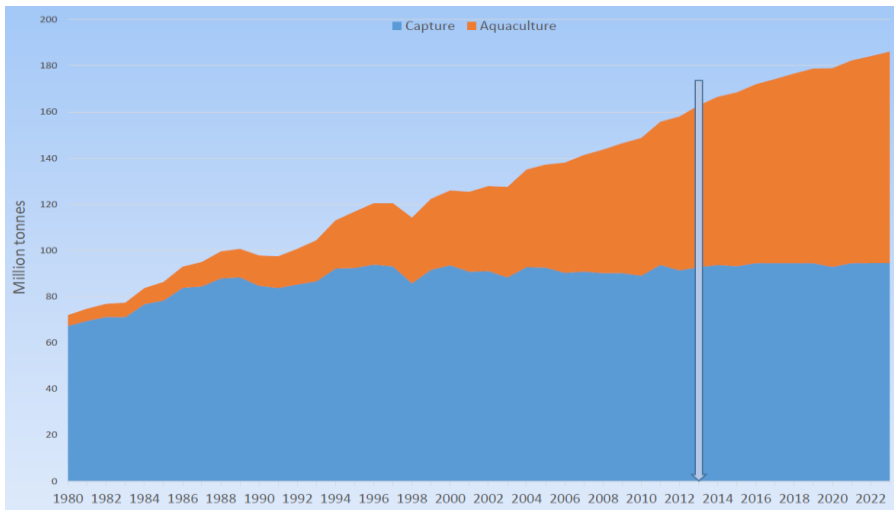
Figure 2.

Global trends in the state of world marine fish stocks, 1974–2011



Source: FAO, The State of World Fisheries and Aquaculture (2013).

Figure 3. World production of fish (1980-2023)



Source: OECD-FAO Agricultural Outlook (2014).

A separate analysis indicates that wild catch will remain stagnated (including fresh and marine catch) over the next 20 years. It has been foreseen that this level of catch may only slightly grow to 93 million tons by 2030²⁰ under relatively optimistic scenario. This will simply imply that we may be better managing existing stocks in the near future although not yet be able to achieve a significant stock recovery over the next 15 years unless this also becomes a priority for the global community.

The main causes of fish stock pressures and depletion include: overfishing and damaging fishing practices driven by an increasing global demand for fish and the lack of adequate fish management systems or weak capacities of existing ones. The impact of the market-based drivers is accentuated by other externalities such as environmental threats in the form of pollution and high carbon [acid] levels, low levels of oxygen in marine areas, oceans acidification, rising seawater temperatures and disruptions in marine ecosystems and the impact of seabed activity. Additionally, the existence of negative incentives such as subsidies that contribute to overfishing and over capacity of fishing fleets and damaging fishing practices like IUU fishing have contributed to the over exploitation of fish populations.

Fish populations are also affected by the health of oceans, their natural habitats. The Oceans Health Index (OHI)²¹, a multifaceted index based on a set of 10 ocean public goals, estimates that globally, in 2015 the OHI was around 67/100 (under this index 100 on the scale equals to full achievement of an ocean health goals). In the case of the specific goal on "harvesting sea food sustainably," it reaches 51/100, which is not the best result. While results of the OHI do not enjoy consensual support from scientific community; they offer one perspective on the overall consequences of human interaction with the marine environment and species on annual basis.

Unless the underlying causes of fish population depletion are tackled, the international community may be facing the beginning of an even steeper decline²² in fish population over the coming decades. If current fishing

²⁰ World Bank, FAO, IFPRI and AES (2013). *Fish to 2030: Prospects for Fisheries and Aquaculture*. See <http://www.fao.org/docrep/019/i3640e/i3640e.pdf>

²¹ See <http://www.oceanhealthindex.org/>

²² WWF (2014). *Unsustainable fishing* (Accessed 03 of February 2015)

practices continue unchecked, the depletion of fish stocks could possibly result in a potential mass collapse by 2050 of many high trophic level commercial species (e.g. tuna, hake and sword fish), suggests one well-known but controversial analysis.²³ Other scientific views²⁴ question this prognosis. In any case, ongoing analysis and specific scientific assessments are needed to provide updated information and inform decisions and policies.

As wild fish catch faces increased pressures and may have leveled off for many fish species, aquaculture production of fish is growing rapidly to fill the gap in supply and demand of fish. Between 2007 and 2012, global aquaculture fish production for food purposes increased from about 50 million to 66.6 million tons,²⁵ showing a compound annual growth rate of 5.9 percent per year during that period. Aquaculture production projections for 2013 were in the region of 70 million tonnes – 44 percent of total fishery output and 49 percent of fish for human consumption.²⁶ The trend is that aquaculture will play an increasingly important role in filling the gap between the global fish demand and supply in the next 15 years as wild catch levels off. One estimate indicates that aquaculture will account for 62 percent of total of global fish production by 2030,²⁷ significantly reducing the need to source fish from natural marine resources.

²³ Worm, B. et al (2006) *Impacts of biodiversity loss on ocean ecosystem services*. Science.

²⁴ Ray Hilborn (2013). Faith based Fisheries. American Institute of Fisheries Research Biologists.

²⁵ Ibidis.

²⁶ FAO news (2014).

²⁷ World Bank (2013).

C. Sustainable fisheries

There is no internationally agreed definition of “sustainable fisheries.” One common understanding of “sustainable fisheries” makes reference to fishing activities that can be continued on a sustained or indefinite basis.²⁸ A more methodological approach makes reference to the application of the maximum sustainable yield (MSY), in some cases updated by economic and social considerations. The methodology requires, and is based on, science-based fish stocks management. Nonetheless, it can ignore, depending on how such methodologies are designed, the fact that fishing practices may negatively affect the balance of ecosystems and other species (if not well regulated and monitored) and that ecosystems affected by pollution and other external factors may hinder the reproduction and recovery capacity of fish and other marine stocks. This has led to the incorporation, not only in the case of oceans but also in relation to biodiversity conservation, of a more holistic approach on the conservation, resilience and sustainability of ecosystems and the services they produce as witnessed in the recently adopted SDGs.

On an institutional basis, “sustainable fisheries” can be perceived as fishing practices and actions that follow, and effectively apply relevant international agreements, guidelines and best practices agreed under the United Nations Convention on the Law of the Seas (UNCLOS), the FAO, and the International Maritime Organization (IMO), or under binding trade agreements such as the World Trade Organization (WTO) in relation to market entry (tariffs) and market access (sanitary and phytosanitary measures,²⁹ technical regulations (e.g. harvesting and packing regulations), unfair practices (e.g. subsidies) and private standards and labelling (fishing practices).

Beside these, five sectoral conservation treaties also have relevance for the ocean and fisheries. These are: the Ramsar Convention on Wetlands (1971); the Convention on International Trade in Endangered Species of Wild fauna and Flora (CITES) (1973); the Bonn Convention on Migratory Species (1979) and its species-specific sub-agreements and

²⁸ FAO (1982). *Management concepts for small-scale fisheries: economic and social aspects*. See <http://www.fao.org/docrep/003/x6844e/X6844E02.htm#chII>

²⁹ Such as dangerous ingredients, microorganism controls and quality control.

memorandums of understanding; and the Convention on Biological Diversity (1992). At the regional level, several Regional Fisheries Management Organisations (RFMOs) have been established to develop and implement conservation and management measures for fisheries among countries sharing a common ocean zone. These sectoral treaties and RFMOs also focus on the 'sustainability' of the natural resource so that the resource is not endangered and depleted.

Key points: The fisheries sector plays a significant role in economic development, food security, employment and livelihoods of coastal populations in particular. It is an important contributor to economic development and food security, especially of SIDS and LDCs, even though its average share in GDP ranges about 3 percent in SIDS and a low of below 1 percent for other countries and especially developed countries. Value addition in the fisheries sector can expand the livelihoods opportunities and create internal downward and upward economic linkages in goods and services provision. Though fish is important due to its multi-functional contribution to development, the consumption of fish is growing as population expands and the supply of wild caught fish is under intense pressure. Most of the world' s marine fish stocks are fully exploited, overexploited or depleted. Unless the underlying causes of fish population depletion are tackled, the international community may be facing the beginning of an even steeper decline in fish population, and fishing yields, over the coming decades. Aquaculture will play an increasingly important role in filling the gap between the global fish demand and supply in the next 15 years. More "sustainable fisheries" policies and practices are required to allow fish populations to recover. While there is no internationally agreed definition of sustainable fisheries, the content and promotion of sustainable fishing practices is being shaped under several international conventions under the United Nations, the WTO and bilateral fisheries agreements, and within RFMOs.

3. THE 2030 SUSTAINABLE DEVELOPMENT AGENDA: FISH GOALS AND TARGETS

The new UN development agenda for the post-2015 UN Millennium Development Goals is titled "Transforming our World: the 2030 Agenda for Sustainable Development". It was adopted by the UN Sustainable Development Summit 2015 that met between 25 and 27 September in New York. The 2030 agenda includes 17 Sustainable Development Goals (SDGs), one of which, namely Goal 14, addresses oceans, seas and marine resources as a priority. Goal 14 to "Conserve and sustainably use the oceans, seas and marine resources for sustainable development" underlines the importance of sustainably managing and using maritime resources and related ecosystems. Its targets recognize the role played by fisheries in SIDS and LDCs, and hence call for increased economic benefits accruing to them (see Table 1).

Goal 14, and its targets, builds upon many of the provisions for oceans and fisheries conservation and sustainable use provided in the "The Future We Want" - the Rio+20 outcome document-, the Samoa Pathway for SIDS, and the Istanbul Programme of Action (IsPOA) for LDCs. For example, in "the Future We Want", member States placed an important emphasis on building healthy oceans and seas and related marine resources including fish. In paragraphs 158 to 177, issues highlighted included support for more sustainable agriculture, including fisheries and aquaculture, restoring and conserving fish stocks, eliminating IUU fishing and strengthening disciplines on fish subsidies and taking actions to eliminate harmful subsidies.

SDGs Goal 14 can also be a catalyst for improving and/ or implementing more effectively existing treaties and soft law instruments such as the UN Fish Stock Agreement (1995), the FAO compliance Agreement (1993), the FAO Code of Conduct for Responsible Fisheries (1995), the FAO International Plan of Action to prevent, deter and eliminate IUU fishing and the recent Port Measures Agreement (2009, not yet in force), and relevant UN GA resolutions.

Table 1: Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Simplified list of targets

14.1	By 2025, prevent and significantly reduce marine pollution of all kinds
14.2	By 2020, sustainably manage and protect marine and coastal ecosystems, including by strengthening their resilience, and take action for their restoration
14.3	Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
14.4	By 2020, effectively regulate harvesting, and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, to restore fish stocks in the shortest time feasible
14.5	By 2020, conserve at least 10 percent of coastal and marine areas, consistent with national and international law
14.6	By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing and refrain from introducing new such subsidies
14.7	Increase the economic benefits to small island developing states and least developed countries from the sustainable use of marine resources
14.a	Increase scientific knowledge, develop research capacities and transfer marine technology to improve ocean health
14.b	Provide access of small-scale artisanal fishers to marine resources and markets
14.c	Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS

These have improved the global policy landscape needed to enhance the sustainability of fisheries and address some of the underlying causes of depletion. WTO agreements and the negotiations under the Doha Round in respect of fisheries could also be prioritized in light of implementing SDGs Goal 14.

SDGs Goal 14 creates provisions for the sustainable management of fisheries that may spur the development of more robust international approaches to protecting and preserving fisheries, along with global marine and ocean management. The current universe for the international management of fisheries and the oceans is characterized by a myriad of disjointed international and regulatory agreements, implemented often in a disjointed manner by a variety of different agencies. This spaghetti bowl of governance systems could be simplified and streamlined to become more effective as part of implementing SDGs Goal 14.

Goal 14 and its targets reflect high ambitions in the light of the tragedy of commons in fish being experienced. However, it must be recognized that their implementation will be difficult. Achieving targets, for example, such as ending overfishing, and IUU fishing and destructive fishing practices and the implementation of science-based management plans, to restore fish stocks by 2020 (Goal 14.4), will all be challenging. Additionally, the thorny issue of addressing and removing fisheries subsidies (Goal 14.6), is stalled in the current WTO Doha Round of negotiations. Multilateral and regional trade negotiations can and should however contribute to more sustainable fisheries. Aligning negotiation strategies in view of the stated objectives of the SDGs - a view to promoting rather than undermining policy coherence - could facilitate this process. With the adoption of the SDGs and Goal 14, this should generate new momentum at the multilateral level to reinvigorate efforts to address unsustainable fish practices. In the case of the WTO, the prognosis is not good as 14 years of fisheries subsidies negotiations under the Doha Agenda have not yet produced a concrete outcome. The serious challenge ahead thus is in translating the oceans and fisheries Goal 14 into practical actions.

Taking into account the vital role of fisheries for many SIDS and LDCs, the SDGs do make specific mention to the need to increase economic

benefits for these countries (Goal 14.7) and providing 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 SIDS and LDCs 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 achieving other relevant SDGs such as Goal 2 (End hunger, achieve food security and improve nutrition and promote sustainable agriculture) and Goal 12 (Ensure sustainable and consumption and production patterns). The oceans and fish agenda is thus also linked to other global goals.

Key points: SDGs will provide a new pathway for advancing sustainability. There is for the first time a SDG (Goal 14), which reflects the aspirations of the international community, to focus on conservation and the sustainable use of oceans and marine ecosystems. This Goal provides targets that will affect how we craft trade policies and agreements in the near future. It is also one of the few Goals that contains an explicit target on the need to increase the economic benefits to SIDS and LDCs from the sustainable use of marine resources.

4. INTERNATIONAL TRADE AND TRADE POLICY

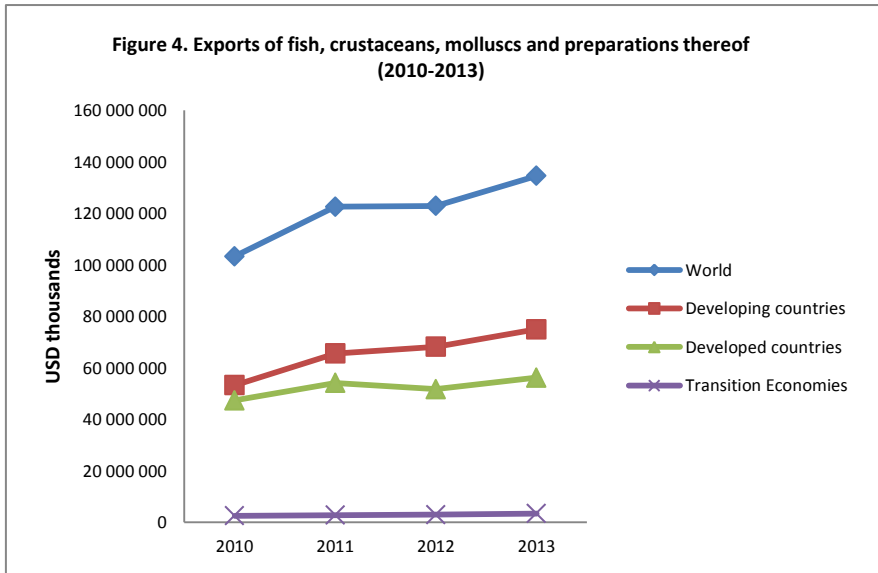
A. Fish trade

Fish is one of the most traded commodities worldwide. FAO data illustrates that fish represents about 10 percent of all agricultural exports and 1 percent of all merchandise trade in value terms.³⁰ World trade flow (exports + imports) in fish and fish products reached US\$ 264 billion in 2013,³¹ which represents 76 percent more in terms of trade value than the amount traded in 1995. This sharp increase in trade is a consequence

³⁰ FAO (2012). *The State of World Fish and Aquaculture*.

³¹ UNCTAD Stats (2015) and FAO (2014).

of several factors, which include: increased demand (particularly in developing countries and in Asia); the perceived positive health effects of fish consumption; the depletion of stocks in many areas of the world and in particular Europe; and, technical advances in fish preservation, processing and transport.³²



Source: UNCTAD based on UNCTAD Stats (2015)

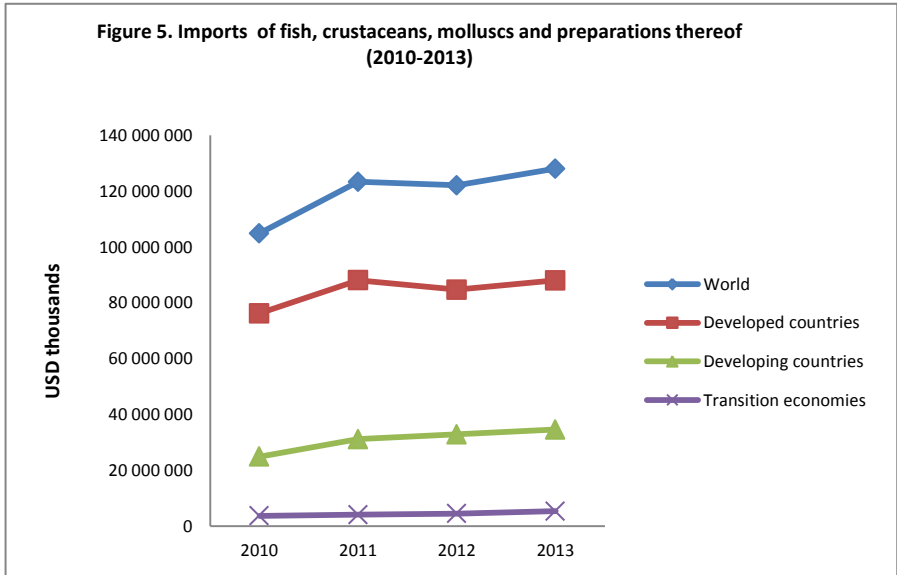
Exports of fish and fish products reached a record level of US\$ 136 billion in 2013, about 5 percent more than in the previous year.³³ This trade growth has been fueled by an increased capacity in global aquaculture production as discussed previously. A shift has been underway in fish exports for many years and actually reached a turning point in 2010.³⁴ In 2010, developing countries already account for more than half of global exports. By 2013, developing countries exported 56 percent of all fish and fish products, while developed countries accounted for 42 percent

³² UNCTAD (2014).

³³ UNCTAD Stats (2015) and FAO News (2014). *World Trade in Fish to set new records*. See <http://www.fao.org/news/story/en/item/214442/icode/>

³⁴ UNCTAD Stats (2014) and FAO (2014).

and transition economies for about 2 percent (See Figure 4). The fact that developing countries are today the main exporters of fish implies a significant co-sharing of responsibility over the future of fish stocks and aquaculture production, particularly as it concerns sustainable management of both species and ecosystems. Among the largest exporters of fish in 2013 were: China, Norway, Vietnam, Thailand, United States, EU, India, Chile and Peru.³⁵



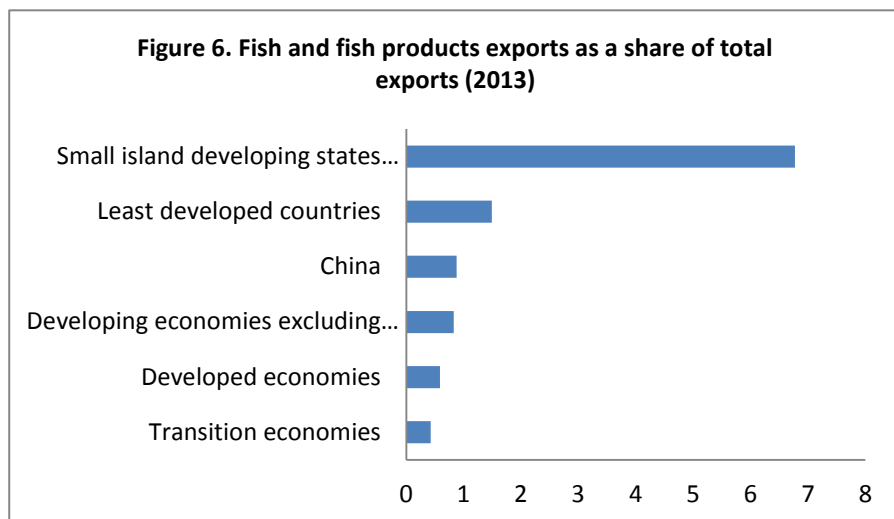
Source: UNCTAD based on UNCTAD Stats (2015)

As regards fish imports, developed countries are the main importers. They accounted for approximately 69 percent of global imports, followed by developing countries (27 percent) and transition economies (4 percent) (see Figure 5). Globally, the main importers are Australia, Brazil, Canada, China, EU, Japan, Republic of Korea, Russian Federation, Thailand and the United States.³⁶

³⁵ FAO (2015).

³⁶ Ibid.

When comparing fish exports and fish products exports versus total exports, the relevance of fisheries for the trade balance of SIDS and LDCs becomes evident. Fish and products exports represent over 7 percent of total SIDS exports and about 1.5 percent in LDCs (See Figure 6). For economies as big China and for other developing countries, fish and fish products represent almost 1 percent of their total exports.



Fish trade is also affected by global value chains (GVCs). The practice of lead firms outsourcing their processing activities is expected to increase in the coming decades due to increased demand. Within these types of GVCs, raw material is sent from European and North American markets to Asia (China in particular, but also in other countries such as India, Indonesia and Vietnam) as well as to Central and Eastern Europe for filleting and packaging. Final products are then re-imported. This makes the fisheries value chain complex and the sector highly globalized.³⁷ Limited growth prospects for domestic fishery production suggest that developed countries will remain highly dependent on external supplies

³⁷ OECD-FAO (2014). Agricultural Outlook 2014.

to satisfy their domestic demand.³⁸ This will necessitate the utilization of more transparent trade agreements which adhere to some basic principles including the acquisition of access rights to distant waters fishing grounds, and due consideration of the development aspirations of developing coastal states and SIDS.

Key points: Fish is one of the most traded food commodities today and exports reached record levels in 2013 with export value of USD 136 billion. The main exporters of fish today are developing countries. The main importers are developed countries. Fish and products exports represent over 7 percent of total SIDS exports and about 1.5 percent in LDCs showing their importance for the trade balance and the availability of the hard currency. Developing countries wishing to move upward in the global value of fish and fish products need more transparent and fairer trade and fish access agreements so they can maximise opportunities for joint cooperation agreements and local value addition.

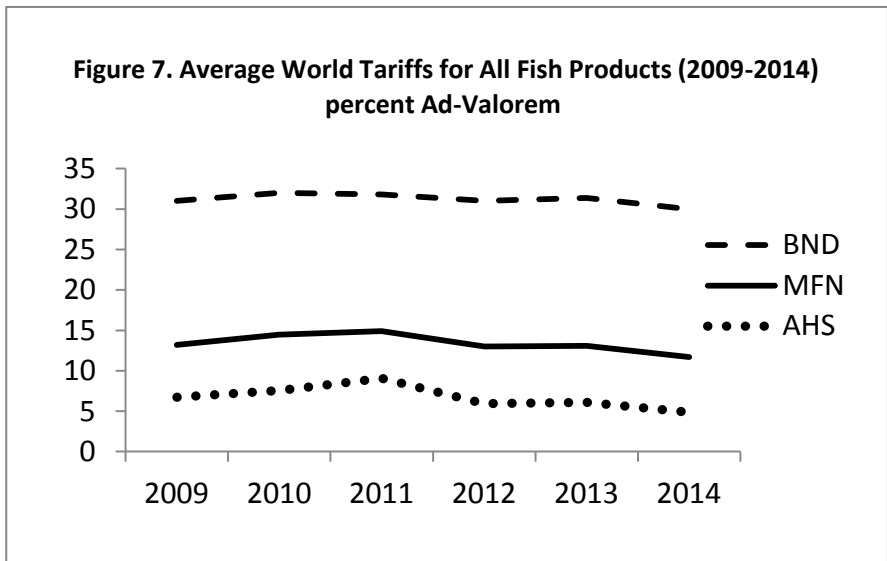
B. Fish tariffs (market access) and WTO NAMA negotiations

Among the most common measures that affect market access for fish and fish products are border tariffs. Tariffs tend to have a double purpose of generating government income and maintaining a certain level of protection (against high import volumes) including for local production and/or the development of infant industries. Most Favoured Nation tariff rates (MFN) for fish and fish products today are not particularly high when compared to bound tariffs, and have been decreasing slowly since 2011. Recent UNCTAD-World Bank-WTO data³⁹ suggests that that globally averaged effectively applied tariffs (AHS) were

³⁸ Ibid.

³⁹ Tariff data reported in this paper represent global averages of countries' average 'simple average tariff' for all fish products (HS codes 03, 1603, 1604 and 1605).

only about 4.8 percent for fish products HS code 03 (raw fish and fish fillets) in 2014, dropping from 6.7 percent in 2009. The globally averaged Most Favored Nation (MFN) tariff (the ones applicable to all WTO Members unless a there is a WTO Preferential or Regional Trade agreement) for fish products stood at 11.6 percent in 2014, a decline of more than 2 percentage points since 2009. There were some small increases in effective MFN tariffs averages between 2010 and 2011, may be due to defensive actions by some Members in response to the post 2009 financial crisis phase. The WTO tariff bound rates (BND) have been evolving slightly due to new accession members, but within an average

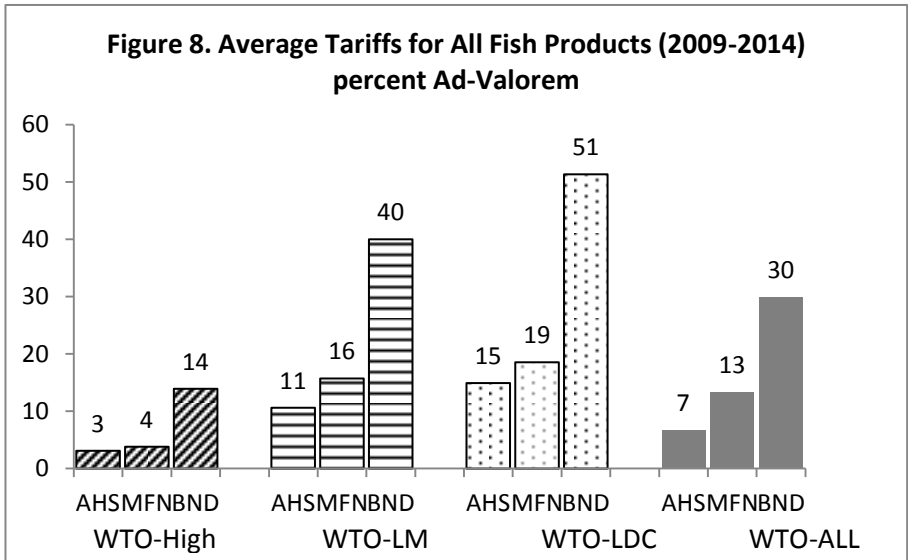


range of around 30 percent.

Figure 7: Average global tariff rates are shown for three different tariff categories: effectively applied tariff rates (AHS), MFN, and bound tariff rates (BND). Source: UNCTAD (2015) based on UNCTAD-World Bank -WTO TRAINS Database, 2015.

For all WTO Members the average tariffs for all fish products calculated over the last 5 years (2009-2014) are shown in figure 8. When looking at a simple average tariff versus country groupings, it can be clearly seen

that high income countries have the lowest effectively applied tariff average (3 percent), MFN (4 percent) and bound tariffs (14 percent). Most tariff lines in this grouping range from between 0 to 5 percent. However, there are tariff peaks⁴⁰ for processed fish products that can reach up to 20-30 percent. For low and middle income countries, effective and MFN tariffs, while higher than those of high income countries, still have reasonable averages of 11 and 16 cent respectively. For LDCs effective and MFN tariffs are 15 and 19 per cent respectively, which is also reasonable as in many cases there may be a need to ensure incipient value addition and to promote processing infant industries. The bound tariffs in LDCs are relatively high for this type of product and



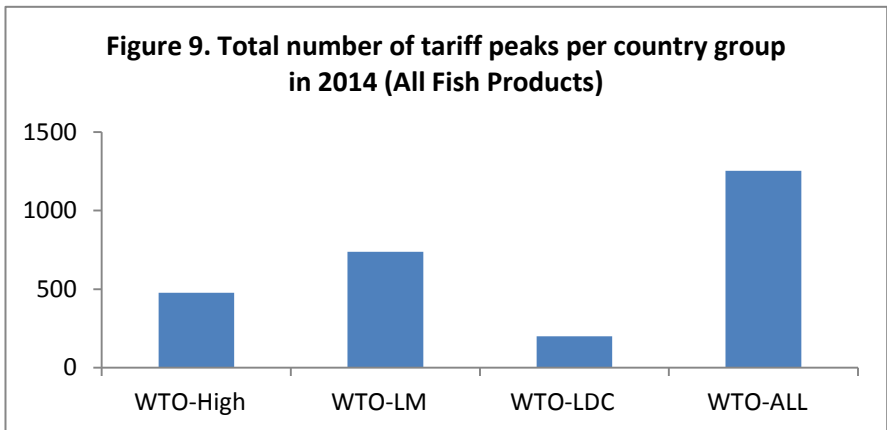
often reach above 50 percent.

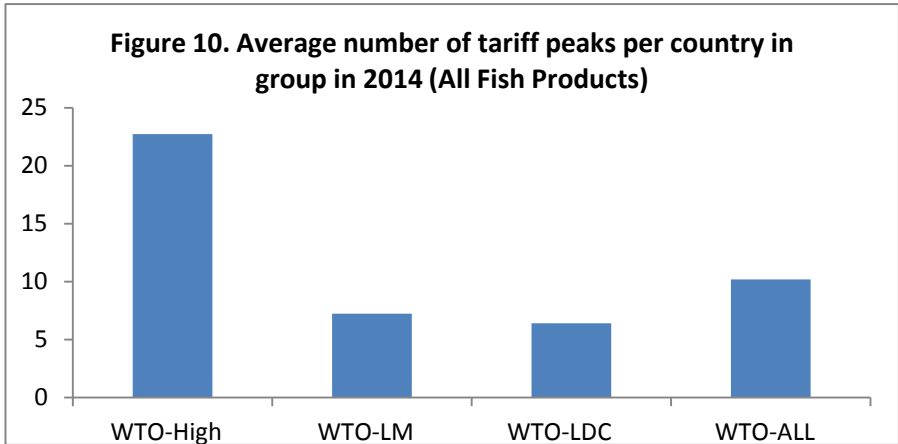
Figure 8: For each country grouping, 'simple average tariffs' on fish products are shown for three different tariff categories: effectively applied tariff rates (AHS), Most Favoured Nation tariff rates (MFN), and bound tariff rates (BND).

⁴⁰ **Tariff peaks** are frequently defined as a tariff equal or above 20 percent or its ad valorem equivalent in studies by institutions such as UNCTAD, the World Bank and the OEC.

Source: UNCTAD (2015), based on data from UNCTAD-World Bank -WTO TRAINS Database, 2015. The country groupings are for WTO members as follows: WTO-High [WTO High-income Members (21 countries)], WTO-LM [WTO Low & Middle income members (102 countries)], WTO-LDC [WTO LDC members (31 countries)], WTO-ALL [WTO All members (123 countries)]. Data is not available for all countries and years.

Tariff escalation is commonly found on tariff lines that cover processed fish products amongst all country groupings (see Figure 9 below). By way of example, EU tariffs for processed fish and fish products are subject to tariff peaks of 24 percent for processed tuna, 20 percent for processed shrimp and 12 percent for canned sardines. In countries like the Republic of Korea and Thailand, applied MFN tariffs are 20 percent for tuna preparations (HS 1604). In absolute terms, more tariff peaks are found among low and middle income countries with 738 peaks in 2014. Fewer tariff peaks are found among high income countries (477 peaks) and LDCs (199 peaks). Nevertheless, when we look at average peaks per country, in each high income country we find an average of 22 peaks, while the average per country among low, middle and LDCs is less than 7 peaks (see Figure 10). This analysis demonstrates the strategic use of tariff peaks within certain fish product lines to ensure some level of local value addition. Moreover, it demonstrates that developing countries actually resort less to tariff peaks than developed.





Figures 9 and 10: Number of international tariff peaks in fish products for various country groups. Both group totals, and per country averages for each the country groups, are shown. Source: UNCTAD-World Bank -WTO TRAINS Database, 2015.

It is a particular anomaly that fish and fish products captured in Chapter 03 of the Harmonized Commodity Description and Coding System (hereinafter HS), have fallen within the WTO negotiations on industrial goods. While raw, frozen and fish fillets are found under HS 03, most of the preparations are found under chapter 16 (HS 1604 and 1605). It is also important to note that tariff lines for fish apply to both wild capture and aquaculture as they do not differentiate on production method. Finally, although not part of the agriculture negotiations, fish and fish products have a critical importance for food security objectives alongside agricultural products, even though they are negotiated within different tracks within the WTO.

There have been negotiations on Non-Agricultural Market Access (NAMA) since the launch of the Doha Development Agenda (DDA). Negotiations on NAMA modalities aim to further promote the liberalisation of industrial goods, and subsequent reform measures to be pursued, which will cover fish and fish products. While slow reductions in tariffs are quite

evident in the average tariffs, many tariff peaks remain and non-tariff measures have grown in importance for the purposes of market access, particularly in developed country markets (see section below on non-tariff measures for fish and fish products).⁴¹ Ministers at the 4th WTO Ministerial Conference agreed on negotiations that aim ‘to reduce, or as appropriate eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs, and tariff escalation, as well as non-tariff barriers, in particular on products of export interest to developing countries.’ Ministers further mandated that negotiations take fully into account ‘the special needs and interests of developing and least-developed countries’ .⁴² However, these negotiations have not yet been concluded. Instead they have been subject to intermittent progress and setbacks of different nature over the last 15 years.

Today, the draft modalities reflected in the fourth revision of the Chairman’ s text (TN/MA/W/103/Rev.3) continues to be the basis for negotiations.⁴³ In line with the draft modalities, liberalisation in fish and fish products will be subject to a so-called ‘Swiss Formula’ with separate coefficients for developing and developed member states. The formula approach contained in the draft modalities defines the maximum tariff after all cuts have been applied. The coefficient [i.e. the maximum tariff rate that a Member could apply] will determine the severity of the cut; the lower the coefficient, the lower the final tariff rate. Table 3, below shows an example on how the Swiss formula will apply to a coefficient of 25.

Towards this end, the draft modalities propose a coefficient of eight for developed countries tariffs, and 20, 22, and 25 respectively for developing countries.⁴⁴ The text also identifies targeted flexibilities for

⁴¹ <http://www.thefishsite.com/articles/863/impact-of-wto-and-trade-negotiations-on-fisheries/>

⁴² Doha Ministerial Declaration paragraph 16, 4th WTO Ministerial Conference.

⁴³ Fourth Revision of draft modalities on Market Access; TN/MA/W/103/Rev.

⁴⁴ WTO (2015). Tariff reductions for industrial products would be made using a “simple Swiss” formula with separate coefficients for developed or for developing country members. But whereas the coefficient for developed members will be the same applicable to all of them, there will be a menu of options for developing members that will apply according to the scale of the flexibilities they choose to use. The lower the coefficient is (maximum

Small Economies and other developing country sub-groupings including the LDCs. The challenges of preference erosion are also acknowledged.⁴⁵

Table 3. How a Swiss formula with a coefficient of 25 works over six years. (The coefficient of 25 also defines the maximum tariff at the end of the period).

	Starting tariff 150%	Starting tariff 125%	Starting tariff 100%	Starting tariff 75%	Starting tariff 50%	Starting tariff 25%	Starting tariff 10%
Coefficient	25	25	25	25	25	25	25
Year 0	150.00	125.00	100.00	75.00	50.00	25.00	10.00
Year 1	128.57	107.64	86.67	65.63	44.44	22.92	9.52
Year 2	107.14	90.28	73.33	56.25	38.89	20.83	9.05
Year 3	85.71	72.92	60.00	46.88	33.33	18.75	8.57
Year 4	64.29	55.56	46.67	37.50	27.78	16.67	8.10
Year 5	42.86	38.19	33.33	28.13	22.22	14.58	7.62
Year 6	21.43	20.83	20.00	18.75	16.67	12.50	7.14
Annual steps (%age)	21.43	17.36	13.33	9.38	5.56	2.08	0.48
% cut over 6 years	85.71	83.33	80.00	75.00	66.67	50.00	28.57
Comparison: Year 6	96.00	80.00	64.00	48.00	32.00	16.00	6.40

Source: WTO (2015). Reduction Methods. See

https://www.wto.org/english/tratop_e/agric_e/agnegs_swissformula_e.htm

tariff rate that a Member could apply), the higher the flexibilities would be for developing countries and vice versa). A Swiss formula produces deeper cuts on higher tariffs. See WTO NAMA portal;

https://www.wto.org/english/tratop_e/markacc_e/guide_dec08_e.htm

⁴⁵ Ibid.

Given the nature of the flexibilities provided for in the draft modalities, members with high ambition in market access negotiations have proposed ‘Sectoral Negotiations’ which aim to significantly reduce tariffs on identified categories of ‘industrial goods’ , including fish and fish products. Table 4 indicates that the HS codes covered by the NAMA sector initiative under the WTO Agreements resulting from sectoral negotiations will only apply to the WTO Members participating in them.

Table 4. Tariff lines covered by the fish and fish products sectoral initiative

HS 2002	Description
3	Fish and crustaceans, molluscs and other aquatic invertebrates
509	Natural sponges of animal origin
511.91	Animal products; of fish or crustaceans, molluscs or other aquatic invertebrates and dead animals of chapter 3, unfit for human consumption
1504.1	Fish-liver oils and their fractions
1504.2	Fats and oils and their fractions, of fish, other than liver oils
1603 ex	Extracts and juices of fish or crustaceans, molluscs or other aquatic invertebrates
1604	Prepared or preserved fish; caviar and caviar substitutes prepared from fish eggs
1605	Crustaceans, molluscs and other aquatic invertebrates, prepared and preserved
2301.2	Flours, meals and pellets, of fish or crustaceans, molluscs or other aquatic invertebrates

Source: WTO (2008) Draft text for non-agricultural market access modalities. Document TN/MA/W/103/Rev.3, annex I

More precisely, these initiatives would aim to reduce, harmonize or, as appropriate, eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs and tariff escalation, over and above those which would be achieved by the formula modalities.⁴⁶ Demanders of sectoral initiatives have succeeded in integrating a zero-for-zero tariff modality into paragraph 9 of the Chairman' s text, which is further elaborated in Annex 7 of the text.⁴⁷ The draft texts on sectoral negotiations for fish and fish products include limited scope for Special and Differential Treatment (S&DT), for example, by allowing developing countries to bind up to [15] percent of national fish and fish product tariff lines at [5] percent.⁴⁸ While a binding of 5 percent is higher than the complete elimination of tariffs contemplated in other sectoral negotiations, the proposed flexibility [5 percent] is modest. The following countries have been proponents of sectoral negotiations in fish and fish products: Canada; Hong Kong, China; Iceland; New Zealand; Norway; Oman; Singapore; Thailand and Uruguay.

The net result of the proposed modalities would be a marked reduction in developing countries tariffs on fish and fish products, as well as further reductions in tariffs in developed countries on lines that cover fisheries. Ultimately, both the Swiss formula, as well as the proposed sectoral initiative, implies the further reduction and harmonization of tariffs for WTO member States (with the exception of those developing countries that effectively deploy modulating flexibilities for identified lines). Under both options (whether under the Swiss formula or the sectoral initiative), the outcome over time will be the same: tariff liberalization. The main differences will relate to the speed, level of special and differential treatment and the fact that under sectoral negotiations NTMs may be addressed.

Such an outcome may result in increased trade in fish, as a consequence of greater market access and the prospect of lower prices and increased global demand. The consequences of such an eventuality on the sustainability of global fisheries are difficult to quantify, though it is clear

⁴⁶ Fourth Revision of Draft Modalities for Non-Agricultural Market Access, paragraph 9

⁴⁷ Fourth Revision of draft modalities on Market Access; TN/MA/W/103/Rev.

⁴⁸ Ibid.

that there could be increased demand for marine wild capture fisheries which places consequential pressure on stocks that are for the most part, over exploited (unless demand is filled by an increased supply in aquaculture production, which is also probable). Finally, there may be less tariff income for developing countries; unless a waiver in using tariffs as a mean to protect local infant industries is taken, policy space may be reduced.

Beyond the proposed multilateral approaches explored above, the proliferation of regional and bilateral trade agreements (RTAs) and the implementation of required tariff reforms have contributed to the general downward trend apparent in applied duties on fish and fish products in most participating countries.⁴⁹ Such agreements serve to create what is widely acknowledged as a myriad of fisheries related instruments. For example, in addition to trade regimes which provide for trade liberalization, bilateral fisheries agreements, such as the EU's Fisheries Partnership Agreements, may also serve to create a framework within which distant fishing nations can harvest fish in developing countries for an access price. This can be an important source of revenue for many SIDS and SVEs.

Some developing countries and more specifically, the LDCs benefit from preferential market access for fish and certain fish products under schemes such as the EU's everything-but-arms (EBA) initiative, the US African Growth and Opportunity Act (AGOA), the Generalized System of Preferences (GSP), and the GSP+. However, notwithstanding de jure market access, trade flows are sometimes constrained by special rules of origin (RoO).⁵⁰ These rules may be too restrictive and complicated and thus hinder the ability of many SIDs and LDCs to make use of trade agreements. For example, the RoO proposed for fish under the comprehensive Economic Partnership Agreement (EPA) between the Pacific and the EU have proved to be particularly contentious.

Several Pacific Island Countries (PICs) (LDCs and non-LDCs) in negotiating the EPA hoped to obtain a derogation in terms of the 'global sourcing' of fish, which means they could acquire fish from

⁴⁹ Campling (2014).

⁵⁰ Ibid.

outside the circle of EPA signatories, process it and export it to the EU tariff-free. Despite severe productive-capacity constraints which for fisheries include a lack of cold storage facilities, the EU offers global sourcing to PICs only if they have an EPA with the EU. The costs that will result from the removal of tariffs towards the EU under an EPA, coupled with the introduction of other regulatory measures (including the abolishment of export taxes – permitted under the WTO), may outweigh the benefits to many LDC PICs, despite their need to expand formal employment opportunities by increasing fisheries processing.

Effective access under the preferential agreements has been affected by mainly non-tariff measures such as difficult-to-meet rules of origin requirements, sanitary and phytosanitary standards, and technical barriers. Moreover, the value of preferences has been eroded overtime by multilateral liberalization, regional liberalization, special fisheries deals, and if the NAMA liberalization under the Doha Round takes place including in terms of sectoral liberalization of fish and fish products, the tariff preferences would disappear or become meaningless.

Key points: Average applied tariffs for fish and fish products today are not particularly high. Effective applied tariffs and MFN applied tariffs are also slowly decreasing, indicating that most blocking barriers will be NTMs. In some countries, some tariff peaks exist, bound tariffs remain at elevated levels and tariff escalation affects processed fish products. While there are more tariffs peaks in absolute numbers among low and middle income countries, when we look at average peaks per country, high income countries concentrate most of the tariff peaks.

C. Non-tariff measures (market entry)

Exports of fish and fish products face a growing number of non-tariff measures (NTMs) when they arrive at the border of many importing countries, particularly developed countries. While many of these measures have been put in place due to legitimate concerns and are intended to facilitate trade, in practice because of technical or financial

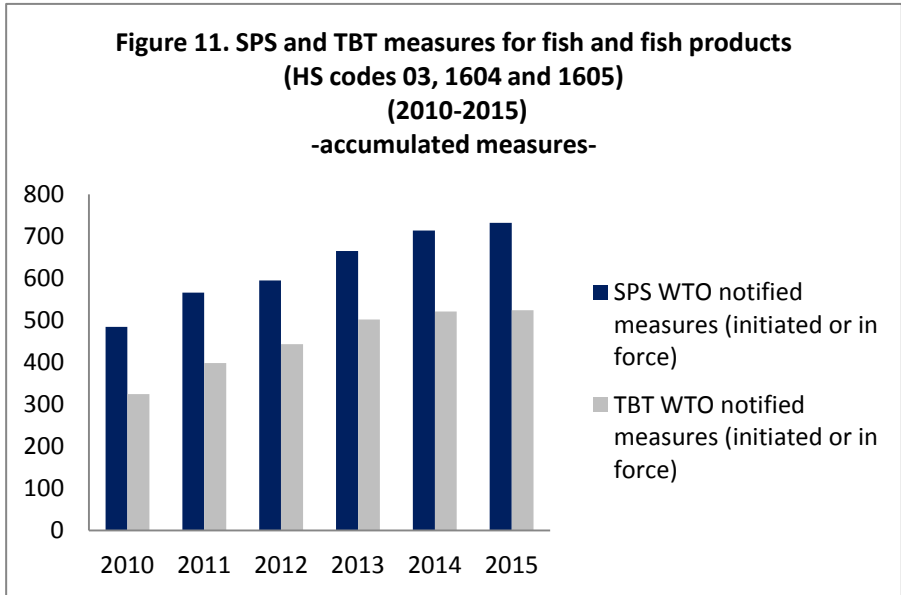
barriers they may instead become barriers. For example, due to capacity constraints, they can inhibit exports originating from developing countries.

An example of an NTM at the regional level is the presentation by exporters of the International Commission for the Conservation of Atlantic Tuna (ICCAT) Statistical Document and Re-export Certificate. It requires an exporting member country to provide certificates to accompany export consignments of tuna (e.g. Bluefin, Southern Bluefin and Bigeye). In many instances, many national regulations may require importers or exporters to apply HACPP procedures, set traceability systems, and extended and accurate goods labeling in order to avoid alerts, rejections or detention at the border regarding the quality and safety of their products. While this type of fish stocks conservation, environmental, and safety regulations seek to support public policy concerns and overarching conservation objectives, they may result in technical or financial barriers for exporters who wish to maintain market access. This implies, for example, the need to conduct internationally certified and valid laboratory tests for contaminants of their fishery products.⁵¹ There is thus a significant role for technical cooperation and capacity building.

According to WTO, 732 Sanitary and phytosanitary (SPS) measures (whether initiated or in force) applicable to fish and fish products (HS code 03, 1604 and 1605) were notified by 67 Members by September 2015. There were also about 9 specific trade concerns (e.g. safety, quality and import restriction) raised by Members to the SPS Committee. In terms of technical barriers to trade (TBT) measures applicable to fish and fish products, 524 were notified by 53 Members; two specific trade concerns were also raised. These numbers contrast with the numbers of notifications made up to 2010. At that time, there were 484 SPS measures notified by 53 Members and 324 TBT measures by 52 Members. These numbers show notable annual growth of 10.2 percent and of 12.2 percent in the number of SPS measures and TBT measures respectively since 2010 (see Figure 11). It is probable that many of these NTMs are related to the fast development of aquaculture production, health and consumer protection concerns, and the implementation of obligations

⁵¹ Ibid.

under international conventions and soft law related to sustainable harvesting. Nevertheless, they clearly demonstrate growth in the number of NTMs related to trade in fish and fish products, and thus the challenges that some capacity constrained exporters may face in accessing markets, without commensurate support such as Aid for Trade.



Source: UNCTAD (2015) based on data from the WTO Integrated Trade Intelligence Portal.

In addition to NTMs which can reflect legitimate public policy objectives, other challenges may relate to business-to-business certification and private regulations in major markets. Private standards can represent an additional hurdle which must be overcome if developing countries are to effectively access major markets and engage with high value supply chains.

There is a need for a much more systematic mapping exercise of existing NTMs including regulations and private standards to raise awareness on the universe of NTMs. Such a mapping exercise could help to identify the number and nature of most common NTMs. It could also identify those

that exert the strongest effect on developing country exports and have the potential to become obstacles to trade. Identification of the most relevant NTMs will assist in assessing any potential discriminatory nature of those NTMs (*de jure* or *the facto*); the trade effects; and, subsequently, the need for Aid for Trade and other technical assistance to overcome them. UNCTAD is currently working on a preliminary mapping of NTMs in the fish and sea food sector.

The State of Sustainability Initiatives of the International Institute of Sustainable Development (IISD)⁵² has recently produced a preliminary research on Private Standards and the Blue Economy that would complement the NTMs mapping being undertaken by UNCTAD. Both exercises may shed light on the number, objective, content, and use of both regulations and private standards.

Key points: There is a need to expand the understanding of NTMs applicable to fish and fish products. While tariffs are mostly low, NTMs affecting fish and fish products that are based on sanitary, safety, quality, environmental and consumer considerations are growing in numbers. These can affect and undermine market entry. A specific mapping exercises on NTMs for fish and fish products in quantitative but also qualitative terms needs to be undertaken in order to explore options for simplification and harmonization or mutual recognition. A mapping for the number, implications and options to harmonized private standards is also needed.

D. Certification

Private certification schemes have emerged in recognition of the need for market based responses to the over exploitation and depletion of global fisheries stocks. They have also responded to the increasing trend in consumer awareness and demand by retailers for fish harvested from

⁵² See Standards in the Blue Economy. ISS and ISSD (2015). See http://workshop.eurofish.dk/Presentations/D3-1_Wilkinings.pdf

healthier and responsible practices. Private certification schemes and eco-labeling also have resulted from the weakness in national authorities to implement sufficient monitoring, control and surveillance capacity, poor institutional capacity, insufficient funding for fisheries management and the use of subsidies.⁵³

Certification and eco-labeling has proliferated in recent years in view of the positive impacts that they portend for improved management systems and in light of the growth in consumer demand for sustainable fisheries.⁵⁴ Some of the more important certification programmes include the Marine Stewardship Council (MSC); Friend of the Sea (FoS); Naturland Association; Dolphin-safe/dolphin friendly labeled tuna (United States); Marne Eco-Label (Japan); KRAV (Sweden); Seafish Responsible Fisheries Scheme (UK); the Global Seafood Sustainability Initiative (GSSI); Seafood Choices Alliance (SCA); Unilever: Fishing for the Future; WalMart, and Young' s Seafood Fish for Life. The vast majority of these programmes emanate from developed country markets including the United States, UK, Switzerland, Germany, Sweden, Australia, New Zealand, Japan, France, Belgium, and Austria along with others. Some developing countries such as Ecuador and Chile are starting to develop their own "organic" and country brands but mostly for aquaculture products. Recently one small fishery in Ecuador achieved 'Fair Trade' certification.⁵⁵

In order to guide seafood certification processes, the FAO has developed a series of user friendly tools. The most important ones are the following: (1) the Guidelines for the Eco-Labeling of Fish and Fishery Products from Marine Capture Fisheries (2005); (2) the Guidelines for the Eco-Labeling of Fish and Fishery Products from Inland Capture Fisheries (2010); and (3) Guidelines for Aquaculture Certification (2011). Several certification programmes are already utilizing these guidelines as benchmark tools in their criteria. These guidelines have also promoted some basic level of harmonization and a technical basis for new certification schemes,

⁵³ Certification and Sustainable Fisheries, United Nations Environment Programme, 2009.

⁵⁴ Ibid.

⁵⁵ The Lighthouse Foundation. Ecuador: Model for a Sustainable Small-Scale Fishery.

especially in relation to standard setting processes and transparency.⁵⁶ Recently, members of International Standard Organization (ISO) have been developing a seafood ecolabel standard that utilizes the FAO Guidelines on marine capture fisheries as a reference.⁵⁷

In view of the growing consumer awareness and demand, private standards and sustainability considerations have become increasingly important to retailers in developed countries and can mean the difference between gaining access to these markets and being locked out. For example, Wal-Mart committed to carry 100 percent MSC-certified wild capture fish in all of its stores,⁵⁸ although it has since moderated this commitment. While this may be a positive step towards ensuring that the suppliers/producers conform to more demanding standards, suppliers, particularly from developing countries that are not MSC-certified, will be locked-out of the supply chain of the world's biggest retailer. Similarly, Carrefour, the largest retailer in France has developed a proprietary (in-house) eco-labeling scheme. Sainsbury has also committed to working with suppliers to develop buying policies that support sustainable fisheries. In addition to the efforts of a few mega-retailers, scores of other merchants and retailers have adopted certification and eco-labeling policies that support sustainability in the fisheries sector, both with respect to aquaculture as well as marine wild capture.

Beside this, it has been observed that while some sectors have pursued voluntary certification, the cost of such private certification is prohibitive for many fisheries sectors, particularly in small economies. The sectors in many small economies are simply not of the scale to warrant or support the costs attendant to certification. To illustrate the cost of certification, MSC certification for the South African Hake fisheries came at a cost of USD 735,000.⁵⁹ Though it is recognized that the cost of certification will vary according to the scale of the assessment, many small-scale fisheries operate on small margins and do not benefit from the requisite industrial or institutional/organizational structure to support certification.

⁵⁶ FAO/COFI (2014). Report on The Effects of Ecolabelling Schemes on Fisheries.

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ Ibid.

Assessments such as MSC require good data and a high level of scientific analysis of the fishery, which is often lacking in developing countries, and especially among small scale and artisanal fishers. The same argument is equally valid for SIDS and LDCs which may have the scale but often lack the purchasing power and institutional capacity.

Certification by producers is sometimes motivated by a price incentive; the expectation being that the market will pay a premium for certified and eco-labeled fisheries. The existence of premium prices for certified seafood products that could help to offset some of the certifications costs has been estimated at 10–15 percent at the retail level for eco-labelled versus non-labelled seafood products in the same markets.⁶⁰ However, some certified producers, in consultations undertaken by UNCTAD, in South America and the Pacific⁶¹ argue that certificates and eco-labeling do not always offer a sufficient value proposition in practice. They have even indicated that certification today is becoming an assurance for accessing foreign markets and getting retail and consumer attention but it is losing its economic appeal. It can be expensive and may not bring the expected returns.

The movement by large retailers towards business to business certification and eco-labeling requirements, particularly in view of the consolidation of global supply chains which has taken place in recent years, has had a major effect on the relative competitiveness of fisheries sectors in developing countries. Hence, regardless of the market access conditions that are negotiated at the WTO or preferential agreements entered into, private standards can significantly frustrate access to the major markets for un-certified producers. While they aim to provide information to retailers and consumers regarding the provenance of the fisheries and the care and attention demonstrated in harvesting, such certification, for all intents and purposes can lead to exclusionary processes. As the private standards bar is raised, institutional capacity needs to increase in a commensurate way. This should not only be the responsibility of development cooperation but also of import agencies and responsible retailers.

⁶⁰ FAO/COFI (2014). Report on The Effects of Ecolabelling Schemes on Fisheries.

⁶¹ UNCTAD's consultations and workshop for National Green Export Reviews in Ecuador, Oman and Vanuatu (2014-2015).

Key points: Several private certification schemes have emerged in recognition of the need for market based responses to the over exploitation and depletion of global fisheries stocks and consumer demands. The FAO has put efforts in providing guidance and ensuring a minimum level of harmonization. Many retailers require the use of business to business as well as consumer orientated certification schemes. However, the cost of certification is usually borne at the lower/extractive layer of the value chain. There is a need to facilitate certification for small scale and artisanal fishers and to distribute the costs along the complete value chain so as to induce inclusionary rather than exclusionary forces.

E. Subsidies

Global fisheries subsidies have been estimated as high as USD 15 to 35 billion⁶² worldwide, of which USD 20 billion has been categorized as capacity-enhancing subsidies.⁶³ Some fisheries subsidies are a necessary part of economic development and can have positive effects, serving as an important policy tool to support fisheries development (including artisanal). They can, if properly designed, for example: support crew safety, support processing by local populations, enable value addition, facilitate the establishment of fish stocks management systems, finance less harmful fishing methods as well as promote the adoption of more sustainable technologies and therefore provide for the restoration and rehabilitation of ecosystems. Some of these activities clearly have public good elements.

At the same time, the use of subsidies may be necessary in order to obtain future sources of income. For example, subsidies can be used to pay for fish licensing fees in third countries' exclusive economic zones (EEZs), which are at the same time one of the principal sources of income for some governments, especially among SIDS. Subsidies may also be

⁶² UNCTAD (2014).

⁶³ Sumaila, Lam and Le Manach (2013) Global Fisheries Subsidies. EU Parliament.

used to decommission fishing vessels and to facilitate a shift in the economic activities for fishers (e.g. moving toward eco-tourism services).

In formal terms, only India has recently made a fish subsidies notification to the WTO of more than 833 million Rupees (about USD 13 million). The reported subsidies were mostly dedicated to protect and secure the livelihood of traditional and poor fishing communities and infrastructure building during the period 2010-2012.⁶⁴ A recent EU Commission report indicates that the European Maritime and Fisheries Fund (EMFF) has a budget of approximately EUR billion 5.7 for the period 2014 - 2020, which will be mostly dedicated to the adaptation of the EU fleet to available resources, aquaculture development, protection of the aquatic flora, sustainable development of fisheries areas and infrastructure among others.⁶⁵

Whilst there are many positive examples of fisheries subsidies, some practices can be very damaging. Some subsidies can contribute to overfishing and hence to stock depletion. For example, it is estimated that out of the € 12.9 billion in fishing subsidies granted by the EU and its Members for the fishing sector since 2000 until 2012, only 1 percent were considered beneficial subsidies for the marine environment.⁶⁶ Harmful subsidies not only distort the market and affect conditions of competition but also convey distorted price signals to markets. Subsidies that contribute to overfishing and over capacity also hamper the potential of developing countries to harvest fish directly, add value and compete fairly in the global market. Hence, they can support beneficiary fleets in harvesting a disproportionate share of the common pool of resources⁶⁷ thereby compromising the prospective inter-state and inter-generational equity considerations. On the subsidizing country

⁶⁴ See Indian notification to the Committee on Subsidies and Countervailing Measures (G/SCM/N/253/IND, 2 May 2014).

⁶⁵ EU Commission (2014). Facts and figures on the Common Fisheries Policy.

⁶⁶ Oceana (2013); European Fisheries Subsidies: State aid - the hidden subsidies. See http://oceana.org/sites/default/files/euo/OCEANA_State_aid_factsheet_072013.pdf

⁶⁷ Sumaia, Khan, Teh, Watson, Tyedmers, and Pauly (2019). Subsidies to high seas bottom trawl fleets and the sustainability of deep-sea demersal fish stocks.

side, citizens tend to pay twice for their fish, first as tax payers and then as consumers.⁶⁸

In 2007, the Chairman of the WTO Negotiating Group on Rules presented a draft text on Anti-Dumping, Subsidies and Countervailing Measures that included proposed disciplines on fisheries subsidies. The text proposed the prohibition of subsidies that contribute to overfishing and overcapacity, the so-called 'red box' subsidies. Red box measures also include subsidies that benefit vessels involved in IUU fishing or those that aim at the acquisition or construction of new vessels resulting in enhanced capacity. Notwithstanding this broad prohibition, the draft text offers some relief through general exceptions applicable to all WTO members and specific exceptions targeted at identified categories of members. General exceptions include those targeted at the enhancement of crew safety; the adoption of gear for selective fishing techniques; the adoption of other techniques aimed at reducing the environmental impact of marine wild capture; re-education, retraining or redeployment of fisheries workers, and vessel decommissioning or capacity reduction.⁶⁹ With respect to specific exceptions, the draft text provides for a full exemption from "red box" measures for LDCs.

Recognizing the need to regulate subsidies that contribute to the unsustainable harvesting of the world's fisheries, the WTO Doha Ministerial Declaration (2001) launched negotiations to clarify and improve WTO disciplines on fisheries subsidies.⁷⁰ The mandate to advance negotiations on fisheries was further elaborated at the Hong Kong Ministerial Conference in 2005⁷¹ where members agreed to strengthen disciplines leading to the prohibition of certain forms of fisheries subsidies that contribute to overcapacity of fishing fleets and overfishing. More recently, however, a technical paper on fisheries subsidies refers to any standstill commitments also taking into account

⁶⁸ Global Oceans Commission (2013). Illegal, unreported and unregulated fishing.

⁶⁹ World Trade Organization 2007, 'Draft consolidated chair texts of the AD and SCM Agreements', TN/RL/W/213, 30 November, available at: www.wto.org/english/tratop_e/rulesneg_e/rules_chair_text_nov07_e.htm (accessed 4 August 2014).

⁷⁰ See: Doha WTO Ministerial 2001: Ministerial Declaration, paragraphs 31 to 33.

⁷¹ See: Hong Kong WTO Ministerial 2005: Ministerial Declaration, Annex D, 9–11.

the development and food security needs of LDCs and SVEs.⁷² Finally, it is proposed that any standstill commitment use similar language to that adopted at Rio+20, as follows:⁷³

'173. ...Given the state of fisheries resources, and without prejudicing the WTO Doha and Hong Kong Ministerial mandates on fisheries subsidies or the need to conclude these negotiations, we encourage States to eliminate subsidies that contribute to overcapacity and overfishing, and to refrain from introducing new subsidies or from extending or enhancing existing ones.'

Hence, it is fair to say that the main challenge that confronts WTO negotiators is finding the appropriate balance between disciplining the use of subsidies that result in overcapacity and resource depletion, and protecting the development interests of developing countries and LDCs to access fishing resources for food and income generation. SDG Goal 14.6 which specifically states that "by 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing and refrain from introducing new such subsidies" may further spur these efforts.

It is recognized that LDCs require maximum flexibility to enable their respective fisheries sectors to developed in-line with their developmental expectations and needs. However, some developed countries in the WTO have indicated that any exemption to the general prohibitions should be accompanied by disciplines on fisheries management. Such an approach is being advanced in recognition of the fact that a number of LDCs have significant capacity to scale up their production, but lack the appropriate management schemes to ensure this development is sustainable. In addition to this specific concern are those emanating from the notion that some developed and emerging market economies may use LDCs ship and maritime registries to seek flags of convenience and in so doing, circumvent the prohibitions directed at non-LDCs. In this view, any

⁷² See 3.7 Elaboration of Technical Issues, Technical Paper on Fisheries Subsidies, Communication from New Zealand. 29 July 2015. WTO TN/RL/W/261.

⁷³ This Rio+20 Commitment is contained in paragraph 173 of UN General Assembly Resolution 66/288 'The Future We Want' of 11 September 2012.

exemptions from the general prohibitions should remain within the exclusive domain of domestic fisheries.

Another contentious discussion that requires further reflection relates to operating cost subsidies. A more nuanced approach is required. Prohibitions on operating costs should target fleets that can utilize operating costs subsidies to engage in non-commercially viable fisheries. It must be borne in mind that many SIDS, SVEs and LDCs do not have the capacity to utilize operating costs subsidies in a manner that promotes over-exploitation. Indeed, it could be argued that small economies require such support given their small internal markets, high cost of fuel and inputs, higher relative cost of certification and the myriad other adverse impacts faced by small states⁷⁴ resulting from diseconomies of scale. Like LDCs, effective rules against circumvention by non-LDCs should be made operational. Indeed, small economies as well as LDCs will require public policy interventions to improve their capacity to engage in sustainable fisheries; such interventions should also include the establishment or strengthening of fisheries management systems in small economies.

Ministers from fourteen developed and developing countries made a pledge during the Ninth WTO Ministerial Conference to 'refrain from introducing new fishing subsidies that contribute to overfishing or overcapacity or extend or enhance existing subsidies, and work within the WTO and other fora to improve fisheries subsidies reform and transparency.'⁷⁵ More recently and under the Trans-Pacific Partnership Agreement (TPP) negotiations, parties are discussing options to include prohibitions on fisheries subsidies that contribute to overcapacity and over fishing in the environmental chapter of the agreement. The incorporation of exceptions and special and differential treatment, in

⁷⁴ While LDCs and SIDS are the UN recognized and approved nomenclature, the term small states refers to the Commonwealth definition as "a country with 1.5 million people or less". The Commonwealth advisory Group in its report, *A Future for Small States: Overcoming Vulnerability* (1997) and *Small States: economic review at basic statistics* (2014), volume 17 page 48.

⁷⁵ ICTSD (2013), 'Submission to the Open Working Group on Sustainable Development Goals: fisheries, trade and sustainable development', www.ictsd.org/sites/default/files/event/2014/04/ictsd-background-paper-international-trade-and-sustainable-development.pdf (accessed 5 August 2014).

particular for small scale and artisanal fishing activities should not be prohibited.

Regardless of these efforts, solutions still need to be found in the road to the Tenth WTO Ministerial Conference at Nairobi. Members need to explore options that are at the same time feasible and effective. So far alternative options that Ministers could explore when seeking to move forward on this issue include the following:

- Mandatory notification of all fish subsidies that contribute to overfishing and overcapacity plus an all Members stand still clause (taking into account the development and food security needs of LDCs and SVEs);
- Rescue the *'acquis'* (the 2007 draft text), the results of the road map exercise and resume negotiations as a matter of priority in the WTO;
- Revise the Subsidies and Countervailing Agreement (SCM Agreement) to insert new prohibited subsidies which clearly contribute to overfishing;
- Alternatively, to use the WTO agricultural model in order to put a cap on total subsidies plus reduction commitments;
- Promote coherence in WTO negotiations by ensuring that any outcome in NAMA is coupled with parallel and effective disciplines on fisheries subsidies;
- Explore the possibility of requiring WTO members to put in place effective 'fisheries management systems' commensurate to their capacities on the basis of technical cooperation similar to the mechanism used in the trade facilitation negotiations;
- Shift from harmful to sustainable subsidies. For example, by redirecting them to set marine management systems, fish stock conservation and restoration systems, and the creation of marine protected areas. Improve IUU monitoring, particularly in developing countries with special attention and support provided for small economies, SIDS and LDCs;
- Consider strong rules against the 'circumvention of the prohibitions' through flags of convenience, access rights or other bilateral instruments while still protecting the development aspirations of coastal states;

- Small Economies, SIDS and LDCs should be allowed policy space to support interventions that address diseconomies of scale – for example development assistance should be made available to build national/regional fish stocks management systems.

Options outside the WTO to improve subsidies disciplines should not be ruled out if progress is not possible within the WTO. For example, by bringing the issue to a joint UNCLOS, FAO and UNCTAD common framework. While such actions may be needed in the absence of progress at the WTO, the absence of a more effective enforcement jurisdiction, as provided under the WTO legal architecture may result in suboptimal outcomes. Ultimately, whether the WTO or an alternative jurisdiction becomes the seat for reform, political will is required to ensure success.

Key points: The existence of harmful incentives in the fishing industry such as certain types of subsidies continues to compromise the sustainability of stocks by creating and supporting excessive fishing capacities to extract an already scarce resource. Goal 14 of the SDGs recognizes the need to take action on certain forms of subsidies that contribute to overcapacity and overfishing and to refrain from introducing new subsidies. Efforts by the international community need to be reinvigorated to find a find an effective and feasible solution at the multilateral level. In doing so, the development and livelihoods needs of developing countries, LDCs and SIDS need to be taken into consideration.

5. HARMFUL FISHING PRACTICES: CASE OF IUU FISHING

The sustained decline in wild fish population has been facilitated by fishing practices that are destructive to fish population and their marine ecosystems. Some of these are unsustainable fishing practices which extract fish resources intensively without regard to the capacity of fish

stocks to naturally recover and replenish populations. Such practices by fishing fleets have included the use of purse seine fishing, demersal otter trawl, bottom trawling and dredging, pelagic pair trawl, and drift net fishing. Among fishing communities, examples of harmful practices that have evolved include the use of cyanide or dynamic fishing.

One harmful fishing practice that is having a major impact on fish populations and presents a daily threat to global fisheries includes illegal, unreported, and unregulated fishing (IUU). Though data is difficult to come by, IUU fishing activities appear to have escalated over the past two decades, especially in waters beyond national jurisdictions. These activities are estimated to amount to 11 to 26 million tons of fish are harvested illicitly each year, worth between USD 10 and 23.5 billion.⁷⁶ This equates to about 18 percent of all fishing activities globally.⁷⁷ It has been estimated for example that about half of the fish stocks of the West Coast of Africa are today overexploited due to the lack of fish management systems, continuous overfishing, and IUU fishing practices. Estimates indicate that West Africa loses more than USD 1.3 billion a year due to IUU fishing.⁷⁸

In practice, IUU fishing⁷⁹ can include several illegal activities such as harvesting without a license or in violation of national laws or agreements by RFMOs. Illegal fishing activities may also include fishing out of season; harvesting banned species; the use of illegal gear; and catch over a prescribed quota without a license. Unreported fishing tends to include the provision of untrue data or misrepresentations regarding where, how and which amounts were caught. It can also mean the relevant required documentation and certification has not been provided or is incomplete. Unregulated fishing generally refers to fishing by vessels without nationality, harvesting in unregulated areas or fishing by vessels that are not members of particular RFMOs.

IUU fishing does not only affect fish stocks in high seas but also within EEZs of both developed and developing countries. Lack of action hinders

⁷⁶ Global Oceans Commission (2013). Illegal, unreported and unregulated fishing.

⁷⁷ Oceans Commission (2014). From decline to Recovery.

⁷⁸ Africa Progress Report (2014).

⁷⁹ For a technical definition of IUU see Article 3 of the FAO International Plan of Action to Prevent Deter and Eliminate IUU (2001).

potential gains from fish licenses, depletes resources that could be used otherwise by the local fisheries sector, and damages livelihoods of small scale and artisanal fishers. IUU fishing may be also linked to other undesirable criminal activities such as piracy, smuggling of drugs, weapons and migrants.

Multilateral efforts have been undertaken to address IUU fishing as reflected in several multilateral instruments. These include: the UN Fish Stocks Agreement (1995), the FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (Compliance Agreement, 1993 [in force 2003]), the FAO International Plan of Action to Prevent Deter and Eliminate IUU (2001) – which forms part of the voluntary FAO code of conduct for responsible fisheries, and the FAO Port State Measures Agreement (2009 [not yet in force]). Specific measures put forward to tackle IUU fishing found in these instruments include the creation of regional fisheries management organizations, reciprocal high seas boarding and inspection, a global record of authorized high seas fishing vessels (maintained by the FAO) and complemented by unique vessels identifiers (UVI) (created by the International Maritime Organization (IMO)); measures to avoid the unloading of IUU or suspicious catch in ports; blacklisting and maintaining lists of vessels that have engaged in IUU fishing; introduction of effective sanctions for vessels, owners and captains; and efforts to improve cooperation between fisheries national and regional surveillance and law enforcement authorities.

Many countries and RFMOs have introduced some of these measures but full incorporation and effective application still needs improvement. For example, less than 15 percent of all fishing vessels globally have UVIs. The 2009 Port State Measures Agreement has not yet entered into force, since the minimum number of ratifications has not yet been achieved. Many countries do not have appropriate regulations to implement the treaty or have electronic systems to keep records effectively and to share information on time. Additionally, in some countries, sanctions are outdated, too weak, or are not enforced. Efforts to ratify and apply the Port Measures Agreement need to be seriously considered by countries when seeking to expand their contribution to fight IUU fishing. Links between trade and IUU fishing could be envisaged for introduction in potential outcomes under the WTO negotiations. Perhaps, the only area

where a prohibition of fish subsidies enjoys near consensus at the WTO is on subsidies that contribute to and support IUU fishing. Also, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is indirectly relevant to IUU fishing as it aims to regulate/prohibit the trade in wild plants and animals (including fish, sharks, and mollusks) and ensures that trade does not threaten the survival of listed species.

The international community (both fishing exporting and fish importing countries and concerned international agencies) has widely recognized the need to tackle IUU fishing. Measures and practices at international levels have been developed and national regulatory regimes have been developed and applied, such as by the EU and the United States. The experience of fish exporting countries, especially developing countries, with IUU standards as well as related best practices and regulations has been to comply with them so as to assure stability and continuity of markets. However, many have expressed concern about the onerous, complex and costly implementation of IUU policies and regulations in place today.

They are concerned about potential unilateral notifications ("yellow cards"), bans and restrictions that could be set by major markets in cases where it is deemed that the fish exporting nation is "not cooperating" in the fight against IUU fishing or cannot demonstrate and show evidence of the existence of "similar or equivalent efforts." In many developing countries, especially among SIDS, the existence of capacities to tackle IUU fishing is limited while the sea areas they have to cover are extensive EEZs; such limitation manifests in low certification and document processing capacity and weak capacity to monitor and their coast lines. In this light it seems that country evaluations regarding compliance with IUU standards should be multilateral, be based on actual levels of risk, and take account of the costs and benefits of additional monitoring and enforcement efforts by developing countries. This would be appropriate in both addressing the IUU fishing problem as well as reducing the burden on the administrations in developing countries, especially in SIDS and LDCs.

A recent advisory opinion of the International Tribunal of the Law of the Seas (ITLOS) regarding a request of the West African Sub Regional

Fisheries Commission (SRFC) on the obligations of the flag State in cases where IUU fishing activities were conducted within the EEZ of third party States (2015),⁸⁰ provides some guidance on the content and limits of the responsibility of flag states as it relates to IUU. The advisory opinion clearly indicates that that SRFC countries have a duty to conduct due diligence to ensure that their fishing vessels do not engage in IUU fishing in the waters of other countries and can be held liable for breach of this duty. The advisory opinion also holds that a country, when a party to a fisheries access agreement with other countries, also has the same obligation of due diligence as the flag state. In this case, due diligence meant that flag states have to take enforcement actions to ensure their vessels comply with the laws of SRFC member states and to take measures necessary to ensure that their vessels comply with protection and conservation measures adopted by the SRFC member States.

Meaningful efforts to address IUU should be incentivized and rewarded. Countries should avoid the simple sanctioning of the weakest country for its lack of capacity. In this regard, efforts should be evaluated from the point of view of the actual political will and capacity to address IUU with resources available. States facilitating ship/flag registration need to join the effort and establish national measures to avoid abuses and IUU ships to find “safe harbor” .

Some of the trade-related measures identified in UN General Assembly resolutions, the Global Oceans Commission, the FAO and the literature that could be envisaged by all countries involved in fish industry to address IUU fishing could include:

- Support the introduction of national/regional managements systems, and plans to combat IUU fishing and build institutional capacity, particularly in developing countries;
- Set national/regional measures to monitor, verify and sanction IUU fishing;
- Clearly set the limits of flag States responsibility regarding IUU fishing;

⁸⁰ See Advisory opinion of ITLOS: Request for an Advisory Opinion Submitted by The Sub-Regional Fisheries Commission (SRFC), 02 of April, 2015. https://www.itlos.org/fileadmin/itlos/documents/cases/case_no.21/advisory_opinion/C21_AdvOp_02.04.pdf

- Link the implementation of relevant IUU multilateral agreements and the FAO IUU plan of action to the effective delivery of technical and financial assistance to developing countries;
- Promote IUU evaluation schemes that are multilateral, based on the actual level of risk and take account of the costs and benefits of additional monitoring and enforcement efforts;
- Consider options to expand the use of UVI under the IMO;
- Support initiatives in developing countries to introduce traceability of seafood products;
- Ban at sea transshipments; and
- Create easily accessible international lists of vessels and companies engaged in IUU activities.

Key points: IUU fishing represents a significant threat to fish stock conservation and can be linked to other illegal activities at sea. It affects both developed and developing countries alike and generates negative environmental impacts at the high seas. There is a wide recognition for multilateral and regional action against IUU fishing. There is also an emergence of unilateral/national schemes that have been inspired in multilateral conventions and related soft law to combat IUU fishing. However, efforts need to be deployed to ensure that national/unilateral requirements do not become an obstacle to trade, are applied consistently and uniformly, based on levels of risks and are commensurate to levels of development and capacities of countries. Effective technical cooperation and transfer of technology will be fundamental in ensuring that developing countries can cope with the effort.

6. SUSTAINING FISH STOCKS AND RESILIENCE: COMPLEMENTARY APPROACHES

There are many other complementary/flanking policies at regional and national levels that could support more sustainable trade in fisheries. These include introducing and strengthening environmental services and hence, value addition; effective fish management systems; regulating and monitoring of sustainable use of marine resources and economic activities within high seas areas; and, creating of new marine protected and biodiversity rich areas to rebuild fish stocks, populations and ecosystems. The FAO estimates that rebuilding overfished stocks could increase production by 16.5 million tons and annual rent by US\$32 billion.⁸¹

A. National green and blue export performance and value addition

In 2014 UNCTAD initiated a new technical support project to assist developing countries and transition economies to implement green policies and establish regulatory and institutional frameworks and cooperative mechanisms to strengthen the capacity, efficiency and competitiveness of their green sectors. These activities are undertaken through UNCTAD' s National Green Export Reviews (NGERs). NGERs respond to emerging country demand for assessments of national potential to advance the development of national green sectors to generate new employment and export opportunities while promoting sustainable development. Several countries are examining their fisheries sectors in NGERs. Box 1 illustrates how UNCTAD is supporting countries in making the transition towards more sustainable production and exports in the fisheries sector.

⁸¹ FAO (2014)

Box 1: Promoting the export of sustainable fish and fish products from Ecuador: preliminary lessons of UNCTAD' s NGER.

Ecuador has selected, among its green exports, oceans-related sectors and more precisely sustainable fisheries, as a priority for setting national green export policies. The selected products included tuna (raw, fillets and canned), bream, and certain types of shrimp. Ecuador' s exports of fish and crustaceans from under HS code 03 reached over USD 2.7 billion in 2012, making it one of the most important exports in value for Ecuador after oil and bananas. Analysis of HS 03 code exports reveals high levels of competitiveness reflected in high values of revealed comparative advantage (RCA). With an aim to enhance competitiveness further, many Ecuadorian producers have acquired dolphin free certification and several bream and tuna artisanal producers will soon obtain Marine Stewardship Council certification. Also many aquaculture shrimp producers already enjoy of organic certifications from Bio-Suisse, Carrefour, ISEAL, WWF, Naturland and Global Aquaculture Alliance.

With the involvement of relevant Ecuadorian authorities, experts, private sector and other stakeholders, UNCTAD supported a sector assessment and developed a National Green Export Strategy and Action Plan (NGESAP). The NGESAP was recently adopted by the Government of Ecuador, through the Ministry of Commerce. The NGESAP seeks to maintain and further expand Ecuador's competitive base for sustainable fish products, including by gaining recognition for implementation of responsible harvesting and processing practices by producers in the fisheries value chain at all levels. Lines of action were identified in relation to: a) regulatory reviews (especially in line with relevant multilateral Conventions and regional agreements); b) productivity and innovation; c) associativity and value chains; d) financial and non-financial incentives; e) international marketing; and f) reduction of trade barriers for Ecuador' s green products in third markets. The implementation of the NGESAP has also recently started with a request by Ecuador to the FAO to support a regulatory assessment and review of national fisheries regulations in light of FAO plans, guides and Conventions. Also, the tuna industrial sector is currently developing a "Voluntary Code of Conduct for the Sustainability of the Tuna Value Chain" .

Sources: UNCTAD and MCE (2014). Estudio base para la revisión de la política de exportación de productos verdes del Ecuador. UNCTAD/DITC/TED/2014/4. UNCTAD and MCE (2015, forthcoming). Política Nacional de Productos Verdes del Ecuador: Cacao-Chocolate y Pesca Sostenible, UNCTAD, (2015, forthcoming). Mónica Maldonado (2015). *La competitividad de la Cadena del Atún en Ecuador*, CEIPA.

B. National and regional fish management systems

Fisheries management systems (FMSs) comprise a regulatory system of appropriate management rules based on defined objectives and a mix of management means to implement the rules, which are put in place by legislation and enforced through a system of monitoring control and surveillance.⁸² National systems are applied to all stocks but can be adapted to work at the species level. Regional fish management systems are normally applied by RFMOs, but can also be implemented by competent agencies of coastal states.

FMSs should be based, to the extent possible, on scientifically based objectives, data and incorporate rules for management. FMS activities cover scientific data gathering, fishing and vessels licensing schemes, entry requirements, quotas and catch limits and/or effort limits, controls on types of activities and in which zones (e.g. where do industrial fisheries or artisanal fisheries take place), type of gear and fishing methods. Activities can cover all stocks or apply to certain targets and commercial species. FMS can regulate bycatch, use of waste, and landing regulations. In the past they tended to focus on fish stock management but they have evolved to also cover, depending on the case, the protection of non-targeted species, ecosystems and livelihoods. For large-scale fisheries, management is typically the responsibility of federal, state or local governments. For small-scale fisheries, management may be accomplished through collaboration at local levels, including view

⁸² FAO (1997) Fisheries Management.

fisheries associations, communities, tribes or even families, in conjunction with appropriate government entities.⁸³

The existence of effective fish management systems is considered to be a pre-requisite for maintaining and promoting recovery of stocks and ecosystems. These are likely to be highly context specific, though some elements of best practice are likely to be common. The effectiveness of such systems will invariably differ between countries as it is linked to level of regulatory and institutional capacities. Nevertheless, a sound FMS will increasingly matter in the future as it can set the scientific base to devise the appropriate policy for managing fisheries stocks, and then subsequently private sector behaviour.

With regards to Regional Fish Management Organizations (RFMOs), the UN Fish Stocks Agreement recognizes RFMOs as the institutions through which fisheries are to be sustainably managed in areas beyond national jurisdiction in the high seas.⁸⁴ Although these organizations now cover much of the geographic extent of the world's high seas,⁸⁵ biodiversity appears to need much more effective management than enjoyed at present.⁸⁶ According to many scholars and environmental non-governmental organizations, RFMOs are failing to achieve their objectives.^{87,88,89,90,91,92,93} Many RFMOs may be responding to pressures of

⁸³ Global Health index (2015). Fisheries Management effectiveness.

⁸⁴ United Nations, 1995. Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, Adopted 4 August 1995, Entered into Force 11 December 2001, 1542 A/CONF.164/37, 34 International Legal Materials.

⁸⁵ Ban N.C., Bax N.J., Gjerde K.M., Devillers R., Dunn D.C., Dunstan P.K., Hobday A.J., Maxwell S.M., Kaplan D.M., Pressey R.L., Ardron J.A., Game E.T., Halpin P.T., 2014. Systematic conservation planning: A better recipe for managing the high seas for biodiversity conservation and sustainable use. *Conservation Letters*, 7(1): 41–54.

⁸⁶ Gjerde, K.M., et al., 2013. Ocean in peril: Reforming the management of global ocean living resources in areas beyond national jurisdiction. *Marine Pollution Bulletin* 74, 540-551.

⁸⁷ Cullis-Suzuki, S. and Pauly, D. (2010) Failing the High Seas: A Global Evaluation of Regional Fisheries Management Organizations. *Marine Policy* 34, 1036-1042.

⁸⁸ Gianni, M., Currie, D.E.J., Fuller, S., Speer, L., Ardron, J.A., Weeber, B., Gibson, M., Roberts, G., Sack, K., Owen, S., Kavanagh, A. (2011) Unfinished business: a review of the implementation of the provisions of UNGA resolutions 61/105

national lobbies to push quotas beyond the MSY, or prevent the implementation of other controls, even if not formally recognized.⁹⁴

The extent of the problem is often obscured due to a lack of publicly available information, particularly concerning compliance and enforcement.^{95,96,97, 98} Nevertheless, there are a few promising signs that

and 64/72 related to the management of bottom fisheries in areas beyond national jurisdiction. Deep Sea Conservation Coalition. 54 pp.

- ⁸⁹ Pitcher, T.J., Cheung, W.W.L. (2013) Fisheries: Hope or despair? *Mar. Pollut. Bull.* 74(2): 506-516.
- ⁹⁰ Wright, G., Ardron, J., Gjerde, K. and Rochette, J. (2014) Advancing marine biodiversity protection in ABNJ through regional fisheries management: a review of high seas bottom fisheries closures. Working Paper N°14/2014. Paris, France: IDDRI.
- ⁹¹ DSCC. (2011) Unfinished business: a review of the implementation of the provisions of United Nations General Assembly resolutions 61/105 and 64/72, related to the management of bottom fisheries in areas beyond national jurisdiction.
- ⁹² Weaver, P.P.E., Benn, A., Arana, P.M., Ardron, J.A., Bailey, D.M., Baker, K., Billett, D.S.M., Clark, M.R., Davies, A.J., Durán Muñoz, P., Fuller, S.D., Gianni, M., Grehan, A.J., Guinotte, J., Kenny, A., Koslow, J.A., Morato, T., Penney, A.J., Perez, J.A.A., Priede, I.G., Rogers, A.D., Santos, R.S., Watling, L., (2011) The impact of deep-sea fisheries and implementation of the UNGA Resolutions 61/105 and 64/72. Report of an international scientific workshop, National Oceanography Centre, 45 pp.
- ⁹³ Rogers, A.D. and Gianni, M. (2010) The Implementation of UNGA Resolutions 61/105 and 64/72 in the Management of Deep-Sea Fisheries on the High Seas. Report prepared for the Deep-Sea Conservation Coalition. London, U.K.: International Programme on the State of the Ocean, 97 pp.
- ⁹⁴ Economist, The 2014, 'Governing the high seas: in deep water', *The Economist*, 22 February.
- ⁹⁵ Gilman E. and Kingma, E., 2013. Standard for Assessing Transparency in Information on Compliance with Obligations of Regional Fisheries Management Organizations: Validation Through Assessment of the Western and Central Pacific Fisheries Commission. *Ocean & Coastal Management* 84, 31-9.
- ⁹⁶ Koehler, H., 2013. Promoting Compliance in Tuna RFMOs: A Comprehensive Baseline Survey of the Current Mechanics of Reviewing, Assessing and Addressing Compliance with RFMO Obligations and Measures. ISSF Technical Report 2013-02. International Seafood Sustainability Foundation, McLean, Virginia, USA. 53 pp.
- ⁹⁷ Englander D., Kirschey, J., Stöfen, A., Zink, A., 2014. Cooperation and Compliance in Areas Beyond National Jurisdiction. *Marine Policy*, 49: 186-194.

some basic transparency practices may be improving.⁹⁹ Furthermore, nine years of discussions in the United Nations led to a landmark decision in June 2015 to “develop an international legally-binding instrument under the Convention [on the Law of the Sea] on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction.”¹⁰⁰ Preparatory negotiations on the new high seas legal agreement are to begin next year.

The above UN decision was taken in the context of some scholars suggesting that modern industrial fisheries can no longer be treated as a “high seas freedom” and need to be legally constrained.¹⁰¹ One economic modelling study suggests that it would make more sense if high seas fisheries were closed entirely, acting as a large *de facto* marine protected area, the costs of which would be more than offset by the benefits to fisheries in national waters.¹⁰²

The Global Ocean Commission in 2014 proposed a moratorium on high seas fisheries (a “regeneration zone”) if better protective measures, including marine protected areas, were not put in place.¹⁰³ Though it is doubtful that high seas fisheries will be closed by RFMOs, whose very member States have a direct economic interest in their continuation, there certainly is a greater role that could be played by conservation measures such as marine protected areas.

⁹⁸ Ardron J.A., Clark N., Seto K., Brooks C., Currie D., Gilman E., 2014. Tracking 24 years of discussions about transparency in international marine governance: where do we stand? *Stanford Environmental Law Journal*, 33(2): 167-190.

⁹⁹ Clark N, Ardron JA, and Pendleton L. 2015. Evaluating the Basic Elements of Transparency within Regional Fisheries Management Organizations. *Marine Policy*, 57: 158-166.

¹⁰⁰ UNGA (2015) UN General Assembly Resolution 69/292, §1.

¹⁰¹ Brooks CM, Weller JB, Gjerde K, Sumaila R, Ardron J, Ban NC, Freestone D, Seto K, Unger S, Costa DP, Fisher K, Crowder L, Halpin P, Boustany A. (2014) Challenging the ‘Right to Fish’ in a Fast-Changing Ocean. *Stanford Environmental Law Journal*, 33(3): 289-324.

¹⁰² White C, Costello C (2014) Close the High Seas to Fishing? *PLoS Biol* 12(3): e1001826. doi:10.1371/journal.pbio.1001826

¹⁰³ Global Ocean Commission. 2014. From Decline to Recovery - A Rescue Package for the Global Ocean; Proposal 8. http://www.globaloceancommission.org/wp-content/uploads/GOC_report_2015.pdf

C. Marine protected areas

Restoring the health of marine areas that are depleted of fish is not only a conservationist imperative but it is also an economic one. Due to improved management practices, fish stock health in some developed countries has been improving, signaling the potential for future economic gains.¹⁰⁴ The global trend however remains negative as fish populations decline.¹⁰⁵ An analysis of data-poor national fisheries not normally included in national or FAO assessments, found that the health of these stocks appear to be worse still.¹⁰⁶ Added to that, there are several other worrying indicators that refute any premature optimism about recovering fish stocks.¹⁰⁷

In economic terms, unhealthy fish stocks imply negative commercial results that persist largely due to poor management and fishing practices, sunken costs, and as noted before, perverse subsidies.¹⁰⁸ Nevertheless, the benefits of re-building fisheries in general, outweigh the costs. While developed countries are moving towards more technologically advanced solutions, such as video recording and automatic identification of catches, most developing countries can ill afford these and other management- and capital-intensive approaches. In developing world fisheries management, simpler is usually the better option.

Though not a panacea, properly managed marine protected areas (MPAs) can represent a simple and effective tool for both conservation and economic recovery of many varieties of depleted fish stocks.¹⁰⁹ There are

¹⁰⁴ Worm, B., Branch, T., 2012. The future of fish. *Trends Ecol. Evol.* 27, 594–599

¹⁰⁵ FAO, 2014. Food and Agricultural Organization of the United Nations. *The State of World Fisheries and Aquaculture: Opportunities and challenges*. Rome. 223 pp.

¹⁰⁶ Costello, C., Ovando, D., Hilborn, R., et al. (2012) Status and solutions for the worlds unassessed fisheries. *Science*, 338, 517–520.

¹⁰⁷ Pitcher TJ, Cheung WWL. 2013. Fisheries: hope or despair? *Marine Pollution Bulletin*, 74, 506–516.

¹⁰⁸ Sumaila, U. R., Khan, A. S., Dyck, A. J., Watson, R., Munro, G., Tydemers, P., & Pauly, D., 2010. A bottom-up re-estimation of global fisheries subsidies. *Journal of Bioeconomics*. 12:201–225.

¹⁰⁹ There are now hundreds of studies demonstrating the values of MPAs; e.g., Aburto-Oropeza O, Erisman B, Galland GR, Mascareñas-Osorio I, Sala E, et al. (2011) Large recovery of fish biomass in a no-take marine reserve. *PLoS ONE* 6:

about 5000 MPAs or areas with some sort of protection covering about 2.8% of the global oceans.¹¹⁰ The benefits of MPAs can vary widely. A recent international longitudinal study looking at benefits to biodiversity underlines the importance of good management and design, specifically that MPAs are no-take, well-enforced, long-term (>10 years), large (>100 km²), and ecologically isolated (e.g. by deep water or sand).¹¹¹ Though good for biodiversity, not all MPAs that follow these guidelines will necessarily benefit commercial fish stocks, unless commercial stocks (and their prey) are also protected. In other words, placing MPAs where there is little or no fishing is very unlikely to benefit fish stocks being exploited elsewhere. This may seem self-evident, but practice to date has been exactly that – avoiding areas of conflict with fisheries.¹¹²

While avoiding conflict can result in the rapid expansion of MPA systems, it can also seriously compromise the potential for those systems to protect ongoing losses of marine biodiversity, their main purpose. In some cases, certainly, this strategy could have benefits in the long run because protection may precede the inevitable expansion of human activities into hitherto unexploited areas of the marine ecosystem. However, it remains that protecting areas that few value will not address current pressures on a region's marine environment. If design objectives typical for MPA networks worldwide are to be fully met, with fish stocks better protected than at present, then some conflict with existing human uses will be inevitable.

e23601; Lester SE, Halpern BS, Grorud-Colvert K, Lubchenco J, Ruttenberg BI, et al. (2009) Biological effects within no-take marine reserves: a global synthesis. *Marine Ecology Progress Series* 384: 33–46.

¹¹⁰ UNEP (2015). Geodata. See http://geodata.grid.unep.ch/mod_graph/graphexe.php?selectedID=1876&selectedCountries=&selectedYears=all&global=on&per_capita=&type=geglive&selectedLanguage=en

¹¹¹ Edgar, G.J., Stuart-Smith, R.D., Willis, T.J., Kininmonth, S., Baker, S.C., Banks, S., and N.S. Barrett. (2014) Global conservation outcomes depend on marine protected areas with five key features. *Nature*, 506: 216–220.

¹¹² Devillers, R., Pressey, R.L., Grech, A., Kittinger, J.N., Edgar, G.J., Ward, T., & Watson, R. (2014). Reinventing residual reserves in the sea: Are we favouring ease of establishment over need for protection? *Aquatic Conservation: Marine and Freshwater Ecosystems*, doi: 10.1002/aqc.2445.

Notwithstanding the need for meaningful stakeholder consultation, existing uses should not exclusively dictate the location, size, spacing and management of the required conservation and economic interventions. Minimizing conflict while still reaching the objectives of the MPA network will first require acceptance across sectors of the planning process' s mandate and legitimacy; second, a comprehensive spatial database (or simply paper maps) of human valued areas, activities, and uses in the region; and third, a transparent and participative process.¹¹³

D. Ecologically or biologically significant areas (EBSAS)

In 2010, with the passing of the Convention on Biological Diversity' s (CBD) Aichi Target 11, the vast majority of the world' s maritime nations committed to protecting at least:

*...10 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services [...] through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape.*¹¹⁴

As discussed above, with such a target, there may be increasing temptation to sacrifice quality for quantity in terms of MPA network establishment. As a first step, areas important for fisheries and biodiversity should be identified for further consideration. The CBDs global process to identify ecologically or biologically significant areas (EBSAs) is the only process of its kind, a result of years of concerted international cooperation amongst policy-makers, scientists, and

¹¹³ Ardron JA, Gregr EJ, Robinson CLK, Coleman HM, Dearden P, Sumaila UR, Brandon C, Kenk E, Cisneros-Montemayor AM. (2015) Recommendations on applying the Canada-BC Marine Protected Area Network Principles to Canada's Northern Shelf Bioregion: Principles 1, 2, 3, 5, 6, 16, with discussion on 4, 7, 8, 12. Produced by PacMARA for the British Columbia Marine Protected Area Implementation Team. 110 pp.

¹¹⁴ Convention on Biological Diversity Aichi Target 11. <https://www.cbd.int/sp/targets/rationale/target-11/>

governments.¹¹⁵ However, it still remains to be seen if EBSAs will be considered for protection by the competent national and international authorities, in particular the RFMOs.^{116,117}

Key points: There are several complementary policies that need to be considered by countries to promote sustainable fisheries and fish stocks conservation and restoration. UNCTAD's NGERs are a useful multi-stakeholder economic planning tool that seeks to promote sustainable exports while improving environmental and social performance, and several countries are examining their fisheries sectors in NGERs. National fish management systems are considered a pre-requisite for fish stocks conservation. RFMOs have a fundamental role in stocks management of migratory species. MPA and EBSAs expand the potential for fish stocks and ecosystem recovery.

7. FROM A TRAGEDY OF COMMONS TO A TRIUMPH OF COMMONS: A COMPREHENSIVE TRADE AGENDA FOR SUSTAINABLE FISHERIES

In light of the challenges and opportunities identified in this paper, as well as ongoing initiatives and assessments conducted on fish populations and fishing practices, there is a need to explore practical approaches and options for fish conservation and sustainable use. A Trade Agenda for Sustainable Fisheries that is anchored in the Goal 14 of

¹¹⁵ <https://www.cbd.int/ebsa/>

¹¹⁶ Dunn D & Ardron JA (co-leads), Bax N, Bernal P, Cleary J, Cresswell I, Donnelly B, Dunstan P, Gjerde K, Johnson D, Kaschner K, Lascelles B, Rice J, von Nordheim H, Wood L, Halpin PN. (2014) The Convention on Biological Diversity's Ecologically or Biologically Significant Areas: origins, Marine Policy, 49: 137-145.

¹¹⁷ Ardron JA, Rayfuse R, Gjerde K, Warner R. (2014). The sustainable use and conservation of biodiversity in ABNJ: what can be achieved using existing international agreements? Marine Policy, 49: 98-108.

the new SDGs, the Future We Want, the Samoa Pathway and the IsPOA, among others, is proposed for consideration. The agenda, designed on fostering a transformation from a situation of a tragedy of commons to a triumph of commons, comprises the following:

- **A: Strengthening sustainable fisheries governance systems and related regulatory systems, codes and practices at international, regional and national levels**
 - a) Improve and strengthen coordination among the different fish governance bodies to ensure stronger linkages between environmental, social, and economic concerns of fish harvest, trade and consumption.
 - b) For those States that have not done so, consider the ratification of relevant UN and FAO treaties and as well as the implementation of relevant FAO soft law instruments, and report on how those agreements are being followed.
 - c) Conduct an annual review of progress in the implementation of oceans SDG Goal 14 and relevant targets in terms of fisheries, preferably against agreed milestones.
 - d) Ensure that bilateral fisheries agreements are transparent, fair and support better governance of the fisheries sector in the developing countries, in terms of surveillance, inspection and administrative as well as scientific capacity.

- **B: Improving market access and entry conditions for sustainably harvested fish and fish products**
 - a) Provide clarity on the real market price for fish that incorporates the cost of improved sustainable practices.
 - b) Address market issues that affect fish and fish products within the WTO Doha Round, whilst providing for some flexibilities with reference to specific developing country sub-groupings.
 - c) Address non-tariff measures that affect fish and fish products, including in the WTO Doha Round, and enhance transparency on such measures in force.

- d) Facilitate the use of certification schemes by developing countries, especially by small scale and artisanal fishers (e.g. by clustering several small fishers in one application).
 - e) Expand transparency on fisheries access agreements.
 - f) Address, with a view to eliminating, harmful subsidies that contribute to overfishing and overcapacity, including by reinvigorating relevant WTO Doha Round negotiations.
 - g) Encourage and strengthen the effective reporting, monitoring, and surveillance of fish subsidies.
 - h) With regards to IUU fishing practices:
 - Strengthen efforts to curtail IUU fishing practices.
 - Ensure that the implementation of IUU measures are based on clear and objective criteria, do not discriminate between countries, and that IUU audits are transparent.
 - Support and strengthen institutional and technical capacity of developing countries to put in place measures to combat IUU fishing.
 - i) Increase technical and financial assistance and effective transfer and or dissemination of fishing technology essential in ensuring developing country participation in the fish trade and sustainability initiatives. Ensure that Aid for Trade supports institutional capacity building relating to SPS/TBT and other NTMs, and if necessary private standards, where these exceed public mandatory market entry requirements.
- **C: Restoring fish stocks and marine ecosystems:**
 - Complementary measures**
 - a) Support the development of national green exports and value addition strategies that incorporates the fisheries sector;
 - b) Support sustainable harvesting of fish and local value addition by developing countries;
 - c) Provide support and technical assistance to boost fish management systems and to improve their effectiveness;
 - d) Support institutional development in view of setting recognised, multipurpose and low cost traceability systems;

- e) Enhance consumer awareness in both developed and developing countries on sustainable practices in seafood harvesting, preparation and trade;
- f) Promote the creation of MPAs and EBSAs and the introduction of fishing moratoriums in areas where reproduction takes place or where stocks are significantly depleted in order to allow their recovery, and rebuild their resilience.