

**FISHERIES SUBSIDIES NEGOTIATIONS UNDER WTO -
AN INDIAN PERSPECTIVE**

A Dissertation submitted to the National University of Advanced Legal Studies,
Kochi in partial fulfilment of the requirements for the Award of L.L.M Degree in
International Trade Law



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I, declare that this dissertation titles' **Fisheries Subsidies Negotiations under WTO-An Indian perspective**' researched and submitted by me to The National University of Advanced Legal Studies in partial fulfilment of the requirement for the award of the Degree of Master of Laws in International Trade Law, under the guidance and supervision of **Mr. Hari S. Nayar**, is an original, bonafide and legitimate work. It has been pursued academic interest. This work or any type thereof has not been submitted by me or anyone else for the award of another degree of either this University or any other university.

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LIST OF ABBREVIATION

APEC	Asian Pacific Economic Co-operation
CBD	Convention on Biodiversity
CMFRI	Central Marine Fisheries Research Institute
DAHD	Department of Animal Husbandry and Dairying
DDA	Doha Development Agenda
DOALOS	Division for Ocean Affairs and the Law of the Sea
EEZ	Exclusive Economic Zone
ETS	Effluent Treatment System
EU	European Union
FAO	Food and Agricultural Organization
GEF	Global Environment Facility
GEF(STAP)	Scientific and Technical Advisory Panel of GEF
HSD	High Speed Diesel
ICJ	International Court of Justice
ICTs	Information and Communication Technologies
ITLOS	International Tribunal for Law Of Sea
IUU	Illegal, Unreported and Unregulated
LDC	Least Developed Country
LOS	Law of Sea
MC11	WTO's Eleventh Ministerial Conference
MEA	Multilateral Environmental Agreement
MFRA	Marine Fisheries Regulation Act

MPEDA	Marine Product Export Development Authority
MSP	Marine Spatial Planning
MSY	Maximum Sustainable Yield
NCDC	National Co-operative Development Corporation
NFP	National Fisheries Policy
OAL	Overall Length
OECD	Organization for Economic Co-operation and Development
PES	Payment for Ecosystem Services
PSMA	Port State Measures Agreement
RFMO	Regional Fisheries Management Organization
RNG	Rules on Negotiating Group
RSW	Refrigerated Sea Water System
S&DT-	Special and Differential Treatment
SCM-	Subsidies and Countervailing measures
SDG-	Sustainable Development Goal
SIDS	Small Island Developing States
SOFIA	State of World Fisheries and Aquaculture
SSF	small-Scale Fisheries
SVEs	Small and Vulnerable Economies
TFA	Trade Facilitation Agreement
TPP-	Trans-Pacific Partnership
TPR-	Trade Policy Review
TUSMP	Technology Upgrade Scheme for Marine Product
UNCLOS	United Nations Convention on Law of Sea

UNEP	United Nations Environment Programme
UNFSA	United Nations Fish Stock Agreement
UNITAR	United Nations Institute for Training and Research
VCLT	Vienna Convention on the Law of Treaties
WTO	World Trade Organization

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CHAPTER 1

BACKGROUND AND INTRODUCTION

"The economies of most developing countries are based on their natural resources.... Their soils, forests, fisheries, species, and waters make up their principal stocks of economic capital. The overexploitation and depletion of these stocks can provide developing countries with financial gains in the very short term, but can also result in a steady reduction of their economic potential over the medium and long term"

Mac Neill¹

According to the United Nations Expectation, the World's Population will reach 9.8 billion by 2050 from the current 7.6 billion people and half of this growth is concentrated in the developing countries.² This excessive population growth will exacerbate the current problems of hunger and malnutrition in many poor communities of South Asia and Africa Sub-Saharan. It would be essential to increase global food production by 50 per cent by 2050 to feed this increasing world population.³

The fisheries sector is critical to food security and nutritional intake for a large number of people globally. It also supports livelihoods, both directly and indirectly, for about 10-12 per cent of the global population. Fisheries resources are a significant source of protein, vitamin and micro-nutrients which are not readily available in these amounts and varieties either in crops or other feeding kinds of stuff. They account for about 17 per cent of animal protein that is consumed by many low-income rural communities.⁴ A cheap variety of fish can be converted to make an odourless, Colourless fish protein concentrate that could be used as a flour additive to supplement protein-deficient diets

¹ MacNeill et al., Beyond Interdependence: The Meshing of the World's Economy and the Earth's Ecology, p. 59 as cited in Gregory White "Too Many Boats, Not Enough Fish: The Political Economy of Morocco's 1995 Fishing Accord with the European Union" The Journal of Developing Areas, Vol. 31, No. 3 (Spring, 1997), pp. 313-33(16th August 2019)

² United Nations, 2017. No Title. [WWW Document].
URL.<http://www.un.org/sustainabledevelopment/blog/2017/06/world-population-projected-to-reach-9-8-billion-in-2050-and-11-2-billion-in-2100-says-un/> (accessed 22.5 2020)

³FAO - Food and Agriculture Organization of the United Nations, 2017a. [The Future of Food and Agriculture - Trends and Challenges](#).

⁴ Fernandes, J.A., Kay, S., Hossain, M.A.R., Ahmed, M., Cheung, W.W.L., Lazar, A.N., Barange, M., 2016. [Projecting marine fish production and catch potential in Bangladesh in the 21st century under long-term environmental change and management scenarios](#). ICES J. Mar. Sci. 73, 1357–1369

at a slightly lower cost than eggs, milk or meat. There are other possibilities such as fish soup powder and fish flakes that can increase the contribution of protein from fish without increasing the amount of capture.⁵ In recent years, world per capita fish consumption has doubled from an average of 9.9 kg in the 1960s to over 20 kg in 2016⁶ as a result of a combination of factors such as population growth, increasing income and urbanisation, fast expansion of fish production and more productive channels of distribution.⁷ According to the estimation, about 64 per cent of the world's Fisheries located in the coastal areas of developing countries.⁸ According to FAO, more than 14.5 million people in India rely on fishing activities both directly and indirectly.⁹ The sector is a foundation for the economy and security of the country's livelihood. The overall production of fish and fishery-derived products exceeded 9.6 million tons during 2013–14; the country is the world's third-largest producer of inland catches and aquaculture. According to the National Marine Fisheries Census, 2010, the marine fishermen population in India is 4.0 million, of which 0.99 million are considered to be active fishermen. Among active fishermen, 33 per cent are employed in the mechanised sector, 62 per cent in the motorised sector and 5 per cent in the artisanal sector¹⁰. The potential of the fisheries sector in general and marine fisheries sub-sector, in particular, was recognised quite early in the Indian development planning. Since then a considerable amount of public and private efforts has been channelled into the sector for developing it as an instrument of growth. Apart from the prime consideration of securing food and nutritional requirements of the population, the fisheries sector plays a pivotal role in trade and commerce, and in the process promotes employment and livelihoods of coastal communities. The export of fish and fish associated products has increased the economical turnover of 30,213.26 crores (US\$ 46.5 million) in 2013–14

⁵ National Committee on Science and Technology, *NCST Sectoral Report on Marine Resources*, New Delhi, 1973, p. 250.

⁶ FAO - Food and Agriculture Organization of the United Nations, 2017b. No Title. [WWW Document]. URL. <http://www.fao.org/news/story/en/item/421871/icode/> (accessed 22.May.2020).

⁷ FAO - Food and Agriculture Organization of the United Nations, 2014a. *The State of World Fisheries and Aquaculture Opportunities and Challenges*. [WWW Document]. URL. <http://www.fao.org/3/a-i3720e.pdf> (accessed 22-5 2020)

⁸ Frederick W. Bell, "World-wide Economic Aspects of Extended Fishery Jurisdiction Management," in Lee G. Anderson, ed., *Economic Impacts of Extended Fishery Jurisdiction*, Ann Arbor Science Publishers, 1977, p. 14.

⁹ FAO - Food and Agriculture Organization of the United Nations, 2015a. *National Aquaculture Sector Overview – India*. [WWW Document]. URL. http://www.fao.org/fishery/countrysector/naso_india/en#tcN70019 (accessed 22.5.2020).

¹⁰ Artisanal Fisheries- Traditional fisheries involving fishing households (as opposed to commercial companies), using relatively small amount of capital, relatively small fishing vessels, making short fishing trips, close to shore, mainly for local consumption.

(a crore is a unit of 10,000,000 in the Indian numbering system;)¹¹. The fisheries sector, particularly artisanal and semi-industrial fishing was for a long time the primary source of employment for unqualified young people.¹² This is especially true in delta areas where, apart from skilled anglers, there are also many people who often fish to provide their families with food (subsistence fishermen¹³). In all the decades, the fisheries sector has reported higher growth compared with the agricultural industry. The rising fish production indicates the fisheries sector is booming and contributing to the nation's economic development.¹⁴The Indian Ocean's under-utilised marine resources, the availability of adequate cheap labour and the exclusive right to exploit a large area of ocean space offer vast potential for advantage, while at the same time offering formidable impediment to India's capability to manage it.¹⁵

STATEMENT OF PROBLEM

Over many years, marine resources have been over utilised and over-exploited, leading to pertinent questions about ecological sustainability. Overfishing is one of the significant threats faced by Oceans and marine ecosystems. Nearly 90 per cent of fish stocks are estimated to be over-exploited or completely exploited, which has drastic effects at several levels, including on the climate, global food security and economic growth, particularly in developing countries.¹⁶ As per the United Nations Food and Agriculture Organization, around 87 per cent of the world's fish stocks were either fully exploited or overexploited. Though several components have contributed to the over-exploitation of fish, the role of fisheries subsidies cannot be sufficiently emphasised.

The FAO initiated the global debate on fisheries subsidies in the early 1990s, leading to the 1992 Conference on responsible fishing held in Mexico. The connection between overfishing and certain types of fisheries subsidies is long overdue. It has been

¹¹ Government of India, 2014. [Handbook on Fisheries Statistics, \(2014\)](#)

¹² Id

¹³ All fish caught are shared and consumed directly by the families and kin of the fishers rather than being bought by intermediaries and sold at the next larger market. Pure subsistence fisheries are rare as part of the products that are often sold or exchanged for other goods or services.

¹⁴ Anjani Kumar & P.K Joshi et al 'Fisheries Sector in India: An Overview of Performance, Policies and Programmes 2 (2003)

¹⁵ Manjula Shyam, The Emerging Fisheries Regime: Implications for India, 8 Ocean Dev. & Int'l L. 35 (1980).

¹⁶ Food and Agriculture Organization of the United Nations, 'The State of the World Fisheries and Aquaculture' (Report, 2016) 38.

recognised and is the subject of increased international attention recently. The main argument was that subsidies are a significant factor in the creation and promotion of excess fishing capacity.¹⁷ The rising global demand for fish is motivated by the globalisation of the fisheries trade¹⁸. It is a major contributing factor in encouraging increased fishing capacity and effort,¹⁹ which has eventually contributed to overfishing. According to the World Bank, any profit to be gained from a globalised fisheries trade has been undermined by inadequate fisheries governance that has allowed such overfishing and fish stock depletion.²⁰ Perverse economic incentives create a situation where governments find themselves to provide enormous subsidies for the maintenance of fisheries which would otherwise they will be unable to operate, distort global trade and lead to overfishing and unsustainable fishing.²¹

In light of these issues, the leaders of the World Trade Organization (WTO) agreed to find a solution for addressing fisheries subsidies within the context of international trade law. The WTO Ministerial Conference in Doha then launched negotiations to develop disciplines on fisheries subsidies. Recognising the severity of the problem of overfishing, in its Ministerial Declaration of 2001, the World Trade Organization ("WTO") urged WTO member nations to keep developing and discussing unique WTO

¹⁷ Amanda Rologas Tsangalis, *Fisheries Subsidies under the Trans-Pacific Partnership: Towards Positive Outcomes for Global Fisheries Sustainability and Regime Interaction under International Law*, 17 *Melb. J. Int'l L.* 445 (2016).

¹⁸ World Bank and Food and Agriculture Organization of the United Nations, *The Sunken Billions: The Economic Justification for Fisheries Reform* (2009) 5 (*The Sunken Billions*). See also Food and Agriculture Organization of the United Nations, Fisheries and Aquaculture Economics and Policy Division, *Fisheries Management: Managing Fishing Capacity* (FAO Technical Guidelines for Responsible Fisheries, No 4, Supp 3, 2014) (*FAO Technical Guidelines*).

¹⁹ The terms 'fishing capacity' and 'fishing effort' are subject to much debate and have different meanings for fisheries scientists, fisheries managers and economists: *FAO Technical Guidelines*, above n 15, 9-13. See also J M Ward et al, 'Measuring and Assessing Capacity in Fisheries: Basic Concepts and Management Options' (Technical Paper No 433/1, Food and Agriculture Organization of the United Nations, 2004). The FAO has defined 'fishing capacity' to mean 'for a given resource condition, the amount of fish (or fishing effort) that can be produced over a period of time (eg. a year) by a vessel or a fleet if fully utilized': *FAO Technical Guidelines*, citing Food and Agriculture Organization of the United Nations, *Report of the Technical Consultation on the Measurement of Fishing Capacity* (FAO Fisheries Report No 615, 2000). See also *Healthy Fisheries Report*, ; Gareth Porter, *Analysing the Resource Impact of Fisheries Subsidies: A Matrix Approach* (United Nations Environment Program, 2004) 16 (*UNEP Report*). 'Fishing effort' has been defined as 'the degree to which fishing capacity is actually employed' (the product of fishing capacity and fishing activity): *Healthy Fisheries Report*.

²⁰ *The Sunken Billions*, citing International Centre for Trade and Sustainable Development, 'Fisheries, International Trade and Sustainable Development' (Policy Discussion Paper, 2006).

²¹ Margaret A Young, 'Fragmentation or Interaction: The WTO, Fisheries Subsidies and International Law' (2009) 8 *World Trade Review* 477, 478. See also Anja von Moltke (ed.) *Fisheries Subsidies, Sustainable Development and the WTO* (Earthscan, 2011) 10.

rules regulating the regulation of fisheries subsidies.²² Countries have started to submit proposals that run the gamut from complete eradication of government subsidies to removing only subsidies that contributes directly towards overfishing.²³ The subsequent 2005 WTO Ministerial Conference in Hong Kong²⁴ reaffirmed the need to strengthen such disciplines by prohibiting certain forms of fishing subsidies which contribute to overcapacity and overfishing. The Hong Kong Ministerial Declaration calls on Members to act promptly on certain kinds of fisheries subsidies contributing towards overfishing and overcapacity. The Negotiating Group on Rules has since explored thoroughly the nature of the subsidies and how to control them. In defining the scope of prohibitions whether to adopt a bottom-up approach (Specific list of Prohibited Subsidies) or a top down approach (broad based prohibition with certain exceptions) has long been significantly divergent among WTO members. There has been no breakthrough at the WTO, however, because of differences of opinion among member states. In the current fisheries negotiations at the WTO, the members are working towards developing a set of rules to discipline fisheries subsidies. Developed country members of WTO, advocating sustainability of the fisheries resources have posed a vital concern on the depletion of the fisheries resources. The WTO negotiations on fisheries disciplines have been complicated, with the significant issue being how to address significant policy concerns of WTO members, especially developing countries and LDCs.²⁵ Since the United Nations Sustainable Development Goals (SDGs) has adopted, there has been a renewed impetus at the multilateral level to address unsustainable practices in the fisheries sector.

As a member of the World Trade Organisation, India is one of the active participants in the WTO fisheries subsidies negotiations. Given that the fisheries sector is critical for food security, employment and poverty eradication efforts, it is crucial that India clearly express its development concerns at the WTO fisheries subsidies negotiations.

²² See World Trade Organization, Ministerial Declaration of 14 November 2001, WT/MIN (01)/DEC/1, 41 I.L.M. 746, 750 (2002) [hereinafter Doha Declaration] (declaring the conclusions reached in negotiations by the World Trade Organization ("WTO") at the Doha Ministerial Conference).

²³ Id

²⁴ The Hong Kong Ministerial Declaration which calls on Members to act promptly on certain forms of fisheries subsidies that contribute to overfishing and overcapacity

²⁵ WTO, Introduction to Fisheries Subsidies in the WTO, available at https://www.wto.org/english/tratop_e/rulesneg_e/fish_e/fish_e.htm (last accessed 23/5/2020)

RESEARCH OBJECTIVE

This study intends to search for the main important issues for India in the WTO fisheries subsidies negotiations, especially from food security, employment and poverty eradication perspective.

HYPOTHESIS

A blanket ban on fisheries subsidies without fine-tuning the requirements and circumstances of developing and least developed countries including India can have detrimental effects on the Indian domestic fisheries sector especially from food security, employment and poverty eradication perspective.

METHODOLOGY ADOPTED FOR THE STUDY

The method used in this research is purely doctrinal.

RESEARCH QUESTIONS

What is the structure and significance of Indian fisheries sector, especially from food security, employment and poverty eradication perspective?

What are the different kinds of subsidies provided in the Indian fisheries sector?

What is the scope of the conservation and management obligations under the United Nations Convention on the Law of the Sea (UNCLOS) and other international legal instruments on fisheries?

What is the current status of the WTO fisheries subsidies negotiation?

OUTLINE OF CHAPTERS

Chapter 1- This Chapter shall contain a brief introduction to the area of study, its relevance and significance, the research problem, research questions and literature review conducted concerning this research.

Chapter 2 - The second Chapter discusses Developments in WTO Fisheries Subsidies Negotiations starting from the Doha Ministerial Conference (2001) towards the ongoing negotiations. The chapter also examines the proposals and suggestions put forward by both the developed and developing nations.

Chapter 3 - After the discussion on the current status of fisheries subsidies negotiations at the WTO the third chapter shall contain principal International Legal Instruments on Fisheries management such as United Nations Convention on Law of Sea, UN Fish Stocks Agreement, Food and Agriculture Organization Code, Regional Fisheries Management Organization etc. The chapter also shed light on the law of Access to Resources at various Maritime zones such as territorial waters, continental Shelf and High seas. The chapter also discusses the interconnectivity between Sustainability and Fisheries Subsidies Perspectives.

Chapter 4 – The fourth Chapter focuses on Indian Fisheries, its Landscape and the Current Regulatory Environment. This chapter mainly focuses on Development Concerns and Subsidies Scenario. This chapter proposes special, and Differential Treatment for least developed and developing countries.

Chapter 5 - The Fifth Chapter discusses on sustainable use of fisheries resources. This chapter depicts the United Nations Sustainable Development Goal 14 and its interconnectivity with other Sustainable Development Goals (SDGs).

Chapter 6 - The summary, conclusions and recommendations is provided in the sixth and final chapter of this Dissertation.

LITERATURE REVIEW

The negative impact of the fisheries subsidies and its contribution towards overexploitation and overfishing is discussed, and a significant amount of literature has been written on it highlighting the problems of developing and Least Developed Countries (LDCs) owing to the sweeping ban of fisheries subsidies.

Margaret Young²⁶ , in her book 'Trading Fish, Saving Fish' discussed the overexploitation of fisheries resource. She addressed environmental concerns such as biodiversity conservation through a series of Multilateral Environmental Agreements known collectively as MEAs. The use of ocean resources was negotiated under the 'rule of the sea' in various instruments, resulting in the United Nations Convention on the Law of the Sea (UNCLOS) and related agreements. She also referred to the fisheries subsidies negotiations at the World Trade Agreement. She also insisted the Special and

²⁶ Margaret A. Young, *The Negotiation of WTO Rules on Fisheries Subsidies*, in *TRADING FISH, SAVING FISH: THE INTERACTION BETWEEN REGIMES IN INTERNATIONAL LAW* , 85–133

Differential Treatment to developing and Least Developed Nations in terms of fisheries subsidies. She concluded that the total ban of fisheries subsidies would negatively affect their economy.

Tracey M. Price²⁷, in his article 'Negotiating WTO Fisheries Subsidy Disciplines: Can Subsidy Transparency and Classification Provide the Means towards an End to the Race for Fish,' expressed his concern about overcapacity which contributes towards the decline of fish stocks. The article also analyses the positions of member states including Friends of fish, European Commissions view, Japan's view, small and vulnerable coastal views on fisheries subsidies. The article speaks for negotiating deadlock for fisheries subsidies including the modification of the definition of subsidies under the WTO's Agreement on Subsidies and Countervailing Measures.

Yenkong Nganjoh Ho du & Xuan Gao²⁸ in their article discusses the concerns of Small and Vulnerable groups on Fisheries subsidies. As its name suggests, the WTO Doha Development Round negotiations expected to improve the current global trade regime in the way of enhancing the interest of developing country members. Such a developmental objective was also confirmed in the Ministerial Declarations in Doha and Hong Kong as a legal mandate. Chair's Draft (Chair of the Committee on Trade Negotiations) and the proposals made by some WTO Members, have failed to adequately recognise the importance of the fisheries sector to developing Member States. The total ban of subsidies would affect the people of developing Countries in terms of poverty reduction, food security and livelihood. This paper examines the ongoing negotiations on trade rules in detail. It explores the potential negative impacts that they could have on SVEs, presents a series of counter measures to strike a balance between prevention of overfishing and the development priorities of SVEs.

Margaret A. Young²⁹ in her Article 'Fragmentation or interaction: the WTO fisheries subsidies and international law' expressed that fishing subsidies have trade and ecological implications, in particular for over-exploited fisheries. To confront this issue, WTO members are negotiating to clarify and improve the Subsidies and

²⁷ Tracey M. Price, Negotiating WTO Fisheries Subsidy Disciplines: Can Subsidy Transparency and Classification Provide the Means towards an End to the Race for Fish, 13 Tul. J. Int'l & Comp. L. 141 (2005).

²⁸ Yenkong Nganjoh Hodu & Xuan Gao, Implications of Concluding the WTO Doha Round Fisheries Subsidies Negotiations on SVEs, 6 Manchester J. Int'l Econ. L. 93 (2009).

²⁹ Margret A Young "Fragmentation or interaction: the WTO fisheries subsidies, and international law" (2009)

Countervailing Measures Agreement. However, this ongoing effort is constrained by significant legal challenges as fisheries conservation, and management issues are often dealt with by the United Nations Convention on the Law of the Sea, Food and Agriculture Organization instruments, and other legal regimes that some WTO members have not agreed to. This article analyses modes of learning and information exchange within the WTO regime and compares the proposed use of standards, benchmarks, and peer review in the draft fisheries subsidies rules with existing arrangements between the WTO and other organisations such as the OECD and product standard-setting bodies. The article also points out that to resolve the impediments posed by International law's fragmentation more deliberative strategies of regime interaction are required other than adherence to strict mandates or legal hierarchies.

Oliver Delvos³⁰, in his article, considers the negotiations concerning a potential alteration of the World Trade Organization (WTO) Agreement on Subsidies and Countervailing Measures (SCM Agreement) concerning fishing subsidies. The Doha Ministerial Conference of 2001 gave the mandate for those negotiations. The current WTO rules are deficient in that many of the subsidies do not meet specific SCM Agreement criteria. This is primarily because of the current definition of the subsidy, specificity requirements and inadequate categorisation of subsidies for the "red box" and the "amber box." To properly fix fishing subsidies, this article claims that the SCM Agreement needs to be updated. The United States, the European Community, many developing countries and Japan are actively debating this issue. After examining the various proposals, the best solution seems to be to find a standard categorisation for subsidies for fisheries and identify those that lead to over-capacity and over-fish. These subsidies should be banned and placed on an illustrative list. Besides, subsidies which are not reported to the WTO should be actionable. Any country that has not conducted its notification duties will bear the burden of showing that such subsidies comply with the SCM Agreement. The article also suggests that under new WTO rules, subsidies which are suitable for the environment should be allowed, such as subsidies for the retirement of fishing licenses, the retraining of fishers and the scrapping of old vessels.

³⁰ Oliver Delvos, *WTO Disciplines and Fisheries Subsidies - Should the SCM Agreement Be Modified*, 37 *Victoria U. Wellington L. Rev.* 341 (2006).

Derek J. Dostal³¹, in his article, discusses the fisheries subsidies and its contribution towards the overexploitation and overfishing. He analyses various proposals submitted by member nations. The present lack of fisheries regulations for fisheries subsidies is the reasons for this disaster. He identifies The WTO's elimination of those subsidies that contribute to overcapacity is a necessary and critical first step in rectifying the overfishing problem. Eradication of subsidies is but the first step in redressing overfishing issue. Once the WTO tackles the issue of subsidies, the next-and perhaps more difficult-hurdle will be to allocate fishing rights among individual nations to the oceans of our world.

Amanda Rologas Tsangalis³², in his article, describes the role of fisheries subsidies under Trans-Pacific Partnership. The recently concluded Trans-Pacific Partnership ('TPP')'s much anticipated Environment Chapter includes provisions prohibiting members from granting certain subsidies to their fishing industries and calls for significant fisheries management systems to be implemented. Such provisions represent a significant step forward for the protection of fisheries and come at a time when the oceans of the world face severe challenges from overfishing and over-exploitation of marine resources. While there is a strong link between overfishing and certain types of subsidies, despite numerous draft proposals, established competing economic, political and developmental interests hampered efforts by the World Trade Organization members to agree on effective disciplines in this area. It appears that TPP members have drawn on some of these Proposals to formulate their own fisheries subsidy disciplines, to overcome, in some respects, the further challenge of 'regime interaction' by incorporating the standards and concepts of fisheries management set out in the United Nations Convention on the Law of the Sea and the United Nations Food and Agriculture Organization. In its analysis of the provisions on fisheries subsidies of the TPP, this article shows that while there is certainly scope for improvement and firmer disciplines in this area, the current provisions provide a strong basis from which to move towards the eventual elimination of all forms of fishing subsidies which contribute to overfishing.

³¹ Derek J. Dostal, *Global Fisheries Subsidies: Will the WTO Reel in Effective Regulations*, 26 U. Pa. J. Int'l Econ. L. 815 (2005).

³² Amanda Rologas Tsangalis, *Fisheries Subsidies under the Trans-Pacific Partnership: Towards Positive Outcomes for Global Fisheries Sustainability and Regime Interaction under International Law*, 17 Melb. J. Int'l L. 445 (2016).

CHAPTER II

DEVELOPMENTS IN FISHERIES SUBSIDIES NEGOTIATIONS

"Recognizing that their relations in the field of trade and economic endeavour should be conducted ...while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment..."³³

2.1 INTRODUCTION

Oceans are essential to human sustenance as they are providing many provisioning and supporting services. They have been a source of vast resources for humanity. Among the various resources offered by the oceans, the fish has perhaps made the most significant contribution to the development of the human condition. The Principal and known use of fish is as a food for human consumption. Fish is important component of food security around the world. It is also an essential source of animal protein and contains vitamins and minerals.

Moreover, they are converted into fishmeal or oil and used as a fertilizer and animal feed. The great Jewish philosopher Maimonides once said, *"Give a man a fish, and you feed him for a day; teach a man to fish, and you feed him for a lifetime"*³⁴. This statement depicts the importance of fisheries in the modern context, as fish and fishing have provided millions around the world livelihood and employment. Marine and inland fisheries, together with Aquaculture, provide food, Nutrition and a source of income to around 820 million people around the world from harvesting, processing, marketing and distribution³⁵.

Global fisheries are under the threat of depletion. Suppose the human activities are not carefully managed to ensure that they do not alter ecosystem structure and function. In that case, they may result in damage to the marine environment and reduction or loss of vital ecosystem services³⁶. Over the last few decades, one-third of the world's fish

³³ Marrakesh Agreement Establishing the World Trade organization 1994, Preamble.

³⁴ Kenneth Seeskin, Maimonides, The Stanford Encyclopaedia of philosophy (Spring 2014 ed)

³⁵ "FAO's Role in Fisheries" as available at <http://www.fao.org/fisheries/en/> (Last visited January 13,2020)

³⁶ UN-a technical abstract of the first global integrated marine assessment. 'The ocean and the sustainable development goals under the 2030 agenda for sustainable development'

stock is regarded as overfished. Advancement in science and technology has resulted in the improvement in fishing gears used for locating, fishing and processing Fish. This has been especially true after the Second World War when there was a tremendous advancement in shipbuilding technology which was why industrial fishing started to spread like wildfire.³⁷ Many states lack tools and techniques for robust assessment, development and effective management of their fisheries. 57% of fish stocks are fully exploited and other 30% are overexploited or recovering³⁸. Fisheries industries are at the mercies of the environment. Excessive fishing can lead to a reduction in the size of fishery resources and also changes the species structure of those organisms that they prey on them³⁹. The exploitation and conservation of marine living resources (MLR) is a question of utmost relevance for a global society, given the importance of MLR as a source of protein for human consumption and dependence of many local communities upon fishing⁴⁰.

2.2 OVERVIEW OF SUBSIDIES

The practice of government providing financial assistance to sectors of the economy or directly to private companies to protect infant industries or encourage economic development in a given region has been in existence for many centuries.⁴¹ The government was always trying to subsidize every sector. At one time, one could claim in the US congress that 'the definition of a subsidy, like that of beauty, varies with the beholder whose eye is focused on the object under scrutiny.'⁴² An open-minded beholder could detect subsidies everywhere in governmental actions. A creative observer could even label the negative actions by the government as a 'regulatory subsidy' when this government refrains from providing a certain level of regulation⁴³. So the range of

³⁷ "Ships and Shipbuilding", as available at <http://www.fao.org/fisheries/en/> (Last visited on January 11,2020)

³⁸ The state of World fisheries and aquaculture: opportunities and challenges, Food and Agricultural Organization 2016

³⁹ John S Gray, Marine Biodiversity: Patterns, threats and Conservation Needs (Jan,21,2020) <<http://www.avesmarinhas.com.br/20%20-20%marine%20biodiversity%20%20patterns,%20threats%20and.pdf>>

⁴⁰ The Oxford Handbook of the law of sea 491 (1st ed 2015)

⁴¹ C-J Chen, Fisheries Subsidies under International Law, Hamburg studies on Maritime Affairs 20, DOI 1007/978-3-642-15693-9_1 Springer – Verlag Berlin Heidelberg 2010

⁴² US Congress, House Committee on Agriculture, 1972 cited by Dominic Coppens 'WTO Disciplines on Subsidies and Countervailing Measures, Balancing policy space and legal constraints 608(1st ed 2014)

⁴³ Dominic Coppens 'WTO Disciplines on Subsidies and Countervailing Measures, Balancing policy space and legal constraints 608(1st ed 2014)

subsidies would vary depending upon the views of the beholder on the market and the government.

2.3 DEFINITION OF FISHERIES SUBSIDIES

Fisheries subsidies are the subsidies which are confined to the fisheries sector. Westlund (2003) defined fisheries subsidies as "*government actions or inactions that are specific to fisheries industry, and that modify by increasing or decreasing –the potential profits by the sector in the short, medium or long term.*"⁴⁴ Many International Organizations, including FAO and OECD, have attempted to define fisheries subsidies. FAO developed the "Guide for Identifying, Assessing and reporting on fisheries subsidies. As per the definition given under this Guide fisheries subsidies are government actions or inactions beyond regular practices that, by increasing or decreasing them, modify the potential profit of the fisheries industry in the short, medium or long term."⁴⁵ OECD defines the government Financial Transfers (GFTs) as *the monetary value of interventions associated with fishery policies, whether they are from central, regional or local levels.*⁴⁶

2.4 SUBSIDIES UNDER WTO

The origins of the current SCM Agreement can be traced back from articles VI and XVI of the General Agreement on Tariffs and trade 1947.⁴⁷ Later in Tokyo Round, these provisions were summarized as the Subsidies Code of 1979. During the Uruguay round of negotiation, the present version of Agreement was framed. To classify the subsidies, the SCM Agreement uses a traffic light approach, which means that subsidies are categorized in three parts as prohibited (red box subsidy), actionable ("amber" box subsidy) and permitted ("green box" subsidy). SCM Agreement will apply if only the requirements outlined in Article 1 and Article 2 is fulfilled.

Article 1 of the SCM Agreement provides that a subsidy exist when there is a financial contribution by a government or any public body within the territory of a member that

⁴⁴ Aswathy N and Shyam. S. Salim, Subsidies in Indian Fisheries, Manual on World Trade Agreements and Indian Fisheries Paradigms, A Policy Outlook (2012)

⁴⁵ FAO Doc. FAO Fisheries Technical Paper No .48, at 78 adding that "government" here means government and public bodies other than the ones in the country where the subsidy as such exist, including contributions from public and international development aid and cooperation institutions, and actions or inactions by non-fishery government agencies and organizations. "Fisheries industry" refers to all productive sub-sectors of the fisheries and aquaculture sector, processing and marketing. The term potential profit means the overall profitability of the industry.

⁴⁶ OECD Doc. No AGR/FI (93)11 REV1

⁴⁷ General Agreement on Tariffs and Trade (30 October 1947)55 UNTS187, Arts VI and XVI

confers a benefit.⁴⁸ Accordingly, a subsidy is deemed to exist when a benefit is conferred on an industry as a result of (1) direct transfer by the government of funds (e.g. Grants, loans and equity infusion) or potential direct transfers of funds or liabilities (e.g. loan guarantees); (2) foregone or uncollected government revenues (e.g. fiscal incentives such as tax credits); (3) when government provide goods or services other than general infrastructure or purchases goods; (4) when the government makes funding mechanism or to a private body to carry out any of the functions described above; or (5) when there is a form of income or price support in the context of Article XVI of GATT 1994.⁴⁹

So under the SCM Agreement, any government aid including the direct transfer of funds, goods and services, must meet the criteria of subsidy.⁵⁰ This also includes the case where a government does not demand revenues, such as taxes which it is obliged to collect.⁵¹ Moreover, a subsidy shall have deemed to exist if there is any form of income or price support in the sense of GATT 1994.⁵² Moreover, a subsidy must also meet the criterion of specificity mentioned under Article 2 of the SCM Agreement. As per this Article, a subsidy must be granted to a certain enterprise.⁵³ If a subsidy does not meet this criterion under Article 2 of the SCM Agreement, there are other explicit circumstances under which specificity can be assumed.⁵⁴ Subsidies under the SCM Agreement are allocated to three different boxes: the "red box", "green box" and the "amber box". The red box contains all subsidies that are prohibited under article 3 of the SCM Agreement and are contingent on export performance. They can also be deemed to be having an export performance if they are "in fact tied to actual or anticipated exportation or export earnings."⁵⁵ "Illustrative list of Export subsidies"

⁴⁸ WTO Doc. No. WT/DS70/AB/RW, "Report of the Appellate Body, Canada-Measures Affecting the Export of Civilian Aircraft" (21st July 2000), para.9.96

⁴⁹ See Article 1 of SCM Agreement.

⁵⁰ Agreement on subsidies and Countervailing measures 15 April 1994)1867 UNTS 14 [SCM Agreement] Arts 1.1(a)(1)(i) and 1.1 (a)(1)(iii)

⁵¹ SCM Agreement art 1.1 (a)(1)(ii)

⁵² SCM Agreement art 1.1(a) (2); General Agreement on Tariffs and Trade (15 April 1994)1867 UNTS187.

⁵³ SCM Agreement 4, art 2.1(a)

⁵⁴ Article 2.1(c) of the SCM Agreement provides such factors, which are: "the use of a subsidy programme by a limited number of certain enterprises, predominant use by certain enterprises, the granting of disproportionately large amounts of subsidy to certain enterprises, and the manner in which discretion has been exercised by the granting authority in the decision to grant a subsidy.....Account shall be taken of the extent of diversification of economic activities within the jurisdiction of the granting authority, as well as of the length of time during which the subsidy programme has been in operation.

⁵⁵ Mistuo Matsushita, Thomas J Schoenbaum and Petros C Mavroidis, the World Organization: Law Practice and Policy 273(Oxford University Press, Oxford,2003)

provided in Annex I of the SCM Agreement fall under this regulation. Besides that, subsidies that are contingent upon the use of domestic goods over imported goods are prohibited.⁵⁶ Actionable subsidies, are also known as amber box subsidies, are those that cause injury to the domestic country of another member country or cause "serious prejudice" to the interest of another member.⁵⁷ That means they are assessed according to the injury to another member's domestic industry. "Serious prejudice" under article 5(c) of the SCM Agreement as defined under article 6.3 of the SCM Agreement.⁵⁸ The nullification or impairment of benefits of another member is a condition precedent for classifying a subsidy as actionable subsidy. The green box, which includes subsidies for the adaptation of existing facilities to environmental sustainability, has been struck down from the SCM Agreement.⁵⁹

The growing Fish stock depletion due to overfishing or overcapacity is described as one of the defining environmental challenges of our time⁶⁰. Government provided fisheries subsidies which resulted in overfishing and overcapacity, are one of the reasons for the depletion. The majority of fisheries subsidies are granted by a handful of economically powerful nations in a wide variety of forms, including direct government payments to the fishing industries, tax waivers and deferrals, government loans and loan guarantees, and general programs that affect fisheries.⁶¹Owing to the unique nature of negative impacts of fisheries subsidies Agreement on subsidies and countervailing measures fail

⁵⁶ SCM Agreement art 3.1(b)

⁵⁷ SCM Agreement art.5(a)

⁵⁸ Until the end of 1991, Article 6.1 of the SCM Agreement contained four circumstances under which a "serious prejudice" was deemed to exist. Today, article 6.3 states the following:

Serious prejudice in the sense of paragraph (c) of article 5 may arise in any case where one or several of the following apply:

- (a) the effect of the subsidy is to displace or impede the imports of like products of another Member into the market of the subsidizing member.
- (b) The effect of the subsidies to displace or impede the exports of a like products of another Member from a third country market;
- (c) The effect of the subsidy is a significant price undercutting by the subsidized product as compared with the price of a like product of another Member in the same market or significant price suppression, price depression or lost sales in the same market;
- (d) The effect of the subsidy is an increase in the world market share of subsidizing Member in a particular subsidized primary product or commodity as compared to the average share it had during the previous period of three years and this increase follows a consistent trend over a period when subsidies have been granted.

⁵⁹ See SCM Agreement Art.8, 9. The green was adopted on a provisional basis for a period of 5 years: SCM Agreement, Art.31. when it expired on 31st December 1999, a lack of consensus among WTO members meant that it was not renewed.

⁶⁰ Sadeq Z. Bigdeli, Will the Friends of Climate Emergence in the WTO: The prospects of applying the fisheries subsidies model to energy subsidies, 2008 carbon & Climate L. Rev 78(2008)

⁶¹ Chen, supra, 1

to address fisheries subsidies issues adequately. Due to the lack of consensus between the member countries, an attempt to incorporate fisheries issue in the Uruguay Round Negotiations as part of Agreement on Agriculture was abandoned. However, since the adoption of SCM Agreement, the definition of subsidies has got narrowed.

Overfishing refers to a level of fishing effort or fishing mortality such that a reduction of this level would, in the medium term lead to an increase in the total catch.⁶² For long-lived species, overfishing starts well before the stocks become overfished.⁶³ Fishing capacity' has been defined as 'the amount of fish (or fishing effort) that can be produced over a while (such as a year or a fishing season) by a vessel or a fleet if fully utilized and for a given resource condition.'⁶⁴ The tremendous increase in the overcapacity ultimately results in overfishing. The fishing industry is one which incurs the huge expense. So the fisheries sector is financially supported by the States. Many subsidies are for management and conservation while others are directed to increase overcapacity alone. The government also decides to provide subsidies to the fishing sector to increase their capacity to compete against other states, especially in accessing fish from the High Seas⁶⁵. Government provided subsidies enable unprofitable fleets to continue fishing. Acknowledging Fisheries subsidies constitute a significant cause of overfishing, so the states began to delimit their subsidies payment. Firstly, States turned their effort voluntary policies within WTO. These measures met with mixed success leading to reform efforts within the WTO regime that can offer binding discipline.

The current WTO Regulations are deficient, in that many subsidies do not meet certain criteria of the SCM Agreement⁶⁶. There are many problems with the current version of the WTO Agreement on Subsidies and Countervailing Measures (SCM Agreement). To be prohibited, subsidies must be specific and must generally have a distorting effect on international trade⁶⁷. Usually, fisheries subsidies do not meet these criteria under the SCM Agreement. Fisheries subsidies are not covered under the WTO's Agreement on Agriculture and the Agreements on Subsidies and Countervailing Measures. Therefore,

⁶² AN_TDP_2017_5_The-WTO'S-Fisheries-subsidies -Negotiation

⁶³ FAO Term Portal, <http://www.fao.org/faoterm/en/>

⁶⁴ FAO Fisheries Report No. 613, Report of the Technical Consultation on the Measurement of Fishing Capacity, (FAO, 2000)

⁶⁵ Margaret A. Young Trading Fish, Saving Fish (1st ed.2011)

⁶⁶ Oliver Delves, WTO Disciplines and Fisheries Subsidies - Should the SCM Agreement Be Modified, 37 Victoria U. Wellington L. Rev. 341 (2006).

⁶⁷ Id

the existing definition of a subsidy must be modified to cover fisheries subsidies. Besides, the categorization of prohibited and actionable subsidies must be restructured include fisheries subsidies. This proposal was seconded by the "Friends of Fish", who also opined that the fisheries sector has unique features that cannot be addressed by the existing rules of the SCM Agreement. It is to be noted that SCM Agreement does not contain a preamble which might indicate that there was a divergent view among drafters while drafting the SCM Agreement.⁶⁸

2.5 FISHERIES SUBSIDIES AND WTO NEGOTIATIONS

2.5.1 Doha Ministerial Conference

The World Trade Organization agreed to conduct negotiations for fisheries subsidies at Ministerial Conference in Doha.⁶⁹The guiding principle of the Doha Round Negotiations since its launch in 2001 has been to reshape the development paradigm in favour of the developing and least developed country (LDC) members of the WTO through trade⁷⁰. Since it mainly focuses on developmental concerns, it is also known as the Doha Development Agenda. Doha Ministerial Declaration directed WTO Members to enter into negotiations aiming at clarifying and improving WTO disciplines on fisheries subsidies, taking into account the development interests of developing countries in this sector.⁷¹ This Conference set forth the mandate on fisheries subsidies as follows:

".....participants shall also aim to clarify and improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries".⁷²

At the Ministerial Conference in Doha in 2001, the World Trade Organization (WTO) agreed to conduct negotiations for special fisheries disciplines. Some Member Nations pointed out that the special treatment of this sector would lead to fragmentation.

⁶⁸ Columbia Studies in WTO law and Policy "Law and Economics of Contingent Protection in International Trade; Robert Howse "Subsidies and Countervailing Measures: Determining benefits of Subsidies 103(1st ed. 2010)

⁶⁹ WTO Ministerial Declaration at Ministerial Conference, Fourth Session (WT/MIN(01)/DEC/1,Doha, 2001)

⁷⁰ Yenkong Ngangjoh Hodu; Xuan Gao, Implications of Concluding the WTO Doha Round Fisheries Subsidies Negotiations on SVEs, 6 Manchester J. Int'l Econ. L. 93 (2009).

⁷¹ Id

⁷² WT/MIN (01)/DEC/1 (November 20,2001) n 36.

Meanwhile, both NGOs and IGOs have raised the issue of fisheries subsidies by some developed and developing countries to come together in a new coalition, known as the "Friends of Fish" (FOF)⁷³, to lead the effort in bringing the issue of fisheries subsidies to the WTO negotiating agenda.⁷⁴ In 2001, these efforts were realized when the WTO Ministerial Members at the Doha Ministerial Conference, at Qatar agreed to conduct negotiations on clarifying and improving WTO disciplines on fisheries subsidies "in the context of" negotiations on 'WTO Rules'. Members at Doha decided on two points. First, fisheries subsidies which have a negative impact on the environment should be regulated; second, it is necessary to introduce a new set of rules to regulate fisheries subsidies effectively.⁷⁵ Trade negotiation committee established the Negotiating Group on Rules in February 2002. Hence, negotiations on fisheries subsidies organized and became one of the core points of the agenda of the WTO Negotiating Group on Rules in the Doha Round.⁷⁶ Moreover, WTO Members have identified the inadequacy of the SCM Agreement in restraining fisheries subsidies. The connection between the trade-distorting and harmful fisheries subsidies has been restated in the course of negotiations.

2.5.2 The Hong Kong Ministerial Conference

Hong Kong Ministerial Conference of trade ministers in 2005 states that:

"Ministers *recall* their commitment at Doha to enhancing the mutual supportiveness of trade and environment, *note that there is broad Agreement that the Group should strengthen disciplines on subsidies in the fisheries sector, including through the prohibition of certain forms of fisheries subsidies that contribute to overcapacity and over-fishing, and call on* Participants promptly to undertake further detailed work to, *inter alia*, establish the nature and extent of those disciplines, including transparency and enforceability. Appropriate and effective special and differential treatment for

⁷³ WTO negotiating Group on Rules the Doha Mandate to Address Fisheries Subsidies: Issues, submission from Australia, Chile, Ecuador, Iceland, New Zealand, Peru, Philippines and the United States (TN/RL/W/3, Geneva, 2002) paras 12-16 [Doha Mandate]. United States, Philippines, Peru, New Zealand, Australia, Chile, Ecuador are named as the "Friends of Fish" because in the WTO Negotiation Group on Rules these countries submitted the views together. They insist on stricter fishing rules and regulations.

⁷⁴ Adijaya Yusuf; Melda Kamil Ariadno; Arie Afriansyah, Legal Framework and Mechanism of Marine Fisheries Subsidies in the Aspects of International Trade and Sustainable Development, 5 Indon. L. Rev. 291 (2015)

⁷⁵ Youngjeen Cho, revisiting WTO Fisheries Subsidies Negotiation, 6 Beijing Law Review 9,12(2015)

⁷⁶ Id

developing and least-developed Members should be an integral part of the fisheries subsidies negotiations, taking into account the importance of this sector to development priorities, poverty reduction, and livelihood and food security concerns⁷⁷.

At WTO's Fifth Ministerial Conference (Hong Kong, 2005,) members reaffirmed their commitment to strengthen disciplines on Fisheries subsidies. Moreover, they mandated Chairman of the Negotiating Group on Rules to prepare a consolidated text which would be the basis for future negotiations.

The Hong Kong Declaration intends to prohibit fisheries that contribute to overcapacity and overfishing. The friends of fish sought a comprehensive list of the prohibition of subsidies, with limited exception, as well as improved fisheries management program that contributes to overcapacity and overfishing⁷⁸. The Hong Kong Declaration paved away for intense negotiation on the Fisheries subsidies leading to the Chair of the Negotiating Group on Rules to prepare a draft proposal. To effectively direct the negotiators, the duty of the Chair of the Negotiating Group on Rules as an interpreter is to examine the ministerial mandate to determine the common intentions of the parties before coming up with a roadmap for discussions⁷⁹.

The Hong Kong mandate was to identify the types of subsidies that are to be prohibited and special and differential treatment for developing countries.

2.5.3 PROPOSALS OF WTO MEMBERS

2.5.3.1 Proposals of the United States

Even before the Doha declaration in 2001, the United States submitted a statement pointing out that subsidies have their worst environmental effect in open-access fisheries.⁸⁰ The United States' proposal calls on WTO members to eradicate all subsidies that contribute to overfishing.⁸¹ United Nations adopted a modified version

⁷⁷ WT/MIN (05)/DEC (adopted on 18 December 2005), Annex D, Para. 9.

⁷⁸ WTO Fisheries Subsidies Negotiation, *Main issues and interest of least developed countries, smriti bahety, Julian Mukiibi, 9 (2017)*

⁷⁹ The issue of giving meaning to the common intentions of WTO Members has been pointed out by the WTO Appellate Body in its jurisprudence. See for instance, the Report of the Appellate Body in Indian- patent (US), WT/DS50/AB/R, para. 45

⁸⁰ WTO Committee on trade and Environment Environmentally-Harmful and trade- Distorting Subsidies in Fisheries-Communication from the United States (WT/CTE/W/154, Geneva,2000) para 9 [Communications from the United States.]

⁸¹ WTO Negotiating Group on Rules, Communications from the U.S: Possible Approaches to improved Discipline on fisheries Subsidies.TN/RL/W/77(March 19.2003)

of a "traffic light" approach to defining these types of categories. United Nations suggest that in addition to red light subsidies (prohibited subsidies) there are also dark amber subsidies (seriously prejudicial and presumptively harmful). The US Proposal defines its category of "red light" subsidies as those subsidies that "*directly promote overcapacity and overfishing, or have other direct trade-distorting effects.*"⁸² "*Dark amber*" category of subsidies are those subsidies that would "*presumed to be harmful unless the subsidizing government could affirmatively demonstrate that no overcapacity/overfishing or other adverse trade effects have resulted from the subsidy*"⁸³. If no such rebuttal were made by the issuing nation, these subsidies would contravene the WTO international Agreement. An important significance of US Proposal is notification and transparency of each Nations subsidies, and United States urges the WTO to adopt a system in which data are readily available for member nations to analyse and assess other nations' level of subsidies⁸⁴.

2.5.3.2 The European Union's Proposal

In its proposal, the European Union first defines the ultimate aim of WTO fisheries subsidies rules: "*to match capacity to the available fish and so contribute to the sustainable exploitation of fishery resources.*"⁸⁵ By reformation of common fisheries policy EC has made a clear choice that adjusts objectives of its fisheries policy to ensure sustainable development in environmental, economic and social terms. European Union proposes also contain its proposal calls for complete eradication of subsidies enhancing capacity which include subsidies for marine fishing fleet renewal and subsidies for the permanent transfer of fishing vessels to third countries, including the creation of joint enterprises with third-country partners⁸⁶. Unlike the American proposal, European Union suggests certain categories of subsidies that should be considered permitted and therefore non-actionable. These includes:

1) Subsidies to support the retraining of fishers, early retirement schemes and diversification.

⁸² Id

⁸³ Id

⁸⁴ Supra 31

⁸⁵ WTO Negotiating Group on Rules TN/RL/W/82

⁸⁶ Id

2) Limited subsidies for modernization of fishing vessels to improve safety, product quality or working conditions or to promote more environmentally friendly fishing methods.

3) Subsidies to fishers and vessel owners who have to temporarily stop their fishing activity when stoppages

are due to unforeseeable circumstances such as natural disasters, or in the framework of tie-up schemes linked

to permanent capacity reduction measures in the context of recovery plans for overexploited fish stocks.

4) Subsidies for the scrapping of vessels and the withdrawal of capacity.⁸⁷

European Union's proposal makes an exemption for developing countries, pointing out that a sweeping ban would have a negative impact on their economies and suggested that subsidies should be prohibited after a short transitional period⁸⁸. Above all, the opinion of the European Community is that the SCM Agreement is inadequate to deal with the current situation in the fisheries sector. Though slightly more than other nations, the EC believes that the current SCM Agreement should be the basis for new disciplines.⁸⁹ However, EC does not recommend the restrictive approach as the U.S.⁹⁰ The EU is proposing two steps: a review of the semi-annual CVD reports of the members to assess if notifications have been made, and the preparations of notifications by the Secretariat when subsidies have not been notified.⁹¹

2.5.3.3 Chinese proposal⁹²

The proposal put forward by China suggests that certain subsidies should not be prohibited, After China demanded that subsidies for infrastructure construction and scientific research should be allowed, the submission of the EC in 2003 started to debate whether certain subsidies should be expressly permitted. It is doubtful whether china

⁸⁷ id

⁸⁸ id

⁸⁹ WTO Negotiating Group on Rules Submission of the European Communities to the Negotiating Group on Rules – Fisheries Subsidies (TN/RL/W/12, Geneva, 2000)

⁹⁰ In fact, no statement is made regarding the “broad ban” approach. It is not even mentioned at all.

⁹¹ WTO. 2015a. “Rule Negotiations – Transparency: Communication from the European Union.” Negotiating Group on Rules. TN/RL/W/260. 16 July.

⁹² WTO negotiating Group On Rules, Proposal from the People’s Republic of China On Fisheries Subsidies (TN/RL/W/9, Geneva, 2002)

being the largest producer of fish commodities would support harsh disciplines on fisheries.

2.5.3.4 Japanese proposal

The supporters for the prohibition of fisheries subsidies include politically and economically important members. They are demanding for the new and improved fisheries disciplines. Even if the supporting side is firm, the nations which are against any modification of the SCM Agreement should not be undermined. Japan is strongly opposing the modification of the fisheries sector. Japan contends that the fisheries sector should not be treated separately from other industrial sectors.⁹³ Japan points out that "any casualty between fisheries subsidies and trade distortion has yet been presented"⁹⁴. It upholds that it is important to realize the conservation and sustainable development of fisheries to secure food sources for sustainable development. Japan also used fisheries traffic light approach to distinguish between the subsidies but presented it in a manner different from the United States and European Union. Under its green light category, it enumerates the fisheries subsidies that promote the conservation and sustainable utilization of fisheries resources⁹⁵. It includes the fisheries subsidies for research on; enhancement of fisheries resources for the "conservation and improvement of the habitat of fisheries resources;" for the monitoring, control, and surveillance of fisheries resources; for the "development and diffusion of new technologies to reduce the catch of unintended small fish or untargeted species;" and for the "protection of [the] environment"⁹⁶. Japan proposes a definition of red light or prohibited subsidies such as the following: illegal, unregulated, and unreported ("IUU") subsidies and those subsidies that contribute to overcapacity. Japan proposes a definition of red light or prohibited subsidies such as the following: illegal, unregulated, and unreported("IUU") subsidies and those subsidies that contribute to overcapacity⁹⁷. So Japan asserts that a fisheries sector should not be treated separately from other industrial sector and current SCM agreement is sufficient to cover fisheries subsidies. Japan argues that the United Nations Convention on Law of Sea (UNCLOS) is a more important tool to achieve

⁹³ WTO Negotiating Group on Rules Japan's Basic Position on the Fisheries Subsidies Issue (TN/RL/W/11, Geneva ,2002) para2

⁹⁴ TN/RL/W/164(SEPTEMBER,27,2004)

⁹⁵ Id

⁹⁶ Id

⁹⁷ Id

resource conservation. However, this argument is not questionable because UNCLOS fails to cover high sea fisheries.⁹⁸

The Republic of Korea also supported the Japanese view that there is no need to modify the SCM agreement⁹⁹. In 2003 a statement by Antigua, Barbuda, Belize, Fiji, Guyana, the Maldives, Papua Guinea, Solomon Islands and St Kitts and Nevis suggested that more restrictive rules on the fisheries can have a negative impact upon their economies. But they adopted a different view from Japan and North Korea. These coastal states do not have a capacity in fish vessels to harvest their resources. So the government of these states permit other fleets to enter its domestic water in return of foreign payments. Above all, it would destroy the artisanal fisheries in their countries.

The difference of opinion between the member countries began to be reflected from the very beginning of the submissions to the NGR. The 'friends of fish' coalition sought for a sweeping ban of fisheries subsidies covering subsidies contributing towards overcapacity and overfishing. Countries including Japan, EU, Korea and Chinese, Taipei resists the blanket ban of fisheries subsidies.

By 2004, members arrive at a consensus towards an environmental mandate of the negotiation. This balanced approach resulted in the Hong Kong Ministerial Conference in 2005.

2.5.4 2007 CHAIR'S TEXT.

On November 30, 2007, the first draft was tabled by Guillermo Valles Games, the Chair of the Negotiating Group on Rules (NGO). The Chair's text is in the form of an annex ('Annex VIII') of the SCM Agreement and is reproduced in the Appendices.¹⁰⁰ It has a set of prohibited subsidies along with its objectives. Specifically, the draft prohibited the subsidies for vessel construction, repair etc. of fishing/service vessels: subsidies on operating costs of fishing (like fuel, ice, bate, and personnel charges): Subsidies for port infrastructure, port facilities (fish landing facilities, fish storage facilities: income and

⁹⁸ United Nations Convention on the Law of Sea (10 December 1982)1833 UNTS 3, part VII, s 1, art 86-87 and 2. In the latter section, articles 116 and article 117 deal with fisheries. Article 116 assesses the right to fish on High Seas. Article 116 (a) states that all states have the right for their nationals to engage in fishing on High Seas, subject to their treaty obligations. Article 117 assesses that all States have the duty to take, or to co-operate with other states in taking, measures for their respective nationals as may be necessary for the conservation of living resources at High Seas.

⁹⁹ WTO Negotiating Group on Rules *Korea's Views on the Doha Development Agenda Discussions on Fisheries Subsidies* (TN/RL/W/17, Geneva, 2002) para IV [*Korea's Views on Fisheries Subsidies*]

¹⁰⁰ See Appendeix A of SCM Agreement

price support for products of marine wild capture fishing: Subsidies arising from the further transfer of access rights that a payer government has acquired from another Member government; Subsidies to vessels engaged in illegal, unreported or unregulated fishing (IUU)¹⁰¹. The draft also recognized certain General Exception to those prohibited subsidies. It includes Improving fishing vessel and crew safety; Adoption of gear for selective fishing technique; Personnel costs related to re-education; retraining or redeployment of fish workers; Decommissioning or capacity reduction programs¹⁰². The draft also recognized some special and differential treatment for developing countries including complete exceptions for LDCs. The draft also points out that fisheries management provisions would be indicative, not mandatory and could draw on indigenous institutions and measures.

From December 2007 to May 2008 a series of the meeting brought out the difference of opinion among the WTO members about Chair's draft. The draft was approved by the 'Friends of Fish' and other environmental stakeholders such as WWF¹⁰³. However, it was opposed by the countries like the U.S, Japan, and EU, and they were divided on the question of the scope and coverage of the proposed ban. Consequently, 2007 chair's draft failed to get a consensus of the members.

The NGR released a second set of consolidated text revising the text by the end of 2008 on subsidy disciplines and countervailing measures that reflect a "bottoms up approach to the issue at hand. This set of Rules also failed to achieve its objective.

2.5.5 10TH WTO MINISTERIAL CONFERENCE (2015)

There was no outcome on fisheries subsidies disciplines at 10th Ministerial Conference because three issues proved to be contentious. They are (1) a proposal to complete negotiations on prohibition of subsidies to IUU fishing and effort on overfished stocks within a specific trade name (2) a provision that would have required members to commit to the best endeavour stands still provision on new subsidies in prohibited areas, despite the inclusion of the standstill provision in the SDGs and the TPP;(3) Specific

¹⁰¹ TN/RL/W/213 (November 30,2007)

¹⁰² Id at 27

¹⁰³ Smriti Bahety, Julian Mukiibi “WTO Fisheries Subsidies Negotiations: Main issues and interest of countries (2017)

fisheries subsidy programs notification commitments under the ASCM, including details on format, and accounting for members resources' and technical capacity¹⁰⁴.

In a ministerial statement issued by 28 WTO members, they agreed "to seek to reinvigorate work in the WTO aimed at achieving ambitious and effective disciplines on fisheries, which should include, but not be limited to, prohibitions on subsidies, which should consist of, but not limited to, prohibitions on subsidies, (a)for fishing that negatively affect overfished fish stock; and (b) provided to vessels or operators engaged in illegal, unreported and unregulated fishing¹⁰⁵

2.5.5.1 SUSTAINABLE DEVELOPMENT GOAL 14

On September 2015, the 193 member states of the United Nations adopted the 2030 Agenda for sustainable development, including 17 Sustainable Development Goals(SDG) with 169 targets and 230 indicators.

Owing to the increased Human actions oceans are in threats of marine pollution, resource depletion and climate change. To combat these issues and to promote ocean sustainability, WTO adopted sustainable development Goal (SDG) 14 which mainly deals with 'life below water'. SDG 14 intends to support global, regional and local efforts to combat environmental degradation, as well as to address the ocean acidification. It mandates to conserve and sustainably use the oceans, seas and marine resources for sustainable development. Food and Agricultural Agency of the United Nations (FAO) act as a custodian agency for a few numbers of indicators under SDG 14. FAO support governments to set national priorities and targets; foster strong and coherent institutional and policy process and dialogues, and dialogues and contribute innovative partnership; contribute to mobilizing resources in support of national efforts; contribute to the global follow up and review of SDGs¹⁰⁶.

¹⁰⁴ UNCTAD, Trade and Environment Review 2016

¹⁰⁵ WT/MIN (15)/37/Rev.1 of 7 January 2016

¹⁰⁶ Food and agricultural organization of the United Nations 'Exploring Sustainable Development Goal 14.b and its Proposed Indicator (November 2017).

Target 14.1: By 2025, prevent and significantly reduce marine pollution of all kinds in particular from land-based activities, including marine debris and nutrient pollution.

Target 14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant and adverse impacts, including the strengthening their resilience and take action for their restoration to achieve healthy and productive oceans.

Target 14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels.

Target14.4: By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans

NEGOTIATING GROUP ON RULES- COMMUNICATIONS FROM THE
CHAIR DECEMBER 2018

Recent documents from the Negotiating Group on Rules¹⁰⁷ acknowledges the importance of the fisheries sector to livelihood and development. It also discusses the sustainable development of fisheries capacity throughout the value chain and concerns of food security in developing countries. It also reaffirms the commitment under 2030 to prohibit the subsidies that contribute towards overcapacity and overfishing by 2020, eliminate the existing subsidies that contribute towards the illegal, unreported and unregulated fishing and to prevent the introduction of such kind of subsidies. It also recognized that appropriate and effective special and differential treatment should be accorded to developing and Least Developed Countries (LDCs). Article 5 of this text states that a transitional period should be given to the developing and least developed countries following the entry in to force of this Agreement provided that the vessel receiving the subsidy does target the fish stocks that are already in an overfished situation.¹⁰⁸ The NGR Rules 2018 also mandates the members to notify the newly providing subsidies.¹⁰⁹ The SCM Committee shall make new arrangements to evaluate the current subsidies and to make recommendations for future improvement.¹¹⁰ The operation of this instrument shall reviewed by the committee.

inorder to restore fish stock in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.

Target 14.5: By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international and based on the best available scientific information.

Target 14.6: By 2020, prohibit certain forms of fisheries subsidies which contributed to overcapacity, eliminate subsidies that contribute to illegal, unreported, and unregulated fishing and refrain from introducing new such subsidies, recognising that appropriate and effective special and differential treatment for developing countries should be an integral part of the World Trade Organization fisheries subsidies negotiation.

Target 14.7: By2030, increase the economic benefits to small island developing states and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism.

Target 14 a: Increase scientific knowledge, develop research capacity and transfer marine technology, to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular, small island developing states and least developed countries.

Target 14.b: Provide access for small-scale artisanal fisheries to marine resources and markets.

Target 14c: Enhance conservation and sustainable use of oceans and their resources by implementing international laws as reflected in the United Nations Convention on the Law of the Seas, which provides the legal framework for the conservation and sustainable use of oceans and resources, as recalled in “future we want”

¹⁰⁷ TN/RL/W/274/Rev.6 November 2018

¹⁰⁸ Id Article 5

¹⁰⁹ Id Article 6

¹¹⁰ Id Article 8

NEGOTIATING GROUP ON RULES- WORK PROGRAMME JANUARY- JULY 2019 ¹¹¹

Negotiating Group on rules declared a cluster of meetings from January to July discussing the main issues such as special and differential treatment; institutional arrangements, notifications and transparency. Ambassadors will play an important role in the negotiations.

NEGOTIATING GROUP ON RULES CHAIR SUBMITS A DRAFT CONSOLIDATED TEXT TO WTO MEMBERS JUNE 25, 2020 ¹¹²

In negotiating Group on Rules Meeting on Fisheries Subsidies on 25 June, 2020, the Chair, Ambassador Santiago Wills of Colombia, proposed to the Heads of WTO delegations, in preparation of the document-based process of the negotiations, a draft unified document of disciplines.¹¹³ This was the first meeting on Fisheries Subsidies since the imposition of containment measures at Covid19 in mid-March. The Chair offered a thorough description of the document, which invited delegations to review at a meeting scheduled for 21 July in preparation for the first substantive discussion. The Chair remembered the importance of the talks on fisheries subsidies. Prior to the COVID-19 pandemic, the Members worked to conclude talks on fisheries Subsidies at the 12th Ministerial Conference, which was expected to take place from 8-11 June, and has not yet been rescheduled.

2.6 CONCLUSION

The reduction in worldwide fish stocks has consequence for the protection of food and the livelihoods of many people around the world. The Agreement of the World Trade Organization (WTO) on the prohibition of harmful subsidies for fisheries, which is currently being negotiated, will make a major contribution to the protection of global fisheries.

¹¹¹ TN/RL/31

¹¹² WTO/2020 News items-Fisheries Subsidies Negotiations Chair introduced draft Consolidated text to WTO Members https://www.wto.org/english/news_e/news20_e/fish_25jun20_e.htm Last Visited (9 August 2020)

¹¹³ Id

CHAPTER III
INTERNATIONAL LEGAL INSTRUMENTS ON FISHERIES – ACCESS TO
RESOURCES, SUSTAINABILITY AND FISHERIES SUBSIDIES
PERSPECTIVES.

“The sea is common to all because it is so limitless it cannot become a possession of anyone because it is adapted for the use of all, whether we consider [it] from the point of view of navigation or fisheries.”

- H Grotius¹¹⁴

INTRODUCTION

The above statement by Grotius in Mare Liberum¹¹⁵ points out that high seas are inalienable and are open to all. It reflects states common interest in uncontrolled use of high seas as a route for trade and as a fishing ground, as well as the part of the interest of the naval power in rigid allowing unhindered passage of their fleets.¹¹⁶ Grotius further pointed out that Sea is not a property of no one (re nullis) but is it in a common possession (res communis) and is public property (res publica).¹¹⁷

International fisheries law, a part of the law of the sea, is an emerging area of Public International Law that attempts to regulate fisheries management in areas beyond national Jurisdictions. This body of law is linked with other areas of international law, international environmental law, international marine environmental law, sustainable developmental law, etc. Along with international and regional treaties and customs, other elements such as decisions of International Courts and tribunals on international matters, practices of regional fisheries management organizations and writings of legal experts have contributed towards the development of International Fisheries Law. Economist and environmentalist have called for attention to the fishing sector by the WTO Regime. Fisheries conservation and management are addressed by several

¹¹⁴ H Grotius, The Freedom of the seas; Or, the Right which belongs to the Dutch to take part in the East Indian Trade (Trans R Magoffin) (Oxford University Press Oxford 1916) 28 as cited in The Oxford Handbook of the Law of the Sea.203 (2015).

¹¹⁵ Mare liberum (or The Freedom of the Seas is a book on International law written by the Dutch Jurist Hugo Grotius and is published in 1609. In the free seas, Grotius formulated a new principle that the sea was International territory and all nations were free to use it for trade.

¹¹⁶Natalie Klein, Maritime security and law of sea 14 (Oxford University Press Oxford 2011)

¹¹⁷ Supra 144

financial instruments such as UNCLOS, FAO and other regimes to which WTO members are not parties.

INTERNATIONAL LEGAL INSTRUMENTS ON FISHERIES.

United Nations Convention On Law of Sea (UNCLOS)

The UNCLOS has been often called as a constitution for the oceans. The Convention law on the law on the Sea came during the second half of the 20th century. Before UNCLOS Cannon short rule and the doctrine of the freedom of the seas were used to restrict national jurisdiction over high Seas¹¹⁸. The former rule meant that territoriality would extend to the distance a projectile can be fired from the land to cover, the latter doctrine manifested that a nation's sovereign would extend to a narrow band of coastal waters, leaving the rest of the seas free for all. In 1945, the United States introduced the Truman proclamation to claim sovereign rights over the outer continental Shelf and the resources therein. It also facilitates conservation of Zones in areas of the high seas contiguous to the coasts of the United States¹¹⁹.

The first United Nations Conference on Law of Sea was held in 1958, which resulted in the adoption of four important Conventions. These Conventions were (i) Geneva Convention On territorial waters and the Contiguous Zone. (ii) Geneva Convention on Continental Shelf; (iii) Geneva Convention on High Seas; and (iv) Geneva Convention on Fisheries. However, it failed to demarcate the maximum breadth of the territorial Sea.¹²⁰ The United Nations Convention On Law of Sea was coordinated in 1960 to deal specifically the issue of the breadth of territorial waters and also issues relating to fisheries limits¹²¹. The Conference failed to arrive at a consensus in establishing the limits of territorial waters. No Convention was therefore adopted in this Conference. The Third United Nations Conference on the law of the Sea (UNCLOS III) adopted in 1973 and was participated by 160 states. This Convention resulted in the adoption of a Comprehensive Convention, i.e., the United Nations Convention on the law of Sea. UNCLOS seeks to "promote the peaceful uses of the seas and oceans, the equitable and

¹¹⁸ Arup Kumar Poddar, Marine Biodiversity Protection 44 (1st ed.2016)

¹¹⁹ Harry S. Truman, President Truman's Proclamations on U.S Policy Concerning Natural Resources of Sea Bed and Fisheries on High Seas, available at <http://www.ibiblio.org/pha/policy/1945/450928a.html> (Last visited January 14,2020)

¹²⁰ Background to UNCLOS, Continental Shelf Programme available at (<http://www.Continentalshelf.org/about/1143.aspx>)

¹²¹ V.K Ahuja, Public International Law (1st ed.2015)

efficient utilization of their resources, the conservation of their living resources, and the study, protection and preservation of the marine environment.¹²² The objective of this Convention is to provide the legal framework marine issues, including the regulations for the exploitation and management of MLR (Marine Living Resources). However, the treaty took almost another decade for its full implementation, coming into force on November 16, 1994. some modifications and adjustments were made to Part XI of the LOSC before it entered into force. This occurred via a 1994 UNGA resolution¹²³ that formally agreed upon an agreement relating to the implementation of Part XI of the United Nations Convention on the law of the Sea of December 10, 1982¹²⁴. UN Fish Stock Agreement which was implemented on December 11, 2001 along with Part XI of UNCLOS III which came into force on July 28, 1996 is often referred to as the Constitution of the Sea. The fish stocks Agreement's core objective is the long term conservation and sustainable use of straddling fish stocks and Highly Migratory Fish stocks¹²⁵ and seeks to achieve that end via application of the precautionary principle in the management of these stocks. An important point of distinction between 1994 implementing Agreement and the 1995 fish stock Agreement is that the former is to be interpreted and applied in the context and manner consistent with LOSC.¹²⁶

" UNCLOS recognizes the need of conservation and efficient utilization of fisheries subsidies and thereby set forth an aspiration for a 'just and equitable international economic order' and due consideration of the special interests and needs of developing countries is pronounced to be vital to this end¹²⁷.

UNCLOS sought to settle the jurisdiction of coastal states over their territorial sea and fishing resources located in the sea adjacent to their coast. Jurisdiction of coastal states had been debated in international law through a series of decisions of the International court of justice.

UNCLOS enshrines the overarching framework for the governance of Oceans. Part XII of UNCLOS deals with protection and preservation of the marine environment. States have an obligation to protect and preserve the marine environment¹²⁸. States have the sovereign right to exploit their natural resources pursuant to their environmental

¹²² UNCLOS Preamble.

¹²³ UNGA Resolution 48/263 (1994)

¹²⁴ See 1994 implementing Agreement, Annex

¹²⁵ Art 2, Fish Stocks Agreement

¹²⁶ Id Art 4

¹²⁷ Supra 122(UNCLOS preamble)

¹²⁸ Article 192 of UNCLOS

policies and in accordance with their duty to protect and preserve the marine environment¹²⁹. The synergy between Arts 192 and Art 193 demonstrates the balance which had to be made between the common awareness of the need to protect and preserve the marine environment and proper consideration of the economic status of states. Though the foremost purpose of Article 193 has been to guarantee states demand for natural resources and the right to exploit them, it also underlines the precept 'No use of the ocean without its protection'. There is nothing novel in the proposition in the proposition first articulated in Article 192 of the 1982 Convention that 'states have an obligation to protect and preserve the marine environment' although this may not be the case when the article was first proposed in 1975¹³⁰.

However, the 1982 Convention is important because it assigns to the IMO the task of defining and updating the detailed content of the obligation of due diligence as formulated in Article 194¹³¹.

ACCESS TO RESOURCES

The zonal distinction was introduced by UNCLOS III delineating the maritime regions and the extent of sovereign powers.

Internal waters

Internal waters and territorial sea forms a part state territory. Article 3 of the UNCLOS declares that a nation may establish a territorial sea that extends up to 12 nautical miles from the baseline¹³². Internal waters¹³³ whether lakes, rivers or harbours, are such waters are to be found on the landward side of the baseline from which the width of the territorial and other zones is measured, and are assimilated with the foreign state. Other states can enjoy in these waters is a right of innocent passage in the territorial sea and, in minimal circumstances in internal waters. Though it is unusual in practice, a state enjoys exclusive access to the fish stocks in its internal waters and territorial sea, unless another state is accorded access by Agreement. Article 47 of the UNCLOS provides for

¹²⁹ Supra 122

¹³⁰ Patricia Birnie et al., International law and the Environment 387 (3rd ed.2009)

¹³¹ Id at 390

¹³² Daniel Hollis et al., United Nations Convention on Law of the sea (UNCLOS),1982,2010 (Jan 20,2020 11:45PM),<http://dramarnathgiri.blogspot.in/2012/11/unnited-nations-convention-on-law-of-sea.html>.

¹³³ R.R Churchill & A.V Lowe, The Law of Sea (3rd ed.1999)

regulations on how to determine the baseline for an archipelagic nation that consists of a small group of islands.¹³⁴

Exclusive Economic Zone

States have sovereign rights for exploring and exploiting, conserving and managing the fish stocks within the EEZ.¹³⁵ These rights are not absolute but subject to a number of duties. The coastal states must make sure that fish stocks within its EEZ are not endangered by overexploitation and must take all possible conservation and management measures. The coastal States is mandated to promote optimum utilization of living resources of its EEZ.¹³⁶ The coastal state is to determine the total allowable catch within its EEZ.¹³⁷ But it is to be noted that the duties of the coastal states are extensive and general and the States are given broad discretion in exercising these duties. For instance, the states enjoy discretionary powers in relation to setting the total allowable catch¹³⁸ provided that it does not amount to over-exploitation which do harm to the fish stock. Still, it is not necessarily a bad thing, but it enables the coastal states to adopt fishing strategies suitable to its need. It is still uncertain that the duties outlined in articles 61 and 62 have become part of customary law. A few states have incorporated these duties under their national law. Where the coastal states do not have the capacity to harvest the whole of allowable catch, it shall permit fisherman of other States to access to the surplus of allowable catch.¹³⁹ As per articles 69 and 70, landlocked and geographically attached States have guaranteed access for a portion of a surplus of allowable catch. The coastal states can lay down the conditions to govern fishing by other states in EEZ.¹⁴⁰ Where the coastal states have set down regulations which are in compliance with the Convention for foreign vessels in its EEZ it may enforce them by boarding, inspection, arrest and judicial proceedings.¹⁴¹ Where the size of EEZ of a

¹³⁴ Baseline is the coastal waterline ,the point from which a state can initiate determination of the part of adjacent oceanic areas or continental shelf for the purpose of exercising sovereignty as per Articles 5,6,7,and 9 to 14.

¹³⁵ Art.56(1) of LOSC

¹³⁶ Art.62(1) of LOSC

¹³⁷ Art.61(1) of LOSC.

¹³⁸ Art .61(1) of LOSC

¹³⁹ Art.62(2) of LOSC

¹⁴⁰ See Article 62(4) of LOSC. In the Franco- Canadian Fisheries Arbitration the tribunal held that the coastal state's competence to enact legislations was confined to conservation measures alone and therefore could not include measures to regulate fish processing.

¹⁴¹ Article 73(1) of LOSC

coastal state is considerably large, it poses a challenge for the enforcement of its fishery regulation in terms of technology¹⁴² and resources.

Exclusive Fishing Zone (EFZ)

Exclusive Fishing Zone (EEZ) is a concept of recent origin in International Law of the Sea. Widespread claims to the (EFZ) were the result of the failure of UNCLOS I and II to agree on the breadth of the territorial sea. It also failed to accord coastal states any special right of access to fish beyond the territorial sea. Coastal states led a wave of unilateral claims to twelve-mile EFZ. Some of the claims were initially challenged even leading to a ‘cold war’ between two states¹⁴³. In the 1974 fisheries Jurisdiction cases, the International Court of Justice without hesitation pronounced twelve-mile EFZ to be an established rule of international law. Within the EFZ the coastal state had exclusive access to the resources of the zone, although in most cases states whose vessel had traditionally fished in waters in the waters embraced by the new zones were given a period of time in which to phase out their activities and in some cases indefinite, though limited, continued access¹⁴⁴.

Continental Shelf

The coastal state has an exclusive access to the natural resources of its continental shelf. This right is confined under the customary rules of International law developed through various decisions of International Court of Justice¹⁴⁵. These rights are also recognized under Articles 1 to 3 of the Convention on the Continental Shelf¹⁴⁶. Where the physical shelf extends beyond 200 nautical miles, states can exercise rights to the outer limits of

¹⁴² Technology includes the use of satellites to track vessels

¹⁴³ The United Kingdom contested Iceland’s proclamation of a twelve EFZ in 1958, leading to a ‘cod war’ between the two states. However, by the early 1960s the United Kingdom and other states abandoned their opposition to such claims. There followed the conclusion of a number of bilateral agreements, and at regional level in western Europe the Fisheries Convention of 1964, which recognized claims to a twelve-mile EFZ.

¹⁴⁴ Supra 10

¹⁴⁵ See North Sea Continental Shelf cases (1969)

¹⁴⁶ Article 76 allows states to protect an additional 150 miles beyond the EEZ provided a naturally occurring continental shelf exists in that region, growing out to meet the oceanic water body in a continental slope and supporting a huge amount of marine life: nations exploiting resources in this region get a free head-start of five years, after which they are required to pay certain percentage of the values generated out of such resources to the International Seabed Authority, which is then apportioned among member-states of UNCLOS.

the Continental Shelf over those resources. ¹⁴⁷More than 80 states may be able to claim territorial rights over their continental shelf, where such right extend beyond 200 nautical miles from their coast, and many of these claims are currently being examined by the Commission on the Limits of Continental Shelf.

High Seas

High Seas are regarded as Common heritage of mankind. They are not inclined to appropriation and are open to use by all states. Thus the vessels of all states have access to the fish stocks of the High Seas. Though access to the fishery resources of the High Seas was unrestricted, many states through arrangements regulate high seas fisheries to limit their access. Under customary international law a coastal State particularly dependent on fishing for its economic livelihood in certain circumstances enjoyed preferential rights of access to the high-seas fishery resources in the waters adjacent to its coast¹⁴⁸.

Prevention of overfishing under international law was initially limited to allocating the competence to adopt conservation measures, but through the establishment of international fisheries commission and ad hoc agreements regulating fishing, it became a concern under International Law.

FISH STOCK AGREEMENT 1995

With the Adoption of the 1994 Implementing Agreement and the 1995 Fish Stock Agreement it has been possible to fill some of those gaps and to extend the LOSC into new areas¹⁴⁹. The Fish Stocks Agreement aims to improve the cooperation between the states to achieve the long term conservation and sustainable use of straddling Fish stocks and highly migratory fish stocks¹⁵⁰. It provides that coastal states and states fishing on the High Seas either directly or through appropriate regional However, the technological developments and environmental challenges may in the future further test the capacity of the regime of the international law of the sea to cope and there has been speculations as to whether there may be need for a Fourth United Nations Convention

¹⁴⁷ Joanna Mossop “The continental Shelf Beyond 200 nautical Miles Rights and Responsibilities 15 (1st edition 2016)

¹⁴⁸ See Fisheries Jurisdiction Cases

¹⁴⁹ Donald R Rothwell & Tim Stephens, the International law of the sea 28 (2010)

¹⁵⁰ Fish Stocks Agreement, Preamble

on Law of Sea.¹⁵¹ This question really challenges the validity and stability of the LOSC or in other words can the LOSC continue to act as a ‘constitution of the oceans’.¹⁵²

The provisions of UNCLOS are challenging to implement owing to logistical problems and colossal expense involved, especially in relation to areas beyond national jurisdiction. Every states would not give preference to the High seas over its coastal areas, where would like to have its resources concentrated. The paucity of resources assumes graver significance in the developing countries, an indication of the same being quickly revealed by a comparative assessment of enforcement mechanism of the bodies like the regional fishery bodies like the regional fishery in the Bodies in developed countries, when it comes to the availability of resources and issue based solutions.

STRADDLING STOCKS

The LOSC Convention identifies the need for the inter-state cooperation and coordination regarding shared stocks and highly migratory species. Straddling stocks are stocks of fish that migrate between or occur in both, the EEZ of one or more states and high seas¹⁵³. Since the establishment of 200 nautical miles Exclusive Economic Zones (EEZ) by many coastal states, distant-water fishing states are forced to conduct their fishing operations in areas of high seas adjacent to EEZ. Consequently, there was a notable increase in catches of straddling fish stocks and highly migratory fish stocks.¹⁵⁴ In some cases, such fishing activities have the potential to undermine the protection and management measures placed in place by coastal states in areas under their natural jurisdiction, given the transboundary existence of fish stocks¹⁵⁵. The law of sea Convention has only one brief provision dealing with straddling stocks. Where the same stock or stocks associated species occur both within the exclusive economic zone and in an area beyond and adjacent to the zone, the coastal zone and the states fishing for such stocks in the adjacent area shall seek, either directly or through appropriate sub-regional or regional organizations, to agree upon the measure necessary for the conservation of these stocks in the adjacent area¹⁵⁶. This provision fails to provide a

¹⁵¹ Supra 145

¹⁵² Koh, Constitution for the Oceans’(n 115)

¹⁵³ Supra 10

¹⁵⁴ See Also Malcom Devanas ‘International Law 680 (4th ed.2014)

¹⁵⁵ DOALOS/UNITAR briefing on developments in ocean affairs and the law of sea 20years after the conclusion of the united nations convention on the law of sea (Wednesday,25 and

Thursday,26september 2002, United Nations Headquarters, New York, Conference Room 5.

¹⁵⁶ Article 63 (2) of UNCLOS.

substantive guidance as to how the problems involved with regulating straddling stocks are to be addressed. But it did provide for cooperation directly or through international organizations for the conservation and optimum utilization of such species¹⁵⁷. UNCLOS is accompanied by more specific treaties, such as an implementing agreement on straddling fish stocks and highly migratory fish stocks (United Nations Fish Stocks Agreement, UNFSA).¹⁵⁸ The UNFSA attempts to address ongoing problems especially overutilization of resources within the high seas. It is regarded as a major improvement to the international framework sustainable fishing. A Precautionary approach to the protection of marine ecosystem and biological diversity is now addressed in many of the international treaties and Conventions including Conventions on Biological Diversity and Climate Change, 1995 Agreement on Straddling and Highly Migratory Fish Stocks, the 2004 Ballast Water Convention and the creation of specifically protected areas by IMO and under regional sea Agreements.

GOVERNING BODIES UNDER UNCLOS

Various bodies have been created under UNCLOS to administer its provisions. These include the Commission on the Limits of the Continental Shelf, the International Seabed Authority (including the Secretariat, the Assembly and the Council), Legal and Technical Commission and Economic Planning Commission. These bodies try to ensure effective and expanding implementation of the provisions and principles contained in the UNCLOS. Moreover, they regulate the exploitation of marine resources in accordance with the tenor of UNCLOS. The International Tribunal for Law of Sea, which is established under UNCLOS also plays an important role in resolution of disputes spring from the issues addressed by various provisions of the Treaty. International law fails to define the term ‘overfishing’ and it even fails clearly point out when a fish stock is overfished. As fisheries are common property natural resource, anyone can enter a particular fishery. Property rights only arise when the fish are caught and kept in the custody of an individual fisherman. If more and more fishermen enter the fishery more and more fish will be caught. If the quantity of fish caught, together

¹⁵⁷ Article 64 UNCLOS

¹⁵⁸ 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.

see further http://www.un.org/Depts/los/convention_agreements/convention_agreements.htm. Note that highly migratory species are listed in Annex I of UNCLOS, which lists 17 species, not all of which would be considered as “highly migratory fish stocks” (i.e. dolphins and cetaceans)

with fish lost through natural mortality, exceeds the amount of fish being added to the stock through reproduction, then the size of the stock will start to decrease: in extreme cases the stock may even collapse and this phenomenon is known as overfishing¹⁵⁹.unregulated fishery will ultimately end in overfishing.in order to combat overfishing it is necessary to regulate the fish to be caught. However, the United Nations Convention on the Law of the Sea (UNCLOS) states in Article 61 on the conservation of living resources that “[t]he coastal State [...] shall ensure through proper conservation and management measures that the maintenance of the living resources in the exclusive economic zone is not endangered by over-exploitation. Such measures shall also be designed to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield. Therefore, the convention recognizes the maximum sustainable yield for the assessment of fish stock. Article 61 ad 62 of the UNCLOS describes the states obligation for the conservation and use of living marine resources within the Exclusive Economic Zone¹⁶⁰. Article 194 lays down the obligation for the conservation of biodiversity and protection of marine habitat. The agenda 21 of the 1992 Rio Conference have referred to UNCLOS 1982 as providing ‘the international basis upon which to pursue the protection and sustainable development of the marine and coastal environment and its resource. Several new elements which were not found in UNCLOS have introduced under Chapter 17 of Agenda 21 which includes an emphasis on integrated and precautionary approaches to the protection of marine and coastal environment¹⁶¹.

FOOD AND AGRICULTURAL ORGANISATION

FAO recognizes the importance of fisheries and its associated products in poverty allocation and in economic growth through fish production and trade. FAO plays a crucial role in International Fisheries regulation through Committee on Fisheries and related Sub-committees on Fish Trade and Aquaculture¹⁶². FAO along with Regional Fisheries Bodies, Cooperatives and government works on implementing Code of Conduct for Responsible Fisheries and the Ecosystem approach to Fisheries (EAF)¹⁶³.

¹⁵⁹ Supra 133

¹⁶⁰ P kataria, “sustainable development goals: their impacts on forest and people”

¹⁶¹ Agenda 21,ch 17,para 17.1

¹⁶² FAO. 2019. *Report of the Thirty-third Session of the Committee on Fisheries, Rome, Italy 9–13 July 2018*. FAO Fisheries and Aquaculture. Report No. 1249. Rome. Licence: CC BY-NC-SA 3.0 IGO.

¹⁶³ Id

The focus of FAO has shifted from building brotherhood between coastal states and fishing states to devising methods of conservation. The FAO's Contribution towards the management of fisheries can be divided into three phases. In the first phase FAO focused on the management of fisheries in the Northern European countries through the formulations of standardized methodologies. During the second phase they shifted its focus from Northern European countries towards developing countries. They have carried out various workshops and training courses and establishing regional commissions between the 1960s and 1980s. This phase of FAO is commonly referred to as developing countries phase. In the third phase the FAO has expanded its work towards the global level as it had considerably more resources and better experience. In this phase FAO analyses the effect of globalization on world fisheries. In order to eliminate IUU Fishing, FAO has issued certain guidelines in the form of an International Plan of Action (IPOA IUU).¹⁶⁴ This is a voluntary instrument which describes IUU fishing with reference to Maritime Zones as well as RFMO's arrangements for governance along with the description which has been taken up in the WTO's textual proposals on fisheries subsidies disciplines.¹⁶⁵

The lack of proper and efficient enforcement mechanism has been one of the primary reasons for the failure for the regulation of fisheries under the regime of International Law. According to the Food and Agriculture Organization (FAO) of the United Nations, fish stocks that are within biologically sustainable levels has fallen from 90.0 percent in 1974 to 66.9 percent in 2015¹⁶⁶.

SUSTAINABLE DEVELOPMENT AND SUSTAINABLE USE

Ever since the conclusion of Earth Summit and Agenda 21, the concept of sustainable development concept has been frequently invoked in international law and policy¹⁶⁷. Brundland Commission described it as *development that meets the needs of the present without compromising the ability of future generations to meet their own needs*. Article

¹⁶⁴ FAO IPOA-IUU (<http://www.fao.org/fishery/ipoa-iuu/en>) see also (<http://www.fao.org/fishery/ipoa-capacity/en>) and the Voluntary guidelines on flag state Performance (<http://www.fao.org/fishery/topic/16159/en>)

¹⁶⁵ FAO IPOA-IUU para 3.

¹⁶⁶ Introduction to Fisheries Subsidies in the WTO, World Trade Organization (13 September 2016) At 9 (https://www.wto.org/english/tratop_e/rulesneg_e/fish_intro_ehtm)

¹⁶⁷ Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, UN Doc A/CONF.151/26 (1992) Annex II.

4 of the Rio Declaration requires that ‘*environmental protection shall constitute an integral part of development process and cannot be considered in isolation of it*¹⁶⁸. The Convention on Biodiversity defines the sustainable development as ‘*use in a way and at the rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs of present and future generations*.’¹⁶⁹

In a strict sense, putting sustainable use into practice should mean that over a certain period of time only as much of renewable resource is taken for human purposes that can be naturally replenished¹⁷⁰. The sustainable use of MLR (Marine Living Resources) would therefore oblige the state to allow for catches of a target species only to the extent to which the relevant stock reproduces. Yet, despite obvious necessity, the international legal framework in place and continuous efforts towards its implementation, it seems doubtful that management of MLR at sustainable levels will be fully achieved in future. The LOSC supports sustainable use of resources by limiting exclusive Economic Zone (EEZ) and high seas to the maximum Sustainable yield (MSY)¹⁷¹. The Geneva Convention on Fishing and the Conservation of Marine living resources of the High Seas also incorporated objectives for the achieving and maintaining the ‘optimum sustainable yield’ in order to secure the supply of fish as food for human consumption.¹⁷²

CONCLUSION

At the International level the countries are obliged for the conservation and sustainable management of fisheries. This is apparent from the membership and commitments of countries to the UNCLOS, UN Fish Stock Agreement etc. The coastal states, distant water Fishing Nations should take the adequate steps for the conservation and management. Regional level fisheries management should be strengthened to identify illegal and overfishing. Continuous monitoring surveillance of high sea vessels by the concerned state is significant in controlling IUU fishing. Development and protection of Marine life forms should go hand-hand.

¹⁶⁸ Rio Declaration n 8

¹⁶⁹ Art 2 Convention on Biological Diversity.

¹⁷⁰ Supra 10

¹⁷¹ Art 61(3) and 119(1) of LOSC

¹⁷² Art 2 of Geneva Convention on Fishing and Conservation of the Living Resources of the High Seas.

CHAPTER IV

INDIAN FISHERIES LANDSCAPE – REGULATORY ENVIRONMENT, DEVELOPMENT CONCERNS AND SUBSIDIES SCENARIO

“Ensuring the Sustainable Development of the Oceans requires effective coordination and cooperation, including at the global and regional levels, between relevant bodies”¹⁷³

INTRODUCTION

Managing living marine resources for the global food market is a classic issue of collective action, and often it is referred to as "back of the invisible hand" problems or free-rider problems. Most problems of collective action involving natural resources share similar qualities.¹⁷⁴ Take a physical resource that is scattered, and mostly independent of a system for the legal property. Add multiple independent actors who feel they are entitled to extract the property, for a variety of historical reasons. Top it off with an inadequate system of governance, also under control. The consequence is an unprecedented resource crisis.¹⁷⁵ As per the Living Blue Planet Report, the State of global Marine Fisheries is critical and worrying.¹⁷⁶ The global fishing fleet is 2-3 times larger than what the oceans can withstand. In other words, humans are taking far more fish out of the ocean than any remaining will replace them. As a result, 31% of global fish stocks are listed as overfished and another 58% as being completely depleted, with little capacity to produce higher harvests.¹⁷⁷ The United Nations Educational, Scientific and Cultural Organization (UNESCO) warns that fish, long regarded as the "poor man's protein", is diminishing globally as a result of increasing market demand and overfishing.¹⁷⁸

¹⁷³ Plan of Implementation of the World Summit on Sustainable Development (A/CONF.199/20) para 30

¹⁷⁴ Russell Hardin, Collective Action 7 (1982)

¹⁷⁵ Anastasia Telesetsky, Laundering Fish in the Global Undercurrents: Illegal, Unreported, and Unregulated Fishing and Transnational Organized Crime, 41 Ecology L.Q. 939 (2014).

¹⁷⁶ WWF 2015 'Living blue planet report. Species, habitats and human well-being. Eds. Tanzer, J et al. WWF, Gland, Switzerland. 68 pp.

¹⁷⁷ FAO, 2016 The State of World Fisheries and Aquaculture 2016 'Contributing to food security and nutrition for all. Rome. 200 pp.

¹⁷⁸ The United Nations Educational, Scientific and Cultural Organization is a specialized agency of the United Nations aimed at Contributing "to building of Peace, the eradication of poverty, Sustainable

INDIAN FISHERIES LANDSCAPE

India is a South Asian Country that is mostly surrounded by oceans. It has 28 states and seven union territories, out of which the population of nine states and four union territories depend on fishing both directly or indirectly. With an overall population today exceeding 1.2 billion people, India is the World's second-most populous country. Marked oceanographic differences exist between the east and west coasts. However, both the eastern Bay of Bengal and the Arabian Sea along the west coast provide the coastal communities with abundant marine resource. India's southwestern coastal region extends from approximately 8° N to 15° 30' N with a coastline length of 994 km, adjoining three maritime states, Kerala, Karnataka and Goa.¹⁷⁹ The continental shelf area off the southwest coast is 75 400 km, and less than 50 m depth is 31 per cent of the area.

India is the third-largest country in terms of Fish production and the World's second-largest producer of aquaculture fish. India contributes to global fish production by around 7 per cent. The country also has more than 10 per cent of the World's aquatic biodiversity and is one of the biodiversity richest countries with 17 mega bio diversities. The country is also home to more than 10% of the worldwide fish biodiversity and is one of the 17-mega biodiversity-rich countries. Nearly 14 million people in India are engaged in fisheries and its allied activities. Andhra Pradesh is the largest fish producing state in the country, followed by Gujarat and West Bengal. As per the 2017-2018 estimate, the total fish production of the country is around 12.60 million metric tonnes, of which nearly 70 per cent is from inland fisheries and 50 per cent from culture fisheries. About 50 different types of fish and shellfish products are shipped to 75 countries worldwide. Fish and fish products have now emerged as India's largest agricultural export group, with a quantity of 13.77 lakh tonnes and a value of Rs. 45,106.89 Crore.

The fisheries sector plays an inevitable role in the development of the Indian Economy, and it contributes one per cent to the total GDP. There is rapid growth in the Industrial sector from 4.9 per cent in 2012-2013 to 11.9 per cent in 2107-2018. Export of fish and fish allied products emerged as the largest group in agricultural exports, and as per the

development and Intercultural dialogue through education, the sciences, Culture, Communication and Information.

¹⁷⁹ E. Vivekanandan & M. Srinath etal 'Marine Fisheries Along the Southwest Coast of India' 758

latest Estimation, it accounted for Rs 47,620 crore in 2018-2019.¹⁸⁰ 0.99 million fishermen are directly, and 0.61 million are indirectly associated with the fisheries sector. The country's total fishing folk population is 4.00 million, and about 1,94,490 fishing crafts are operating in the country to harvest marine fishery resources (CMFRI, 2010).¹⁸¹ Around 72,500 of these are mechanised crafts, 71,300 are motorised, and the remaining are un-mechanised. There are approximately 35,200 trawlers in the mechanised sector. These crafts are fishing up to 100m depth zone. Traditional crafts and motorised boats are more concentrated on the east coast (72% and 58%) while the mechanised vessels are more in the west coast (58%).¹⁸² It is commonly cited that the depletion of fisheries is due to the introduction of techniques of trawler fishing, which are scrape, the bottom of the sea and end up catching juvenile fish. The fact that there is a definite challenge to fishing stocks is not disputed by a lot of work undertaken by several fisheries research firms.¹⁸³

FISHERIES MANAGEMENT IN INDIA

In India, the fisheries Management and Conservation are under the Department of Animal Husbandry, Diaring and Fisheries (DAHD) under the Ministry of Agriculture, Government of India.¹⁸⁴ The Indian Council of Agricultural Research (ICAR) and other scientific Institutions also plays an inevitable role in the fisheries Management and Conservation.¹⁸⁵

The geographical area of Indian Marine Fisheries has coastline around 8118 km; Exclusive Economic Zone is an area around 2.02 million sq.km including 0.5 million sq.km of Continental Shelf and 3937 fishing villages.¹⁸⁶ Gujarat secured the first position with 7.80 lakh tonnes landings followed by other maritime states. As per current CMFRI report Tamil Nadu has 7.80 lakh tonnes (20.1%), Kerala with 6.43 lakh tonnes which contributes to 18.4% of total Indian Marine Landings. Significant contributions are made by other maritime states such as Karnataka with 4.52 lakh

¹⁸⁰ <https://economictimes.indiatimes.com/news/economy/agriculture/fisheries-sector-registered-more-than-double-growth-in-past-5-years-emerged-largest-group-in-agri-export-economic-survey/articleshow/70071062.cms> last visited May 6 2020

¹⁸¹ T.V Sathinandan ‘ Marine Fisheries Sector in India- Resource Endowments, infrastructure intensities and stakeholder analysis.28

¹⁸² Id

¹⁸³ Johnson.B Management of Indian Fisheries- Regulation and Compliance 365 (2012)

¹⁸⁴ Jacob Joseph, select legal and Policy Instruments on Marine Fisheries Conservation and Management,210(1st e.d 2011)

¹⁸⁵ Id at 210

¹⁸⁶ Preamble Marine Fishing Policy 2004

tonnes (13.0%), Maharashtra with 2.95 lakh tonnes which contributes 8.5% and Andhra Pradesh with 1.94 lakh tonnes which adds 5.5%, West Bengal with 1.60 lakh tonnes and Odisha with 0.89 lakh tonnes. Contributions of Union territories are also inevitable where Daman & Diu has 0.68 lakh tonnes, Goa with 0.59% and Puducherry with 0.45 lakhs.¹⁸⁷ There are 1896 traditional fish landing centres, 33 minor and six principal fish harbours which act as a base for 2,08,000 non-motorised craft, 55000 small scale beach landing and 180 deep-sea fishing vessels in which 80 are in operation.¹⁸⁸

In India fisheries management are under two heads; Fisheries Management under Exclusive Economic Zone (EEZ) and in territorial waters.¹⁸⁹ As per the Indian Constitution, the central government has jurisdiction over the fisheries in Exclusive Economic Zone¹⁹⁰ whereas the state government has jurisdiction over fisheries in territorial waters.¹⁹¹ In addition to playing an advisory role, the Central Government also provides financial support for the administration of the Central Sector and Centrally Sponsored Schemes for the states / Union Territories. Policy measures are needed not only to make marine fisheries sustainable and responsible but also to make them competitive globally so that Indian producers can benefit from international markets.¹⁹²

FISHERIES MANAGEMENT UNDER EXCLUSIVE ECONOMIC ZONE (EEZ)

In 1976, India enacted the Territorial Waters, Continental Shelf, Exclusive Economic Zone and Other Maritime Zones Act followed by the adoption Article 297¹⁹³ of Chapter III, Part XII of the Constitution with the implementation of the EEZ concept.¹⁹⁴

¹⁸⁷ CMFRI Report 2018-2019

¹⁸⁸ Preamble Marine Fishing Policy 2004

¹⁸⁹ <https://indianfisheries.icsf.net> last accessed on May 6, 2020

¹⁹⁰ Entry 57, list 1 of 7th Schedule of Indian Constitution

¹⁹¹ Entry 21, List II of 7th schedule

¹⁹² Preamble Marine Fishing Policy 2004

¹⁹³ Article 297 of the Indian Constitution read as follows: Things of value within territorial waters or continental Shelf and resources of the Exclusive Economic Zone to vest in the Union.

- (1) All lands, minerals and other things of value underlying the ocean within the territorial waters, or the Continental Shelf, or the Exclusive Economic Zone, of India shall vest in the Union and be held for the purposes of the Union.
- (2) All other resources of the Exclusive Economic Zone of India shall also vest in the Union and be held for the purposes of the Union.
- (3) The limits of the territorial waters, the Continental Shelf, the Exclusive Economic Zone, and other Maritime Zones, of India shall be such as may be specified, from time to time, by or under any law made by the Parliament.

¹⁹⁴ The Exclusive Economic Zone of the Seas around India (2018)

<https://www.geographyandyou.com/exclusive-economic-zone-seas-around-india> last accessed on 7th May 2020.

Section 7 of the conveys central government with sovereign powers in the EEZ, for the exploration, exploitation and conservation of natural resources including fisheries.¹⁹⁵No person, including a foreign government, shall, except under and in compliance with any agreement with the Central Government or a license or letter of authority granted by the central government, explore or exploit any EEZ resources or conduct any search or excavation or conduct any research within the EEZ or perform any research exercises therein, maintain or operate for any reason any artificial Island, offshore terminal installation or other structure or system located therein.¹⁹⁶ A Letter of Permission from the Department of Animal Husbandry, Dairying and Fisheries is required for the operation of any fishing vessel in the Indian EEZ and should not be transferred to any other company or individual unless explicitly authorised by the government.¹⁹⁷ Although the state governments control Inland Fisheries entirely, Marine Fisheries is a joint responsibility between the central and coastal state / UT Governments. Coastal States / UTs are responsible for the growth, management and control of fisheries in marine waters within the territorial 12 nautical miles (22 km) range. The Government of India is responsible for fisheries production, management and regulation in the waters of the EEZ beyond 12 nautical miles and up to 200 nautical miles (370 km). It is therefore imperative that the Centre efficiently manages and controls this common property resource in close cooperation with States for its safe and responsible use. Coastal states / UTs have enacted the Marine Fisheries Protection Acts (MFRAs) to control and maintain territorial waters, including compulsory registration and licensing of fishing vessels. On a national level, there is no such regulation for EEZ. The Centre will also pass comprehensive legislation (National Marine Fisheries (Regulation and Management) Act, 2019) for the systematic use of EEZ tools. An

¹⁹⁵ Section 7 (4) of the Territorial Waters, Continental Shelf, Exclusive Economic Zone(EEZ) and other Maritime Zones Act,1976 reads as follows

In the exclusive economic zone, the Union has,--

- (a) sovereign rights for the purpose of exploration, exploitation, conservation and management of the natural resources, both living and non-living as well as for producing energy from tides, winds and currents;
- (b) exclusive rights and jurisdiction for the construction, maintenance or operation of artificial islands, off-shore terminals, installations and other structures and devices necessary for the exploration and exploitation of the resources of the zone or for the convenience of shipping or for any other purpose;
- (c) exclusive jurisdiction to authorize, regulate and control scientific research;
- (d) exclusive jurisdiction to preserve and protect the marine environment and to prevent and control marine pollution; and
- (e) such other rights as are recognised by International Law

¹⁹⁶ Section 7(5) of the Territorial Waters, Continental Shelf, Exclusive Economic Zone(EEZ) and other Maritime Zones Act,1976

¹⁹⁷ Guidelines for fishing Operations in Indian Exclusive Economic Zone, 2014

institutional framework to mitigate and manage inter-state conflicts, as well as international disputes for the management of marine fisheries will need to be improved and developed.

FISHERIES MANAGEMENT UNDER TERRITORIAL WATERS

According to the Indian Constitution, coastal fisheries are a state subject, and coastal states have played a variety of roles in developing fishing and post-harvest. Although it is a state subject, the central government continues to support fisheries by making investments in more capital-intensive infrastructure for areas such as fishing harbours and deep-sea fishing.¹⁹⁸ The states implement many of the centrally sponsored schemes. As a result of the boom in export trade for frozen shrimp, the rapid growth of the country's mechanised fishing fleet has increased the fishing pressure on coastal marine fishery resources leading to fish catch stagnation and economic overfishing.¹⁹⁹ The ensuing rivalry for the same resources between the mechanised and craft sectors leads to frequent conflicts. It has prompted many maritime states to enact Marine Fishing Protection Acts to protect the interests of both indigenous and commercial fisheries.²⁰⁰ Such regulations are in terms of the reasonable use and protection of fishery resources. The management approaches are more or less identical in all States, and the proposed rules are based on preventing disputes between indigenous fishers and mechanised fishing vessels.

The former British government visualised as early as 1897 the need to implement such legislative policy steps to regulate inland and marine fishing practices. However, the Indian Fisheries Act of 1897 expressly prohibited only the use of explosives and poisons for capturing fish and provided for the enactment of rules and regulations by the provincial governments on fisheries resources management. Apart from granting licenses for the operation of different forms of fishing equipment in inland waters (including backwaters), the provincial government saw no urgent need to control fishing in coastal waters, as fisheries were mainly artisanal.

The aim of coastal fisheries management in India until the 1970s was to increase fish production by developing and enhancing fishing techniques and efficiency and by

¹⁹⁸ Ramachandra Bhatta and R. Santha Kumar, *Fisheries Administration and Legislation* 1(2003)

¹⁹⁹ P.S.B.R James *A review of the existing Regulations in the Maritime States in India in Relation to Exploitation of Fishery Resources and their Conservation and Management* 84 (1992)

²⁰⁰ *Id* at 84

offering fishermen welfare initiatives.²⁰¹ With the advent of mechanised fishing vessels using trawl nets to catch prawns in the early 1960s, the rapid expansion of the mechanised fishing fleet, the induction purse in Goa, Kerala and Karnataka in the late 1970s and the inflow of large numbers of trawlers in the early 1980s, the fishing pressure on marine fisheries has increased drastically leading to economic overfishing. The resulting rivalry- for the same resources between the mechanised and craft sectors lead to regular conflicts. Such developments prompted the Government of India in March 1978 to issue the following guidelines to State Governments.²⁰² The guidelines include the waters can be up to a distance of 5 km from the shore reserved solely for non-mechanized fishing boats. Mechanised fishing vessels can only operate within 5 km of the coastline. Fishing vessels of 25 GRT (usually above 15 m OAL²⁰³) which require skippers to manned under existing miles should operate more than 10 kilometers from the shore. In December 1980 the guidelines were modified as follows: Non-mechanized crafts can operate exclusively up to a distance of 10 km from the shore. Small mechanised vessels can operate over a distance of 10 km from the coast. OAL vessels 20 m above sea level can operate beyond 23 km from the shore, i.e. outside territorial waters. Simultaneously with the issue of these guidelines, the Government of India circulated a model bill to all maritime states to formulate rules and regulations for the management of marine fisheries to be passed by the respective State legislatures with a view to preserving the fisheries resources and also providing safety to the artisanal fishermen.

However, there were grave concerns in the 1980s and 1990s that the unregulated growth of the fishing industry might become counterproductive.²⁰⁴ Consequently, fisheries management priorities need to be shifted from increasing fish production to sustaining fisheries, and in the 1980s Marine Fisheries Regulation Acts (MFRA) were enacted by the governments of the maritime states. Those acts concentrate on controlling the fishing effort, gear and area. Although the content varies

²⁰¹ E. Vivekanandan, Sustainable Coastal Fisheries for Nutritional Security, Sustainable Indian Fisheries. Pandian. T.J. (ed.), 200 I. pp. 19-42. National Academy of Agricultural Sciences, New Delhi

²⁰² Supra 194

²⁰³ OAL stands for Overall length. It is defined as the distance measured in metres in a straight line on a parallel to the design waterline between the foremost point of the bow and the aftermost point of the stern.

²⁰⁴ Devaraj, M and Vivekanandan, E (1999) *Marine capture fisheries of India: Challenges and opportunities*. Current Science, 76 (3). pp. 314-332.

between states, the two significant restrictions in the Acts are (1) mesh size regulation and (2) ban on inshore fishing by mechanised vessels. However, these two restrictions are considered to be difficult to enforce and can prove ineffective in replenishing the fish stocks if enforced.²⁰⁵

Marine Fishing Regulation Act was first passed by Goa Legislature in 1980 followed by Kerala (1980), Maharashtra (1981), Orissa (1982), Tamil Nadu (1983), Karnataka(1986), West Bengal(1993) and Andhra Pradesh (1994), Lakshadweep (2000), Gujarat (2003) and Andaman and Nicobar Islands (2003). Indeed, these laws have provided state governments with the authority to regulate and monitor fishing activities in their respective states in accordance with different local needs. Indeed, these laws have provided state governments with the power to control and monitor fishing activities in their respective states in accordance with different local needs. In addition to other administrative requirements, the system of registration and licensing of all fishing vessels including non-mechanized country craft serves the urgent need to provide an accurate record of the number of different types of fishing vessels operating from the various bases/ports along the Indian Coast.

According to the World Bank,²⁰⁶ the current India fisheries legal framework is not comprehensive, and it contains several loopholes, not updated and inconsistent with India's international obligations. It emphasized on foreign access and development rather than fisheries management and conservation. Moreover, India lacks an efficient system to translate the advisories put forth by the research institutions into rules and regulations for sustainable development.

NATIONAL FISHERIES POLICY 2020

The National Fisheries Policy 2020 aims to consolidate the sectoral gains and ensure sustainable growth through policy support to encourage and accelerate the production of fisheries in a responsible and inclusive manner through multi-pronged strategies and focused interventions to provide the requisite impetus to realize the full potential across the country. The Policy sets out a straight forward roadmap for unhindered sector

²⁰⁵ Vivekanandan, 'Sustainable Coastal Fisheries for Nutritional Security, Sustainable Indian Fisheries. Pandian. T.J. (ed.), 200 I. pp. 19-42. National Academy of Agricultural Sciences, New Delhi

²⁰⁶World Bank, 2010. India Marine Fisheries: Issues, opportunities and transitions for sustainable development. Report No. 54259-IN. 101p.

growth by optimally harnessing fishery capital in compliance with the best national and international standards. It will also create a conducive climate for the fisheries sector to draw investment. The Policy aims to reinforce the government program to double the incomes of fishermen and fish farmers and double the exports to improve the lives and livelihoods of Fishermen and their families. The NFP will include elements of the 'Blue Growth Initiative' the 2018 Agriculture Export Policy, as well as the goals set under the Sustainable Development Goals that India is committed to. The NFP serve as an overarching policy mechanism that will provide direction to States and UTs in the formulation of state-specific policies and laws with regulatory and structural characteristics to be enforced through short, medium and long term plans. The NFP is an emerging instrument open to analysis on the basis of changing needs and technologies. It will be reviewed in consultation with stakeholders to ensure the policy remains relevant and is in line with changing sector needs and requirements through an institutional mechanism. It is developing an ecologically stable, economically viable and socially inclusive fisheries sector that contributes to the economic prosperity and well-being of fishers and provides safe and responsible food and nutritional protection for the country.

INDIA'S STAND ON FISHERIES SUBSIDIES

Indian Fisheries sector is vast economic importance on account of its immense resource potential, promising export growth, employment opportunities and its significance as an inevitable source of animal protein.²⁰⁷ India's coastal communities track multiple fishing and non-fishing activities and the majority of their profits comes from open access / common Resource land.²⁰⁸ The sector is about to reach the significant phase of high growth that would eventually bring the "Fish Revolution" to the waters of India, both inland and at sea.²⁰⁹ Infrastructural facilities play a crucial role in catching fish and delivery of the same to the ultimate consumers. Infrastructure growth gained momentum in India after mechanised fishing vessels were introduced in Indian Waters. During the inception of Mechanisation, the gear was still the same old gill nets, but they were now nylon nets in contrast to conventional cotton, hemp, and linen yarn. Later, trawlers were brought to prominence. This increase in gear and vessels saw an

²⁰⁷ A.G Kalwar and R.G Dandekar, "Bright prospect for Indian Fisheries, *Journal of the Indian Fisheries Association* "167 (1988)

²⁰⁸ Ramachandra Bhatta 'Socio Economic Issues in Fisheries Sector in India' 17

²⁰⁹ Id at 172

increasing demand for the Indian prawn from the USA and Japan. The returns were impressive, and this led to the introduction of larger-scale mechanised vessels and the modernisation of indigenous crafts for marine fishery production. These have proven to be a significant foreign-exchange source.²¹⁰

Subsidies have, for many years, been a controversial aspect of fisheries policy and management. Fisheries subsidies are for a wide variety of purposes, including promoting the growth of the industry, supporting rural economies, providing fisheries facilities and support services, retiring fishing capacity and encouraging early retirement for fishers.²¹¹ According to UNEP, the various subsidies to the fisheries sector are fisheries Infrastructure (harbour and port construction, management services (monitoring and surveillance, study management, fishing access subsidies, vessel decommissioning subsidies, capital subsidies, income support for variable cost subsidies and price supports²¹². Fisheries subsidies, however, are recognised as a critical factor in generating overcapacity and sector overfishing. Although these problems stem from many sources, including poorly structured national and foreign management systems and inadequate implementation of legislation, the situation has been aggravated by continued granting of subsidies. Although subsidies are potent policy tool for governments to implement fisheries policy, many subsidy schemes are poorly designed, with unclear targets and inadequate evaluation of the dynamic impact on the industry and the rest of the Economy.²¹³

Furthermore, subsidies once adopted tend to be very difficult to receive dismantling, creating a subsidy dependency loop and reducing the stability and resilience of industry and fisheries communities. Rapid technical development in vessel construction, gear design, and techniques of storage, together with the continued availability of subsidies, encouraged a "race to catch," with consequent adverse impacts on fish stocks. Except in the mid-1960s, financial assistance reports to the fisheries sector prepared by the Organization for Economic Co-operation and Development (OECD) urged its Member States to limit themselves in granting subsidies and sought to boost the transparency of

²¹⁰ Salagrama V. 2002 Fish out of Water: the story of globalization, modernization and artisanal fisheries in India. In Proc. Asian Fisherfolk Conference 2002, 25-29 January Prince of Songkhala University, Hat yai, Thailand

²¹¹ Anthony Cox &U Rashid Sumaila "A Review of Fisheries subsidies, Quantification, Impacts and Reforms "116 (2010)

²¹² *World Trade Agreements and Indian Fisheries Sector: Reflections and Upshots*

²¹³ Anthony Cox &U Rashid Sumaila "A Review of Fisheries subsidies, Quantification, Impacts and Reforms "116 (2010)

the subsidy programs.²¹⁴ OECD emphasised the correlation between subsidies and overfishing.²¹⁵

In India, the various types of subsidies include subsidies to the production of marine fisheries, reimbursement of excise duty or exemption from sales taxes on fuel, subsidies for kerosene, construction of fishing harbours and other infrastructures, support for domestic marketing, processing facilities, subsidies for the promotion of aquaculture, subsidies for various Research and Development Subsidies. Government of India classifies subsidies into direct and indirect subsidies for the development of the fisheries sector. Direct subsidies include those provided for the purchase of boats, gears and engines, fuel subsidies and aquaculture assistance activities. Indirect subsidies are given for financial assistance for various welfare schemes, port building, fishing harbours and fishing landing centres, and post-harvest and market infrastructure growth. Amid these subsidies, the subsidies for marine fisheries infrastructure development, post-harvest operations and export are categorised as harmful subsidies. The third Five-Year Plan and those that followed changed the emphasis from fisheries growth to helping the small increase in export production.²¹⁶

India has proposed to classify fisheries on the basis of socio-economic factors such as low income and lack of resources.²¹⁷ India also indicated that only the basics of fisheries management should be integrated into the final discipline and that the scope for implementation should be given to members on a case-by-case basis.²¹⁸ India has also argued in favour of subsidising high-sea fishing because developing countries are late in the sector and would take time to catch up with the developed countries.²¹⁹ Concerning India, the amount of subsidies received is much smaller, with less than 8% of the overall value even though it is challenged internationally. India's marine fisheries

²¹⁴ However, subsidies to the fisheries sector are dwarfed by agricultural support, which amounts to around US\$500 billion a year for OECD countries alone

²¹⁵ OECD (1980). *Financial Support to the Fishing Industry*. Paris: Organisation for Economic Co-operation and Development

²¹⁶ Third Five Year Plan, Government of India, Planning Commission, Government of India Press, New Delhi, 1961, pp.357-358

²¹⁷ WTO Negotiating Group on Rules, Communications from Brazil, China, Indonesia and China dated 11/2/2008 (TN/RL/GEN/163)

²¹⁸ Id

²¹⁹ WTO Negotiating Group on Rules, Submissions by India, Indonesia and China dated 19/05/2008 (TN/RL/GEN/155/Rev.1)

sector is subsistence fishing and is very different from developed countries' factory/commercial fishing.

Furthermore, the fuel subsidy is given amounts to less than 5 per cent of the overall landing value. But in the Indian sense, on the other hand, the welfare initiatives, saving cum relief, housing and other transfer payments add to the subsidy portion. It is also essential that the good subsidies do not feature in the subsidy regime for Indian fisheries.²²⁰ The goal of India would be to optimise S&DT access while opposing the development of further divisions within the 'developing countries' segment. India aimed to make the Hong Kong mandate real in that 'fair and effective special and differential treatment for least-developed and developing countries should be an integral part of the fisheries subsidy negotiations, taking into account the value of this sector for development goals, poverty reduction and food security concerns. The prohibition of subsidies which trigger excessive fishing effort and harm fishery resources can and must be reconciled with the vital role of fisheries in developing countries' economic development. The provision of subsidies by fish workers on an individual or family or association basis or by micro-enterprises or boat owners to low-income resource or livelihood fishing activities shall not be prohibited. Concerning the small-scale, artisanal fisheries, India and the like-minded countries put forward a concept based on socio-economic parameters, inspired by Article 6.2 of the Agriculture Agreement.²²¹ In the procedural aspect, India has always challenged developed countries' stance not to put the element of the fishery subsidy into the general discussions on subsidies. The question is whether these countries' original intention is only to fix the trade inequalities caused by subsidies or to introduce unnecessary trade problems into the discussion of subsidies. However, as Kurien (2006) has stated, subsidies in developing countries play a crucial role in the livelihoods of marginalised communities and are minuscule compared to those offered in developed countries.

²²⁰ Id at 38

²²¹ See Article 6.2 of Agreement on Agriculture- In accordance with the Midterm Review Agreement that government measures of assistance, whether direct or indirect, to encourage agricultural and rural developments are an integral part of the development programme of developing countries, investment subsidies which are generally available to agriculture in developing country members and Agriculture input subsidies generally available to low-income or resource-poor producers in developing country members and agricultural input subsidies generally available to agricultural in developing country Members and agricultural input subsidies generally available to low-income or resource-poor producers in developing country Members shall be exempt from domestic support reduction commitments that would otherwise be applicable to such measures, as shall domestic support to producers in developing country Members to encourage diversification from growing illicit narcotic Crops.

Subsidies and state interference are essential to help small-scale fisheries worldwide and are necessary for promoting sustainable practices.²²² In developed countries, the major fishing companies use massive factory ships to process their catch. Small-scale Indian fishers point out that their problems arise not from subsidies but the open-access system for international trawlers. From their perspective, specific rules banning subsidies would limit governments' ability to help small-scale fishers and protect coastal ' food security'.²²³

MARINE PRODUCT EXPORT DEVELOPMENT AUTHORITY

The Marine Product Export Development Authority (MPEDA) provides subsidy funding for export promotion in culture and catch fisheries industries, as well as infrastructure development and business promotion schemes. According to a study conducted by MPEDA in 2002, during the ninth five-year plan the total direct subsidy component contingent on export was trivial (less than Rs.100 crore) compared to the value of marine exports Rs. 26, 842 crores in the same period. The Marine Product Export Development Authority (MPEDA) offers a subsidy for promoting culture and capture fisheries production and trade. Some of the schemes of MPEDA include:

Export Production - Capture Fisheries: This scheme includes financial assistance for the installation of insulated / Refrigerated Fish Hold, Refrigerated Sea Water System (RSW) and Ice Making Machine on board mechanised fishing vessels, Financial assistance for the conversion of existing fishing vessels to Tuna Long Liners and Financial Assistance for the Construction of New Tuna Long Liners.²²⁴ In the case of culture fisheries, subsidy aid is for the production of new farms, the establishment of small and medium-sized hatcheries, the establishment of PCR labs, the effluent treatment system (ETS) in shrimp farms and also for organic shrimp and scampi farming.²²⁵

Induction of emerging technologies, modernisation of manufacturing facilities, and infrastructure development- Financial assistance for Basic Facilities (New) for Chilled

²²² John Kurien Untangling Subsidies, Supporting Fisheries: The WTO Fisheries Subsidies Debate and Developing- country Priorities (2006)

²²³ Shyam S. Salim and R. Narayanakumar Manual on World Trade Agreements and Indian Fisheries Paradigms: A policy Outlook 295 (2012)

²²⁴ Aswathy N and Shyam. S. Salim 'Subsidies in Indian fisheries- Methodological issues and implications for the future.208 (2012)

²²⁵ Id at 209

Fish / Chilled Tuna for Export, Technology Upgrade Scheme for Marine Products (TUSMP), Subsidy for the Establishment of New Modern Ice Plant / Renovation of existing Facility, Financial support for the Acquisition of Refrigerated Truck / Containers, Financial assistance for the Establishment of Large Cold Storages Subsidised Distribution of insulated Fish Boxes. This scheme includes interest subsidy assistance for seafood units to promote up-gradation and growth assistance for the export of ornamental / aquarium fish. Besides, under market promotion scheme of MPEDA, Group Insurance Coverage for workers employed in the pre-processing and processing plants is given. The employer will pay the premium of the insurance, employee and MPEDA in a ratio of 50 per cent, 25 per cent.

Capital construction and infrastructure subsidies: Subsidies or grants for the procurement or modernisation of vessels, motors, fishing gear and other fishing equipment (iceboxes, GPS, communications systems, fish finders) in the craft and mechanised sectors; subsidies for small-scale and large-scale operators for land, capital costs and working capital aid in aquaculture. Development of exploratory fishing gear and aquaculture; State investment in fisheries – Fisheries Development Corporations; Safety Equipment Grants; disaster preparedness and mitigation facilities and equipment; Infrastructure – ports, harbours and jetties, fuel stations, access roads to fishing harbours and landing centres. The numerous fishery development initiatives such as the motorisation of crafts and the rebate on HSD oil and the construction of fishing harbours are included within the WTO subsidy class as they specifically facilitate fishing operations. Within the WTO concept, assistance for the development of fishing harbours is an indirect subsidy. Furthermore, the NFDB promotes fisheries through the construction of fishing harbours, support to fish markets and deep-sea fishing. The harmful subsidies included fuel subsidies and financial assistance for purposes such as boat building and expansion, fishing ports construction and reconstruction, market and storage facilities, and other fishery growth and support services.²²⁶

²²⁶ Id at 210

ANALYSIS OF FISHERIES SUBSIDIES UNDER DIFFERENT INDIAN STATES

The various types of fishing subsidies in the state of Kerala included the central government grant for development of marine fisheries, the construction of fishing harbours, the reimbursement of sales tax on HSD oil²²⁷ for fishing boats and the subsidy of kerosene to motorized boats. The Govt. Karnataka provides various subsidies to the marine fisheries sector consisting of the reimbursement of HSD oil, the exemption from VAT and the motorisation of traditional craft. The Government also provides various assistance schemes for fishermen's welfare. Among these is the tax exemption for HSD oil and assistance for the motorisation of crafts as a fishing initiative to raise subsidies.²²⁸ The states of Karnataka and Maharashtra give the marine fisheries sector 100 per cent sales tax exemption. The total amount of subsidies provided in the marine fisheries sector amounts to 23 per cent of Maharashtra's total value of marine fisheries production.

FISHERIES DEVELOPMENT UNDER FIVE YEAR PLANS

The central government has played an essential role in the growth of the fisheries sector, as there is a clear connection between the outlay of central sector schemes and the share of the agricultural expenditure of fisheries. Scheme-wise spending under various five-year plans shows that over the different five-year plans, the spending on fisheries production has increased impressively.²²⁹ Planning Commission of India is established in March 1950. Since September 1950, the Commission cooperated with Central and state government, to analyse the schemes in-depth under execution and those suggested for inclusion in the First Five Plan for the Year.²³⁰ The Five Year Plans were drawn up with the goals of improving fishing techniques and equipment, improving methods for processing, maintaining and transporting fish, rationalising marketing arrangements, landing facilities, ice and cold storage facilities and improving socio-economic

²²⁷ HSD stands for High Speed Diesel in oil Industry. It is normally used as a fuel in medium and high speed compression ignition engines that are operating above 750 rpm in commercial vehicles, stationery diesel engines, locomotives etc.

²²⁸ Id at 212

²²⁹ A.K. Vasisht and D.R. Singh 'An Analysis of Capital Formation in Fisheries Sector in India 823 (2009) <https://www.researchgate.net/publication/263091262>

²³⁰ Five year plans and fishing available at https://shodhganga.inflibnet.ac.in/bitstream/10603/139493/11/11_chapter%204.pdf accessed on 16th May 16, 2020

conditions for fishers. The State has also helped the fishermen in procurement fishing specifications such as synthetic twine, cotton yarn, floats, hooks and lines and giving nylon and other accessories subsidies at all times.²³¹

The two problems highlighted in all the Five Year Plans are poverty and unemployment. Poverty eradication has been identified as one of human society's biggest challenges. Indian fisheries, though very underdeveloped, contribute annually about Rs.10 crores to National income before the First Five Year Plan. Fish is rich in proteins, minerals, vitamins, and salt. Over considerable areas, it forms an essential constituent of the diet. Fisheries growth is, therefore, one of the most promising ways to improve people's food.²³²

The inadequacy and in exactitude of current fisheries statistics have discussed by several committees. The report published by Marketing and Inspection Directorate on the marking of fish is the primary source of information. The Central Marine Fisheries Research Station has obtained some valuable data about marine fisheries. The Technical Committee on the coordination of Fisheries Statistics had looked in depth at the topic of statistics. Consequently, the report was issued in 1950, and the situation would gradually strengthen the enforcement of its recommendations by the central and state governments. As a result, a total of Rs.8 lakhs for fisheries enhancement had given in the First Five Year Plan.²³³The economic situation in India was unpalatable at the beginning of the First Five Year Program in 1951-56. The First Five Year Plan emphasised not only agriculture but also developing new subsidiary dairy and fishery food sources. The states even formulated their plans in line with the national strategy that included fisheries development. For the first time, the attention was given to the fisheries. During the first five year Plan, special attention was paid to certain aspects of marine fisheries production through country craft mechanisation Implementation of modern mechanised vessels, charting of deep-sea fishing, provision for training and facilities for fishing²³⁴ with a total outlet of 196.5 lakhs. Implementation of these schemes gave significant impetus to the improvement of existing fishing methods.²³⁵ For marine fisheries development, the plan recommended Mechanisation of already

²³¹ G.O.Ms.No.244, Agriculture Department, dated 25th July 1996, TNA.

²³² The First Five Year Plan, Government of India, Planning Commission, 1951, p.306.

²³³ Id at 306 The First Five Year Plan, Government of India, Planning Commission, 1951, p.306.

²³⁴ Subba Rao, N., Economics of Fisheries, Deya Publishing House, Delhi, 1986, p.122

²³⁵ Development Scheme in the First Five Year Plan, Planning Commission, Government of India, December, 1952, p.55

existing boats. The Indian government has contracted a naval architect's services to advise on the modification that will be required for power fishing in indigenous vessels.²³⁶ In the first five year plan, 50.5 lakhs was allotted for the "Marine Fishery Research and Development. The Government of India also stressed that the aforementioned money should be used marine fisheries development and research activities.²³⁷ An evaluation of the 1956-61 Second Five Year Program reveals that it was drafted for the development of marine and inland fisheries and to provide funding for research and Socio-economic development of fisheries.²³⁸ Some of the significant schemes included in the second five-year plan are related to the construction and distribution of mechanised fishing vessels, the supply of nylon nets and hooks to fishers, the creation of fishing harbours at the suitable mouth of the river, the provision of ice plants and cold storage facilities, and the construction of model fish markets, in-shore and offshore fisheries, as well as improved techniques. The allocation for the year 1956-57 was Rs.11, 89 lakhs under Second Five Year Plan, and the outlay was Rs.12.98 lakhs. The Additional Head of Industries and Commerce was expected to see that all the schemes worked more vigorously because successful marine fisheries developments depend on those systems are introduced.²³⁹ The critical plans presented within the marine sector included assistance to fishers cooperative marketing societies, salt subsidy scheme, scheme for the construction of fishing harbours at appropriate river mouths, development of fishing crafts, the supply of nylon net at subsidised rates to fishers, preservation of fish. The Second Plan provides for the expansion of existing activities related to the Mechanisation and development of better methods of fishing.²⁴⁰ The Second Plan provides for loans to be distributed to fishers via cooperatives in order to discharge their previous debts with the intermediaries and to buy and tackle craft and to build curing sheds and godowns.²⁴¹ The Third Five Year Plan (1961-66) makes no shift in fisheries development policy. In the third plan, the

²³⁶ The Progress of the Plan, A short survey of the working of the Five Year Plan from April 1951 to September 1953, Government of India Planning Commission, Government of India Press, New Delhi, 1953, pp.23-24.

²³⁷ G.O.Ms.No.3236, Agriculture Department, dated 2nd November 1954, TNA.

²³⁸ Andhra Pradesh Review of Progress, 1956-57 to 1960-61, Government of Andhra Pradesh, Hyderabad, 1962, p.238.

²³⁹ G.O.Ms.No.709, Food and Agriculture Department, dated 28th February, 1958, TNA

²⁴⁰ Second Five Year Plan, Government of India, Planning Commission, 1956, p.292.

²⁴¹ Five year plans and fishing available at

https://shodhganga.inflibnet.ac.in/bitstream/10603/139493/11/11_chapter%204.pdf accessed on 16th May 16, 2020

different programs undertaken in the first and second plans were further accelerated.²⁴² Fishery income can be significantly increased through the use of improved techniques in all aspects of production and utilization of fisheries resource.²⁴³ The total budget allocation under the third five-year plan (1961-66) for the development and various schemes for the improvement of the fisherman was 222 lakhs. The key objectives of the scheme contained in the Third Five Year Plan are threefold as shown below: Production of fish which is a protein food of high nutritional value, increasing the socio-economic status of the fishermen's community and developing the fishing industry with modern and well- scientific lines as in other developed countries.²⁴⁴ The establishment and operation of fisheries cooperatives was a significant aspect of the Third five-year plan. Fishers usually didn't own Ships, nets, and other fishing equipment.²⁴⁵ The Cooperatives are an indispensable means for preventing exploitation of fishers by the middlemen. The fourth five-year plan had three central goals with respect for the development of fisheries. They were increasing the production of fishing in order to meet the protein diet requirements, improving the export potential and uprising the economic conditions of the fisherman.²⁴⁶ Provisions were made in the fourth five-year plan for the marine fisheries development, deep-sea fishing, processing, storage and export and other miscellaneous programmes.²⁴⁷ The subsidy on boats was reduced by 50 per cent on engines and 25 per cent on hulls during the fourth five-year plan.²⁴⁸ The fundamental goal of the Fifth Five Year Plan (1974-1979) was the substantial increase in the fisheries production in order to improve the Socio-economic conditions for fishermen to increase the employment opportunities and boost the domestic marketing mechanism for fish and fishery products.²⁴⁹ The major endeavours pursued numerous steps in the fifth plan, such as enhancing country boat construction, more extensive use synthetic twine, ice and cold storage facilities, and fish stocks cure yards at various centres. Three approaches towards Deep Sea fishing in the fifth five year plan include expansion of surveys and explorations, attempts to implement sufficient

²⁴² Third Five Year Plan, Government of India, Planning Commission, Government of India Press, New Delhi, 1961, pp.357-358.

²⁴³ Id

²⁴⁴ Id

²⁴⁵ Id at 359

²⁴⁶ Fourth Five Year Plan (1969-74), Madras State Draft Outline, 1968, Government of Tamil Nadu, p.8.

²⁴⁷ Id at 58

²⁴⁸ Id at 58-59

²⁴⁹ Draft Five year Plan, 1974-79, Vol.II, Government of India, Planning Commission, p.34.

number of large fishing vessels and to establish fisheries harbours and ancillary processing and distribution services. Under the scheme named "assistance to the mechanised fishing crafts" 4750 mechanised fishing crafts were introduced under fifth five year plan. Other significant schemes under the plan include the establishment of shipbuilding yards and other pilot projects. One of the pilot programmes were related to demonstration of fish processing while others were linked to the technical and economic feasibility of new process technique vessels or material/equipment. Under the successive five year plans, the State Fisheries Department was introducing various planning schemes.

During the Sixth Plan era, the Union Planning Commission approved an outlay of Rs.2,400 lakhs for fisheries development in the Tamil Nadu. This outlay includes a total of Rs.1,000 lakhs for the implementation of externally assisted projects as envisaged in the Sixth Plan proposals. The Sixth Plan sought to increase the development of marine and inland fish from the State to the point of 3.00 lakhs and 2.10 lakhs, respectively from the base level of 2.17 lakhs and 1.60 tones. The Sixth Plan introduced 500 FRP boats and allocated it on 20 percent subsidy basis. The balance costs 80 percent is from Company Banks. A total of Rs.32 lakhs had approved up until 1983-84. To this end, 190 boats were allocated out of 500 vessels.

Nevertheless, the Fishermen Co-operative Societies had distributed several boats.²⁵⁰ The National Co-operative Development Corporation (NCDC) had been rendering financial assistance to cooperative societies through the state governments for purchasing boats and godown construction.²⁵¹ During the sixth five year plan, 294 marine Fisherman Cooperative societies and 10 Women Co-operatives were established. Under the sixth five year plan, these societies were granted a financial assistance of Rs 20 lakhs to procure fishing equipment and to provide medical loans to the fisherman. This plan also incorporated intensified efforts to boost brackish water prawn farming in the States. Funds were provided for the construction of or import of large trawlers in the country. Building facilities to enable the operation of large trawlers in fishing harbours, promotion for exports were the important steps incorporated under

²⁵⁰ Id

²⁵¹ The National Cooperative Development Corporation is a statutory corporation set under an Act of Indian Parliament on March 13 1963.

his plan.²⁵² The seventh five-year plan aimed at promoting prawn and hatchery farming and also developing deep-sea fishing fleets by importing and building large-scale trawlers. Thereby strengthening the domestic marketing of fish, diversifying fish products, motorising country crafts. The seventh five year plan was an addition to the sixth five year plan. Pattern of financial assistance under this plan include 20 percent subsidy, 20 percent beneficiary share and 60 percent bank loan. The plan resulted in the distribution of 4000Kg of nylon webbings with 20 percent subsidy and 80 percent loan. Under this plan Accident Insurance Scheme was introduced for the fishers. Insurance scheme covers death and disability with a premium of 9 per cent per fisherman.²⁵³ The State and central government share the premium equally. In case of death or permanent disability a sum of Rs 15,000 is paid as the sum insured whereas in the case of in the case of partial disablement a sum of Rs 7905 was given.

The eighth five-year plan aimed to increase the fish and prawn seed production to raise inland food production.²⁵⁴ This five-year plan focuses on the State's capability to go in to for the deep sea fishing. The total outlay of the eighth five-year plan was 31.50 crores. The ninth five-year plan intends to increase the deep sea fishing by motorisation of traditional craft, by providing subsidies for the purchase of fishing nets and other types of equipment for fishing, and export of fish. Investment in fisheries research has increased under periods of the programme, and the government has given priority to this sector. However, more public investment in fisheries science still has scope to realize future research benefits. Growing public and private investment is also required to reinforce infrastructure to diversify fishing activities to increase fish production, productivity and exports. Private sector investment in fisheries can also play an essential role in the production of seeds and feed, adapting existing technologies for higher output, development of human resources, post-harvest management as well as marketing.

Once the fundamental principles for the conservation and management of high-seas fisheries had been accepted, the question remained on how to bring them into action. The coastal states shall have specific authority to implement effective rules and

²⁵² James, P S B R (1987) *Growth profile of marine fisheries in India*. CMFRI Bulletin: National Symposium on Research and Development in Marine Fisheries Sessions I & II 1987, 44 (Part -). pp. 10-27.

²⁵³ Seventh Five Year Plan, 1985-90, Vol. II, Government of India, Planning Commission, New Delhi, October 1985, p.34.

²⁵⁴ Eighth Five Year Plan, 1992-1997, Tamil Nadu State Planning Commission, January 1993, pp.121-122.

measures to the degree that action is necessary in areas under national jurisdiction to this effect. Existing policies for fisheries Management in India revolve mainly around populist welfare measures.²⁵⁵ Overall, the country needs a firm fisheries policy that balances welfare concerns with sustainability. Because of lack of resources, small budgets, weak institutional coordination, and opposition from fishermen, many regulations are not adequately enforced. This requires the attention to causative factors and appropriate participatory mechanisms or co-management arrangements to enable regulatory measures to be implemented more effectively. Fisheries should take necessary steps for the regulation of fishing. Fishery authorities should provide information on potential resource production and existing fishing capacity and processing capacities to commercial banks and funding institutions. Such organisations could prevent inefficiencies by regulating credit availability or issuance of foreign exchange authorisations.²⁵⁶ This approach would be suitable for the Indian background, because the mechanisation scheme is entirely funded by government subsidies. Another key to efficient management is the registration and licensing of all powered fishing vessels. It provides direct information on fishing capacity, and this is a prerequisite for planned development.

CONCLUSION

Fisheries sector plays an inevitable role in the socio-economic development of Indian Economy. The sector has been approved as the powerful employment and income generator since it promotes the growth of large number of subsidiary industries. Fish is an important source of protein for large million people in India. Before independence, the marine fisheries sector are at subsistence level, but later motorized crafts and sophisticated fishing vessels has been used. Fisheries subsidies in a way contributed towards overfishing. Fisheries subsidies negotiations at the WTO aims to prohibit subsidies that contributes to overfishing and overcapacity. Some Members of WTO stood for the broad ban approach. This would adversely affect developing countries like India whose economy is largely depended on fisheries directly or indirectly. So India and other SVEs insist on ban of subsidies that contributes to overfishing.

²⁵⁵ E. Vivekanandan, M. Srinath et al, 'Marine Fisheries Along the Southwest Coast of India 757(2003)

²⁵⁶ Manjula Shyam, The Emerging Fisheries Regime: Implications for India, 8 Ocean Dev. & Int'l L. 35 (1980).

CHAPTER V
UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS AND
FISHERIES SECTOR

Our oceans — their temperature, circulation, chemistry, and ecosystems — play a fundamental role in making Earth habitable.

*Our rainwater, drinking water, weather, climate, coastlines, much of our food, and even the oxygen in the air we breathe, are all ultimately provided and regulated by the sea. Throughout history, oceans and seas have been vital conduits for trade and transportation. Careful management of this essential global resource is a key feature of a sustainable future.'*²⁵⁷

Communities, nations, and the world as a whole want to express common priorities and to build ways to monitor their progress. Stockholm conference of 1972 paved the way for the union of industrialized and developing nations for discussing the issues and challenges for sustainable development.²⁵⁸ It was the first international measure that examines the right of the people towards a healthy and productive environment, but it failed to address the issues of high seas specifically. The principle 7²⁵⁹ of the Stockholm Declaration, speak about the obligation of the states to take all possible measures to prevent substances which are harmful to marine life or interfere with legitimate uses of the sea.²⁶⁰ The word 'sustainable development' as such has still not been coined, let alone applied to ocean governance.²⁶¹ While the Stockholm Conference symbolized the emergence of an environmental consciousness in international law in

²⁵⁷ United Nations 'Sustainable Development Goal 14, Conserve and Sustainably Use the Oceans, seas and marine resources. <https://www.un.org/en/conf/ocean/background.shtml>

²⁵⁸ Otto Spijkers & Natalia Jevglevskaja, Sustainable Development and High Seas Fisheries, 9 Utrecht L. Rev. 24 (2013).

²⁵⁹ Principle 7: Prevention of Pollution of Seas: States shall take all possible steps to prevent pollution of the seas by substances which are liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the seas.

²⁶⁰ See Compilation Document - Rio+20 - United Nations Conference on Sustainable Development (Major Groups), available on the website of the conference: <<http://www.uncsd2012.org/rio20/content/documents/compilationdocument/MajorGroups.pdf>>, p. 584 (last visited 20 April 2020).

²⁶¹ See generally N. van der Burgt, *The Contribution of International Fisheries Law to Human Development*, 1997, pp. 33 et seq. See also P. Birnie & A. Boyle (eds.), *International Law and the Environment*, 2009, p. 380

the early 1970s, another fifteen years had to pass before the World Commission on Environment and Development's Report, 'Our Shared Future, or the Brundtland Report',²⁶² Adopted the idea of sustainable development and popularized it in the international sphere. The Brundtland report addressed environmental and development issues facing the world as one common challenge to be solved by collective multilateral action. Recognizing that high seas outside of national jurisdiction are indeed 'common heritage of humanity, the Report emphasized the necessity of international effort to secure the high seas' and fisheries' efficient management.²⁶³ Agenda 21, which was adopted in the same conference, has made some reference to the sustainable development of oceans, and it continued to serve as a critical instrument on sustainable development.²⁶⁴ The Secretary-General recently referred to it as 'the most comprehensive and useful action plan ever initiated by the international community to safeguard the interests of future generations.'²⁶⁵ Chapter 17 of Agenda 21 set in motion several new elements not yet enveloped by the UNCLOS²⁶⁶(United Nations Convention On Law of Sea) including a prominence on unified and precautionary approaches to the protection of the coastal and marine environment. It focuses on the prevention of environmental degradation rather than controlling the Causes of Pollution.²⁶⁷ Agenda 21 cannot amend UNCLOS, and is not binding on the states unless the states ratify the same. But it can be taken into consideration when interpreting or enforcing the Convention. Besides, it has had the effect of stimulating legal developments in the field of sustainable use of oceans. The impact of Agenda 21 shows how a more conceptually sophisticated emphasis on the safety of the marine environment has developed out of UNCLOS Part XII in general, and subsequently also

²⁶² The Report was given this title after the chairperson of the commission, the then Prime Minister of Norway, Mrs. Gro. Harlem Brundtland. The Brundtland Commission defined sustainable development as 'development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs', see World Commission on Environment and Development, *Our Common Future*, 1987, p. 43.

²⁶³ UN Doc. A/42/427, p. 259, Para. 7

²⁶⁴ See in general with regard to Agenda 21 Chapter 17: 5. Bateman, 'Technical Cooperation for Sustainable Development: Capacity Building', in M. Kusuma- Atmadja et al. (eds.), *Sustainable Development and Preservation of the Oceans: The Challenges of UNCLOS and Agenda 21*, 1997, pp. 783 et seq.; S. Kaye, *International Fisheries Management*, 2001, pp. 201 et seq.; See also Birnie & Boyle, supra note 8, p. 745;

²⁶⁵ *Oceans and the law of the sea: Report of the Secretary-General (Addendum)*, UN Doc. A/66/70/Add.1, para. 12.

²⁶⁶ United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982, in force 16 November 1994, 1833 *United Nations Treaty Series* 396; <www.un.org/Depts/los> (last visited 20 April 2020).

²⁶⁷ Birnie & Boyle p. 384.

out of UNCLOS Part VII dealing with, among other things, the high seas environment and fisheries.²⁶⁸ This is the One of the key issues discussed at the World Summit on Sustainable Development (hereinafter "WSSD" or "World Summit") held in Johannesburg, South Africa in September 2002 was the rapid and drastic decline in world fish stocks and the international response to the global fish crisis.²⁶⁹ Attended by tens of thousands of participants from 191 countries, the WSSD was convened by the United Nations to promote the ambitious goals set forth ten years earlier at the United Nations Conference on Environment and Development (hereinafter "UNCED" or "Earth Summit") in Rio de Janeiro objectives of "poverty eradication, changing unsustainable patterns of production and consumption, and protecting and managing the natural resource base of economic and social development."²⁷⁰ The concept of sustainable development remains intangible though it has become anchored and widely diffused in International debate.²⁷¹

SUSTAINABLE DEVELOPMENT GOALS

Heads of State and Government decided in September 2015 to set the world on a path to sustainable development by the implementation of the Sustainable Development Agenda 2030.²⁷² Sustainable Development Goals (SDGs) are the agreements to provide a comprehensive agenda for action to support transformations towards social, economic, and environmental sustainability. 17 Sustainable Development Goals (SDGs) and 169 targets will guide the activities of diverse actors over the next 14 years. Such goals are "global in nature and broadly applicable, taking into account the various national realities, capacities and development levels and respecting national policies and priorities."²⁷³ We mark a significant contribution on the part of UN member states to truly achieve sustainable development. The goals include a basis for joint action "for

²⁶⁸ Brine and Boyle P.384

²⁶⁹ World Summit on Sustainable Development, 2002 (hereafter "WSSD"), *See generally*, www.johannesburgsummit.org, and *Report of the World Summit on Sustainable Development*, available at <http://ods-dds-ny.un.org/doc/UNDOC/GEN/NO2/636/93/PDF/N0263693.pdf> (last visited April 20, 2020).

²⁷⁰ United Nations Conference on Environment and Development (1992) [hereinafter "UNCED"]. The quote is from the WSSD, Plan of Implementation, *Id.* at Paragraph 2.

²⁷¹ Elisabeth Burg Bonami "sustainable Development in International Law Making and Trade International Food governance and Trade in Agriculture" (1st ed.2015)

²⁷² The United Nations (2015) *Transforming our world: the 2030 Agenda for Sustainable Development*. Available at <https://sustainabledevelopment.un.org/post2015/transformingourworld>.

²⁷³ *Id.*

people, planet and prosperity," to be adopted in mutual cooperation by "all countries and all stakeholders."²⁷⁴ The whole planet faces dire threats to the environment from human-induced climate change and the depletion of biodiversity. Poor governance, corruption, and violent confrontation in dramatic situations, afflict most of today's country. The SDG Agenda tackles these composite issues and is thus more detailed and complex than the MDGs. Most notably, it takes sustainable development as the guiding principle of global collaboration, implying the combination of economic growth, social inclusion, and protection of the environment. Consequently, the overarching name "Sustainable Development Goals," as the key message to the world community. Furthermore, the SDGs and related agenda apply to all countries, developed and developing alike. The outcome document for the SDG Agenda summarizes the scope of these issues by stating that the SDG system would promote action on five main themes: people, planet, prosperity, peace and partnerships²⁷⁵

The SDGs are a continuation to the Millennium Development Goals (MDGs) of the UN which expired in 2015. The SDGs draw on the momentum of the eight Millennium Development Goals negotiated in 2000 to halve extreme poverty by 2015 as a norm towards eradicating all forms of poverty.²⁷⁶ The (MDGs) of 2000 made an attempt to compensate for the autonomous concentration of wealth by focusing on ensuring dignity for the very most unfortunate people.²⁷⁷ It unified people in different parts of the world and various capacities to implement the MDGs, even though the results have been uneven. Negotiations on the follow-up to the now-expired MDGs have widened the breadth of discussions to include ecological issues and the possible solutions. Finally, they have led to the adoption of a document entitled 'Transforming our World: The 2030 Agenda for Sustainable Development' which provides for the sustainable development goals (UNGA 2014) under the auspices of the United Nations General

²⁷⁴ Getting started with Sustainable Development Goals UNSDSN, 2015 available @ <https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2217&menu=1515>

²⁷⁵ Sustainable Development Solutions Network. (2013). *An Action Agenda for Sustainable Development*. Report for the UN Secretary-General. Paris, France and New York, USA: SDSN. Available at <http://unsdsn.org/wp-content/uploads/2013/06/140505-An-Action-Agenda-for-Sustainable-Development.pdf>

²⁷⁶ Getting started with Sustainable Development Goals UNSDSN, 2015 available @ <https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2217&menu=1515>

²⁷⁷ Joyeeta Gupta & Courtney Vegelin ' Sustainable Development Goals and Sustainable Development 435(2016)

Assembly. Social inclusiveness is a wider concept which was expressed in Millennium Development Goals (MDGs) has its ramifications in human rights, rural development, inequality, redistribution, entitlements and capabilities concepts. Out of 17 sustainable Goals 13 stress on social inclusiveness, at the same time taking in to account ecological and relational aspects. Goal 1 is intended to end all forms of poverty and it declared that poverty cannot be measured in terms of lower-income countries and it is not exclusively located in poor or local income countries. . It tries to eradicate the extreme poverty by ensuring social protection systems and access to basic resources. Goal 2 attempts to end hunger and malnutrition by 2030 by increasing the productivity and incomes of small scale food producers. Goal 10 aims to promote the social economic and social inclusion and to reduce inequality.

SUSTAINABLE DEVELOPMENT GOAL14- LIFE BELOW WATER AND ITS INTERCONNECTIVITY WITH OTHER SDGS

2030 agenda for Sustainable Development and its comprehensive category of 17 interconnected Sustainable Development Goals (SDGs) offer a unique opportunity to advance ocean sustainability.²⁷⁸ The development of a robust implementation framework for the Sustainable Development Goal for the Oceans (SDG 14) is a critical step towards this overarching objective. It provides the opportunity to address complex ocean sustainability challenges through regionally coordinated cooperation across sectors and with a broad spectrum of actors. By the adoption of the 2030 Agenda, the United Nations has realized the state of affairs, ranking the health of the world's oceans among the most pressing development challenges. The stand-alone Sustainable Development Goal on the oceans and coasts (SDG 14) calls on the international community to: "Conserve and sustainably use the oceans, seas and marine resources for sustainable development."²⁷⁹ This goal provides opportunities to facilitate concrete actions for ocean sustainability and to foster greater integration among the different sectors of ocean governance.

Crucially, the 2030 Agenda acknowledges the need to take cross-cutting, cooperative and trans-boundary action to tackle challenges of growth. This invites policymakers to engage in sustainability through a nexus approach that stresses interdependencies and incorporates sector-wide governance, management, and intervention. The essence and

²⁷⁸ Joyeeta Gupta & Courtney Vegelin 'Sustainable Development Goals and Sustainable Development 435(2016)

²⁷⁹ Sustainable Development Goal 14

intensity of the interactions between the 2030 Agenda's various goals and targets are complex and context-specific, ranging from synergistic to antagonistic interdependencies. For example, commitments to maintain economic growth in the least developed countries or to promote job creation and the growth of micro, small and medium-sized enterprises (SDG 8), and initiatives to protect and restore marine and coastal ecosystems (SDG 14) may counteract each other when established in isolation. Likewise, the benefits of the synergies emerging from the inextricable relation between sustainable fisheries and the effective and productive use of natural resources (SDG 12) could well go untapped if not properly established in the follow-up and review process. The United Nations "Regular Process for Global Reporting and Assessment of the State of the Marine Environment Including Socioeconomic Aspects" may serve as a forum of expertise for tracking and evaluating efforts to achieve the Oceans' Sustainable Development Goals. This could be further established in order to reflect on the broader objectives of SDG 14, taking into account not only its targets but also those goals and targets in the 2030 Agenda which have a direct effect on its achievement. The World Ocean Assessments performed through the Regular Process could thus become the cornerstone of a global thematic oceans and coasts analysis in support of the 2030 Agenda in the future

TARGET 14

Despite widespread international awareness of the role of the ocean in the implementation of each of the three pillars of sustainable development, SDG 14 seems to prioritize environmental conservation without sufficiently affecting the ocean's contribution to poverty alleviation (SDG 1), hunger-fighting (SDG 2)²⁸⁰ and human health (SDG 3)²⁸¹. Thus, while the explicit integration of the ocean into a stand-alone SDG can be hailed as a much-needed move forward compared with the MDGs, SDG 14 may ultimately fail to resolve the limitations of conventional, sector-specific approaches to marine management²⁸² and the persistent fragmentation of international

²⁸⁰ Fisheries and aquaculture provide at least 50% of animal protein to millions of people in low income countries. See FAO, *The State of Food and Agriculture: Climate Change, Agriculture and Food Security*, Food and Agriculture Organization of the UN (UN FAO), Rome, 2016

²⁸¹ UN, *A new global partnership: Eradicate poverty and transform economies through sustainable development*, Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda, New York.

²⁸² R.G. Aisi, Statement delivered on behalf of the Pacific Small Island Developing States at the 10th Session of the OWG, 31 March-4 April 2014.

ocean governance²⁸³. The SDG 14 targets and Means of Implementation (MoIs) with a specific socioeconomic aspect can be divided into two groups. Firstly, commitments aimed at supporting the sustainable development process in developing countries include Goal 14.7, which calls for enhanced economic gains from the sustainable use of marine resources for Small Island Developing States (SIDS) and LDCs and MoI 14.a, which provides for enhanced scientific expertise, research capacity building and marine technology transfer, with a view to enhancing the contribution of marine biodiversity to the development of developing countries.²⁸⁴ The second category consists of obligations related to the sustainable development of fisheries sector.²⁸⁵ It includes aim 14.6, which provides for "appropriate and effective special and differentiated treatment" of developed States and LDCs in negotiating restrictions on unfair fishing subsidies, and MoI 14.b, which calls for small-scale artisanal fishermen to have access to marine resources and markets. However, these essential targets and MOIs may probably represent a very limited transition vision, concentrating only on the needs of developing countries or on the sustainable development of a single economic field, but failing to integrate multifaceted elements such as participatory coastal management, gender equality and human rights²⁸⁶, which were highlighted repeatedly during the aim setting process.²⁸⁷ Knox noted that SDG 14 will include comprehensive environmental standards to assess whether States fulfill their international obligations to protect against interference with human rights resulting from environmental harm and whether an adequate balance has been achieved between environmental protection and economic growth.²⁸⁸ Such a reading implies a constructive interpretation of those SDG 14 goals which affirm established international commitments in line with the equity aspect of relevant international normative guidance.

²⁸³ Global Ocean Commission, *From decline to recovery: A rescue package for the Global Ocean*, Global Ocean Commission, Oxford, 2014

²⁸⁴ E. Morgera, M. Ntona, *Linking small-scale fisheries to international obligations on marine technology transfer*, *Mar. Policy (Spec. Issue SDG Synerg. Sustain. Fish. Poverty Alleviation)* (2017). <https://www.sciencedirect.com/science/article/pii/S0308597X17303238>

²⁸⁵ Ntona, M., *Marine Policy* (2017), <http://dx.doi.org/10.1016/j.marpol.2017.06.020>

²⁸⁶ A. Norton, A. Scott, P. Lucci, W. Avis, *Taking the Sustainable Development Goals from 'Main Basis' to Effective Vision – What's the Roadmap?* Overseas Development Institute (ODI), London, 2014

²⁸⁷ WWF, *Beyond 2015, Coastal and Marine Union (EUCC), DIVA, Global Ocean Commission, High Seas Alliance (Representing 29 NGOs and the IUCN), Pew Charitable Trusts, the Women's Major Group, Draft text for SDG 14 Submitted to the 12th Session of the OWG, 16–20 June 2014*

²⁸⁸ J.H. Knox, *Human rights, environmental protection, and the sustainable development goals*, *Wash. Int. Law J.* 24 (3) (2015) 517–536

Further systemic attempts to link SDG 14 and other SDGs seem necessary to achieve the broadest possible range of co-benefits and multiplier effects, thus improving synergies across the board.²⁸⁹ An increasing number of commentators indicate that attempts to link the SDGs are more successful if they go beyond a "political mapping" focused solely on the 2030 Agenda text.²⁹⁰ Instead, a conceptual framework that places focus on the biophysical or socioeconomic factors affecting the substantive complementarity of different goals is better suited to highlight the full spectrum of scientifically relevant interconnections between the SDGs.²⁹¹ For example, in the case of SDGs 1 (no poverty) and 14, such an approach shows more readily that safe, resilient oceans and the sustainable use of marine resources are a prerequisite for ocean ecosystem services to help alleviate income poverty and multidimensional development, environmentally sustainable economic growth and human well-being in coastal communities.²⁹²

SDG CONNECTIONS RELATED TO SMALL-SCALE FISHERIES AND MARINE FISHERIES TRANSFER

Technology is enshrined in SDG 17 as a primary means of implementation in the 2030 Sustainable Development Agenda (Agenda 2030)²⁹³ while 14 targets specifically apply to "technology" and it relate to problems that need to be addressed in terms of technology²⁹⁴. Ironically, technology appears in the SDG 14 target both explicitly and indirectly for present purposes: In the one hand, the rationale for creating a useful global innovation framework for sustainable development tells the objective of explicitly growing scientific expertise, expanding research capability and catalyzing the transfer of marine technology to improve ocean health and enhance the contribution of marine

²⁸⁹ UNDP, UNDP Support to the implementation of the 2030 agenda for sustainable development, UN Development Programme (UNDP), New York, 2016.

²⁹⁰ D. Le Blanc, Towards integration at last? The sustainable development goals as a network of targets, UN Dep. Econ. Social. Aff. (UN Department of Economic and Social Affairs) (2015).

²⁹¹ N. Weitz, M. Nilsson, M. Davis, A. Nexus, Approach to the post-2015 agenda: formulating integrated water, energy, and food SDGs, SAIS Rev. Int. Aff. 34 (2) (2014) 37–50.

²⁹² S. Schmidt, B. Neumann, Y. Waweru, C. Durussel, S. Unger, M. Visbeck, SDG 14: conserve and sustainably use the oceans, seas and marine resources for sustainable development, in: M. Nilsson, D. Griggs, A.-S. Stevance, D. McCollum (Eds.), A Guide to SDG Interactions: From Science to Implementation, International Council for Science (ICSU), Paris, 2017.

²⁹³ UNGA, Transforming our world: the 2030 Agenda for Sustainable Development (UN Doc A/RES/70/1, 25 September, 2015).

²⁹⁴ UN DESA, Global Sustainable Development Report 2016, UN Department of Economic and Social Affairs (UN DESA), 2016.

biodiversity to the development of developing States.²⁹⁵ Furthermore, though technology is not listed in the real issues, qualitative targets drawn up under SDG 14 in connection with marine pollution (SDG 14.1) and ocean acidification (SDG 14.3), improving overall technology efficiency is arguably part and parcel of the underlying justification for these targets.²⁹⁶ As the 2016 UN Global Sustainable Development Report states, technology is critical "for achieving the SDGs and taking advantage of synergies between them, as well as reducing trade-offs between targets."²⁹⁷ On the other hand, the Report not only acknowledges technology as an instrument for achieving a higher degree of social inclusion and cooperation but also as a possible source of conflict. The report stands for a non-discriminatory, transparent and comprehensive coordination between developing and developed nations for inclusive innovation policies that take into account the interests of "underserved communities" and prevent poor and potential communities from being pressured to adopt innovations that are chosen by others.²⁹⁸

Gupta and Vegelin had addressed the interrelationship between Interstate obligations regarding Marine technology transfer and preference of small and artisanal fishing communities and they insisted on global level discussions and deliberations for both the needs of developing and developed states.²⁹⁹ They also stressed the promotion of meaningful participation in UN processes, the adoption of equity principles, as well as context-sensitive capacity building, technology transfer and financial support, to focus on highly vulnerable sectors, such as small-scale fisheries, to enhance human well-being in its many forms.³⁰⁰ This inclusive approach to development often builds upon the idea of relational inclusiveness, which "recognizes that poverty and ecological destruction are often the result of acts taken by others as a consequence of that social injustice and the substance and mechanism of politics."³⁰¹ SDGs 10 ("reduced inequalities"), 16 ("peace, justice and strong institutions") and 17 are meant to directly represent partnership inclusiveness, placing pressure on developing countries to "take

²⁹⁵ UN DESA, Global Sustainable Development Report 2016, UN Department of Economic and Social Affairs (UN DESA), 2016.

²⁹⁶ Id

²⁹⁷ Id

²⁹⁸ Id

²⁹⁹ J. Gupta, C. Vegelin, Sustainable development goals and inclusive development, *Int. Environ. Agreem.: Politics Law Econ.* 16 (3) (2016) 433–448.

³⁰⁰ Id

³⁰¹ Id at 439

their obligations seriously and function via multilateral institutions."³⁰² Gupta and Vegelin, however, note that the related SDGs "do not collectively reflect a powerful enough relational text that challenges status quo politics and current power structures to establish more favorable conditions for enhancing inclusive development"³⁰³ These considerations should be linked to the role of information and communication technologies (ICTs) in the fisheries industry. ICTs refer to technologies that facilitate communication and the processing of information through electronic means and include everything from radio and television to telephones (fixed and mobile), computers and the Internet.³⁰⁴ The use of ICTs is growing across the fisheries sector, from resource evaluation, capture or culture to processing and marketing. Some of these technologies are fisheries-specific (e.g. sonar for fish tracking), while others are general-purpose applications (e.g. Global Positioning Systems (GPS) for navigation and location determination, mobile phones for trading, information exchange and emergencies, radio programming with fishing communities, Web-based information and networking resources).³⁰⁵ The World Summit on the Information Society (WSIS) Principles of Declaration marked the potential contribution of ICTs in building a people-centered, inclusive and development-oriented information society where everyone can create, access, use and share information and knowledge in order to enable individuals, communities and peoples to realize their full potential in promoting their sustainable development and enhancing their quality of life.³⁰⁶ The Declaration further stressed that the sharing and enhancement of global development expertise "can be improved by removing barriers to equal access to information for economic, financial, political, environmental, cultural, educational and science activities".³⁰⁷ WSIS 'ongoing work on the role of ICTs in the implementation of Agenda 2030 further emphasized that empowering communities in the use of such technologies in connection with SDG 14.a and promoting the production of "useful and socially meaningful content is a capacity-building intervention that can increase scientific knowledge and promote innovation

³⁰² Id at 444

³⁰³ Id at 444

³⁰⁴ E. Morgera, M. Ntona, Linking small-scale fisheries to international obligations on marine technology transfer, *Mar. Policy (Spec. Issue SDG Synerg. Sustain. Fish. Poverty Alleviation)* (2017).

³⁰⁵ A.J. Kenny, N. Campbell, M. Koen-Alonso, P. Pepin, D. Diz, Delivering sustainable fisheries through adoption of a risk-based framework as part of an ecosystem approach to fisheries management, *Mar. Policy (Spec. Issue SDG Synerg. Sustain. Fish. Poverty Alleviation)* (2017).

³⁰⁶ WSIS, Declaration of Principles. *Building the Information Society: A Global Challenge in the New Millennium*, World Summit on the Information Society (WSIS), 2003.

³⁰⁷ Id

and research".³⁰⁸ In addition, ICTs will improve the efficiency of fishing activities by, inter alia, making weather information accessible to fishermen and fishing communities in real time, thus boosting economic growth in coastal regions.³⁰⁹ As for SDG 17, ICTs are instrumental in sharing information among stakeholders from different regions (SDG 17.6) and in building partnerships at national, regional, international and global level between governments, the private sector and civil society (SDG 17.7).³¹⁰ Furthermore, ICTs can serve as a catalyst for coordinated action and partnerships to eradicate poverty, hunger and malnutrition, in parallel with sustainable use and natural resource management.³¹¹ In the work of the UN General Assembly (UNGA), the connections between inter-State technical cooperation and small-scale fishing communities have also become evident. The latest UNGA Resolution on Sustainable Fisheries drew attention to the circumstances affecting fisheries in many developing countries – particularly Small Island Developing States (SIDS) – and highlighted the urgent need for capacity building, including through the transfer of marine technology and, in particular, fisheries-related technology.³¹² Furthermore, UNGA demanded distant-water fishing nations to negotiate "equitable and fair basis" access agreements with developing coastal states and to take into account these states'³¹³ "legitimate expectation" by inviting them to move technologies and offering assistance for surveillance, surveillance and control, and compliance and enforcement.³¹⁴ However, it remains a matter of contention to what degree recent access agreements help small-scale fisheries in developing States.³¹⁵ In addition, international financial institutions and relevant intergovernmental organizations have been invited to step up their efforts to capacity building and provide technical assistance to developing countries, particularly in the small-scale fisheries sector, in line with environmental

³⁰⁸ WSIS, WSIS – SDG Matrix: Linking WSIS Action Lines with Sustainable Development Goals, World Summit on the Information Society (WSIS), 2015.

³⁰⁹ Id

³¹⁰ Id

³¹¹ A.J. Kenny, N. Campbell, M. Koen-Alonso, P. Pepin, D. Diz, Delivering sustainable fisheries through adoption of a risk-based framework as part of an ecosystem approach to fisheries management, *Mar. Policy* (Spec. Issue SDG Synerg. Sustain. Fish. Poverty Alleviation) (2017).

³¹² UNGA, Sustainable fisheries, including through the 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, and related instruments (UN Doc A/RES/71/123, 13 February 2017).

³¹³ Id at 214

³¹⁴ FAO, Code of Conduct for Responsible Fisheries (1995) FAO Doc 95/20/Rev/1.

³¹⁵ D. Diz, E. Morgera, M. Wilson, Sharing the Benefits of Sustainable Fisheries: From Global to Local Legal Approaches to Marine Ecosystem Services for Poverty Alleviation (Science – Policy Analysis), SCELG Working Paper No. 7, 2017

sustainability, "in recognition of the fact that food security and livelihoods can depend on fisheries."³¹⁶ The outcome of the 2017 UN Ocean Conference also refers to the need to reinforce technical assistance to small-scale fishermen – especially in SIDS and Least Developed Countries (LDCs) – in implementing policies that promote business without increasing pressure on fisheries, and to provide access to fisheries and partnerships³¹⁷, although it does not refer to technology transfer as such.³¹⁸ Although there may be increasing political awareness of the benefits that could result from the transfer of marine technology to small-scale fishing communities, inadequate attention has been paid to actual and potential risks, especially with regard to technologies that aim to improve the effectiveness of fishing activities.³¹⁹ Small-scale fisheries play an especially 'iconic' role in international development and fisheries debates, insofar as 'they reflect alternative narratives of social justice and ecological sustainability'.³²⁰ Small-scale fishing is seen as relying on local technologies which have evolved organically over time to meet local food needs.³²¹ In addition, local technologies are responsive to the position where they are introduced, the relative abundance of fishing resources, and the complex, traditional resource rights that "promote indigenous forms of resource management based on harvest sustainability over time rather than short-term economic benefit".³²² On the other hand, the technologies supported by foreign donors may embody "a host of values and assumptions concerning preferred social organization, distribution of wealth and division of labour"³²³ The transition of fishing technologies originating in the developed world – marked by greater urbanization, centralization and capital intensity – has also led to the emergence of a dualistic structure of the fisheries sectors of developing countries, whereby large numbers of small-scale producers utilizing simple technologies compete indirectly with a newly formed large-scale fisheries sector.³²⁴ In addition to these structural changes, technology transfer has brought about a shift in values, as it has also led existing

³¹⁶ *Supra* 56 UNGA

³¹⁷ UNGA, Our ocean, our future: call for action (UN Doc A/CONF.230/11, 30 May, 2017).

³¹⁸ *Id*

³¹⁹ D.S. Johnson, Category, narrative, and value in the governance of small-scale fisheries, *Mar. Policy* 30 (6) (2006) 747–756.

³²⁰ *Id* at 751

³²¹ *Id* at 7

³²² C. Bailey, D. Cycon, M. Morris, Fisheries development in the Third World: the role of international agencies, *World Dev.* 14 (10) (1986) 1269–1275.

³²³ *Id* at 1271

³²⁴ J. Kurien, *Small-Scale Fisheries in the Context of Globalisation*, Centre for Development Studies, Trivandrum, India, 1998.

technologies and organizations to be viewed as "primitive and inefficient" and, by extension, as being insignificant for the purposes of participating in the rapidly growing global markets for certain fish varieties.³²⁵ Furthermore, conservationist resource-use principles and community ownership rights over fishery resources appear to be seen as inconsistent with the "individualist, entrepreneurial ethics required to optimize economic growth and increase coastal marine ecosystem efficiency".³²⁶

SDGS AND MARINE SPATIAL PLANNING (MSP)

Two distinct types of conflict occur in the nature of marine resources i.e, User- User conflict and User- environment conflict. User-User conflict occurs when Ocean space required for the growth of maritime sector are contradictory in nature where a user environment issues arise with regard to the degradation of the quality of water or loss to the Marie habitat.³²⁷ The fact that such disputes have historically been resolved reactively and on an ad hoc, sectoral basis has led commentators to argue that the worsening condition of the marine environment is largely due to a "Failure of governance ".³²⁸ As "an instrument for managing other instruments,³²⁹" MSP has the potential to catalyze the creation and implementation of integrated management strategies addressing the cumulative and interactive effects of human actions on space and time,³³⁰ thereby leading to "[maximizing and conserving] ecosystem services.³³¹ Consequently, MSP has transcended its roots as a conservation-oriented instrument whose primary objective was to promote the classification of MPAs, and is now being used by an increasing number of states as a tool for expediting and streamlining the synergistic implementation of sectoral policies³³² in a manner that encourages 'more

³²⁵ Id at 3

³²⁶ Id at 3

³²⁷ C. Ehler, F. Douvère, *Marine Spatial Planning: A Step-by-step Approach toward Ecosystem-based Management*, Intergovernmental Oceanographic Commission(IOC) and Man and the Biosphere Programme, Paris, 2009. <https://www.oceanbestpractices.net/handle/11329/459>

³²⁸ N. Soininen, D. Hassan, *Marine spatial planning as an instrument of sustainable ocean governance*, in: D. Hassan, T. Kuokkanen, N. Soininen (Eds.), *Transboundary Marine Spatial Planning and International Law*, Taylor and Francis, Florence, 2015, pp. 3–20.

³²⁹ Id at 5

³³⁰ B.S. Halpern, K.L. McLeod, A.A. Rosenberg, L.B. Crowder, *Managing for cumulative impacts in ecosystem-based management through ocean zoning*, *Ocean Coast. Manag.* 51 (3) (2008) 203–211

³³¹ T. Potts, *Marine spatial planning and various uses and interests relating to the marine environment*, in: H. Daud, T. Kuokkanen, N. Soininen (Eds.), *Transboundary Marine Spatial Planning and International Law*, Taylor and Francis, Florence, 2015, pp. 42–59.

³³² G. Scarff, C. Fitzsimmons, T. Gray, *The new mode of marine planning in the UK: aspirations and challenges*, *Mar. Policy* 51 (2015) 96–102.

rational and wise use of limited ocean space'.³³³ In fact, MSP is now most commonly described as "a public process of evaluating and allocating the spatial and temporal distribution of human activities in marine areas in order to achieve ecological, economic and social goals that were normally set through a political process".³³⁴ Multi-objective MSP is also increasingly recognized as an integrated, area-based management tool in itself³³⁵, as one of the most realistic choices for applying the ecosystem approach.³³⁶ The CBD Secretariat has described MSP as a "*planning framework focusing on the special and complex requirements of spatial planning in marine ecosystems to support the needs or desires of the goods and services community from these environments over time.*"³³⁷ The seminal step-by-step guide to MSP from UNESCO further states that it can be used to "select effective management strategies to preserve and safeguard the necessary ecosystem services".³³⁸ Nevertheless, despite broad awareness of the close relationship between ecosystem services and MSP, the incorporation of environmental factors into the planning process remains a concern with which scholars and decision-makers are still engaged. In line with the pervasive view of MSP as a resource for conflict resolution and consensus building, some analysts have tried to illuminate the role of ecosystem services in the development of conflicts and the creation of synergies between various marine and maritime uses. For example, Lester et al. states that ecosystem services "*exhibit complex interactions that generate tradeoffs in the provision of one service relative to the delivery of others*".³³⁹ In situations where all competing resources cannot be maximized simultaneously, society is forced to hierarchise between different functions and marine space uses.³⁴⁰ Therefore, MSP will

³³³ M. Young, Building the blue economy: the role of marine spatial planning in facilitating offshore renewable energy development, *Int. J. Mar. Coast. Law* 30 (1) (2015) 148–174

³³⁴ C. Ehler, F. Douvère, *Marine Spatial Planning: A Step-by-step Approach toward Ecosystem-based Management*, Intergovernmental Oceanographic Commission (IOC) and Man and the Biosphere Programme, Paris, 2009.

³³⁵ N. Schaefer, V. Barale, Maritime spatial planning: opportunities & challenges in the framework of the EU integrated maritime policy, *J. Coast. Conserv.* 15 (2) (2011) 237–245.

³³⁶ GEF, *Marine spatial planning in the context of the convention on biological diversity: A study carried out in response to CBD COP 10 decision X/29*, CBD Technical Series No. 68, CBD Secretariat and the Scientific and Technical Advisory Panel of the Global Environment Facility (GEF STAP), Montreal, 2012

³³⁷ *Id*

³³⁸ C. Ehler, F. Douvère, *Marine Spatial Planning: A Step-by-step Approach toward Ecosystem-based Management*, Intergovernmental Oceanographic Commission (IOC) and Man and the Biosphere Programme, Paris, 2009.

³³⁹ S.E. Lester, C. Costello, B.S. Halpern, S.D. Gaines, "Evaluating tradeoffs among ecosystem services to inform marine spatial planning, *Mar. Policy*" 38 (2013) 80–89.

³⁴⁰ *Id*

serve as a future-oriented public mechanism for decision-makers to define, prioritize and safeguard the mix of products and services that will be generated in a particular marine area.³⁴¹ SDG 14 specifically cites the UN Convention on the Law of the Sea (UNCLOS) as it provides the legal framework for the Conservation and management of Ocean and its resources whereas the CBD emphasis on the environmental aspects and its equity aspects have been advanced in the Understanding of those Conventions. The approach to the ecosystems is implicit in the UNCLOS Preamble, which underlines the interrelatedness of ocean space problems and the need to consider them as a whole. Elements of the ecosystem approach can also be derived from the UNCLOS obligations for coastal states to consider the impact of measures aimed at the protection and management of species harvested on related or dependent species in their exclusive economic zones³⁴²; to avoid, mitigate and control pollution resulting from the deliberate or accidental introduction of alien species;³⁴³ and to preserve and protect the fragile ecosystem.³⁴⁴ Nonetheless, the ecosystem approach is not based on either the policy on marine living resources or the one on protecting the marine environment.³⁴⁵ As for equity, UNCLOS' Preamble refers to the fair and equitable use of ocean and sea resources to "realize a just and equitable international economic order." However, UNCLOS' organizational provisions only provide minimal scope for equity in the management of natural resources.³⁴⁶ And while equity is very central to marine scientific research and technology transfer laws³⁴⁷, these focus on fostering equity at the inter-state level and are applied only to a limited degree.

³⁴¹Supra 332

³⁴² UNCLOS Article 61(4)

³⁴³ UNCLOS Article 196

³⁴⁴ UNCLOS Article 194(5)

³⁴⁵ Wolfrum, N. Matz, The Interplay between the United Nations convention on the Law of the Sea and the convention on biological diversity, Max Planck Yearbook of United Nations Law, vol. 4, 2000, pp. 445–480.

³⁴⁶ E.g., the provision of access to the surplus of the living resources of the EEZ: Articles 62(3), 69(1) and 70(1); mineral resources in the Area: Articles 136 and 140; and exploitation of non-living resources of the outer continental Shelf article 82(4).

³⁴⁷ M. Ntona, Benefit-sharing and Marine Scientific Research, Bene Lex blog post, 2015. Available online at: (<http://www.benelexblog.law.ed.ac.uk/2015/11/01/benefit-sharing-and-marine-scientific-research/>). (Accessed 11th May 2020). Also See M. Ntona, the transfer of Marine Technology as Benefit-sharing, Bene Lex blog post, 2015. Available online at: (<http://www.benelexblog.law.ed.ac.uk/2015/11/04/the-transfer-of-marine-technology-as-benefit-sharing/>). (Accessed 11th May 2020)

CBD AND ECOSYSTEM APPROACH

CBD guidance on approach towards ecosystem encourages a fair and equal distribution of ecosystem stewardship benefits with the actors responsible for maintaining habitats and supporting ecosystem services.³⁴⁸ Therefore it can be argued that CBD Parties points out benefit-sharing as a portion of the ecosystem strategy to reward stakeholders responsible for maintaining and restoring valuable ecosystem functions.³⁴⁹ Considering this reciprocal relationship between maintaining ecosystem services and rewarding environmental stewardship, the ecosystem approach can thus help to incorporate equity considerations into the framework for ecosystem services.³⁵⁰ In addition, the CBD suggests that enhancing benefit-sharing should entail, inter alia, proper valuation of ecosystem resources, elimination of perverse incentives leading to their devaluation, and replacement of such incentives with local frameworks supporting good management practices, where possible.³⁵¹ However, valuation exercises come with their own set of challenges. A common concern among scholars is that the importance of intermediate services (e.g., controlling and supporting services) and cultural services (e.g., moral beliefs, cultural identity, and traditional knowledge) is usually not taken into account in valuation exercises, which can lead to a weakening of the respective outcomes in decision-making processes.³⁵² In addition, the assessment of ecosystem resources is especially challenging in the marine context, as the diversity of human beliefs and expectations about ocean uses makes it exceedingly difficult to identify and measure societal preferences .³⁵³ A further complicating factor stems from the fact that many of the main marine environment products and services (e.g. recreation, wildlife viewing, shoreline erosion protection) are not traded in markets. Challenges often occur

³⁴⁸ Thus, a different notion of benefit-sharing than that at CBD Arts. 1 and 15 in relation to the use of genetic resources. See also E. Morgera, The need for an international legal concept of fair and equitable benefit sharing, *Eur. J. Int. Law* 27 (2) (2016) 353–383

³⁴⁹ CBD Decision V/6 (2000) para 91; Diz et al. [65]. In the marine context, this rationale is further substantiated by the provisions of such instruments as the Food and Agriculture Organisation (FAO) Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries, which are meant to support “the equitable distribution of the benefits yielded from responsible management of fisheries and ecosystems (para 5.1).

³⁵⁰ D. Diz, E. Morgera, M. Wilson, Marine benefits Legal Report, forthcoming on SSRN.

³⁵¹ Id

³⁵² K.M.A. Chan, A.D. Guerry, P. Balvanera, S. Klain, T. Satterfield, X. Basurto, A. Bostrom, R. Chuenpagdee, R. Gould, B.S. Halpern, N. Hannahs, J. Levine, B. Norton, M. Ruckelshaus, R. Russell, J. Tam, U. Woodside, where are cultural land social in ecosystem services? A framework for constructive engagement, *Bio Science* 62 (8) (2012) 744–756.

³⁵³ J.K. Summers, L. Smith, “The role of social and intergenerational equity in making changes in human well-being sustainable,” *AMBIO* 43 (6) (2014) 718–728.

when it comes to developing and implementing 'payment for ecosystem services' (PES) schemes as a framework for turning the results of valuation exercises into concrete benefits for stakeholders.³⁵⁴ PES can be described as 'transfer of resources between social actors, which aims to create incentives to align individual and/or collective land use decisions with the social interest in natural resource management.'³⁵⁵ Nevertheless, equity remains a real problem for the implementation of PES projects, as control over the targeted ecosystem service appears to be related to property rights and land ownership, and is thus inversely related to at least one aspect of poverty.³⁵⁶ By focusing on stakeholders with formally recognised control over the targeted service and overlooking broader power issues, PES schemes may allow for the further entrenchment of existing inequities as well as the reworking of traditional socio-natural relations.³⁵⁷ In the marine context, the State is often considered as the provider of ecosystem services, although regulatory measures employed to implement the outcomes of MSP processes (e.g., community-based management, ocean zoning) can gradually confer property/access/use rights to non-State actors, thus including them in the pool of eligible ecosystem service providers³⁵⁸. However, there is a real possibility that the adoption of a cost-efficient approach to the design of PES schemes will lead to poor coastal communities being identified as the preferred providers of ecosystem services, as they are in a position to provide such services in exchange for very low payments. Inequitable outcomes may also stem from PES schemes that "lock" communities into agreements that prevent them from pursuing more profitable uses of their resources. Considerations relating to distributive justice and equity should thus be incorporated into the development of PES schemes³⁵⁹, particularly for poor coastal communities that "rely disproportionately on ecosystem services for their livelihoods

³⁵⁴ UNEP, *Payments for Ecosystem services: Getting started, A Primer*, Forest Trends, The Katoomba Group and the UN Environment Programme (UNEP), 2008

³⁵⁵ R. Muradian, E. Corbera, U. Pascual, N. Kosoy, P.H. May, *Reconciling theory and practice: an alternative conceptual framework for understanding payments for environmental services*, *Ecol. Econ.* 69 (6) (2010) 1202–1208

³⁵⁶ M. van Noordwijk, B. Leimona, L. Emerton, T.P. Tomich, S.J. Velarde, M. Kallesoe, M. Sekher, B. Swallow, *Criteria and indicators for environmental service compensation and reward mechanisms: realistic, voluntary, conditional and pro-poor*, World Agroforestry Centre, Nairobi (2007).

³⁵⁷ M. Barbesgaard, *Blue Growth: Saviour or Ocean Grabbing?*, Global Governance/ politics, Climate Justice & Agrarian/social Justice: Linkages and Challenges, International Institute of Social Studies (ISS), The Hague, 2016. Also See K. McAfee, *The contradictory logic of global ecosystem services markets*, *Dev. Change* 43 (1) (2012) 105–131.

³⁵⁸ W.W.Y. Lau, "Beyond carbon: conceptualizing payments for ecosystem services in blue forests on carbon and other marine and coastal ecosystem services, *Ocean Coast. Manag.*" 83 (2013) 5–14.

³⁵⁹ *Id* at 9

and have few means for alternatives, but often are also the ones with the lowest opportunity costs (in absolute monetary amount) to changing resource use”³⁶⁰. MSP, as a deliberative and participatory decision-making mechanism that could contribute to the development of new rights over marine space and resources – and thus to the creation of new ecosystem service providers qualified to participate in PES schemes – would aim to ensure that the valuation of ecosystem services and PES contribute to fair outcomes ³⁶¹. The sharing of benefits that also include exposure to marine services and markets³⁶², the other socio-economic aspects directly discussed by SDG 14 (MoI 14.b). Finally, the precise advantages to be exchanged are left to a case-by - case decision, and so are justice and equality concretization. Nevertheless, PES schemes are only one mode of benefit-sharing, and the CBD ecosystem approach, as well as other similar CBD guidelines, allows for a variety of benefits-sharing modalities, such as profit-sharing, information-sharing, research and commercial collaboration, cooperative management of natural resources, support and legal recognition of sustainable community activity and constructive consideration of these projects of better / alternative living possibilities.³⁶³ Potential modalities for operationalizing benefit-sharing from ecosystem stewardship in the sense of MSP are further explored below, after considering another, related benefit-sharing justification, namely the incorporation of conventional information into MSP.

FAIR AND EQUITABLE BENEFIT-SHARING FROM THE INTEGRATION OF TRADITIONAL KNOWLEDGE INTO MARINE SPATIAL PLANNING

Traditional knowledge cannot always fit into the typical distinction between biological and human uses but rather provide a more holistic view of marine and coastal areas and resources.³⁶⁴ The integration of traditional knowledge of indigenous peoples and local

³⁶⁰ Id at 9

³⁶¹ D. Diz, E. Morgera, M. Wilson, Sharing the benefits of sustainable Fisheries: From Global to Local Legal Approaches to Marine Ecosystem Services for Poverty Alleviation (Science – Policy Analysis), SCELG Working Paper No. 7, 2017. Available online at: (<https://ssrn.com/abstract=2944330>). (Accessed 13 May 2020).

³⁶² Id

³⁶³This is a synthesis of a series of CBD Decisions analysed in Morgera and Tsoumani E. Morgera, E. Tsoumani, “The evolution of benefit sharing: linking biodiversity and community livelihoods, RECIEL 15 (2) (2010) 150–173.

³⁶⁴ Report of the Expert Workshop to Provide Consolidated Practical Guidance and a Toolkit for Marine Spatial Planning, Annex IV, para 38 (hereinafter, the Report of the Expert Workshop). CBD Parties have been invited to take into account in the implementation of MSP: CBD Decision XIII/9, paras 1 and 3(a).

communities into MSP, both as a source of information in its own right and as a tool for validating and adding value to existing scientific information,³⁶⁵ is enabled by CBD guidance on ecosystem approach.³⁶⁶ The incorporation of traditional knowledge is subject to CBD's mandate to promote the exchange of benefits arising from the use of traditional knowledge for conservation and sustainable use.³⁶⁷ On account of other sources of interpretation of CBD,³⁶⁸ as well as applicable international principles of human rights, it should be emphasized that traditional knowledge can only be used after prior informed consent from indigenous peoples and local communities.³⁶⁹ Critically, sincere attempts to enforce the conditions for prior informed consent and equal and equitable sharing of benefits include a 'continuous process of creating mutually beneficial, ongoing arrangements' between users and conventional information holders in order to 'build trust, good relationships, mutual understanding, intercultural spaces, knowledge exchange, new knowledge and reconciliation.'³⁷⁰ This is a key clarification about the need for an iterative process, not a one-off exercise in giving traditional holders voice in relevant decision-making processes and their views and preferences understood and addressed in that context.³⁷¹ As indigenous and local communities are frequently consulted, during the final phases of the planning process which limits their full engagement in developing and implementing marine space plans,³⁷² CBD Parties have emphasized the full and effective participation of indigenous peoples and local communities in MSP processes,³⁷³ which can be facilitated through, inter alia, legislative frameworks, resource mapping and the promotion of recreational, commercial and cultural activities.³⁷⁴ In turn, the broader and more successful

³⁶⁵ Report of the Expert Workshop, Annex IV, para 37.

³⁶⁶ BD Decision V/6 (2000) Annex, Principle 11.

³⁶⁷ Matthew Humphreys, "Environmental Law" 280 (8th ed. 2013)

³⁶⁸ CBD Article 8(j). See also CBD Decision IX/20 (2008) para 27.

³⁶⁹ CBD Decision XIII/18 (2016). See also E. Morgera, Reflections on 2016 UN Biodiversity Conference (Part II): Assessing the Mo'otz kuxtal guidelines on benefit-sharing from the use of traditional knowledge, BeneLex blog post, 2017. Available online at: (<http://www.benelexblog.law.ed.ac.uk/2017/03/01/reflections-on-2016-un-biodiversityconference-part-ii-assessing-the-mootz-kuxtal-guidelines-on-benefit-sharing-fromthe-use-of-traditional-knowledge/>). (Accessed 5 May 2020)

³⁷⁰ CBD Decision XIII/18 (2016) Annex, para 8.

³⁷¹ E. Morgera, Fair and equitable benefit-sharing at the cross-roads of the human right to science and international biodiversity law, *Laws* 4 (4) (2015) 803-831.

³⁷² Report of the Expert Workshop, Annex VI, para 8(h).

³⁷³ CBD Decision XIII/9 (2016) para 3(b). See also Annex VI, para 39 of the Report of the Expert Workshop, which notes that "[r]especting ownership of traditional knowledge is important to reassure stakeholders that their knowledge will be used in an appropriate manner." On the need to ensure the involvement of stakeholders early and continually in all stages of the MSP process.

³⁷⁴ Report of the Expert Workshop, Annex VI, para 8(h).

participation of these stakeholder groups may allow MSP to incorporate traditional knowledge in a way that respects the plurality of knowledge systems on the assumption that traditional knowledge includes the best available scientific evidence.³⁷⁵ Nonetheless, if the inclusion of various types of information in MSP processes is to be genuinely egalitarian in practice, it will also be important to investigate how specific institutions and their modes of representation and involvement of stakeholders decide whose information is incorporated and how³⁷⁶. To this end, it is important to look beyond the MSP process and into the cultural, political, and socio-economic environment within which it operates, with a view to identifying such contextual factors as power / knowledge relationships that may impede the fundamental elements of synergy development, namely stakeholder control, capacity building, and respectful, interactive learning.³⁷⁷

By focusing more closely on defining stakeholder roles and priorities, and by cultivating a deeper understanding of their reliance on ecosystem services, guidelines established under the CBD in relation to MSP will promote the operationalization of profit sharing in this context with ecosystem stewards and conventional information holders.³⁷⁸ Cross-sectoral engagement can be expected to focus on defining the cultural aspects of MSP and improving cooperation with different cultures; promoting equity, openness and inclusiveness, including addressing ethical issues; and using a long-term historical perspective on how current circumstances and issues developed in a given region with a view to creating a shared narrative between the institutions and stakeholders involved in the MSP process, to provide context for defining goals and objectives, and to assist in building trust.³⁷⁹ Mapping has been described as one potential method for characterizing various uses of ecosystem services, rights and equity aspects, and for generating information on interconnections between different actors in national or local economies. Participatory mapping was related, in particular, to the capture of socio-cultural values and conflict resolution by visualizing the implications of the different courses of action.³⁸⁰ Furthermore, stakeholder baselines

³⁷⁵ Report of the Expert Workshop, Annex VI, para 38.

³⁷⁶ S. Jentoft, *Small-scale fisheries within maritime spatial planning: knowledge integration and power*, J. Environ. Policy Plan. (2017)

³⁷⁷ Id

³⁷⁸ See Richard Barnes “Property rights and Natural Resources” 313 (1st ed.2009)

³⁷⁹ Report of the Expert Workshop, Annex VI, para 10.

³⁸⁰ Report of the Expert Workshop, Annex VI, para 33. See also GEF [51, p. 26].

could be used to describe anticipated past and future use of ecosystem services, expectations of future roles, traditional resource utilization and access to ecosystem services.³⁸¹ The use of common data collection protocols, ethical codes for the use of traditional knowledge and information, and structured methods for monitoring and evaluating ecosystem health or valuation of ecosystem resources (including non-use resources such as cultural, social and aesthetic values) can also improve stakeholder trust and buy-in to the MSP process.³⁸² As long as these tools can be put into practice as an ongoing process of respectful engagement with ecosystem stewards and traditional knowledge holders to co-create knowledge and build genuine coastal and ocean management partnerships, they can provide MSP with a "appropriate and effective" approach, according to the UN Ocean Conference's Call for Action.

However, while the concept of ecosystem services may help connect different SDGs in the context of MSP, the practice of valuing ecosystem services needs to be further developed to effectively explore non-provisioning services, as well as drawing from different knowledge systems, with a view to clarifying different monetary and non-monetary benefits arising from marine ecosystem management. Similarly, in the sense of the coastal and marine climate, thorough consideration should be given to the known shortcomings of benefit-sharing activities to effectively contribute to its specified goals of fairness and equity.

CONCLUSION

The sustainable management of fisheries is a major challenge for the future. Uncertainties regarding the stock assessment and improper implementation of management measure etc. are the reason for the poor management. Stakeholders participation is inevitable step in the effective management of fisheries.³⁸³ But the interest of various stakeholders remains as an impediment for the decision makers to make effective decisions. Changes and improvements are to be made in many areas, but it is unclear whether they are occurring expedient enough to tackle further collapses.³⁸⁴

³⁸¹ Report of the Expert Workshop, Annex VI, para 14

³⁸² Report of the Expert Workshop, Annex VI, para 16

³⁸³ Karjalanin Juha & Marjomaki "sustainability in fisheries Management 8(2005) last visited 12th May 2020

³⁸⁴ McGarvin M 2001 "Fisheries taking Stock Environment Issue Report 2217-30

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

“The World’s Marine Fisheries are in trouble, as a direct result of overfishing and the overcapacity of fishing fleets. Despite the Intensive management efforts, the problem still persists in many areas, resulting in many fisheries being neither sustainable nor profitable.”

Colin W Clark³⁸⁵

Fish is an important trading commodity of higher demand. People around the world depends on fish for livelihood and also for nutrition. Over the last half of the century the world have seen notable change in the realm of fisheries. The world’s total fishmeal and fish oil is estimated to reach the value of USD 14.28 billion by 2022. Trade is innate to fisheries and global trade in fisheries is increasing day by day. This expansion is on account of growing demand for fish as a food as well as feed and also the developments in technology of harvesting, processing and transportation. The history of fisheries development in the developed countries also adds the significance of fisheries and the various measures taken by the state promoting fisheries modernization, development of physical infrastructure, promoting scientific research and steps towards ensuring livelihood security of fishing community.

From this doctrinal analysis it is very clear that subsidies that contribute to the depletion of fish stock undermine the livelihood of many people who rely on nutritional and livelihood fisheries. Many of the member nations submitted the proposal stating that the fisheries subsidies are the sole reason for the depletion of world fish stock and thus need to be prohibited utterly. Elimination of all subsidies will not be a solution for all fisheries ills, but it is an inevitable step to eliminate overcapacity. Recognizing this as a global issue, WTO stands well poised to confront the problems head-on. WTO insists member countries submit their proposals for subsidies regulation. The WTO should now require WTO member

³⁸⁵ Colin W. Clark ‘The Worldwide Crisis in Fisheries Economic Models and Human Behaviour (1st ed)

nations to gradually yet wholly eradicate all of those fisheries subsidies that contribute to overfishing, overcapacity, and the artificial distortion of the natural fishing market equilibrium³⁸⁶. Developing countries submitted a proposal that blanket ban of all these fisheries would not be considered as affirmative action. Instead, it will negatively affect their economy, which is dependent on the fisheries sector both directly and indirectly. Fisheries Industries is an industry that incurs huge expenses and unpredictable losses. So working of these industries will be futile if all these subsidies are prohibited all of a sudden. Though these policies put forward by WTO are beneficial to the fisheries industry, it would have a negative impact on people whose livelihood is solely based on fishing. So there must be a clear demarcation between the subsidies that contribute to overfishing and which are not harmful. Underlying problem confronts to WTO is to differentiate between harmful subsidies and those for the sustainability of the fisheries sector. The real issue remains with a lack of universally accepted definition for Fisheries subsidies. The concept of fisheries subsidies is not defined in WTO or other intergovernmental agencies such as FAO or OECD. Problems related to fisheries subsidies are complex and delicate because subsidies are introduced by the government for reasons they considered to valid. After a point of time subsidies which served a useful purpose may have become entrenched and now promote the interest of participants receiving the subsidies.

United Nations Sustainable Development Goal 14 deals with the conservation of marine resources. The development of rules governing subsidies is the subject of the United Nations 2030 sustainable development goals. In December 2017, WTO members recommitted to work towards the establishment of these rules by 2019, but the negotiations face a number of technical and political challenges. Among them is the fact that negotiators are asked to tackle the environmental rather than commercial impacts of subsidies on renewable natural resources with their governance system by building subsidy rules. They also create enforceable subsidies based on the concept and legal structures from the fisheries management and fisheries management.

³⁸⁶ Supra 31

Technological advances are at the heart of overfishing. Due to the progression of technology, fishing vessels are equipped to catch more fish in a shorter period. What a fisherman fails to catch on Monday, he reasons, will be caught by another fisherman on Tuesday and so the overfishing problem persists, unabated³⁸⁷. The policy of ‘freedom of High seas’ allowed the states to access to many rich fishery resources at great distance from their shores. States have only jurisdiction over the territorial sea extending up to 3 or 6 nautical miles. This reality accompanied with the growing demand for fish worldwide gave impetus to well established fish traders to fund the construction of fishing vessel worthy of long voyages.

Owing to the decision of the erstwhile Soviet Union to source protein from sea rather than land there was an expansion of distant- water fishing. The other countries such as Japan, federal Republic of Germany, Poland, Portugal along with the developing nations like Republic of Korea, Cuba, Ghana and the Taiwan Province of China also involved in distant-water fishing. The aid of these states to promote distant water fishing was forthcoming, both in the form of direct and indirect subsidies. Fisheries subsidies may take either direct or indirect forms. Direct subsidies may be in the form of grants, low-cost loans and loan guarantees for vessel construction and repair. Indirect subsidies include fuel discounts, financial assistance for various Welfare Schemes including the construction of ports, fish harbour and fishing landing centres and market infrastructure.

Such support from liberal states led to the adoption of new technologies and the rapid spread of the same throughout the industry. The purpose of the subsidies was rapid industrial development. The expansion of fishing fleet capacity both nationally and globally was an important consequence of this. A multinational fleet of floating factories has started sweeping the global oceans searching for new resources to cater to the ever increasing demand for fish product and fish feed. In order for remote water fishing vessels to continue sustainable fishing, operational costs especially the fuel costs had to be subsidized and financial arrangements need to be negotiated among coastal states for access to their resource. Many of these developed nations adopt development-import strategy providing development aid to the initially to Asian and Pacific Nations to enlarge fisheries and processing facilities and they import fish after

³⁸⁷ Borman, *supra* note 11, at 133; *see also supra* Section 2.1.

providing these countries preferential treatment. The Organization for Cooperation and Development (OECD) and Asian-Pacific Economic Cooperation (“APEC”), by contrast, puts the estimate of fisheries subsidies at just over \$ 12 billion³⁸⁸. The World Bank Estimates of Fisheries Subsidies is somewhere between \$14 billion to \$20 billion³⁸⁹. However, the fisheries subsidies will be much higher than that of estimation. Reducing or reforming subsidies to the fishing industry could help eliminate policies that distort the effects of overcapacity or overfishing incentives.

RECOMMENDATIONS

6.1) The SCM Agreement could be revised to insert specific provisions on fisheries subsidies

The current SCM Agreement is deficient to deal with fisheries subsidies. At present there is no specific provision of law dealing with fisheries subsidies. The friends of fish claimed that the agreement in its current version are inadequate to prevent fisheries depletion and trade-distorting effects of subsidization. The main issues with respect to the fisheries subsidies is that this sector is unique. The main point of variance from the agricultural sector is that fish is a natural commodity.

6.1.1) The Definition of subsidies under SCM Agreement need to be Modified

The first and foremost problem is with respect to the lack of transparency. Even though the Article 25 is dealing with special rules regarding the notification of subsidies, this system failed to deliver reliable information on fisheries subsidies. Governments failed to notify their programmes to the WTO.³⁹⁰ The current definition of subsidies under Article 1 of SCM is only dealing with direct subsidies. But the subsidies are often provided indirectly. For Instance, access to waters of a foreign country by a domestic fishing fleet. Whether it is a subsidy under Article 1 of SCM Agreement is still a doubt. This may be termed as a service, but this argument is barely supportable for the reason

³⁸⁸Press Release, European Comm'n, WTO: Fisheries Subsidies - EU Tables Proposal for Sustainable Fishing (Apr. 22, 2003), *available at*

http://europa.eu.int/comm/fisheries/news-comer/press/inf03_13_en.htm.63 *Id.*

³⁸⁹ *id*

³⁹⁰ Alice L Mattice “ The Fisheries Subsidies Negotiations in the World Trade Organization: a ‘Win-Win-Win’ for Trade, the Environment and Sustainable Development” (2004) 34 Golden Gate UL Rev 573,582

term “service” appears to be too ambiguous. Other Example is that Multilateral Environmental Agreements (MEA) prohibits fishing during spawning seasons. The non-enforcement of law is an indirect subsidy that would not come under the SCM Agreement. The common asseveration seems to be that subsidies used in the developing countries are non-actionable and the subsidies that are unavoidable for the development of these countries have been left out of this exception. So the definition of subsidies under SCM Agreement need to be modified to include the indirect subsidies as well.

6.1.2) The requirement of specificity under Article 2 of the SCM Agreement need to be more specific.

Article 2 of the SCM Agreement clearly stipulates that a subsidy must be “specific” to an “enterprise or industry or group of enterprises or industries”. Some of the members are of the view that the term is broad enough to cover most of the subsidization programmes. Whereas others are of the opinion that subsidizing a whole industry is not specific, when there is a failure in addressing particular subsector. There is no final conclusion with respect to term “specificity” because when a subsidy falls under the provisions of Article 3, the essentials under Article must not be fulfilled.

There are also problems in regard to the development fisheries subsidies disciplines in developing countries. Most of the subsidies used in developing countries are non-actionable and those that are required to them have been left out of this categorization. Doha Ministerial declaration not only aim to improve the disciplines on fisheries subsidies but also enhanced the significance of this sector to developing countries.

6.3) IUU vessels could be identified by the state

Port State Measures Agreement should require port states to notify relevant flag states and RFMOs if vessels are denied access to the port because of evidence they possess engaged in fishing under IUU. Many of the members of WTO are also signatory to Port State Measures Agreement. However, this agreement should be in conformity with international law complying international rules and standards. To date, WTO members who are parties to the agreement are limited.

6.4) Prohibition of subsidies that contributes to overfishing

According to the Report of FAO around 31% of assessed fish stocks are overfished. There is a very big conceptual difference between a stock being overfished and process of overfishing. Overfishing is referred as a measure of the fishing effort being exerted and whether a stock is overfished is depend upon the stock's biomass. A question usually arose is when a stock is overfished? Often it depends on the decisions of national or regional authorities or a combination of both. Article 61 of the UNCLOS specifically mentions the use of MSY as an indicator of risk of the overexploitation of resources in an EEZ. Some fisheries bodies adopt precautionary approaches to those reference points they use. For Instance, establishing a conservative point where fishing pressure need to be reduced in order to bring back a stock to a target level. The reference point is decided after taking in to consideration social, economic and biological and management objectives.

6.5) Special and Differential Treatment for Developing countries

Several members of WTO have proposed S&DT should be accorded to developing and Least developed countries. Because economy of most of these countries depend on fishing alone. Much of the discussion regarding special and Differential treatment has focused in the degree or limit to which subsidies provided by developing countries might be exempted from the disciplines. This exemption must be based on criterion such as scale of fishing involved (for e. g for small scale fishing), the type of subsidy provided, or the geographic area in which the fishing take place (e.g. EEZ/Territorial Sea). It also aims “capacity building” to help LDCs develop their fishing capacity in a sustainable manner, and also the ability to assess and monitor stocks, and to regulate fishing activities.

6.7) National Fisheries Management should give Importance

To make the rules formulated by the WTO effective it is necessary to bring forth the national fisheries management authorities and other authorities to the main stream of fisheries sector management. This points out that the negotiators need to make a conjoint effort with other counter parts such as ministries or departments dealing with fisheries. For Instance, some subsidies may be administered through the departments which is not directly concerned with the management of fisheries. In most of the

countries payment of fuel subsidies is made customs or tax officials. In some countries National Fisheries Management and fisheries surveillance are under different institutional wings. For Instance, the department of fisheries is concerned only with establishing rules for fishing activities and fisheries management policy settings where the surveillance is under the governance of navy, air force and police. Such ramifications in administration stood as impediment to ensure the effective management, surveillance and regulation of fisheries subsidies. Meanwhile, national fisheries management settings, surveillance and enforcement would need to be modified enabling the reduction off provision of subsidies to identified IUU offender. So if a vessel is not complying with the rules and also failed to provide relevant information regarding areas of fishing, catch and landing data, logbook information on a timely basis, then the authorities can deny subsidy payments. This may be a very good measure for fisheries subsidies regulation but this could only be applied to the future fisheries subsidies.

Although all WTO members acknowledge the significance of stressing IUU fishing barring subsidies and activities leading to it as called for sustainable development Goal Target 14.6, the implementation of the WTO discipline is somewhat challenging for a few members. One of the objections put forward by the member nations is that current fisheries management or enforcement mechanism in many countries is not strong enough to capture all IUU activities. Absences of Fisheries Management and effective implementation mechanism may lead to the difficulties in fall in with fisheries subsidies disciplines explicitly with respect to unregulated and unreported elements of IUU fishing. As far as Least developed countries are concerned capacity building are inevitable at the same time the role of FAO in supporting the implementation of Fisheries subsidies disciplines would be important.

One solution might be to draw the discipline in such a way that it incorporates assistance and the definition of IUU should be carved based on national infractions. Nonetheless, 2020 is the deadline for curbing subsidies that led to overexploitation and overcapacity, it could provide a benchmark transition period of years for ensuring that the disciplines are complied with. Meanwhile the period is not so long and it provides ample opportunities to move on improving fisheries management and enforcement rules. At last, should concerns remain unresolved, one option might be to consider a time-limited

provision under which the WTO dispute settlement system would have special consideration to the developing countries' situations.

With a vision of achieving common prosperity, the international community joined hands and signed up to the sustainable development Goals which is to be achieved by 2030. IUU fishing has signed out of the figure because International communities has experienced impedance in curbing difficulties for too long. It's a time to ensure the effectiveness of the measure formulated to deal with these activities rather than postponing action. A WTO subsidy legislation is a need of time.

Identification of IUU fishing activities for the purpose of framing subsidies discipline, would need to be present both national and international levels as the current rules and different situations warranty several approaches vis-à-vis domestic and international IUU fishing activities.

Most of the countries have National IUU legislation which is in consonance with code of conduct for Responsible Fisheries, the IPOA-IUU and the Port State Measures Agreement. National legislation lays down the particularities of fisheries sector management and activities. What tends to be illegal vary from a country to country until a common subsidy discipline is identified.

Even if IUU activity identifications are not issued by domestically flagged vessels, national implementing legislation could require the suspension of subsidies. Where a foreign flagged vessels are identified as IUU fishing under National jurisdiction, there are procedures for notifying the vessel's flag state, but the SCM committee of WTO could also be notified at the same time. The SCM committee could prove that it is a valuable forum for encouraging non-complaining flag state that are WTO members to be more conscious in addressing IUU fishing as well as promoting WTO members to fulfil their obligations under a new degree not to subsidize these activities.

RFMO vessel listing could be a useful measure for identification of IUU activities to which subsidies prohibition would apply. Another way for identification of IUU activity would be to draw on the information generated through the adoption of PSMA. RFMO vessel listings along with the information generated through the implementation of PSMA could be discussed in SCM committee to encourage offending companies and flag states to address IUU fishing. The application of subsidies to IUU fishing is likely to be primary exposure. Before such vessel engaged in IUU activities, vessel may have

constructed by using the subsidies; a past event that may not undo. Meanwhile, domestic legislation requiring subsidies not to be given to vessels and possibly also to vessel operators/owners once IUU fishing has been discovered would have an impact on future subsidies, particularly on further operational subsidies such as interest rebates, fuel rebates or subsidies for buying bait/ice. Furthermore, once vessels have been involved in IUU activities their owners and operating companies no longer receive subsidies, it might be useful to continue monitoring these vessels, owners and operators for any future illegal activity. The scope of such control obviously needs to be determined on a case- by-case basis. Different tax evasion strategies exist: once detected by the national tax system, criminals are typically subject to fiscal oversight for the years to come.

As per the view OECD, IUU fishing activities exist because they pay off. In order to get rid of these activities a well enforceable WTO rules along with increase in the chance of being caught through surveillance and enforcement is necessary. This may prove very useful to remove subsidies that lead to IUU activities, provide enforceable WTO rules, and use a well -established platform for informed coastal, flag and subsidized state's discussions. It will be a novel addition to the International and national laws and also the regulations which addresses IUU activities. Moreover, it provide a forum for open discussions between WTO members concerned about the connection between illegal fishing activities and subsidies.

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