

**Proceedings of the
Regional Symposium on Sustainable Development Goal 14 – Life below
Water (Blue SDG)**

21-22 June 2018 Colombo, Sri Lanka

Contents

Executive Summary	4
Day 1	
Introduction	5
Participants	6
Agenda	6
Inaugural Session	6
Opening Remarks and Welcome Speech	7
Speech by the Chief Guest, Hon. Mangala Samaraweera, Minister of Finance and Mass Media	7
Speech of Mr. Prasad Kariyawasam, Secretary to the Ministry of Foreign Affairs	8
Speech of Hon. Jens Frolich Holte, State Minister of Foreign Affairs of Norway	10
Speech of Hon. Wijith Wijayamuni Soyza, Minister of Fisheries & Aquatic Resources Development and Rural Economy	11
Vote of Thanks	12
Technical Session 1: Challenges, Opportunities and Best Practices in Achieving SDG 14 – Life below Water	12
Presentation: The Role of Oceans in Food Production (Ove Hokstad, Deputy Director, Ministry of Trade, Industries and Fisheries, Norway)	13
Presentation: A Synthesis of Country Reports on SDG 14 (U.S. Amarasinghe, Senior Professor in Zoology and Environment Management, University of Kelaniya)	16
Discussion and Summing-up	21
Technical Session 2 - Regional Cooperation for Achieving SDG 14	21
Presentation: Regional Cooperation in Marine Affairs (Dr. Hiran Jayawardene, Secretary General, Indian Ocean Marine Affairs Cooperation)	22
Presentation: Initiatives in Regional Cooperation in Management of Fisheries (Ms. Merete Tandstad, EAF-Nansen Programme Coordinator, FAO)	23
Presentation: Achieving of Targets of Blue SDG through Regional Cooperation (Dr. Yugraj Yadava, Director Bay of Bengal Inter Governmental Organization, Chennai, India)	29
Presentation: Ocean Governance from Global to Regional and Local Level: Effects on Fisheries Management (Ove Hokstad, Deputy Director, Ministry of Trade, Industry and Fisheries, Norway)	31
Discussion and Summing-up	

Day 2

Presentation: Blue Economy and Fisheries Management (Dr. (Ms.) D.C.T. Dissanayake, Senior Lecturer, Department of Zoology & Environment Science, University of Sri Jayawardenepura)	34
Presentation: Regional Cooperation in Fisheries Management – Experiences from Norway (Kristoffer-Khrog Bjorklund, Senior Adviser, Department of Fisheries & Aquaculture, Norway)	37
Discussion	39
Possible way-forward for Regional Co-operation	39
Conclusion of the Session	40
Conclusion of the Symposium	40
Annex I: List of Participants	41
Annex 2: Agenda	44

Executive Summary

The regional symposium on “Sustainable Development Goal 14 – Life below Water (Blue SDG)” was organized by the Ministry of Fisheries and Aquatic Resources Development of Sri Lanka in cooperation with the Norwegian Ministry of Trade, Industry and Fisheries and the Norwegian Embassy in Colombo, on 21-22 June 2018. The objectives of the Regional Symposium were as follows:

- (a) To exchange approaches to and improve national frameworks on achieving the blue SDG;
- (b) To analyse the challenges the blue SDG poses on coastal nations in the Region;
- (c) To discuss on a possible a regional review mechanism that will contribute to the global review mechanism;
- (d) To explore the possibility of holding a Meeting of Ministers in the Region on blue SDG with a view to issuing a joint statement on Blue SDGs ("The Colombo Declaration on the Blue SDG");
- (e) To highlight the commitment of the countries in the Region in achieving the blue SDG; and
- (f) To develop a collective programme for achieving blue SDG in the high seas in the Bay of Bengal Region.

Dates of the Symposium were fixed to coincide with the arrival of the UN/Norway Research Vessel, “Dr. Fridtjof Nansen” at the Colombo port before embarking on a 24-days resources survey in the Exclusive Economic Zone of Sri Lanka and subsequently in the high-seas in the Bay of Bengal.

Senior officials and experts dealing with the blue SDG in the Bay of Bengal countries, i.e. Bangladesh, India, Indonesia, Maldives, Myanmar, Sri Lanka and Thailand participated in the Symposium. Senior officials and experts dealing with the blue SDG in the Bay of Bengal countries, i.e. Bangladesh, India, Indonesia, Maldives, Myanmar, Sri Lanka and Thailand participated in the Symposium. In addition, representatives from Ministry of Trade, Industry and Fisheries of Norway, Food and Agriculture Organization of the United Nations, Bay of Bengal Programme Inter-Governmental Organization, Indian Ocean Marine Affairs Cooperation, and the Norwegian Embassies in Sri Lanka, India and Bangladesh have also participated.

The inaugural session was followed by two technical sessions. In the technical session 1, there were two presentations on the role of oceans in food production and a synthesis of the country reports on SDG 14 submitted by the delegates from the Bay of Bengal countries. There were six presentations in the technical session 2. They were (1) regional cooperation in marine affairs; (2) initiatives in regional cooperation in management of fisheries; (3) achieving of targets of Blue SDG through regional cooperation; (4) ocean governance from global to regional and local Level and their effects on fisheries management; (5) blue economy and fisheries management; and (6) Norwegian experience on regional cooperation in fisheries management.

At the discussion, the Symposium underscored the need for more effective regional cooperation in achieving targets of SDG – 14. As Possible way-forward for regional co-operation, the participants agreed to set up a main focal point to spearhead the activities towards regional cooperation in implementing Blue SDG.

1. Introduction

The regional symposium on “Sustainable Development Goal 14 – Life below Water (Blue SDG)” was organized by the Ministry of Fisheries and Aquatic Resources Development of Sri Lanka in cooperation with the Norwegian Ministry of Trade, Industry and Fisheries and the Norwegian Embassy in Colombo, on 21-22 June 2018. The objectives of the Regional Symposium were as follows:

- (f) To exchange approaches to and improve national frameworks on achieving the blue SDG;
- (g) To analyse the challenges the blue SDG poses on coastal nations in the Region;
- (h) To discuss on a possible a regional review mechanism that will contribute to the global review mechanism;
- (i) To explore the possibility of holding a Meeting of Ministers in the Region on blue SDG with a view to issuing a joint statement on Blue SDGs ("The Colombo Declaration on the Blue SDG");
- (j) To highlight the commitment of the countries in the Region in achieving the blue SDG; and
- (k) To develop a collective programme for achieving blue SDG in the high seas in the Bay of Bengal Region.

Human manipulation of natural systems on a large scale as part of the current development scenario has been the root cause for originating many of our modern challenges. These challenges are needed to be addressed for a dramatic change in the way of life of mankind in terms of production processes, and consumption of food and other agricultural products, within a significantly shorter time frame than ever before. The 17 Sustainable Development Goals (SDGs) that were endorsed at a historic UN summit of world leaders in September 2015 came into effect on 1st January 2016. They provide the overall new framework for all countries to develop roadmaps towards sustainable development in all its dimensions. Also, these SDGs provide an agenda that is transformative and will encourage new ways of addressing development, in developing as well as developed countries, with an even emphasis on social, economic, and environmental issues.

The fisheries and aquaculture sector, through its development, has a potential for contribute to achieve several SDGs including SDG 1 - No poverty, SDG 2 - Zero Hunger and SDG - 12 Responsible Consumption and Production, whereas achievement of SDG 14 – Life below Water, directly comes within the mandate of the ministries and agencies responsible for development and management of fisheries and living aquatic resources. Targets in SDG 14 relevant to management of fisheries are as follows:

- 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.
- 14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to

levels that can produce maximum sustainable yield as determined by their biological characteristics.

- 14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.
- 14.6 By 2020, prohibit certain forms of fisheries subsidies, which contribute to overcapacity and overfishing,
- 14.7 Increase scientific knowledge, develop research capacity and transfer marine technology

Although not legally bound, coastal nations now face a new challenge to achieve these targets in SDG 14. It was felt that a collective action from the neighbouring coastal countries could provide a better approach to face this challenge. In this context, the Ministry of Fisheries and Aquatic Resources Development of Sri Lanka in cooperation with the Norwegian Ministry of Trade, Industry and Fisheries and the Norwegian Embassy in Colombo conducted a Regional Symposium on Sustainable Development Goal 14 – Life below Water (or the blue SDG) at Hotel Taj Samudra in Colombo on 21st and 22nd June. Dates of the Symposium were fixed to coincide with the arrival of the UN/Norway Research Vessel, “Dr. Fridtjof Nansen” at the Colombo port before embarking on a 24-days resources survey in the Exclusive Economic Zone of Sri Lanka and subsequently in the high-seas in the Bay of Bengal.

2. Participants

Senior officials and experts dealing with the blue SDG in the Bay of Bengal countries, i.e. Bangladesh, India, Indonesia, Maldives, Myanmar, Sri Lanka and Thailand participated in the Symposium. However, there were no representatives from Malaysia although formally invited for the Symposium. These countries had been selected since they share the same high-sea areas, presumably the same fish stocks for fishing, and have engaged in several programmes of regional co-operation related to fisheries. In addition, representatives from Ministry of Trade, Industry and Fisheries of Norway, Food and Agriculture Organization of the United Nations, Bay of Bengal Programme Inter-Governmental Organization, Indian Ocean Marine Affairs Cooperation, and the Norwegian Embassies in Sri Lanka, India and Bangladesh also participated. The List of participants is given in Annex 1.

3. Agenda

The Agenda of the Symposium is given in Annex 2. The Inaugural Session of the symposium was followed by two Technical Sessions, i.e., (i) Challenges, Opportunities and Best Practices in Achieving SDG 14 – Life below Water; and (ii) Regional Cooperation for Achieving SDG 14.

4. Inaugural Session

The Symposium was ceremonially inaugurated with the participation of Hon. Mangala Samaraweera, Minister of Finance and Mass Media as the Chief Guest, and Hon. Wijith

Wijayamuni Soyza, Minister of Fisheries & Aquatic Resources Development and Rural Economy, Hon. Jens Frolich Holte, State Minister of Foreign Affairs of Norway, Hon. Ameer Ali Shihabdeen, Deputy Minister of Fisheries & Aquatic Resources Development and Rural Economy, Mr. Prasad Kariyawasam, Secretary, Ministry of Foreign Affairs as Guests of Honor. Other participants included a number of Representatives of Foreign Missions located in Colombo, senior government officials, and Symposium participants.

4.1. Opening Remarks and Welcome Speech

Ms. D. K. R. Ekanayake, Secretary, Ministry of Fisheries & Aquatic Resources Development and Rural Economy made opening remarks and welcome speech. She briefed on the development of the fisheries sector in Sri Lanka and actions that have been taken to make fisheries sustainable. She said that as SDG 14 – Life below Water deals with ensuring of long-term sustainability of living marine resources, Sri Lankan Government is committed to act achieve targets of SDG 14. The fisheries sector is an important economic sector in Sri Lanka that produces food, provides employment and earns foreign exchange. Currently fisheries contribute around 1.4 % to the national economy. Since 1940s, successive governments have taken action to develop fisheries in the country by implementing different projects while maintaining the sustainability of resources. With the gradual development of the sector, the number of fishing vessels increased, fishing operations transformed from single-day operations into multi-day operations, the area of fishing expanded from the territorial sea to cover the exclusive economic zone and high seas. She mentioned that the Government of Sri Lanka has formulated a new fisheries policy with technical assistance from the Government of Norway. This new fisheries policy has several features that contribute to achievement of SDG 14. For instance, the Government will take management decisions based on the best scientific evidence available. Also, the Government will take actions to prevent over-capacity of the fishing fleet. She cordially welcomed the Chief Guest, the Guests of Honour, other invitees and participants for the Symposium.

4.2. Speech by the Chief Guest, Hon. Mangala Samaraweera, Minister of Finance and Mass Media

Hon. Mangala Samaraweera, Minister of Finance and Mass Media, who participated as the chief guest at the inaugural session thanked the organizers of the Symposium for allowing him to speak out of his turn at his request enabling him to be in Parliament during a debate on one of the laws pertaining to his ministry.

He said that the SDG 14 - Life below Water aspires to conserve and sustainably use marine resources. Being an island nation, Sri Lanka owes its economic development to a significant extent to its fisheries, marine transportation and marine tourism. Fisheries industry comprises its contribution close to 2% to GDP with a value addition of more than USD 1.3 billion, provides 222,000 direct employment opportunities, and supports 191,000 households. With the reinstatement of GSP+ by EU in May 2016, Sri Lanka's fish exports have boosted by 125 % in 2017. This is one of the major success stories of the government efforts to open up marketed

CESS for Sri Lankan exporters. In the export market such as EU, one of the requirements that should be fulfilled by the countries exporting fish and fishery products is to ensure sustainable resource management. He also mentioned that in his first budget, i.e. the last year's budget that was themed blue green economy of Sri Lanka, a 50% subsidy was provided for purchase of multiday boats with facilities for mitigation of post-harvest losses to encourage deep-sea fishing. LKR 2 billion was provided to upgrade landing sites and fishery harbours in Mirissa, Puranawella, Chilaw and Karainagar, which is aimed at reducing post-harvest losses. The "*Wewak samaga gamak*" or "a village with a lake" programme of the Government has made a significant progress in improvement of social and economic development in fisheries villages in the inland fisheries sector. So far, this programme has been implemented in 38 villages. Environmental management is required to complete the three pillars in sustainable development; economic, environmental, and social. In parallel, it is important to control illegal, unreported and unregulated (IUU) fishing. Sri Lanka has banned mechanized bottom trawling that has a multitude of negative externalities. To protect the delicate mangrove ecosystems, the national budget has allocated close to LKR 6 million for replanting mangrove at Mt. Lavinia, Ratmalana and Angulana, which are suburbs of Colombo. The Government is taking action to rehabilitate numerous lagoons around the country to restore their unique ecosystems. Sixteen lagoons have been identified this year for development with funds from the national budget. Addressing marine pollution is a priority under the Blue-Green Budget. Hotels will be assisted with subsidized loans for investing in technology to ensure zero waste discharge to oceans. Pigeon Island, Bar Reef and Delfts areas have been declared as marine conservation areas under relevant legislation. A pilot project on sustainable resources development has been implemented as an initiative for blue-green economy. The Government has a continued commitment for sustainable use of marine resources. Several conservation measures have been adopted by establishing regulations to protect turtles, dolphins, whales and sharks under relevant legislation. The Government of Sri Lanka and the Ministry of Finance is committed to sustainable development. In conclusion, the minister wished fruitful deliberations in the Symposium and a pleasant stay in Sri Lanka for the foreign delegates.

4.3. Speech of Mr. Prasad Kariyawasam, Secretary to the Ministry of Foreign Affairs

Mr. Prasad Kariyawasam, Secretary to the Ministry of Foreign Affairs in his speech mentioned that oceans are a shared resource and a shared responsibility. Our existence depends on how we treat our oceans, since resources in oceans are finite; and not infinite as thought earlier, he said. We are here today to share experiences and build synergy in marine resources management. Oceans are threatened by climatic change, over exploitation and pollution. The SDG 14 – Life under Water provides an excellent starting point to marine resources management. Achievement of the targets of SDG 14 will depend on the actions taken under other SDGs like food security, climatic change, economic growth and industrialization, to achieve their targets. Quality of life for poor and underprivileged people has to be ensured. This is in line with the spirit of SDGs and 2030 UN Agenda that aims to leave no one behind in achievement of SDGs. Our Planet will have to support a population of 10 billion people by the middle of this century, and the next sphere of competition for resources will be our oceans. If we are to

manage such competition effectively, responsible and sustainable approaches are essential. According to some sources, two thirds of the world's fish stocks are either fished to their limit or over-fished. FAO has estimated that 70% of the fish stocks are fully used, or over-used or in crisis. One of the major reasons for decline of fish stocks is illegal, unreported and unregulated (IUU) fishing operations. Sadly, most maritime states in the Indian Ocean have not been able to put a stop to IUU fishing despite consistent cooperative efforts. Therefore, the visit of the Norwegian research vessel, "Dr. Fridtjof Nansen" to Sri Lanka, which coincides with the Symposium, is a significant milestone in resources management and we welcome that visit very much. Surveying of fish stocks in our waters, will no doubt be an important step forward in accurately estimating the status of fish stocks and thus helps in the sustainable utilization of these valuable resources.

Sri Lanka remains firmly committed to the Paris Climatic Change Agreement and the implementation of the 2030 UN Sustainable Development Agenda. Following the unveiling of a blue green development strategy for Sri Lanka in 2016, the Foreign Ministry has embarked on a series of initiatives together with national stakeholders on adopting a specific foreign policy focus on ocean affairs and climate change. In fact, a dedicated division has been established for this purpose. Sri Lanka has also taken several important initiatives with respect to preventing ocean pollution and promoting sustainable ocean practices. Recognizing that major contributor to ocean pollution is land-based waste and plastics, Sri Lanka has announced a ban of non-degradable plastic products including oxo-biodegradable plastic last year. In 2017 the Ministry of Fisheries spearheaded efforts to amend the Fisheries and Aquatic Resources Act to prohibit fishing operations using bottom trawl nets.

The initiative of blue-green enterprise Sri Lanka will no doubt encourage low emission economic development. Oceanic and marine resources will be used in a sustainable manner and organic agriculture practices and clean renewable energy will be promoted under this strategy. Sri Lanka is championing the Commonwealth Blue Charter Action Group for mangrove restoration. Under this initiative Sri Lanka will lead a group of Commonwealth countries on protection and restoration of mangrove cover across the Commonwealth. It is our intention to encourage and promote marine scientific research, and in this regard we are in the process of introducing transparent simple facilitative mechanism for interested parties to work with Sri Lankan institutions for mutual benefit.

Last year the Government of Sri Lanka unveiled an economic policy, Vision 2025. It envisages making Sri Lanka a rich country by 2025 by transforming the country into the hub of the Indian Ocean with a knowledge-based, highly competitive, social-market economy. Organic agriculture practices will be strengthened. We are keen on harnessing the true potential of the ocean. Action on environmental management should not be left only to the government authorities. We as individuals, families and communities can contribute immensely to it by doing small doable things. For example, Ministry of Foreign Affairs has banned the use of plastic water bottles with effect from 5th June marking the World Environment Day; it is a small but significant step in preventing plastic pollution. We need the oceans clean, safe and thriving.

Over 2000 ships transit our Southern waters. Sri Lanka is one of the leading trans-shipment hubs in the region for continental traffic with potential for expansion. Therefore, we have a significant role to play in protecting these vital sea lanes of communication and trade and ensuring the safety and security of the sea routes. Sri Lanka is eager to cooperate with maritime nations of the Indian Ocean and major maritime users towards ensuring greater maritime security in the region. Sri Lanka believes in preserving and ensuring freedom of navigation in the Indian Ocean for the benefit of the coastal States and major maritime users. By proactive engagement and creating space for dialogue in ocean affairs, Sri Lanka intends to act as a convener based on our historical role as a central point in the regional and transcontinental trade routes between east and west, and more recently during the negotiations of the United Nations Convention on the Law of the Sea. We believe that we are all well placed to play this role for the benefit of all. This Regional Symposium on SDG 14, which we are hosting in Colombo, is part of our common efforts.

In conclusion, he thanked the Ministry of Fisheries & Aquatic Resources Development and Rural Economy, and the Norwegian Government for organizing the Symposium. He also thanked foreign participants and their governments for participation in the Symposium.

4.4. Speech of Hon. Jens Frolich Holte, State Minister of Foreign Affairs of Norway

Hon. Jens Frolich Holte, State Minister of Foreign Affairs of Norway said that it is encouraging to see the Bay of Bengal and other Indian Ocean countries participating in this SDG 14 Symposium as for achievement of success in SDG 14 requires global and regional cooperation. He said that Norway has a long-term cooperation with Sri Lanka on sustainable fisheries management. This symposium gives us a chance to share knowledge and ideas about opportunities and challenges relating to the sustainable management of the oceans. He also mentioned that it is necessary to create partnerships for the oceans that transcend national borders. Norway as a maritime nation, has a long history of giving high priority to the sustainable use of ocean resources. In 2017, the Norwegian Government launched a white paper on the place of the oceans in Norway's foreign and development policy. The white paper gives special priority to three areas, sustainable use and value creation, clean and healthy oceans, and the role of the blue economy in development policy.

The oceans offer huge potential for human development. The world's population is expected to increase to more than ten billion by 2050, so that it is more important than before for us to obtain resources such as food and energy from the oceans. There are considerable opportunities for growth in ocean-based industries. However, there is also serious concern about environmental problems, such as pollution and marine litter, climate change, and unsustainable uses of the oceans, such as overfishing.

He said that international cooperation is the key for tackling the challenges we face when managing the ocean resources. Norway will continue to play an active role in international

efforts to keep the world's oceans clean and healthy, and he mentioned that all countries here today will take part in this joint effort.

He informed that as this Symposium was organized coinciding the arrival of the Norwegian research vessel “Dr. Fridtjof Nansen” in Sri Lankan waters to carry out a resource mapping survey, at the request of the Sri Lankan Government. RV Dr Fridtjof Nansen is the world's most advanced research vessel and provides a combination of state-of-the-art technology and world-class expertise on marine resource management. The survey will give Sri Lanka up-to-date data, which will be of great value in the management of the country’s fisheries resources in the years to come.

He further stated that Norway would be happy to work with Sri Lanka and other Indian Ocean countries to address the environmental challenges facing the oceans, and to ensure that their resources are used sustainably. He concluded the speech mentioning that the Symposium would be an excellent platform for fruitful discussions on these matters.

4.5. Speech of Hon. Wijith Wijayamuni Soyza, Minister of Fisheries & Aquatic Resources Development and Rural Economy

Hon. Wijith Wijayamuni Soyza, Minister of Fisheries & Aquatic Resources Development and Rural Economy said that achieving blue SDG or SDG 14 - Life below Water totally comes within the purview of the ministries, departments and other agencies engaged in development and management of living marine resources. SDG 14 primarily targets at ensuring the long-term sustainability of the living marine and inland aquatic resources. These living aquatic resources support fisheries, aquaculture, and a number of other industries. Apart from my Ministry and agencies under its purview, several other ministries also have roles in supporting the sustainability of Life below Water. Therefore, all those ministries and agencies have to act collectively and in coordination with each other to achieve SDG 14. That is why the Ministry of Fisheries & Aquatic Resources Development and Rural Economy has invited representatives of all relevant ministries, departments and agencies to participate in this Symposium.

He also mentioned that fisheries and aquaculture play a very important role in the national economy and therefore a high priority is being accorded for sustainable management of marine and inland living aquatic resources, on which the fishing and aquaculture industries are based. These industries contribute around 1.4 % to the Gross Domestic Product (GDP) at current market prices. It provides direct and indirect employment to around 575,000 persons or 3.7% of the workforce of the country. The current annual fish production amounts to over 500,000 tonnes with a value addition of over USD 1300 million. The sector also supports an export industry that exports tuna, shrimp, lobster, crab, sea-cucumber ornamental fish, etc. and earns over USD 250 million. Fish also serves as the main source of animal protein of the masses of Sri Lanka.

Currently the local fisheries and aquaculture production supplies around 65% of the total amount of fish required for the national consumption. The balance is imported. The Government intends meeting the total fish requirement from the local fisheries and aquaculture production.

Nevertheless, if the supply from the local production cannot meet the entire local requirement of fish, Sri Lanka has no option, but to import the balance. However, the cost of fish imports should remain within the earnings from fish exports.

The Minister also stated that he wished to inform that his ministry has prepared a new national policy for the fisheries and aquaculture sector with technical assistance from Norway. The Cabinet has granted approval to submit the new policy to Parliament for comments. The new policy has given priority for sustainable management of fisheries and aquaculture resources in the country and equitable distribution of the benefits. Only through the sustainable management of living aquatic resources, we can sustain our fisheries and aquaculture industry, he said.

He further stated that as we share the fish stocks available in the Bay of Bengal region with the other coastal nations in the region, we have to act collectively to manage fisheries sustainably. There have been many bilateral and multi-lateral cooperation programmes implemented with the objective of collectively managing the fish resources in the region. This Regional Symposium is also a step towards this direction. Finally he thanked the representatives from the foreign countries and organizations for coming to Sri Lanka to participate in the Symposium and wished success in the deliberations.

4.6. Vote of Thanks

Mr. A. Hettiarachchi, Coordinator, National Fisheries and Aquaculture Policy Project proposed the vote of thanks. He thanked Hon. Mangala Samaraweera, Minister of Finance and Mass Media, Hon. Wijith Wijayamuni Zoysa, Minister of Fisheries & Aquatic Resources Development and Rural Economy, Hon. Jens Frolich Holte, State Minister of Foreign Affairs of Norway, Hon. Ameer Ali Shihabdeen, Deputy Minister of Fisheries & Aquatic Resources and Rural Economy, Mr. Prasad Kariyawasam, Secretary to the Ministry of Foreign Affairs, His Excellency Thorbjorn Gaustedsaether, the Norwegian Ambassador and other dignitaries and invited guests for their interest and for being present amidst their busy schedules. He thanked the Ministry of Foreign Affairs and the Royal Norwegian Embassy for cooperation in organizing the event. He thanked the former Secretary to the Ministry of Fisheries and Aquatic Resources Development and currently Secretary to the Ministry of Justice and Prison Reforms, Ms. Mangalika Adikari, and Ms. D.K.R. Ekanayake, Secretary, Ministry of Fisheries & Aquatic Resources Development and Rural Economy for their support in organizing the Symposium. He thanked the representatives from the Bay of Bengal countries, resource persons from Norway and international and regional organizations for visiting Sri Lanka and participating in the Symposium on invitation of the Government of Sri Lanka. He thanked the local resource persons and participants for their participation. Finally, he thanked the staff of the Ministry of Fisheries & Aquatic Resources Development and Rural Economy for their assistance in organizing the event.

5. Technical Session 1: Challenges, Opportunities and Best Practices in Achieving SDG 14 – Life below Water

The Technical Session 1 commenced at 1030 h, was chaired by Ms. W.M.M.R. Adikari, Secretary, Ministry of Justice and Prison Reforms who was formerly the Secretary, Ministry of Fisheries and Aquatic Resources Development. It had two presentations, one by Mr. Ove Hokstad, Deputy Director, Ministry of Trade, Industries and Fisheries, Norway on the Role of Oceans in Food Production, and the other by Prof. U.S. Amarasinghe, Senior Professor in Zoology at the Department of Zoology and Environment Management, University of Kelaniya, a synthesis of the country reports on SDG 14 submitted by the delegates from the Bay of Bengal countries.

Commencing the Session, Ms. Adikari observed that perhaps since SDG 14 deals with life under water, all previous speakers spoke only on living marine resources. She said that non-living resources such as sand, sediment and rocks existing in the oceans provide support to the existence of living marine resources, and therefore it would be necessary to restore, conserve and develop such non-living resources in order to achieve the sustainability of living marine resources. After the foregoing observations, she briefly introduced each presenter and invited him to make the respective presentation.

Matters discussed in each presentation were as follows:

5.1. Presentation: The Role of Oceans in Food Production (Ove Hokstad, Deputy Director, Ministry of Trade, Industries and Fisheries, Norway)

Achieving SDG 14 is very important as regards to the role of oceans in food production. Nevertheless, I will try to underline this point further by looking at the challenges the oceans face today and some of the ways we can address these obstacles. Achievement of food security is considered when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preference for an active and healthy life. World leaders have committed themselves to fight food insecurity and malnutrition. Overall progress that has been made in hunger reduction is at a much lower rate than the desired rate. The health of 2 billion people is compromised by nutrient deficiencies. On the other end, one and a half billion people are over-weight. Significant differences exist across regions with many countries left far behind. The growth in food outgrowth has placed pressure on natural resources. The result may be the diminished capacity to meet the food needs of future generations.

Intensive farming systems combined with significant food wastage has also become a big source of greenhouse gas emissions that leads to accelerate the process of climatic change. Ensuring adequate food and nutrition security for global population that is projected to exceed 9 billion by 2050, prone to hunger mostly in developing countries, is a daunting challenge. Fisheries and aquaculture in oceans can play a significant role in this regard. From ancient times, fisheries and

aquaculture have been an important source of food and provider of livelihoods and economic benefits. According to FAO, the world fish production was estimated at 167 million tons in 2014. Fish provide up to 40% or more of total animal protein in some small developing island States, as well as in Bangladesh, Indonesia, Myanmar, Sri Lanka and some other countries. While the production from marine capture fisheries has been fairly stable, the demand for fish and fishery products has continued to rise. Consumption has more than doubled since 1960s. The increasing demand has been met to a certain by robust increase in aquaculture production. Likewise livelihoods, income and employment can be generated by culturing, harvesting, processing and marketing fish. These activities play a significant role in the coastal areas of many developing countries where large sections of people have limited opportunities for employment. Access to harvesting, processing and trade is important and sometimes is the only option for earning a livelihood for coastal communities. Employment in fisheries and aquaculture sectors has grown faster than the growth of world population and faster than employment in traditional agriculture. Fish as seafood are amongst the most traded food commodities. Over 53% of the seafood trade originates in developing countries.

There is no doubt that oceans already play an important part in food production. However, this important role is challenged by economic growth. For example, growth and development of fisheries and aquaculture has resulted in unsustainable exploitation of aquatic resources leading to overfishing, ecosystem degradation and loss of biodiversity. Consequently the share of marine stocks that are over exploited has increased during the last decades from 10% in 1970 to nearly one third in 2016. IUU fishing remains one of the greatest threats to the marine ecosystem. It is undermining the national and regional efforts to manage fisheries sustainably. IUU fishing estimated at 11 to 26 million tons a year is found in all types and dimensions of fisheries. It occurs both in the high seas and in areas under national jurisdictions. IUU concerns all aspects and stages of exploitation and utilization of fish, and may sometimes be associated with the organized crime. IUU fishing derived products illegally find the ways into local and overseas trade markets. As a result, livelihoods of fishers and other fisheries sector stakeholders are threatened and poverty and food insecurity are exacerbated. The good news is that in some regions, introduction of proper fisheries management schemes has restored fish stocks. Nevertheless, the degradation of marine ecosystems continues.

Marine pollution of all types, littering including plastics and micro-plastics, invasive species, climate change, together with ocean acidification and impacts on marine habitats and/or associated ecosystems due human activities are major concerns for sustainable seafood production. Destructive fishing also has an impact on sustainable fisheries and thus food security. An additional challenge is the emission of carbon dioxide and other greenhouse gasses due to various natural and anthropogenic activities into our atmosphere. These change several features of the earth climate and ecosystems that affect fisheries and aquaculture. Air and sea surface temperatures, rainfall, sea level, acidity in the ocean, wind patterns and intensity of tropical cyclones are all changing. Climate change is modifying distribution and productivity of marine and freshwater species. Often these challenges originate on land. Fishers, fish farmers

and coastal inhabitants will bear the full costs of these impacts. Hence, there are factual and very serious challenges to overcome.

Fisheries and aquaculture need specific adaptation and mitigation measures for their improved management that respond to threats to food and livelihood security and help the fisheries and aquaculture sector reduce its own greenhouse gas emissions. Although asserted at high level meetings, important contribution of seafood to food security and nutrition has not always received its due attention. Most strategies aiming at improving food security neglect fisheries and aquaculture or make only passing references to it. We therefore have to remind the World that fish is food. Restoring and maintaining the health of oceans is absolutely vital. Institutional weakness or lack of governance that has led to overfishing and over-exploitation, habitat degradation and pollution has led to key commitments by world leaders and governments. Based on the international agreements, treaties and targets, a vast array of arrangements, programmes and initiatives have been launched. We have signed and ratified them, but still have not achieved expected results to reverse the negative threats, although there have been some success stories. A coordination of these initiatives is needed. Coordinated action can increase cooperation and investment for improvement of solutions. We have to keep this in mind when States meet at the United Nations in September 2018 to start negotiations for a new global treaty. Negotiations are sometimes driven by the frustration of overfishing and the lack of compliance. There are however, strong international legislative and policy frameworks for fisheries already in place: the UN Law of the Sea Convention, the resolutions at the UN General Assembly, the UN Fish Stocks Agreement, and the FAO Code of Conduct for Responsible Fisheries, and related international agreements, guidelines and plans of action. The challenge is to provide incentives and resources to implement these frameworks at the global, regional and national levels to secure political commitment and governance reforms that lead to the adoption of sustainable ecosystem approaches to fisheries and aquaculture management. Special attention needs to be directed to small-scale fishers and the actors who are often economically, socially and politically marginalized. Small-scale fishers need to be encouraged to fully contribute to food security and poverty reduction. This also shows the inter-linkages between all SDG targets. FAO has developed voluntary guidelines for securing sustainable small-scale fisheries, which go beyond the traditional realm for fisheries management, and address crucial socio-economic issues. Women are engaged in all aspects of the fisheries value chain. Unfortunately they often lack the means to access policies that allocate rights to the land and to harvest natural resources. Documentation and sharing of experiences and good practices from countries, which have addressed relevant issues are crucial in the identification and analysis of policy options. Fisheries organizations and collective actions provide the pathway by which men and women can have a voice in decision-making and strength to claim their rights to common property resources. Fisheries organizations can be effective in providing that voice and collective strength. Strengthening of bilateral and multilateral cooperation amongst States including through the support of regional fisheries bodies (RFBs), and FAO significantly contributes to the success of regional management and governance of sustainable fisheries and aquaculture. The

development of marketing instruments such as eco-labeling, certification schemes may be a good idea. A range of eco-labeling and certification schemes exists in the fisheries and aquaculture sector each with its own criteria, assessment processes, levels of transparency and sponsors. In the future the procurement policies of seafood distribution firms with targets of eco-labeled fish are likely to drive the demand and spread it to the new markets.

The curbing of IUU fishing will contribute to strengthen fisheries management and governance, in turn contributing to enhance food security. Implementation of the 2009 FAO Port State Measures Agreement is expected to eradicate entering into ports of IUU fishing derived fish and fishery products. In conjunction with the other tools such as the global record of fishing vessels, catch documentation schemes and satellite monitoring, the Port State Measures Agreement is believed to be one of the most cost effective and efficient means of combating IUU fishing. I also hope that the voluntary guidelines on flag State performance will serve as a valuable tool for strengthening compliance by flag States with their international duties and obligations regarding the flagging and control of fishing vessels alternately contributing significantly to combating IUU fishing.

Aquaculture has made great contribution to peoples' livelihoods, food security, poverty alleviation, income generation, employment and trade. The potential of aquaculture's contribution has not yet been fully realized. In management we need to intensify partnership among stakeholders, the industry, the government at all levels, civil society organizations and communities. They will play a fundamental role in changing current behaviors, practices and technology.

The OECD Report called Ocean Economy in 2030 states that "manage well; the oceans can play an important role in addressing global challenges such as the food systems, environment, climate change, and energy security". This Report also points to the complex variety of risks that need to be addressed. Productive and healthy oceans can contribute to delivering on the UN Agenda 2030. In 2014 and 2015, our Ministry launched whitepapers on the development in the seafood and fish farming industry. They lay out Norway's policies for sustainable use of the oceans and their resources. Both papers pointed the need for knowledge and technology developments as a crucial venture for the sustainable growth. This is a main task and challenge for the management system. We have developed a science and management system to ensure our food security and seafood is harvested and produced sustainably and that is healthy and safe to eat. Affordable growth and new technology will contribute to solve some of the challenges, but also has additional complexity. In order to be able to develop business and to have good and sustainable management of the marine resources we need to invest more in knowledge. More knowledge in this context means relevant knowledge, high quality research and data acquisition. We need more international cooperation and concerted actions in order to build better knowledge and response to the challenges the oceans face. These are beyond the capacities of single States. For that purpose, at this year's COFI - the Committee of Fisheries meeting in FAO in Rome, Norway intends to propose establishment of a separate sub-committee

for fisheries. We believe, this will provide COFI with the means and ability to focus on policy issues and allow for small scale fisheries to be addressed in depth on a regular basis.

I would like to sum up by saying that the possibilities and challenges we face regarding food production from the oceans. It illustrates the need of thinking and acting nationally, regionally and globally. By this we can secure the marine resources, the oceans' health and future growth. Ladies and gentlemen, for the oceans to play an ever increasing important role in food production, we must cooperate on management and continue to learn from each other.

5.2. Presentation: A Synthesis of Country Reports on SDG 14 (U.S. Amarasinghe, Senior Professor in Zoology and Environment Management, University of Kelaniya)

The Sustainable Development Goals (SDGs), which replaced the Millennium Development Goals, have set new targets for sustainable development to be achieved by the year 2030. There are 17 SDGs, namely, 1 No Poverty, 2 Zero Hunger, 3 Good Health and Well Being, 4 Quality Education, 5 Gender Equality, 6 Clean Water and Sanitation, 7 Affordable and Clean Energy, 8 Decent Work and Economic Growth, 9 Industry Innovation and Infrastructure, 10 Reduced Inequalities, 11 Sustainable Cities and Communities, 12 Responsible Consumption and Production, 13 Climate Action, 14 Life below Water, 15 Life on Land, 16 Peace, Justice and Strong Institutions, and 17 Partnerships for the Goals. The SDGs collectively have set 169 targets with 244 indicators.

SDG 14 Life below Water specifically calls for the sustainable use of marine resources, i.e. to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

The following information was extracted from the country reports submitted by India, Indonesia, Myanmar, Sri Lanka, Thailand and The Maldives on the status of implementation of SDG 14 in the respective countries.

India

In India the responsibility of implementing suitable strategies and action plans towards achieving SDG 14 is dispersed mainly among three different Ministries, namely Ministry of Agriculture and Farmers Welfare, Ministry of Earth Sciences and Ministry of Environment, Forest and Climate Change. A National Policy on Marine Fisheries (NPMF) 2017 has been notified to ensure health and ecological integrity of the marine living resources of India's Exclusive Economic Zone (EEZ) through sustainable harvest for the benefit of present and future generations of the nation. The NPMF 2017 aims at taking up appropriate steps in optimizing fishing effort and implementing measures that will help in sustaining resources.

Various national and sub-national legislations are in place for the management and protection of the coastal and marine environment. The Online Oil Spill Advisory System, an online mechanism for predicting the movement of oil spills, was launched in 2015. Further, levels of marine pollution are being monitored by the government at various locations along the country's

coastline through the Coastal Ocean Monitoring and Prediction System developed by Ministry of Earth Sciences.

The marine pollution is one of the reasons for decline in fish stocks. Poor effluent treatment on land, plastics in the sea, ghost fishing are affecting the fish stocks. NPMF 2017 envisages strengthening of regulatory mechanisms to control pollutants to ensure that land and sea based pollution are effectively controlled and also that fishing vessels do not contribute to marine pollution in any form.

The marine pollution is one of the reasons for decline in fish stocks. Poor effluent treatment on land, plastics in the sea, ghost fishing are affecting the fish stocks. NPMF 2017 envisages strengthening of regulatory mechanisms to control pollutants to ensure that land and sea based pollution are effectively controlled and also that fishing vessels do not contribute to marine pollution in any form.

Fisheries are also managed under the Marine Fishing Regulation Acts (MFRA) of the Maritime States of India. Each State Government has its own MFRA. Some of the important management measures adopted under the MFRA are prohibitions on certain fishing gear, regulations on mesh size, establishment of closed seasons and areas, demarcations of zones for no-trawling, besides other measures such as use of turtle excluder devices, and designation of no-fishing areas.

Government of India supports research and development activities with an emphasis on mangrove biodiversity. The Sundarbans mangroves, located in the Bay of Bengal, were the first in the world to be put under scientific management. There has been a net increase in the mangrove cover of the country as compared to the previous assessment.

Indonesia

Indonesia has mainstreamed SDGs into the national development plan, and is committed to and in the process of implementing some targets of SDG 14, Life below Water:

- Marine pollution prevention,
- Marine and coastal ecosystems management,
- Control of IUU fishing and destructive fishing practices
- Adopting Ecosystem approach to fisheries management
- Minimizing the impacts of ocean acidification and
- Addressing adverse impact of climate change

The Ministry of Marine Affairs and Fisheries (MMAF) is the Government Ministry responsible for SDG 14. The following activities concerning SDG 14 have been included in the National Programme:

- Establishment of Marine Protected Areas (MPAs),
- Prevention of IUU Fishing, and
- Fisheries Management based on Ecosystem Approach

Implementation of SDG 14 is conducted in partnership with other ministries, provincial and local governments, universities, research institutions, private sector and non-governmental organizations. A separate unit has been established in MMAF for monitoring the effectiveness of

MPAs. Indonesia also intensively combats the IUU fishing and has strengthened the law enforcement against IUU fishing. Combating IUU fishing activities has also improved the fisheries business governance and a strategic roadmap has been initiated to implement the program.

Currently, Indonesia has been recognized by the international community as a leading country in the implementation of ecosystem management programs with Ecosystem Approach to Fisheries Management (EAFM). Under EAFM, Indonesia has established a framework for harvest strategies for tropical tuna in its archipelagic waters.

Myanmar

Myanmar is the largest fishing nation in the Bay of Bengal region. According to the RV Dr. Fridtjof Nansen surveys in 1979-1980 and 2013-2015, fish biomass had declined substantially and species composition has been dramatically changed since 1979 and 1980. This information was applied by the Myanmar government in sustainable planning, management and development in relation to coastal and marine ecosystems.

In the absence of reliable survey data, it is not possible to undertake integrated coastal management (ICM) or marine resource management. In-country capacity to conduct research, particularly of universities needs to be improved. Government institutions responsible for conserving biology and managing Marine Protected Areas (MPAs) often suffer from shortages of financial resources and technical expertise. There are a number of policies regulating fisheries and making concerted efforts to protect marine ecosystems as well as to conserve coastal and marine species, but without adequate compliance and enforcement, many of these laws are ineffective.

The country is rapidly opening up to increased coastal and marine investments, e.g. oil and gas exploration, harbour construction. Marine spatial planning (MCP) is needed to resolve current and potential future conflicts through multi-sectoral stakeholder dialogues. There are also programs such as BOBLME working to improve fisheries conservation on a regional level.

Sri Lanka

The existing legal framework for the management and conservation of marine ecosystems includes amongst others:

1. Sri Lanka Sustainable Development Act, No. 19 of 2017. This Act provides for formulation of a national policy and strategy for sustainable development, and establishment of a sustainable development council. It requires all ministries, departments, provincial councils, provincial ministries and departments, and local authorities to conduct an environment and social audit on development projects, and ensure the environmental and social security.
2. Fisheries and Aquatic Resources Act, No. 2 of 1996 as amended by Acts, No. 35 of 2013, No. 2 of 2015, 2 of 2016 and 11 of 2017 provides for management of fisheries in Sri Lanka waters, and regulation of fishing activities by Sri Lanka fishing vessels

conducted outside Sri Lanka waters, giving effect to Sri Lanka's obligations under specified regional and international fisheries agreements, enhanced penalties for IUU fishing, and banning of bottom trawling.

3. Coast Conservation Act No 57 of 1980 as amended by Act, No. 64 of 1988
4. Marine Pollution Prevention Act 59 of 1981 (amended 2008)

Some of the coastal ecosystems of the country have degraded owing to land clearance for aquaculture practices, expansion of human settlements, coastal development for tourism, and disposal of untreated waste. The Coastal Zone Management Plan (CZMP) of the Coast Conservation Department is a key instrument for managing and conserving the coastal ecosystems in Sri Lanka. CZMP is revised and updated periodically (mostly every five years).

Sri Lanka has taken many initiatives to combat IUU fishing. The major initiatives include close monitoring of high seas fisheries by physical inspection of vessels, implementation of an electronic vessel monitoring system (VMS), enforcement of fish catch data regulations, and enforcement of a moratorium on foreign fish landings and transshipments at sea, and prohibition of transferring, selling or exporting fishing vessels to IUU listed countries or operators.

Sri Lanka has formulated a new national policy for fisheries and aquaculture. The new Policy provides a framework for sustainable development and management of fisheries and aquaculture resources with equitable distribution of benefits. It aims at transforming the fisheries and aquaculture industry into a knowledge-based modern industry. The resources survey to be conducted by RV Dr. Fridtjof Nansen in Sri Lanka waters and high seas in the Bay of Bengal commencing in late June is expected to provide the required information for this. The new Policy envisages discouraging subsidies that contribute to over-fishing.

Thailand

Fishery resources in Thailand have been rehabilitated by installation of artificial reefs. The artificial reefs are made of strong material resistant to water currents, and deposited on seabed. They attract aquatic animals, enhance their feeding and breeding, and provide juveniles protection from fishing. In addition, releasing of seed-fish is done to enhance stocks. During spawning and nursery periods, closed areas and closed seasons for fishing are enforced.

The Maldives

Being a small island developing state (SIDS), the Maldives faces several challenges. Nevertheless, the Maldives had achieved five of the eight millennium sustainable development goals (MDGs) before 2015, becoming the first 'MDG plus' country in the South-Asia region.

Almost 99% of the Maldivian territory is ocean, and marine biodiversity of the Maldives is considered one of the richest in the world. However, marine litter and pollution are a significant threat to the marine biodiversity of the Maldives. The main sources of land-based marine

pollution in the country are attributed to solid waste, untreated sewage, oil pollution and ballast water. The Government formulated a waste management policy in 2015. In accordance with the Waste Management Policy, waste management centres are expected to be established in all inhabited islands by the end of 2018. In 2017, a national campaign was launched to reduce plastics in the Maldives by focusing on the reduction of the use of plastics in various sectors.

The Maldives has faced a number of constraints in addressing marine pollution. These include the lack of human capacity, lack of a long-term strategic direction and focused policies, weak collaboration between inter-governmental agencies, limited capacity of enforcement agencies and local communities including community-based organizations and non-governmental organizations, lack of awareness on the values of biodiversity at grass-root level, and the inadequate of research conducted on in biodiversity.

Although there is no formal mechanism to review the progress of SDG implementation, in 2017, the Maldives has conducted a voluntary national review for the high level political forum on sustainable development. It indicated that for SDG 14, some data is nationally unavailable for an ideal review.

Summary

It was observed that, in general, the countries of the Bay of Bengal region have laws and regulations, and mechanisms to implement SDG 14, in particular to combat IUU fishing. They have constraints that include lack of capacity, resources and research information. Thailand has initiated action to rehabilitate the declined resources by making artificial reefs and sea ranching. Apparently no national reviews are being conducted by any country on the implementation of SDG 14.

5.3. Discussion and Summing-up

At the discussion that followed presentations, it was agreed that elimination of fisheries subsidies would be a slow process with a lot of disagreements. Therefore it may not be possible achieve the SDG target with regard to fisheries subsidies. Also, the countries appear to give a low priority to address the issue of pollution since the national programmes are focused on the GDPs. For combating IUU fishing of shared and highly migratory stocks, regional cooperation mechanisms are available. However, there are no such mechanisms to control IUU fishing of localized stocks such as crustaceans.

In response to a question, Mr. Hokstad mentioned that Norway has not banned the use of plastic although plastics affects marine mammals like whales. However, Norway is concerned about impacts of micro-plastic. Time is needed to understand the complexity of the plastic issue. As regards to bottom trawling, he said that Norway has generally banned trawling below a depth of 1000 m in the sea. In response to another question, he said that Norway has no special programme in the Bay of Bengal region, apart from the resources survey in the Bay of Bengal conducted using RV Dr. Fridtjof Nansen.

In the summing up of the Session, Ms. Adikari said that from the presentations it appears that all countries are interested in achieving targets in SDG 14 and implementing various measures for that purpose. When one considers that 2 billion people are under malnutrition, and the world will have to provide food for 10 billion people in 2050, conservation and sustainable management of the world fish stocks should be of high priority in the development agendas of the countries. Although aquaculture development was not much discussed, it is also very important in meeting local and international demand for fish. In the region small-scale fishers are the major players in the fishing industry. Their level of education is low, they have no access to science, and they use traditional methods. Care should be taken to focus on small-scale fisheries in management of fisheries. Marine pollution in the Indian Ocean has also to be addressed. It needs knowledge and investment. Norway sets a good example in managing shared resources that Bay of Bengal countries can adopt.

The Technical Session 1 ended at 1310.

6. Technical Session 2 - Regional Cooperation for Achieving SDG 14

The Technical Session 2 commenced in the afternoon of Day 1 at 1400 h. It was chaired by Ms. Sashikala Premawardhane, Director General, Ocean Affairs & Climatic Change, Ministry of Foreign Affairs. There were four presentations, Regional Cooperation in Marine Affairs by Dr. Hiran Jayawardene, Secretary General, Indian Ocean Marine Affairs Cooperation, Initiatives in Regional Cooperation in Management of Fisheries by Ms. Merete Tandestad, EAF-Nansen Programme Coordinator, FAO, Rome, Achieving of Targets of Blue SDG through Regional Cooperation by Dr. Yugraj Yadava, Director Bay of Bengal Inter Governmental Organization, Chennai, India, and Ocean Governance from Global to Regional and Local Level: Effects on Fisheries Management by Mr. Ove Hokstad, Deputy Director, Ministry of Trade, Industry and Fisheries, Norway. Before each presentation, the Session Chair made a short introduction of the respective presenter.

6.1. Presentation: Regional Cooperation in Marine Affairs (Dr. Hiran Jayawardene, Secretary General, Indian Ocean Marine Affairs Cooperation)

Marine affairs have been my area of concentration for nearly 4 decades. I am very happy to share with you what we have seen during that period. My comments are purely personal and not official. I was engaged in this process since the time of the third United Nations Convention on the Law of the Sea. I was on the Law of the Sea delegation. We had embarked on a difficult situation as rules of under consideration for defining the continental shelf would have resulted in Sri Lanka having lost a tremendous portion of the continental shelf. UNCLOS worked on consensus that is in agreement in the absence of formal objection. US had withdrawn from the Conference, and there was a danger of losing years of work. Ambassador Tomiko took over as the Chairman. Ambassador Shirley Amarasinghe, who was the Chairman of that Conference has

passed away while in office. One of the difficult areas was the seabed. We have opposed to formula given in Article 76. Having taken up the position that the formula proposed for defining of the continental margin was highly disadvantageous to Sri Lanka, we proposed a new definition. We were dealing with the features of the Bay of Bengal. The runoff of sediment over millions of years from the Ganges and Bangladesh has formed a sedimentary rock of at least 24 km in thickness. Sri Lanka was at the distal end. We proposed a compromise of taking a cutoff point of 1 km thickness as a piggy-back clause. We got the support of India on the piggy back clause. In the near future Sri Lanka will get the continental shelf boundary delimited.

Sri Lanka and India had a very good rapport on the maritime boundary definition. In 1974 the countries had marked the boundaries in the Palk Bay, and 1976 proceeded with the demarcation of the 200-mile maritime zones had concluded the maritime boundary. That was the first recorded EEZ delimitation. In 1976, the UNCLOS was not in force. At that time in Sri Lanka, there was no institution to deal with marine affairs. I abandoned my studies and returned to Sri Lanka and created NARA. There were no marine scientists except one or two geologists. I was asked to get a foreign consultant. We had a cordial relationship with India. India had acquired two research vessels from Germany. Our scientists joined the Indian cruises. By December 1983, we had a 100% complement from Sri Lanka. We had no means to go to the sea. UNDP came forward for assistance with equipment on a 10-year cycle. We were able to mobilize scientific equipment. We modified an abandoned tuna vessel as a research vessel. With that 35 cruises of research were made.

In the context of national capacity building NARA is now a capable institution. We had leadership in the Indian Ocean Affairs. We thought of a broader framework, which was regional. Therefore we embarked on establishment of IOMAC in 1981. However, we had difficulties from the large neighbour.

In 1985, we had a conference in Geneva. Marine affairs were defined to include marine science and technology, living resources including fisheries, non-living resources and ocean energy, ocean law policy and management, marine transport and communication, and marine environment that included archeology, tourism. Sri Lanka was a proponent of peace in the Indian Ocean. IOMAC left out maritime security. India, Pakistan and Indonesia were actively involved in IOMAC. The Indian Ocean was described as the largest unknown. Since 1960 there was multinational effort to understand it, particularly with a view to military and security. National Institutes of Oceanography of India and Pakistan was established. We subsequently commenced training courses in Sri Lanka.

We wanted to get Tanzania and Mauritius also involved, but due to the lack of resources and change in the world affairs, this was not successful. However, at the initiative of Australia, The Indian Ocean Rim Association has taken over that.

With regard to living resources, NARA had established Indo-Pacific tuna management programme. Atlantic tuna was depleting and European countries were in search of new

resources. We proposed in IOMAC the establishment of IOTC. At that time, FAO was not involved in tuna management. However, FAO wanted to control IOTC. We asked why the IOTC should be managed from Rome. We managed to get the secretary of IOTC appointed by the member countries. Involvement of EU in IOTC came later. They had resources and provided a market.

I am happy that all our first-generation scientists in NARA are currently employed overseas gainfully. We have to keep training people. We have sent our people to several countries for training. We need more people trained for both the government and private sector. We have started training people locally. Concerning ports and shipping, we have become a major hotspot of marine pollution. I hope the Nansen Programme will look into this.

6.2. Presentation: Initiatives in Regional Cooperation in Management of Fisheries (Ms. Merete Tandstad, EAF-Nansen Programme Coordinator, FAO)

Fisheries have a long tradition of cooperation as called for in global legal and voluntary instruments. The United Nations Law of the Sea Convention (UNCLOS), UN Fish Stocks Agreement (UNFSA), the FAO Code of Conduct for Responsible Fisheries (CCRF) and UNGA Sustainable Fisheries Resolutions call for cooperation amongst states for trans-boundary, shared or migratory species for example. This is reflected at the regional level through the establishment of networks of Regional Fisheries Bodies (RFBs) and Regional Fisheries Management Organizations (RFMOs) - the focus on certain specific topics at different international levels has led to the establishment of more regional bodies in recent years, and a change is observed from 2006 until today for example.

UNCLOS and UNFSA Articles Providing for Regional Cooperation

UNCLOS Article 63

- (1) Concerning trans-boundary stocks, States shall seek to agree on measures to ensure conservation and development.
- (2) Straddling stocks shall be managed in cooperation between the coastal States(s) and those fishing for the stocks in the adjacent area.

UNCLOS Article 63(1)

Where the same stock or stocks of associated species occur within the exclusive economic zones of two or more coastal States, these States shall seek, either directly or through appropriate sub-regional or regional organizations, to agree upon the measures necessary to co-ordinate and ensure the conservation and development of such stocks without prejudice to the other provisions of this Part.

UNCLOS Article 64

Concerning highly migratory species, States shall cooperate on management throughout the region, both within and beyond the EEZ.

UNFSA Article 7.1.3

For trans-boundary fish stock, where these are exploited by two or more States, the States concerned should cooperate to ensure effective conservation and management of the resources.

FAO Code of Conduct for Responsible Fisheries (CCRF)

The FAO CCRF (1995) provides voluntary principles and standards applicable to the conservation, management, and development of all fisheries. It also covers the capture, processing, and trade of fish and fishery products, fishing operations, aquaculture, fisheries research, and the integration of fisheries into coastal area management. Three types of instruments exist under CCRF, International plans of action (IPOAs), FAO technical guidelines and FAO international guidelines. International plans of action (IPOAs) are voluntary instruments emerging from the CCRF that are designed to have international agreement on issues concerned in compliance with the code. To date, IPOAs have been developed on conservation of seabirds, conservation of sharks, management of fishing capacity, and combating of IUU fishing.

FAO technical guidelines are designed to provide relevant stakeholders with practical guidelines with which to integrate and implement the principles and standards of CCRF. FAO has produced over 29 of these guidelines, including ones for marine protected areas (MPAs) and fisheries, and incorporating the ecosystem approach to fisheries.

FAO international guidelines are voluntary and designed to help relevant stakeholders implement UNGA resolutions (e.g. to implement UNGA res 64/72 on by-catch) or developed from specific requests (e.g. COFI 27 (2007) requested FAO to develop the FAO deep-sea guidelines). Both sets of guidelines are developed through multi-stakeholder technical consultations.

FAO and SDGs

The organizations of the UN system play a critical role in implementing their outcome and advancing sustainable development goals. FAO is the custodian of several SDG indicators, including those of SDG 14. It develops guidelines and training materials and organizes workshops to support countries and regional organisations with implementation.

SDGs are a new set of goals and targets that UN Member States will be expected to use to frame their agendas and political policies until 2030. The organizations of the UN system play a critical role in implementing its outcome and advancing sustainable development goals. Key indicator is on the status of resources, produced every 2 years at the FAO Committee on Fisheries (COFI), in many cases the unpinning information that comes from the work of regional fisheries organizations. FAO works to support capacity development in countries and regional organizations and sees how to develop approaches that can facilitate reporting on these indicators.

In fisheries in general, one distinguishes between regional bodies that have an advisory mandate and those that have a management mandate. Many advisory bodies between states back to the many centuries and were established to enhance collaboration and exchange between states on certain issues in fisheries, they may have different scope and form. Some of these bodies were established under the auspices of the FAO constitutions and others are independent. FAO provides exchange through the Regional Fishery Body Secretariats' Network (RSN).

Regional fisheries management organizations (RFMOs) take management decisions. Generally they are for specific species groups, e.g. Indian Ocean Tuna Commission (IOTC), but some are area specific, e.g. Fishery Committee for the Eastern Central Atlantic (CECAF). CECAF is an advisory body; its recommendations are not mandatory. Most parts of the world have some form of collaborative arrangement. Collaboration can be at different levels, typically with a scientific body and a management body, also compliance mechanisms.

BOBLME

The Bay of Bengal Large Marine Ecosystem (BOBLME) is one of the 64 large marine ecosystems (LMEs) that have been described worldwide. LMEs have been identified on the basis of their bathymetry, hydrography, productivity and tropho-dynamics. BOBLME has 8 countries and more than 6 international partners. The BOBLME Project started in 2009 at a cost of USD 31 million aims to improve the lives of the coastal populations through better regional management of the Bay of Bengal environment and its fisheries. Its outputs include increasing capacity in natural resources management, increasing knowledge about the ecosystem, developing indicators for tracking changes and starting to improve ecosystem health through trans-boundary demonstration activities. Its vision is "A healthy ecosystem and sustainable use of marine living resources for the benefit of the people and countries of the Bay of Bengal LME". Its thematic areas are marine living resources, critical habitats, water quality, and social and economic considerations. The BOBLME programme has 5 components: sustainable management of fisheries, restoration and conservation of critical marine habitats and protection of biodiversity, management of coastal and marine ecosystem to improve ecosystem health, improved livelihoods and enhanced resilience of BOBLME, and regional mechanism for coordination, monitoring and assessment.

EAF-NANSEN PROGRAMME

This aims at supporting application of ecosystem approach to fisheries management considering climate and pollution impacts. Over the years the programme has developed into a unique mechanism for cooperation, knowledge and manpower exchange in developing regions and particularly in Africa. During 1975-93, it has undertaken exploratory surveys looking for new resources. From 1994 to 2005, resources monitoring has been conducted in EEZs. The period 2006-2016 has been EAF-I phase based on expanded knowledge needs and scope of management. EAF –II multiple drivers phase commenced in 2017. The UN flag has facilitated the R/V *Dr. Fridtjof Nansen* to move easily across jurisdictional boundaries and address trans-boundary issues.

The present drivers of marine ecosystem change are overfishing and ecosystem impacts of fishing, land-based pollution (including marine debris and micro-plastics), oil and gas exploration and exploitation, and climate change & oceans acidification. The intensity of these pressures is increasing with growing human population. The impacts are often locally compounded, poorly documented and very seldom managed, particularly in developing countries. In this context, the availability of a research platform such as the R/V *Dr. Fridtjof Nansen* has been considered essential as the basis for addressing these pressures. At the heart of the programme we still have the sustainability of fisheries. For this also impacts from pollution and climate change have to be taken into account. The vessel operates in the seas of West Africa, Arabian Sea and the Bay of Bengal.

The three pillars of the new programme are: Science, Fisheries management (EAF) and Capacity development to sustain resources. Research should primarily address regional issues (e.g. shared fishery resources and stocks), but could be “localized” in nature (e.g. study of recruitment processes for any important regional stock). The EAF-Nansen Programme will operate primarily within countries EEZs but work in area beyond national jurisdiction (ABNJ) can also be included in collaboration with regional fisheries management organizations (RFMOs). To the extent possible, research activities should take cognizance of and coordinate with national, regional and international fisheries and marine research programmes. Research should be linked to management needs, either tactical (short-term) (e.g. necessary for fisheries management, assessment or monitoring of oil and gas impacts, or for overall or environmental management), or strategic (long-term), contributing to “global public goods”.

This new phase aims at further strengthening the knowledge base and the overall institutional capacity for the implementation of the Ecosystem Approach to Fisheries (EAF) in developing countries mainly in Africa with additional attention to the impact of climate variability and change, pollution and other anthropogenic stressors, all in the context of the long-term objective that “sustainable fisheries improve food and nutrition security for people in partner countries”. The general scope of the scientific programme was developed in consultations with programme partners during the project development phase. Priorities were set by addressing management needs, focusing on the regional dimensions and associated national requirements (e.g. from EAF Fisheries management or ecosystem plans). The focus of the work in the Bay of Bengal will be on supporting science through the surveys with the R/V *Dr. Fridtjof Nansen* and associated capacity development.

Outcome 1 of the Nansen Programme is to provide fisheries research institutions relevant and timely advice for fisheries management. Outputs include carrying out surveys and making available resulting data and information to support resource and ecosystem assessments and formulation of scientific advice for management and strategic planning at national and regional levels; providing technical support for the analysis of survey data and other fishery and environmental information, addressing key knowledge gaps in relation to resources and ecosystems; and supporting resource and ecosystem assessments and formulation of scientific advice for management at national and regional levels. Research is planned so as to satisfy short term and tactical decision making as well as longer term

strategies and policy making. The management of shared stocks is the key to the EAF-Nansen programme, and science that can address how management of shared stocks can be advanced and would be prioritized.

The area to be surveyed in 2018 by the RV Dr. Fridtjof Nansen includes the continental shelf and upper continental slope of East Africa (Leg 1), the Mascarene Bank (Leg 2) and parts of the Bay of Bengal region (Leg 3). Transfer of the vessel between the different legs is used as an opportunity to carry out studies of specific oceanographic features and meso-pelagic communities. The Table below provides an overview of the surveys to be undertaken as part of Leg 3.

Survey Leg	Survey	Departure	Arrival	No. of days	Port of Departure
3.1	Ecosystem Sri Lanka	24 June	16 Jul	22	Colombo
3.2	Meso-pelagic Sri Lanka	19 Jul	19 Jul	12	Colombo
3.3	Pelagic Bangladesh	02 Aug	02 Aug	15	Chittagong
	Transit	19 Aug	23 Aug	04	Chittagong
3.4	Egg and larvae Myanmar	24 Aug	11 Sep	18	Yangon
3.4 (Contd.)	-do-	14 Sep	29 Sep	15	Yangon
3.5	Deep-sea Thailand	01 Oct	15 Oct	14	Phuket

The survey data will include time series stock abundance estimates, species composition of pelagic fish communities, length frequency distribution of stocks, geographic distribution pattern of stocks, and environmental information. Access to reliable survey data, even if punctual - and in particular in the case where catch data are poor - provides with information that can help both unwrapping some of the information in catch data. It can be used as additional inputs to the assessment models, or directly for making management advice, e.g. through biomass based harvest control rules. Also it provides with a broader set of ecosystem information and variables that can be used to facilitate the understanding of stock distributions (e.g. shared stocks) and with additional environmental information that can be used to assess resource variability.

Outcome 2 of the Nansen Programme is to strengthen fisheries management institutions to manage fisheries in accordance with EAF principles. It has seven outputs: development and implementation of regional and national fisheries policy, legal and management frameworks and plans, establishment, improvement, and implementation of fisheries management cycles, improvement of access to and better use of knowledge in the decision-making process, improvement of systems for collection, management, and reporting of fisheries-

related data, socio-ecological assessments of vulnerability of coastal communities to climate variability and change, and monitoring EAF implementation (EAF tracking tool). Many fisheries institutions lack the means to provide the right data and information for EAF implementation or to underpin shared stock management. Data collection efforts are often not targeted and good social and economic information are generally lacking.

The Nansen Programme also includes capacity development across all thematic areas of the Programme. A strategy for delivery of capacity development is under finalization based on capacity needs assessments to set up a Training Network to implement the activities in Africa.

The goal of the Nansen Programme gender strategy is to make gender equality become “everyone’s business” and thus, minimize the risk that gender issues are not adequately addressed in the EAF-Nansen Programme. The Nansen Programme’s gender strategy will provide guidance for finding entry points to make the implementation of the Nansen Programme more gender-sensitive and mainstream gender aspects in the programme’s activities. It will enable raising awareness about gender and promote gender-sensitive and responsive practices at management level, systematically incorporation of gender aspects and implementing gender-sensitive and responsive practices throughout the programme’s activities, and enhancing the profile of women in fisheries, women’s empowerment and gender equality in all the EAF-Nansen Programme communications and outreach materials.

Gender

The priority areas for action of the Nansen Programme gender strategy follow the overall areas for action identified by the Nansen Programme. They will involve mainstreaming gender in programme management (Area 1), with the overarching objective of raising the profile of gender throughout the Programme and increasing awareness of gender issues among all those involved in its management and oversight, mainstreaming gender in programme activities (Area 2), with the overarching objective of enhancing the sensitivity and responsiveness of all programme activities to gender issues, and pave the way to overcome gender inequalities in fisheries in member countries, and mainstreaming gender in programme communications (Area 3), with the overarching objective of showcasing the commitment and actions of the EAF-Nansen Programme towards mainstreaming gender in fisheries management and governance and addressing gender inequalities in fisheries.

Concluding Remarks

Regional collaborative mechanisms and initiatives are important to address, in a common way, issues in relation to shared stocks. They can drive forward solutions that can help achieving globally set objectives, and be instrumental in facilitating reporting from countries. The EAF-Nansen programme for example provides an opportunity for research and the collection of data in areas of the world that such research is limited and that directly addresses some of the key global issues of today.

6.3. Presentation: Achieving of Targets of Blue SDG through Regional Cooperation (Dr. Yugraj Yadava, Director Bay of Bengal Inter Governmental Organization, Chennai, India)

The Bay of Bengal Programme Inter-Governmental Organization (BOBP IGO)

BOBP-IGO is a four-country regional fisheries advisory body, Institutionalized in 2003 from the erstwhile Bay of Bengal Programme of FAO. The agreement for institutionalization was signed by eight countries around the Bay of Bengal. The present cooperating members are Bangladesh, India, Maldives and Sri Lanka. It is an excellent example for South-South Cooperation.

Overview

SDG 14 is about ensuring a sustainable life below water. The sustainability is not only about ecological sustainability but also economic and social sustainability (triple bottom-line). The terminal year for achieving most of the sub-goals of SDG 14 is 2020 and around the corner. With few regional initiatives, the stride towards SDG 14 remains largely national. Global and regional reviews of the progress show shortfalls; mixed progress at national levels.

Regional cooperation in fisheries context

Cooperation is an act or instance of acting or working together for a common purpose or benefit. Regional cooperation in fisheries is required since fisheries are concerned with shared waters, shared stocks and overlapping ecosystems. The common purpose is sustaining the gains from fisheries, e.g. food, livelihoods, foreign exchange, healthy stocks. The benefits include complementary policies in regional countries, a knowledge-base and better governance.

The SDG 14 Goal and Sub Goals

SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

14.1: Reduce marine pollution

14.2: sustainably manage and protect marine and coastal ecosystems

14.3: Minimize ocean acidification

14.4: Regulate harvesting, end overfishing, IUU fishing and destructive fishing and implement science-based management plans.

14.5: Conserve at least 10 percent of coastal and marine areas

14.6: Prohibit certain forms of fisheries subsidies;

14.7: Increase economic benefits to small island developing States (SIDS) and least developed countries (LDCs) (includes improved R&D, market access for small-scale fisheries; implementation of international laws).

Of the above Sub Goals 14.2, 14.3, 14.4 and 14.7 have regional implications.

Regional Cooperation and the Bay of Bengal

To decide the need for and nature of regional cooperation, it is necessary to consider whether the information needed to plan and execute the cooperation activities and

sufficient knowledge exist within the regional countries, there is capacity for execution in terms of physical, financial and human resources, and the issue is national or trans-boundary.

The future of the Bay of Bengal as the common heritage of the border countries is increasingly getting questionable. Of the 46 commercially important species in the Bay, 11 species are fully exploited and 4 species are either fully or over-exploited. There is fleet over-capacity and highly efficient or destructive fishing gear is used.

The following institutional mechanisms are available for regional cooperation in the Bay of Bengal and the Indian Ocean.

- South Asian Association for Regional Cooperation (SAARC)
- Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)
- Association of Southeast Asian Nations (ASEAN)
- Asia-Pacific Fishery Commission (APFIC)
- South East Asian Fishery Development Center (SEAFDEC)
- Indian Ocean Tuna Commission (IOTC)
- Bay of Bengal Programme Inter-Governmental Organization (BOBP-IGO)
- Bay of Bengal Large Marine Ecosystem Project (BOBLME)

BOBP-IGO

The BOBP-IGO 2014 – 2018 programme includes activities on safety at sea, improving Monitoring, Control & Surveillance (MCS) in fisheries sector, adaption to climatic change, livelihoods, safe fish and implementation of FAO Code of Conduct for Responsible Fisheries (CCRF) and Ecosystem Approach to Fisheries Management (EAFM). The activities are planned and prioritized by the member together with the IGO Secretariat. Scientific and other inputs required are supplied by national agencies and other stakeholders.

A regional workshop was held in Chittagong in Bangladesh with the participation of member countries on MCS (SDG 14.4) for small-scale fisheries. Its outcome was Chittagong Resolution on Monitoring, Control and Surveillance (MCS) for Small-scale Fisheries, which recommends that MCS requirements be comprehensively integrated into every member-country's fisheries policy and regulatory and managerial framework and fisheries and maritime administrations enhance their knowledge and database on the health of the fish stocks and on commensurate efforts required to harvest resources in a sustainable manner; etc.

BOBP-IGO has also conducted training programmes on adoption of CCRF, promulgation of ecosystem approach to fisheries management (EAFM), and stock assessment, and case studies on hilsa fisheries, shark fisheries and the Gulf of Mannar.

Status of regional cooperation in the Region

Countries are more forthcoming in recognizing and discussing trans-boundary issues, i.e. BOBLME Plan. However, actual and effective on-field examples of regional cooperation are scant. Countries need to adjust their priorities and policies. The nature of commitment of the Government also changes under a regional framework as they become more binding. From data to research to policy and action – more transparency becomes necessary (owing to the requirements of sharing information and knowledge).

Moving towards Regional Cooperation

There are two levels in moving towards regional cooperation, i.e. primary level - cooperation in research and information sharing, which is informal and non-binding, and the secondary level – cooperation in primary level together with implementation and enforcement, which is formal and binding, and more effective.

6.4. Presentation: Ocean Governance from Global to Regional and Local Level: Effects on Fisheries Management (Ove Hokstad, Deputy Director, Ministry of Trade, Industry and Fisheries, Norway)

Many negotiators and diplomats in New York do not understand why we go for fishing. But the main reason is to produce food for people. When we negotiate SDG 14 we try to incorporate fish and seafood in Target No. 2, but we did not succeed because no one understood why. Target 2 is mainly about agriculture. But when we consider the FAO definition, marine products are included in agriculture. It was decided in 1940s. But we have a challenge to make seafood more visible.

SDG 2 target is food security. SDG 14 target is interconnected with all the other SDG targets. It does not concern fishing and fisheries management, but factors outside the sector. We have the Law of the Sea Convention as the main instrument, and UN Fish Stocks Agreement which is the implementing agreement for the regional fisheries management organizations. Then the International Seabed Authority (ISA) also has an implementing agreement. There are many environmental organizations and conventions that influence fisheries management. There are many challenges for the oceans. Some of them affect biodiversity, of which fish is a part. We have a long tradition of managing sectors, sector by sector, but they do not collaborate. That also complicates the total governance of the oceans.

Earlier it was thought fisheries were the most important economic activity in the oceans. But there are new economic activities, which are equally important. They are competing for the same areas and have negative effects for fishing and biodiversity. Fisheries were considered as activities that affect oceans, and have lost credibility. About 15 – 20 years ago, there were discussions for a global moratorium on global fishing. Still fisheries are considered as the largest negative impact on oceans. Now it is realized that the climate change is overwhelming all the other factors. We learn from media, science-based sources and well-organized NGOs that fisheries affect biodiversity. However, fisheries can be managed on a sustainable basis. NGOs were focusing on iconic species such as sharks. Species are listed in conventions such as CITES (the Convention on International Trade in Endangered Species of

Wild Fauna and Flora). NGOs support ocean governance. A few years ago Norway discovered some currents and through these currents some alien species have got into Norwegian waters. As regards micro-plastics and nano-plastics, what is released in one part of the world can come to other parts through currents. NGOs professionally use media for dissemination of information and science. However, we find that science from fisheries is unknown in UN. The information available in UN is information such as commercial fishing will be finished in 2048.

We also find information to the effect that fishing in North Atlantic will end soon as Norwegian fishers damage fisheries. Information available in reports from UNESCO, the World Bank and GEF does not match with scientific information produced by Norwegian scientists. Norway tried to give the scientific information to UNESCO, but UNESCO refused to accept, and in the end in the map North Atlantic Ocean remains a gray or no-information area. It is one of the best parts of the Ocean, but not in the UN system. We have a target in SDG 14 to conserve 10% of the ocean areas both in national waters and in waters beyond national jurisdictions by 2020. The World Conservation Union (IUCN) is planning to expand this target after 2020 to 30%. The reason is to prevent the negative impacts of fishing. Well known magazines and some countries of the Organizations for Biodiversity beyond National Jurisdictions (BBNJ) are developing arguments that the main problem is bottom trawling in waters beyond national jurisdictions. There is no bottom trawling in the waters beyond national jurisdictions in the North Atlantic. Further only 10% of the total fish production from the North Atlantic comes from that area. The question is as to why fishing in such area is highlighted. We have tried to produce scientific information at the BBNJ discussions. The International Council for the Exploration of the Sea (ICES) is the scientific body that advises BBNJ on the amount of fish available, the amount to be caught, etc. The Institute of Marine Research (IMR) in Norway collaborates with ICES, and the information generated by ICES and IMR is shared. Conclusions and documents of negotiations can be influenced by taking active parts, in not all, but selected negotiations.

We also take part in important regional negotiations concerning biodiversity in seas close to our waters. In September 2018, we are commencing a new round of negotiations on marine biodiversity beyond national jurisdictions. This is a process commenced in 2004. The Group of 77 countries and China propose that these negotiations should cover marine genetic resources. On the other hand, the European Union says that the negotiations should cover marine protected areas. In 2011 when preparations were being made for the 2012 meeting both G 77 and EU agreed to bring in a new instrument. However some countries expressed concern on the impact of the proposed instrument on existing instruments such as UN Fish Stocks Agreement that are under implementation. We need more seafood. We can turn to aquaculture industry to produce more fish without subjecting fisheries to overfishing. Production, collection and processing fish from the oceans implies that we need clean oceans. Norwegian position on a new instrument is to focus on regional solutions. If there is an issue locally or regionally, it has to be addressed at that level and not at the global level.

Norway perceives BBNJ as the third global instrument under the Law of the Sea Convention. It should be complementary to the all existing global instruments like Regional fisheries management organizations (RFMOs), International Seabed Authority (ISA), etc. BBNJ only concerns areas beyond national jurisdictions. But instruments like UN Fish Stocks Agreement is applicable both in and beyond national jurisdictions, as fish stocks migrate across national jurisdiction borders. In our national policy, we implement all international decisions. There are four topics to be covered by the proposed new international instrument. They are marine protected areas as proposed by EU and G 77 countries, marine genetic resources as proposed by G 77 countries and China, environmental impact assessments before any new venture is commenced, and transfer of technology and capacity building.

There is Regional Seas Convention, which has established marine protected areas along the mid-Atlantic ridge. Decisions of Regional Seas Organization are binding only on its member countries. If those marine protected areas have impacts on non-member countries there should be implementing agreements with them.

Fisheries cannot be managed in isolation. In Norwegian waters, we manage all activities, both fisheries and non-fisheries, entire water column, even below water if minerals are exploited. We aim at ecosystem management with ecosystem approach. Norway is the country with most marine scientists compared to the total population of 5 million people. But we are still far from complete marine ecosystem management, and it may take another 50 years to produce all data necessary for a complete ecosystem management.

6.5. Discussion and Summing-up

Ecosystem approach to fisheries management is influenced by ecological, socio-economic and governance factors. To enhance economic benefits from artisanal fisheries, it is necessary to regulate access, improve the hygiene and sanitation from the point of harvest to point of consumption and eliminate IUU fishing. Benefit sharing of genetic resources particularly monetary benefits is complicated. The company found the particular genetic resource in a national jurisdiction may sell it to another company. Capacity building is one way of addressing this issue.

In summing up the Session, Ms. Premawardhane has stated that there is a gamut of global and regional instruments from United Nations Law of the Sea, United Nations General Assembly (UNGA) resolutions, FAO Code of Conduct for Responsible Fisheries, Regional Fisheries Management Organizations, Regional Fisheries Bodies, etc. However, there are challenges such as resources, knowhow, etc. for the developing countries in implementing the conservation measures stipulated. The Nansen Programme is quite helpful in assessing the extent of fish stocks in the region. Since the fish stocks are mostly shared, regional cooperation is essential for their management. All nations could mutually benefit by sharing information.

The Day 1 Session was over at 1630h.

Day 2 (22nd June)

The Session was recommenced at 0900 h on Day 2, i.e. 22nd June with two presentations, Blue Economy and Fisheries Management by Dr. (Ms.) D.C.T. Dissanayake, Senior Lecturer, Department of Zoology & Environmental Science, University of Sri Jayewardenepura, and Regional Cooperation in Fisheries Management: Experience from Norway by Mr. Kristoffer Bjorklund Krohg, Senior Adviser, Department of Fisheries and Aquaculture, Norway.

6.6. Presentation: Blue Economy and Fisheries Management (Dr. (Ms.) D.C.T. Dissanayake, Senior Lecturer, Department of Zoology & Environment Science, University of Sri Jayewardenepura)

Marine Fisheries provide more than US\$ 270 billion annually to the global economy, livelihoods for 300 million people and nutritional needs of 3000 million people (World Bank 2012, FAO 2016). Only sustainable fisheries can generate more revenue, more fish and more livelihoods. SDG 14 – Life below Water is the most recent initiative to conserve and sustainably manage oceans, seas and marine resources for sustainable development. SDG target 14.4 says effectively regulate harvesting, end overfishing, IUU fishing and destructive fishing practices, and implement science-based management plans to restore fish stocks.

Sustainable fishing is fishing that can be conducted over the long term at an acceptable level of biological and economic productivity without leading to ecological changes that foreclose options for future generations. TIME (November 2006) reported that a study indicated overfishing would soon destroy the seafood supply. According to FAO (2016), the global capture fisheries production in 2014 was 93.4 million tons and stayed static since late 1980s. Fish landings in developed countries have increased linearly from 1950 to 1988, and since then, decreased dramatically. In developing countries, fish landings have continuously increased from 1950 to 2013, but with a slower growth rate since 1995. Of the world marine fish stocks, 31.4% is over-fished, 58.1% is fully fished, and 10.5% is under-fished. The fishing effort in developed countries has fallen rapidly after 1990s, while in developing countries it has continuously increased since 1980s.

The global IUU fish catch corresponds to 13-31% of total fish production. It results in an annual loss of USD 10 – 23 billion representing 11 – 26 million tons. Poorest countries suffer the major loss by way of fish for food, and livelihoods, e.g. West Africa USD 1.3 billion. By-catch poses one of the biggest threats to healthy fish populations. It represents a significant unaccounted source of fish mortality. By-catch is estimated at 8 – 25 % of the global fisheries catch representing 27 million tons.

Many fisheries are declined due to pollution and habitat loss. An estimated amount of 30 – 35% of sea grasses, mangroves and coral reefs have been destroyed (UNEP, 2012). Subsidies have become a critical issue for sustainable fisheries since they lead to unsustainable fishing

practices and over-exploitation of fish stocks. It is estimated that in each year the subsidies provided by governments amount to USD 36 billion. Fuel subsidies comprise 22% of this amount. Of the subsidies provided, USD 11 billion boosts sustainability, USD 20 billion promotes fishing, impact of USD 4 billion is not clear.

As regards to economics in global fisheries, there is a dramatic biological mismanagement. The economic mismanagement is even worse. The global landed value of the fish catch is USD 90 billion. But the profits are insignificant, perhaps about USD 5 billion. Nevertheless, the subsidies are higher, around USD 10 billion in Japan, US and China (R. Amason, 2013). The low governance of fisheries is associated with 42% of the over-fished stocks, high levels of IUU fishing, and low compliance with the Code of Conduct of Responsible Fisheries.

Various publications of FAO, World Bank and OECD, and academic publications indicate that there is a huge increase in fishing effort, net income returns from fisheries are declining, fish stocks are declining drastically, and the global ocean catches remain stagnated or even declining. In developed countries, the status of the fish stocks is better with decreasing fishing capacity unlike in developing countries.

It is not too late to take immediate measures for fisheries management. *The greater the number of owners, the lesser is the respect for common property. People are much more careful of their personal possessions than of those owned communally; they exercise care over common property only in so far as they are personally affected (Aristotle in Politics, Book II. ca. 350 BC).*

We need an integrated process of information gathering, analysis, planning, consultation, decision-making, allocation of resources and formulation and implementation, with enforcement as necessary, of regulations or rules which govern fisheries activities in order to ensure the continued productivity of the resources and the accomplishment of other fisheries objectives (FAO, COCHRANE).

Sustainability of fisheries is the over-riding goal in fisheries management. The status of most global fish stocks is not known so that assessment of the status of fishery resources is needed. In a situation with no scientific surveys and poor data, science-based management is not possible. Data collection has to be improved and stocks have to be assessed. It is necessary to increase the local capacity to access and analyze the existing data. As most fisheries are small-scale, they need country-specific management plans. It is not possible to manage fishing of hundreds of species by setting quotas. A possible approach is to understand the status of the resources using simple methods such as trends in size composition, changes in species composition and the catch per unit effort (CPUE) and get fisher organizations or communities responsible for regulation of fishing pressure. All parties, i.e. the national government, local government and community groups should take part in fisheries management. It is also necessary to improve the technical capacity for management, and use the best available scientific information and the ecosystem approach.

Improvement of governance can be done by strengthening the national agencies undertaking management, and enforcing activities, laws and regulations against IUU fishing such as port-State measures, onboard observers, catch documentation, VMS, traceability and certification and destructive fishing practices. Resolutions of regional fisheries management bodies (RFMOs) should also be complied with.

Overfishing has to be eliminated by measures such as reducing subsidies that result in overcapacity for fishing, setting catch limits or quotas, preventing post-harvest losses and promoting value added products, which result in new jobs and thereby reduce fishing effort. Conserving fully-exploited stocks and restoring over-exploited stocks through restriction or limitation of fishing gear, fishing areas and fishing periods, and prohibiting catching of declined species are other means to prevent overfishing. Strict management plans should be implemented to rebuild overfished stocks. Fully fished stocks provide no room for catch expansion. They should be carefully managed to ensure their MSY. Under-fished stocks have potential for increased production. However, precautionary management plans should be established before expanding effort to catch them.

Multi-disciplinary research and novel technological applications help understand fishery resources and fisheries management. Problems faced by different nations are not unique to those countries; global partnerships can benefit each other with knowledge exchange on fishery resources and their management.

Properly managed fisheries with a significant reduction in overcapacity and overfishing provide additional economic benefits to the global economy in excess of USD 80 billion each year (World Bank 2016), i.e. almost 30 times the annual net benefits currently accrue to the fisheries sector.

6.7. Presentation: Regional Cooperation in Fisheries Management – Experiences from Norway (Kristoffer-Khrog Bjorklund, Senior Adviser, Department of Fisheries & Aquaculture, Norway)

Norway is the most maritime nation in the Northern Hemisphere. It has been a major beneficiary of the developments of the Law of the Sea since World War II giving sovereign rights over the natural resources up to 200 nautical miles in the Ocean and the continental shelf. The Norwegian waters are located 80% north of the Arctic Circle, and therefore marine Norway is mostly Arctic. The extent of waters is more than five times of the landmass of Norway. Most of these waters are very productive ecosystems. They are critical to the national interests of Norway. Norway has three land borders, i.e. Russia, Finland and Sweden, and six maritime borders, i.e. Sweden, Denmark, Russia, Iceland, Greenland and UK. EU is managing waters on behalf of Sweden, Denmark and UK. Norwegian oceans create

international politics. Resource management and international freight are critical to Norway. Seafood exports have earned NOK 95 billion in 2017. Hence, the fishing industry is important in the Norwegian national economy. It also provides for labour and income to the coastal communities. Even the remote coastal areas in Norway are densely populated. Sustainable management of resources is a business strategy. For investment in large fishing vessels and infrastructure, it is necessary to ensure that resources are sustainable for over long periods.

Norway shares marine boundaries and marine ecosystems with many countries. Management of these fish stocks and ecosystems require substantial efforts in international negotiations. This is the reason why regional cooperation is necessary in fisheries management. The Northern part of Norway is the spawning area of haddock and cod. The eggs and larvae drift to Russian waters, grow up there and return to Norway. To manage these stocks we need to agree with Russians on management measures. The Russians have to protect juveniles from shrimp trawling. From economics point of view, fish has to be caught when they reach a reasonable size. For this reason, Norway has to let Russian vessels to catch fish in Norwegian waters, to prevent Russians to catch them in Russian waters when the fish are still in the medium sizes. It is the same pattern with herring. In case of mackerel fishing also, international cooperation is required.

International cooperation is an absolute necessity in the management of shared stocks. When stocks occur in both national waters and international waters, matters become complicated since distance fishing nations are also involved. The countries have to agree on TAC, allocation and technical management measures.

According to UNCLOS Article 63, where the same stock or stocks of associated species occur within the exclusive economic zones of two or more coastal States, these States shall seek, either directly or through appropriate sub-regional or regional organizations, to agree upon the measures necessary to coordinate and ensure the conservation and development of such stocks without prejudice to the other relevant provisions, and where the same stock or stocks of associated species occur both within the exclusive economic zone and in an area beyond and adjacent to the zone, the coastal State 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 measures necessary for the conservation of these stocks in the adjacent area.

In regions for which no appropriate international organization exists, the coastal State and other States whose nationals harvest of these species in the region shall cooperate to establish such an organization and participate in its work.

Article 8 of the UN Fish Stocks Agreement requires coastal States and States fishing on the high seas to, in accordance with the Convention, pursue cooperation in relation to straddling fish stocks and highly migratory fish stocks either directly or through appropriate sub-regional or regional fisheries management organizations or arrangements, taking into

account the specific characteristics of the sub-region or region, to ensure effective conservation and management of such stocks.

Norway has entered into 15 annual international negotiations on fisheries. Norway has annual bilateral talks with EU, Russia, Greenland, Faroe Islands and Iceland, and regional talks with the North East Atlantic Fisheries Commission (NEAFC), South East Atlantic Fisheries Commission (SEAFC), and International Commission for Conservation of Atlantic Tuna (ICCAT), and a number of others.

NEAFC is the most important RFMO for Norway. Its contracting parties are Denmark for Faroe Islands and Greenland, European Union, Iceland, Norway and the Russian Federation. Bahamas, Canada, Liberia, New Zealand, and St. Kitts and Nevis act as Cooperating Non-contracting Parties. The convention area stretches from the southern tip of Greenland, east to the Barents Sea and south to Portugal. NEAFC works for long-term conservation and optimum utilization of the fisheries resources in its convention area with the objective of sustainable economic and environmental benefits. Norway produces 7 to 8 million tonnes of fish, with 10% coming from the NEAFC convention area. NEAFC meets annually and obtains scientific advice from ICES.

RFMOs can set legally binding management measures such as catch quotas, vessel monitoring, TAC, gillnet ban, etc. NEAFC has banned a number of IUU fishing vessels and enforced harvest-control rules, rules for opening fisheries in new areas, etc. RFMOs make one instrument that provides tools for sustainable management of fisheries.

The Joint Norwegian Russian Fisheries Commission (JNRFC) operates since early 1900s. It allows Norwegian and Russian vessels to fish in each other's waters. Both parties implement the same management strategy. It was operative even during the height of the cold war. Nevertheless, since Russia invaded Ukraine, although JNRFC is operative, Norway does not sell fish to Russia.

This evidence suggests that management of shared stocks is not possible without regional cooperation.

6.8. Discussion

At the discussion that followed the presentations of the Symposium underscored the need for the following measures.

1. more effective regional cooperation in achieving targets of SDG – 14;
2. science-based and knowledge-based management of fisheries resources with application of ecosystem approach;
3. sharing of experiences and good practices and working towards improved cooperation in fisheries management on a regional basis;

4. establishment of a system for information sharing and dissemination on SDG – 14;
5. collective action and shared approaches in view of the trans-boundary nature of the fish stocks and marine pollution;
6. utilizing Regional Fisheries Management Organizations (RFMOs) and Regional Fisheries Bodies for effective management and coordination in the region;
7. advancing regional cooperation across sectors and stakeholders and adopting tailor-made and context-specific regional cooperation efforts for sustainable management of oceans;
8. strengthening of formal and informal mechanisms of cooperation and coordination;
9. recognizing the need to work together in addressing challenges posed by IUU fishing and other similar unsustainable fishing practices;
10. establishing an Ecosystem Approach to Fishery Management (EAFM) in each of the countries.

Note: The EAFM should consider three inseparable dimensions: (1) the dimensions of fisheries resources and their ecosystems, (2) resource utilization dimensions of fisheries for the benefit of the social economy community, (3) the dimension of fisheries policy itself. The EAFM implementation also should involve multi stakeholders through partnership with inter-ministries, provincial and local governments, universities, research institutions, private sector and civil society].

6.9. Possible way-forward for Regional Co-operation

The Symposium agreed on the following way-forward activities.

1. Set up a main focal point to spearhead the activities;
2. Identify focal points in each of the Bay of Bengal countries;
3. Set up a working group comprising the focal points in Bay of Bengal countries, and representatives from FAO, IOTC and the Bay of Bengal Regional Fisheries Body (BOBP-IGO).
4. Develop TOR for the Working Group
5. Develop a work plan for regional cooperation in implementing SDG – 14 for the region through the Working Group;
6. Create a platform to report progress of actions taken to implement SDG – 14 in the region;

6.10. Conclusion of the Session

The Session Chair, Ms. Premawardhane in concluding the Session stated that the measures and the way-forward activities agreed to are not binding on any country in the Region. These will be conveyed to the respective governments through diplomatic channels for observations. At the intervention of Director BOBP-IGO it was also agreed that these be conveyed to Regional Fisheries Bodies (RFBs) operating in the Bay of Bengal Region.

8. Conclusion of the Symposium

Mr. Monty Ranathunge, Director General (Technical) of the Ministry of Fisheries & Aquatic Resources and Rural Economy of Sri Lanka concluded the Symposium by thanking the two Session Chairs, Ms. W.M.R.R. Adikari and Ms. Sashikala Premawardhane for efficiently conducting the Technical Sessions. He thanked Ms. Adikari, who in the capacity of the then Secretary of the Ministry of Fisheries and Aquatic Resources Development, and Mr. Johan H. Williams, the then Chief Adviser of the Norway Technical Assistance Project for Formulation of a New National Fisheries and Aquaculture Policy for Sri Lanka for taking the initiative to conduct this Symposium under the Project. He thanked all the panelists and participants for sharing their knowledge and experience in achieving SDG 14, and participation lively at the Symposium. He also thanked Mr. A. Hettiarachchi, Coordinator of the Project and the Symposium Organizing Committee for their excellent contribution in organizing the Symposium.

The Symposium concluded at 1215 h on the 22nd June 2018.

List of Participants

Bangladesh

1. Rear Admiral (Retd) Mr. Khurshed Alam, Secretary, Maritime Affairs Unit, Ministry of Foreign Affairs, Dhaka

India

2. Mr. K.B. Surwade, Director (Fisheries Statistics), Department of Animal Husbandry, Ministry of Agriculture and Farmers' Welfare, New Delhi
3. Ms. Pathvi Rani, Senior Technical Assistant (Fisheries), Department of Animal Husbandry, Ministry of Agriculture and Farmers' Welfare, New Delhi

Indonesia

4. Mr. Aryo Hanggono, Senior Adviser on Ecology and Marine Affairs, Ministry of Marine Affairs and Fisheries, Jakarta
5. Ms. Fegi Nurharbni, Head of Section of Climate Change Adaptation, Ministry of Marine Affairs and Fisheries, Jakarta
6. Dr. Anastasia Tisiana Nuswardani, Senior Researcher at the Research Centre of Marine, Ministry of Marine Affairs and Fisheries, Jakarta

Maldives

7. Ms. Mariyam Simila, Senior Research Officer, Ministry of Fisheries and Agriculture, Male
8. Ms. Maleena Haleem, Research Officer, Ministry of Fisheries and Agriculture, Male

Myanmar

9. Dr. Htun Thien, Deputy Director, Department of Fisheries, Yangon
10. Dr. Khin Maung Sint, Ministry of Natural Resources & Environmental Conservation, Yangon

Thailand

11. Dr. Kamonpan Awaiwanont, Senior Fishery Biologist, Department of Fishery, Bangkok
12. Mr. Somchai Vibunpant, Senior Fishery Biologist, Department of Fishery, Bangkok

Sri Lanka

13. Ms. W.M.M.R. Adikari, Secretary, Ministry of Justice and Prison Reforms
14. Ms. Sashikala Premawardhane, Director General, Ocean Affairs and Climate Change Division, Ministry of Foreign Affairs
15. Prof. U.S. Amarasinghe, Senior Professor in Zoology, Department of Zoology and Environment Management, University of Kelaniya
16. Mr. Monty Ranatunge, Director General Technical, Ministry of Fisheries & Aquatic Resources Development and Rural Economy
17. Mr. A. Hettiarachchi, Policy Project Coordinator, Ministry of Fisheries & Aquatic Resources Development and Rural Economy
18. Mr. Christy Lal Fernando, Addl. Secretary, Ministry of Irrigation, Water Resources and Disaster Management
19. Dr. (Ms.) Chamari Dissanayake, Senior Lecturer, Department of Zoology and Environmental Science, University of Sri Jayawardenepura
20. Mr. Bharatha Ramanayake, Director Planning, Ministry of Fisheries & Aquatic Resources Development and Rural Economy

21. Ms. Iranganie Swarnalatha, Asst. Director Ocean Resources, Ministry of Fisheries & Aquatic Resources Development and Rural Economy
22. Ms. Salika Wadutantri, Legal Officer, Ministry of Fisheries & Aquatic Resources Development and Rural Economy
23. Mr. Ayesh Ranawaka, Adviser to State Minister, Ministry of Fisheries & Aquatic Resources Development and Rural Economy
24. Mr. Madusanka Jayasinghe, Asst. Director, Ocean Affairs and Climate Change Division, Ministry of Foreign Affairs
25. Mr. M. Marcus, Director Fisheries Management, Department of Fisheries and Aquatic Resources
26. Ms. Kalyani Hewapathirana, Deputy Director Fisheries Management, Department of Fisheries and Aquatic Resources
27. Ms. Sepalika Wickramasinghe, Deputy Director Fish Product Quality Control, Department of Fisheries and Aquatic Resources
28. Ms. Sandamali Herath, Asst. Director Fisheries Management, Department of Fisheries and Aquatic Resources
29. Dr. Palitha Kithsiri, Deputy Director General, National Aquatic Resources Research & Development Agency
30. Dr. Prabhath Jayasinghe, Senior Scientist, Marine Biological Resources Division, National Aquatic Resources Research & Development Agency
31. Ms. Kishara Bandaranayake, Scientist, Marine Biological Resources Division, National Aquatic Resources Research & Development Agency
32. Mr. Nimal Chandraratne, Director General, National Aquaculture Development Authority
33. Dr. J.M. Asoka, Director Coastal Aquaculture, National Aquaculture Development Authority
34. Mr. Percy Samarasinghe, General Manager, Ceylon Fishery Harbours Corporation
35. Dr. Terney Pradeep Kumara, General Manager, Marine Environment Protection Authority
36. Ms. Chamila Karunathilaka, Director, Ministry of National Policies & Economic Affairs
37. Mr. B.H.J. Premathilaka, Deputy Director, Department of Coast Conservation and Coastal Resources Management
38. Capt. A.A.A.R. Abeysinghe, Sri Lanka Navy
39. Mr. K A Nalin Perera, Sri Lanka Coast Guard
40. Ms. Vijini Gunawardana, Asst. Director, National Planning Department
41. Ms. Chandani Rupasingha, Central Environment Authority
42. Dr. M.G. Kularatne, Senior Lecturer, Department of Economics, University of Kelaniya
43. Dr. (Ms.) Nilantha De Silva, Senior Lecturer, Department of Agric. Economics & Extension, Faculty of Agriculture, University of Ruhuna

Norway

44. Mr. Ove Hokstad, Deputy Asst. Director General, Department of Fisheries and Aquaculture, Oslo
45. Mr. Kristoffer Bjorklund Krohg, Senior Adviser, Department of Fisheries and Aquaculture, Oslo
46. Mr. Jens-Otto Krakstad, Senior Scientist, Marine Research in Developing Countries, Bergen
47. Ms. Monica Svenskerud, Deputy Head of Mission, Embassy of Norway, Colombo
48. Ms. Vidya Perera, Senior Adviser Economic Affairs, Embassy of Norway, Colombo

49. Mr. Fedrik Aasasren, Intern, Embassy of Norway, Colombo
50. Ms. Arti Bhatia Kumar, Embassy of Norway, New Delhi
51. Mr. Elise Loftreim, Advisor, Embassy of Norway, New Delhi
52. Mr. Morshed Ahamed, Senior Adviser Development Affairs, Embassy of Norway, Dhaka

International and Regional Organizations

53. Ms. Merete Tandestad, EAF – Nansen Programme Coordinator, FAO, Rome
54. Dr. Yugraj Yadava, Director, Bay of Bengal Inter-Governmental Organization, Chennai
55. Dr. Hiran Jayawardene, Secretary General, Indian Ocean Marine Affairs Cooperation, Colombo

Other Participants

56. Mr. Helge Tryti, Innovation Norway, India
57. Mr. Hiran Soyza, Director, Centre of Ocean Resources Analysis
58. Mr. Malaka Rodrigo, Environmental Journalist
59. Mr. Prasad Dodangodage, Assistant Director (Foreign News), Sri Lanka Rupavahini Corporation

Agenda

21 June 2018

Inauguration Session

- 0830 – 0900 Registration of participants
- 0900 – 0905 Lighting of traditional oil lamp
- 0905 – 0910 Opening Remarks Ms. D.K.R. Ekanayake, Secretary, Ministry of Fisheries and Aquatic Resources Development & Rural Economy
- 0910 - 0920 Speech Mr. Prasad Kariyawasam, Secretary, Ministry of Foreign Affairs
- 0920 – 0930 Speech Hon. Jens Frolich Holte, State Secretary Ministry of Foreign Affairs, Norway
- 0930 – 0940 Speech Hon. Wijith Wijayamuni Soyza, Minister of Fisheries and Aquatic Resources Development & Rural Economy
- 0940 – 0955 Speech Chief Guest Hon. Mangala Samaraweera, Minister of Finance and Mass Media
- 0955 – 1000 Vote of Thanks
- 1000 – 1030 Tea

Technical Session 1 “Challenges, Opportunities and Best Practices in Achieving SDG 14 – Life below Water” Chair Ms. W.M.M.R. Adikari, Secretary, Ministry of Justice and Prison Reforms

- 1030 – 1050 Address “Role of Oceans in Food Production” Mr. Ove Hokstad, Deputy Director, Ministry of Trade, Industries and Fisheries, Norway
- 1050 – 1100 Questions and Answers
- 1100 – 1130 Presentation of a Synthesis of the Country Reports on Blue SDG by Prof. Upali S. Amarasinghe, Senior Professor in Zoology and Environment Management, University of Kelaniya
- 1130 – 1200 Country Cases: Supplementary Information, Questions and Answers
- 1200 – 1245 Discussion - Opportunities, Challenges and Issues
- 1245 – 1300 Summing up by Chair
- 1300 – 1400 Lunch

Technical Session 2 - “Regional Cooperation for Achieving SDG 14” Chair Ms. Sashikala Premawardhane, Director General Ocean Affairs& Climatic Change, Ministry of Foreign Affairs

- 1400 -1420 Address “Regional Cooperation in Marine Affairs” Dr. Hiran Jayawardene, Secretary General, IOMAC
- 1420 -1440 Address “Initiatives in Regional Cooperation in Management of Fisheries” Ms. Merete Tandestad, EAF-Nansen Programme Coordinator, FAO, Rome
- 1440 - 1500 Address “Achieving of Targets of Blue SDG through Regional Cooperation” Dr. Yugraj Yadava, Director Bay of Bengal Inter Governmental Organization, Chennai, India
- 1500 - 1520 Address “Ocean Governance from Global to Regional and Local Level: Effects on Fisheries Management” Mr. Ove Hokstad, Deputy Director, Ministry of Trade, Industry and Fisheries, Norway
- 1520 – 1545 Questions and Answers
- 1545 – 1600 Summing up by Chair
- 1600 – 1630 Tea

22 June 2018

Technical Session 2 (Contd.) - “Regional Cooperation for Achieving SDG 14” Chair Ms. Sashikala Premawardhane, Director General Ocean Affairs & Climatic Change, Ministry of Foreign Affairs

- 0900 – 0920 Address “Blue Economy and Fisheries Management” Dr. (Ms) Chamari Dissanayake, Senior Lecturer, Department of Zoology & Environmental Science, University of Sri Jayawardenepura
- 0920 - 0940 Address “Regional Cooperation in Fisheries Management: Experience from Norway” Mr. Kristoffer Bjorklund Krohg, Senior Adviser, Department of Fisheries and Aquaculture, Norway
- 0940 – 1000 Questions and Answers
- 1000 - 1030 Tea
- 1030 - 1145 Discussion – Strengthening of Regional Cooperation on Blue SDG
- 1145 – 1200 Summing up by Chair
- 1200 – 1300 Lunch (Crystal Ballroom)

End of the Symposium

- 1300 – 1700 “The Business Conference on Blue Economy – Sustainable Use of Oceans” organized by the Norwegian Embassy** (This was also open for Participants and Resource Persons of the Symposium subject to prior registration.)