INPUTS OF THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS INTO THE REPORT OF THE SECARETARY GENERAL ON OCEANS AND THE LAW OF THE SEA, PURSUANT TO GENERAL ASSEMBLY RESOLUTION A/73/124, ENTITLED, "OCEANS AND THE LAW OF THE SEA"

1. United Nations Decade of Ocean Science for Sustainable Development: initiatives, ideas, proposals, perspectives

The Food and Agriculture Organization of the United Nations (FAO) was invited to join forces with the Intergovernmental Oceanographic Commission of UNESCO (IOC) and its partners in the co-design of the UN Decade of Ocean Science for Sustainable Development. FAO is convinced of the large potential of our oceans and coasts to contribute to sustainable development, and stands ready to work with the IOC in ensuring this potential is achieved.

FAO has a number of specific contributions to make in the design and implementation of the Decade, from the promotion of Ecosystem Based Management approaches, the development of Blue Growth initiatives, the implementation of the Dr Fridjof Nansen field programme, and our co-leadership of the UNFCCC Action Agenda on Oceans, to name a few. A proper harnessing of knowledge, information and data at global, regional and country levels will improve our understanding of oceans and seas and help us maximize their contribution to achieving a world without hunger and poverty.

FAO has agreed to convey specific comments on the Decade Roadmap proposed by IOC, and agreed that a Planning Group needs to be established to co-design the workplan under the Decade, and confirmed its commitment to support and be part of this Planning Group. The implementation for the Decade could be pursued through, among others, a series of flagship initiatives, and it is anticipated that FAO will contribute to some initiatives. FAO highlights two such flagships initiatives, the EAF Nansen programme and the FAO Climate Change and Fisheries portfolio of projects.

1.1. The EAF-Nansen Programme

The EAF-Nansen Programme has, since the mid-1970s, assisted developing countries in providing data and information on fisheries resources and ecosystems, advancing research and supporting knowledge-based decision-making. The research vessel *Dr Fridtjof Nansen* has been a key tool for the collection of data and information on fishery resources and ecosystems for the Programme, with the objective of producing knowledge for fisheries management and policy development.

A new five-year phase of the Nansen Programme (the EAF-Nansen Programme: Supporting the application of the Ecosystem Approach to Fisheries (EAF) management considering climate and pollution impacts) started in May 2017. The Programme, funded by the Norwegian Agency for Development Cooperation (Norad), is implemented by FAO in close cooperation with the Institute of Marine Research and the Directorate of Fisheries of Norway. The main geographical focus area of the Programme is Africa, and certain countries in the Bay of Bengal. While maintaining overall goals linked to poverty reduction and food security, the new Programme has an expanded scope as compared to earlier phases, which includes knowledge

generation on key stressors on the marine environment beyond fisheries, such as pollution and climate change. The Programme is designed around the following three main areas of work:

- (i) strengthening the knowledge base for the sustainable management of fisheries in the face of increasing fishing pressure, climate variability and change, pollution and other anthropogenic stressors;
- (ii) supporting improved fisheries policy and management in line with EAF including taking into consideration the risks and opportunities related to climate and other environmental variability and change; and
- (iii) developing capacity at the institutional and human resources levels, including the promotion of gender equality and effective participation of women in all Programme activities.

A new, well-equipped *Dr Fridtjof Nansen* research vessel that enables multidisciplinary research covering various aspects of resources, environmental and ecosystem research is available to the Programme, representing a unique platform for capacity building and exchange for scientists from partner countries, in particular developing countries. The EAF-Nansen Programme is built on the paradigm of knowledge-based decision-making. The programme aims to strengthen the links between research activities and policy, legislation, and decision-making.

1.2. FAO's fieldwork on climate change impacts and adaptation strategies

There is scientific evidence of the quick warming of the oceans with observed and predicted impacts on the ecosystems and the economic sectors they sustain. Climate change – alongside climate variability events such as El Niño-Southern Oscillation and extreme (weather) events – is affecting the abundance and distribution of fisheries resources and suitability of geographical locations for aquaculture. Climate-related physical and chemical changes are linked to yet growing carbon dioxide emissions, which are being absorbed in large part by the aquatic systems and trigger substantial shifts of aquatic ecosystems and related services important for food security and livelihoods around the globe.

The FAO Fisheries and Aquaculture Department has undertaken significant initiatives to address climate change, climate-related disasters and their impacts on the fisheries and aquaculture sector. These include the development of knowledge products, awareness raising through the release of policy briefs intended for policy makers and providing an overview of climate change implications and vulnerabilities, as well as potential adaptation and mitigation options. A field programme on climate change adaptation was developed to:

- (iv) improve the knowledge base on climate change impacts and vulnerability through data and information collection and analysis;
- (v) increase the resilience of the fisheries and aquaculture sector and dependent communities through the identification and implementation of adequate adaptation measures; and
- (vi) build capacity at both community and institutional level on mainstreaming climate change in mechanisms to implement climate change adaptation and mitigation, policies, plans and associated processes.

A number of projects are under implementation or in development phase. Global Environment Fund (GEF)-funded projects through the Special Climate Change Fund (SCCF) and/or the

Least Developed Countries Fund (LDCF) are underway in different stages of implementation in the Benguela Current, Eastern Caribbean, Chile and Myanmar. Other LDCF projects are in the pipeline or last approval stage in Bangladesh, Cambodia, Timor Leste and the Lao People's Democratic Republic. GEF-International Waters funded projects covering Large Marine Ecosystems (LME), which also address climate change, are at various stages of implementation in the Bay of Bengal, Indonesian Seas and Canary Current LME. This extensive field programme is expected to grow in the near future and will contribute directly to the research and development areas of the Decade of Oceans Science in areas that are often poorly covered in terms of coastal and marine data collection. The outcomes of the field programme will contribute to improving the understanding of ecosystems functioning, build resilience of oceans-dependent communities, enhance early warning systems and disaster risk reduction practices and inform policies adequately.

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