TO: The United Nations’ Food and Agriculture Organisation

DATE: London, 19 October 2021

Support to the Shanghai Declaration

IFFO The Marine Ingredients Organisation praises the participants of the Global Conference on Aquaculture Millennium +20 and their Call for Action adopted by the Shanghai Declaration: “Aquaculture for food and sustainable development”.

As a trade body representing the marine ingredients industry globally, we recognize our responsibility to drive positive change for the marine ingredients industry and its wider value chain at speed and scale. This implies a continuous support to the growth of the aquaculture sector as the most efficient and sustainable way to produce protein.

In support of the Shanghai Declaration, IFFO is committed to the following actions:

1/ Improve and increase the availability of sustainable marine ingredients as a responsible and highly efficient way of producing protein at scale to feed a growing population

With the immense challenge of achieving the Zero Hunger target by 2030 as set by the United Nations, we believe in aquaculture’s role in supporting countries to fight against poverty, hunger, and malnutrition.

Marine ingredients have been essential components of aquafeeds for thousands of years and have supported the growth of the sector, from a 10% contribution in 1980 to over 70% in 2020. Marine ingredients are recognised by the FAO as strategic ingredients because of their nutritional properties and stable volumes at roughly six million tonnes a year.

The marine ingredients industry is proud to have been part of the journey that has seen aquaculture become “the fastest growing food production industry over the last five decades, allowing the doubling of the average apparent per capita fish consumption since 1960” as stated in the Shanghai declaration. For the raw material that is fishmeal and fish oil, 1kg of fish and fish by-products transformed into fishmeal and fish oil produces 5kg of farmed seafood. This calculation relies on the Fish in: Fish out ratio (FIFO ratio) based on the principle of economic allocation as commonly used in Life Cycle Assessments. This approach was presented in the Kok et al. paper published in 2020.
IFFO believes in establishing robust foundations for dialogue within the whole value chain, which then allows to take action and address sensitive topics such as IUU and labour issues. This is why IFFO has been working with Sustainable Fisheries Partnership (SFP) to establish a Global Roundtable on marine ingredients.

The aim of the Roundtable is to improve and increase the availability of sustainable marine ingredients by:

- Identifying and agreeing on ways to further improve the availability of sustainable marine ingredient materials
- Investigating the potential of new raw material sources, such as mesopelagic species and others
- Catalysing and supporting existing and new fisheries improvement projects
- Understanding and addressing urgent social issues and enhance social responsibility in key fisheries and regions
- Maintaining a global overview of the state of the resources and industry

**2/ Assess the life cycle of marine ingredients to demonstrate impacts and help mitigate them**

IFFO promotes responsible aquaculture development based on thorough assessment of impacts generated throughout the life cycle of the ingredients, considering the three dimensions of sustainability in a balanced and holistic way, from environmental impacts, to nutritional value, ability to provide at scale without jeopardizing livelihoods of local populations.

IFFO is committed to undertaking a life cycle assessment of the marine ingredient industry's activity. Work has already started, with calculations considering feed conversion ratios, water use, land use, Co2 emissions. It is worth noting that the impacts within the fishing sector are primarily driven by fuel use, which themselves are dependent upon fishing methods. Fish can be produced using one fifth of the amount of feed compared to beef. Water use is 2 500 times more important for beef production than for fish and carbon footprint is 30 times higher.

One third of fishmeal and fish oil produced globally comes from by-products which result from the processing of fish and would otherwise be discarded. We have considered the carbon footprint of fishmeals from both fishery and by-products as well as grains and found the following:

![Graph showing carbon footprint of various fish and by-products](image)

Source: based on data provided by Dr Richard Newton. University of Stirling, UK
3/ Promote, initiate and get involved in multistakeholder initiatives as a responsible way to drive positive change

“Good aquaculture governance consists of integrated, coordinated, multisectoral and ecosystem-based management, as well as nature-based and innovative solutions throughout the value chain” as stated in the Shanghai declaration. “Good governance requires strong and effective leadership and accountability and involves broad stakeholder engagement from across various disciplines and sectors”.

IFFO supports fishery improvement projects (FIPs) as efficient ways to drive positive change in some regions where certifications cannot be achieved for various reasons. Positive outcomes have already resulted from collective work conducted by a group of companies coordinating projects with local governments, scientists, fishermen and people, based on the framework provided by certification programmes such as MSC or MarinTrust. The Gulf of Thailand FIP is a good example of such initiatives. IFFO also sees itself as playing an instrumental role in knowledge and best practice sharing. Therefore, IFFO acts as a facilitator in the process for fisheries to engage in FIPs, be it by providing information on FIPs in general and on fishery assessments and fishery action plans more specifically, by coordinating contacts and improving communications among stakeholders.

We have a publicly available knowledge hub with updated data, library of scientific studies and actions taken by member companies towards the 2030 SDG target.

The Global Roundtable on marine ingredients, as described in the above paragraph, is a key step for IFFO and SFP to foster and support precompetitive efforts and drive environmental and social improvements in key fisheries globally.

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