DRIVING IMPROVEMENTS IN SE ASIAN FISHERIES THROUGH IMPROVEMENT PROJECTS: THE BENEFITS FOR FOOD AND FISHMEAL SUPPLY

By Duncan Leadbitter

Southeast Asian (SEA) fisheries are mainly multi-species and multi-gear, and for a number of reasons, traditional fisheries management techniques are technically challenging to apply. Recognising this, IFFO, The Marine Ingredients Organisation and the Global Responsible Supply Scheme (IFFO RS), are promoting an approach that has already proven successful in some of the world's fisheries. Fishery Improvement Projects (FIPs) seek to develop improvements to fisheries through a multi-stakeholder supply chain approach, and the IFFO RS has its own programme for marine ingredients, aligned with internationally recognised FIP requirements called the IFFO RS Improver Programme (IP). Application of the IFFO RS IP has the potential to improve management practices and the sustainability of both food fish and fishmeal supply from South East Asian fisheries.

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Introduction

South East Asia is one of the world's largest fishery exporters, making the sector a major employer. About 80% of the seafood produced by these waters, especially from those fisheries in Vietnam and Thailand, is supplied for human consumption. The remaining 20% is used to produce fishmeal and oil used in aquaculture feeds, in itself key elements of regional food production via aquaculture.

This region has some of the most diverse marine ecosystems in the world and its fisheries are commonly multi-species, multi-gear fisheries (often 200 or more species). These are typical of tropical waters, and are intrinsically more complex than those found in higher-latitude fisheries. Traditional fisheries management techniques are challenging to apply. Moreover, information is often lacking in terms of both fisheries and fisheries production: in South East Asia the diverse nature of the industry, and especially the size of the small vessel/near shore fleet, makes the collection of statistical data very challenging.

An increasing need for traceability

In April 2015 the European Union issued a 'yellow card' warning in response to a failure by Thailand to sufficiently tackle the problem of Illegal, Unreported and Unregulated fishing (IUU) fishing, a step also taken for Vietnam in October 2017 (both yellow cards have been lifted since then). Regulatory measures are undertaken at an international level to tackle such bad practices. In addition to them, and sometimes in their absence, civil society has proven to be powerful as well. Consumers and retailers are more and more keen to know how and where their products are being made. The reputation of any company is exposed to the public eye and there is an increasing need for traceability. According to the United Nations Global Compact, *"Traceability means the ability to identify and trace the history, distribution, location and application of products, parts and materials, to ensure the reliability of sustainability claims in the areas of human rights, labour (including health and safety), the environment and anti-corruption".*

From the year 2000, the continued growth of the global fishmeal and fish oil markets, together with increasing concern over the sustainability of global fisheries and the fight against IUU, shaped an increasing need for the marine ingredients industry as a whole to demonstrate commitment towards responsible sourcing and production. The journey towards more traceability had only begun.

A multi-stakeholder group representative of the full value chain initiated by IFFO, The Marine Ingredients Organisation, was formed in order to tackle this issue and to provide stakeholders with a tool to demonstrate responsible practices. In this way the IFFO Responsible Sourcing (IFFO RS) Standard, a third-party business-to-business certification scheme for fishmeal and fish oil producers, was created. The IFFO RS Standard consists of an independent fishery assessment aligned with the FAO Code of Conduct for Responsible Fisheries, on the sourcing fishery and an audit of the marine ingredient producing plant where robust sourcing, traceability and manufacturing systems must be in place.

The IFFO RS Standard was launched in 2009. Now, 10 years later, it is present in more than 20 countries around the globe and holds up to 54% of the world's production volume on combined fishmeal and fish oil. It is recognised by the major aquaculture standards, feed producers, pet food manufacturers and retailers in the UK and Europe. IFFO RS is an active player in the standardisation of responsible practices and traceability between the links of the seafood value chain. For example, IFFO RS has established an Improver Programme with a structured plan for fisheries that want to meet the level of performance required by its certification scheme, which is applicable to fishmeal/fish oil production facilities. This scheme requires transparent and accountable improvements in fisheries management.

Meanwhile, the Global Aquaculture Alliance (GAA), via its Best Aquaculture Practices certification scheme, also allows access to certified feed supply chains for fisheries that are in an approved Fishery Improvement Project (FIP), where companies and seafood stakeholders are directly engaged in the fisheries management process, and the following basic elements are met:

- Establishment of a stakeholder group to drive the process;
- Preparation of a gap analysis to identify gaps in performance between the fishery and the desired goal – generally the requirements of a credible standard such as MSC or IFFO RS;
- Preparation of an action plan with time-bound actions needed to address the gaps;
- A mechanism for reporting on progress on a timely basis.

FIPs have proved to be successful in helping to manage and improve challenging fisheries around the world, improving stock status and ecosystem impacts, and increasing the number of fisheries certified as sustainable. However, one of the criticisms levelled against FIPs is the slow progress achieved by many fisheries entering the process.

Understanding local situations to find collective solutions

The supply of comprehensive, accurate and up-to-date information is of significant importance to the sustainability of the aquaculture supply chain and fishmeal and fish oil production in this region. That's why IFFO co-funded a study with the GAA in 2018, to fill information gaps in South East Asia and help drive positive change where opportunities present. Through this jointly funded project, a focus has been on Thailand and Vietnam, given their importance in fishmeal and fish oil manufacture and supply and their important role in aquaculture production. Moreover, they represent two distinct cases whose studies can complement each other.

There has been little research or documentation of the existence of directed fisheries for small pelagics for reduction purposes in South East Asia. More importantly, small pelagics are commonly used for direct human food, which contrasts with many developed countries.

The project report makes a number of recommendations in encouraging the attainment of IFFO RS and maintaining an understanding of the developments in fisheries management in the region:

- ***Provide assistance to fisheries with regard to assessment processes:*** IFFO RS could finalise its assessment system for multispecies fisheries and provide a pathway to approval as soon as possible. The RS system, via the Improver Programme, is the key mechanism for involving industry in supporting improvements in fisheries management. The RS assessment system needs to ensure that it can also cover species diverse, tropical purse seine fisheries.

IFFO and GAA could facilitate 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, or maybe even the establishment of a source of funds aimed at providing assistance to fisheries that want to engage in FIPs.

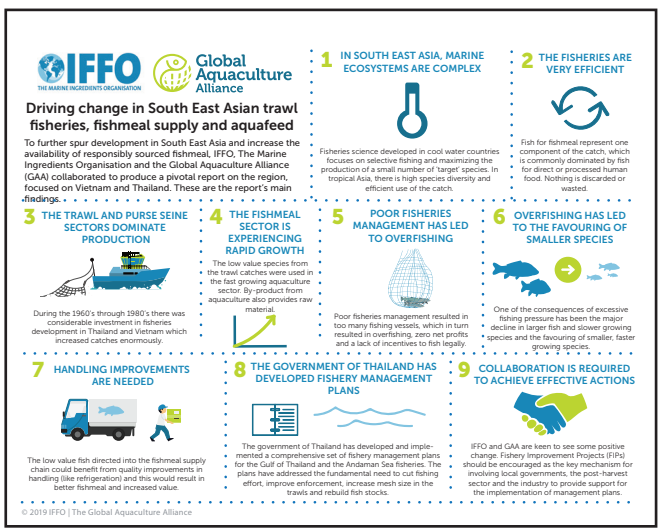
- ***Share knowledge:*** IFFO and GAA need to maintain an up-to-date appreciation of developments in the understanding and management of tropical multispecies fisheries. There is a considerable degree of interest in this area and there are links to developments in approaches to fisheries elsewhere in the world.

  GAA and IFFO could consider reviews of other countries that have similar fisheries that link to the farmed shrimp industry. Examples include India, China and Bangladesh.

- ***Develop further research:*** GAA and IFFO could consider outreach work to feed and other related sectors aimed at promoting formulated feeds as a mechanism for reducing the incidence of direct feeding of bycatch to species such as groupers, spiny lobsters, crabs, snakeheads etc. This would have both resource management and fish health benefits.

  GAA and IFFO could consider evaluating the purse seine fisheries as these are common but their contribution to the fishmeal sector is unknown beyond anecdotes.

  The structure of the industry and, especially the links with the food processing sector, is not well documented and a better understanding would be positive for industry development purposes but also important for understanding supply chains and traceability.



Bearing in mind the project's main findings, IFFO has called for co-management that opens the path to a specific way of addressing the existing challenges based on implementing the report's main recommendations, which encourage an integrated approach that engages industry, national governments and international organisations, as well as the attainment of IFFO RS and maintaining an understanding of the developments in fisheries management in the region.

Supporting local communities' efforts and livelihood: the Improver Programme

IFFO RS' goal for 2025 is to boost the level of certified, in assessment or in the Improver Programme, marine ingredients to 75% of total global volume. It may prove challenging, considering that some of the regions where fisheries are not IFFO RS approved, are areas where information and robust regulatory frameworks may be lacking.

Most of the currently approved marine ingredients are sourced from fisheries in Latin America, the US and the waters of the North Atlantic but there are significant fisheries that produce fish for feed across Africa and Asia. With demand increasingly focusing on the need for responsible production there is an opportunity to tap this demand to drive improvements in both fisheries management and fishmeal production.

Neither the Marine Ingredients Industry nor IFFO RS believe in abandoning local fishermen and marine ingredients producers because they know this is not the way to support improvements. What is at stake is to help provide clear and useful guidance to those who do not currently meet the IFFO RS certification requirements and to provide a more robust mechanism for implementing necessary improvements in order to achieve IFFO RS certification in the future. That's why IFFO RS has developed the IFFO RS Improver Programme (IP).

The IP is a multi-stakeholder approach that provides a transparent and structured pathway of improvement with annual milestones in alignment with the IFFO RS programme and can take up to five years to reach the point of application into the IFFO RS standard for certification. The IP acceptance process has been updated to be in line with current internationally recognised Fishery Improvement Project (FIP) guidelines and includes peer review and IFFO RS audits by an independent and accredited certification body in order to increase the level of assurance. The IFFO RS IP enables marine ingredient producers (and other fishery stakeholders) to obtain recognition for consistent progress of the fishery made towards achieving IFFO RS approval.

Seven years after the introduction of the IFFO RS IP, all stakeholders can express satisfaction at the fact that the FIP concept has been accepted by the market. Lack of certification

is now associated with a high risk both for food safety and environmental protection. This risk can be mitigated by implementing a rigorous and robust system for assessing and accepting FIPs.

The IFFO RS Certification Programme not only requires responsible fisheries management but also best practice in the fishmeal plant itself, which creates high quality fishmeal. Risk will also be reduced over time as the fisheries must demonstrate continuous improvement to maintain the acceptance status into the Improver Programme. Furthermore, IFFO RS procedures have been developed taking into consideration internationally recognised guidelines for supporting FIPs and also follow all the assurance criteria of the IFFO RS Certification Programme. It must be underlined that the outcomes outweigh the great efforts and high investments.

To go a step further, IFFO RS launched a multispecies pilot project last in November 2018 to be tested during the next three years with relevant fisheries such as mixed trawl fisheries in SEA. Multispecies fisheries dominate the number of fisheries worldwide; moreover, they commonly produce a variety of human food and fish feed products. For decades, the multispecies trawl fisheries in Asia have discarded little or no fish as the bycatch has been used for fishmeal. This provides an opportunity for the industry to take a lead in driving the implementation of good fisheries management practice.

During this period, the project will work as a part of the IFFO RS Improver Programme (IFFO RS IP). The objective of the multispecies pilot is to enable the assessment of highly complex fisheries in which sometimes hundreds of species are regularly caught using a robust and credible framework. Over time, this pilot will work towards full IFFO RS approval. The pilot is not specific to Asia and can also be relevant in Australia and Ecuador. The trawl fisheries of the Gulf of Thailand are working towards becoming the first applicant to be tested in the pilot.

Joining efforts to develop a bespoke approach

The growth of aquaculture in Asia, together with pressure from environmental NGOs for resource sustainability, have played a role in the increased demand for certification (including assessed feed ingredients) in the aquaculture value chain.

Restrictions on local availability of certified key ingredients such as fishmeal and fish oil can sometimes drive more interest in imported materials. Import costs are, however, also a problem for many feed producers and fish farmers and given that this area is the second biggest producer of marine ingredients in the world, it seems reasonable to help these fisheries improve in order to be able to supply certified marine ingredients which in turn will help support the local and regional economies. There have been several challenges for this to be taken on board by potential fisheries and the market. Many of the improvements required will be related to management efforts and the controls the main regulators of the fishery have in place through legislation. The main regulators of many fisheries in this instance are governments, which are key players in FIP progression and success.

IFFO, The Marine Ingredients Organisation, is deeply involved both on the international stage (UN-bodies such as the FAO and the IMO, the EU, national governments) and at local levels through its membership and its project works which target specific markets. IFFO RS, on its side, as well as being directly linked to the fishmeal industry on the ground at least in part, is also engaged in multi-stakeholder committees such as the Multispecies Steering Group that has been set up for the multispecies pilot project. The Steering Group consists of Dan Lee, Standards Coordinator and Program Integrity Advisor at Best Aquaculture Practice (BAP) (MPSG Chair); Duncan Leadbitter; Dr. Rawee Viriyatum, FIP Coordinator for the Thai Sustainable Fisheries Roundtable; Kim Thanh Nguyen, a representative from the Vietnam Vung Tau FIP; Libby Woodhatch, Executive Chair at IFFO RS; Francisco Aldon, General Manager at IFFO RS; and Deirdre Hoare, IFFO RS Fisheries Science Manager. Dr. Nicola Clark, at IFFO RS, is in charge of the multispecies development project.

Today, the focus must continue to be on the provision of assistance to fisheries managers through facilitating the sharing of best practice and providing a framework for improvement. Obviously, the whole industry can't act on its own and requires all stakeholders to be engaged and use their influence at all stages of the supply chain. Regulators are the ones who hold the key to effective long-term solutions. With this, it is envisaged that the availability of marine ingredients for the aquaculture value chain will increase, which in turn will both favour the local economy and strengthen the relevance of marine ingredients in feed.

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