Responsible Marine Ingredients For Aquaculture

Jonathan Shepherd
IFFO
International Fishmeal and Fish Oil Organisation is the global trade association representing fishmeal and fish oil producers and related trades.

Represents 60% of world production and 80% of trade in fishmeal and fish oil worldwide with producers in Europe, South America, Africa, USA, China and India.
The Value Chain
There is value chain concern over two critical areas

The need to demonstrate that any whole fish processed come from well managed fisheries and that there are no illegal, unreported or unregulated (IUU) fish included. Also that any fisheries by-products do not come from endangered or IUU fish.

The need to demonstrate that production in the factory ensures pure and safe products. Also that the supply-chain then maintains the purity and identity of the products with a chain of custody demonstrating traceability.
IFFO developed its Global Standard for Responsible Supply (IFFO RS)

RS is a B-to-B initiative following the ISO-65 Standard

Standard developed by multi-stakeholder committee including producers, traders, feed companies, fish farmers, major retailers, standard setters & NGOs

A 3rd party Certification Body was appointed to conduct audits into each application

Currently undergoing ISO 65 Accreditation to ensure compliance with ISO-65
To comply with the Global Standard for Responsible Supply (RS) a factory must:

Source its whole-fish raw material from fisheries managed according to the FAO Code of Conduct for Responsible Fisheries (MSC certification is accepted as proof of this)

Avoid the use of Illegal, Unreported & Unregulated fish (IUU)

Not source fisheries by-products from IUCN red listed fisheries or from IUU fish

Manufacture under a recognised quality control scheme to ensure product safety, purity & traceability
IFFO RS Standard audits

CoC audit covers traceability and control systems along the chain

Ensure managed according to the FAO Code of Conduct for Responsible Fisheries

Ensure no IUU and complete control of intake species and volumes

Ensure full traceability of pure and safe products produced under QMS

Ensure no IUU and no IUCN Red List or diseased farmed fish
Launched to members in October 2009

First factory was awarded certification in February 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Fishery</th>
<th>N° of companies</th>
<th>N° of certified factories</th>
<th>N° of factories pending certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peru</td>
<td>Peruvian anchovy (Engraulis ringens)</td>
<td>10</td>
<td>53</td>
<td>7</td>
</tr>
<tr>
<td>USA</td>
<td>Gulf menhaden (Brevoortia patronus)</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Iceland</td>
<td>Blue whiting (Micromesistius poutassou)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iceland</td>
<td>Atlanto spring spawning herring (Clupea harengus)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iceland</td>
<td>Capelin (Mallotus villosus)</td>
<td>7</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Iceland</td>
<td>Summer spawning herring (Clupea harengus)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iceland</td>
<td>6 Species of By-products</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>Norway pout (Trisopterus esmarkii)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>Sand eel (Ammodytes marinus)</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Denmark</td>
<td>2 Species of By-products</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK/Ireland</td>
<td>19 Species of By-products</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Norway</td>
<td>1 species of By-product</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24</td>
<td>73</td>
<td>9</td>
</tr>
</tbody>
</table>
IFFO-RS progress to date

- This represents over 25% of world production of fishmeal and fish oil
- There are more factories with their fisheries & by-products in assessment including in new countries
- New Chain of Custody Standard has had first approval more in assessment
- The programme is currently undergoing Accreditation to ISO 65
MSC & IFFO RS are different things

IFFO RS is a B-to-B certification program that enables a factory to demonstrate that it responsibly sources its raw material from well managed fisheries and responsibly converts that into pure and safe products.

The MSC's fishery certification program and seafood eco-label recognise and reward sustainable fishing.

IFFO RS recognises the MSC as a good way to demonstrate well managed fisheries
Future supply prospects of RS approved material

Currently 27% of world fishmeal and 38% of world fish oil have been approved.

At the start of 2012 we hope to have over 30% FM and 40% of fish oil.

By 2013 we hope to have 40% of fishmeal and 50% of fish oil approved – but it is getting harder.

In Americas and Europe production well covered – Asia is a problem.
Acceptance by GAA BAP standard

After June 1, 2015, 50% of all fishmeal and fish oil from reduction fisheries shall be certified as compliant with approved standards. The preferred approved standard is the Marine Stewardship Council Environmental Standard for Sustainable Fishing (ISEAL compliant), provided it is combined with the MSC chain of custody compliance for the producing factory. The secondary approved standard is the Global Standard for Responsible Supply of the International Fishmeal and Fish Oil Organization (ISO 65 compliant), which includes the fishery as well as traceability, and good manufacturing practice for the producing factory.
Inclusion in draft ASC standards

Auditing guidance

The International Fishmeal and Fish Oil Organization’s Global Standard for Responsible Supply is one option for demonstrating compliance with standards related to traceability of fishmeal and fish oil, as well as the exclusion of by-products from IUU catch and vulnerable, endangered, and critically endangered fisheries.
Improvers’ Programme under development

There are a lot of factories which cannot achieve the RS standard – particularly in Asia

Often the reason is the lack of fisheries management data

We wish to encourage fisheries and factory improvement

We are working with the help of others, particularly SFP and FAO to produce an IFFO Improvers’ Programme
Can Aquaculture double in 10 years on available marine ingredients?

Global aquaculture production with fishmeal and fish oil usage
2000-2010 - tonnes millions

Over last decade fed aquaculture has grown 97% - marine ingredient usage 23%
Aquaculture can also continue to take from Agriculture

Aquaculture can double in the next ten years by reducing marine ingredient inclusion while increasing feed production.
Conclusions

There is a growing need to be able to demonstrate responsible buying of marine ingredients

IFFO RS is becoming accepted as the method of demonstrating responsible sourcing

Significant volumes are already available – with more to come

Asia requires a special approach – IP underway

Aquaculture can double production again with growing nutritional knowledge
Thank You!

Visit www.iffo.net to view our new video on IFFO RS