



# IFFO Responsible Supply Certification Program

Andrew Jackson

IFFO



global aquaculture  
**the alliance**

## Andrew Jackson

### International Fish Oil and Fishmeal Organisation, United Kingdom

- Andrew Jackson is the technical director of the International Fish Oil and Fishmeal Organisation, a trade organization with 200 members in 40 countries. Before joining IFFO in 2006, Jackson applied his doctorate from Stirling University for 20 years in senior salmon-farming positions in Scotland and Chile. He was also chairman of the Scottish Salmon Producers Organisation.
- His current interests focus on global markets for, and efficient use of fishmeal and fish oil. He chaired the advisory committee that developed the IFFO Global Standard for Responsible Supply, enabling the industry to demonstrate responsible sourcing of raw materials, good manufacturing practices and product safety

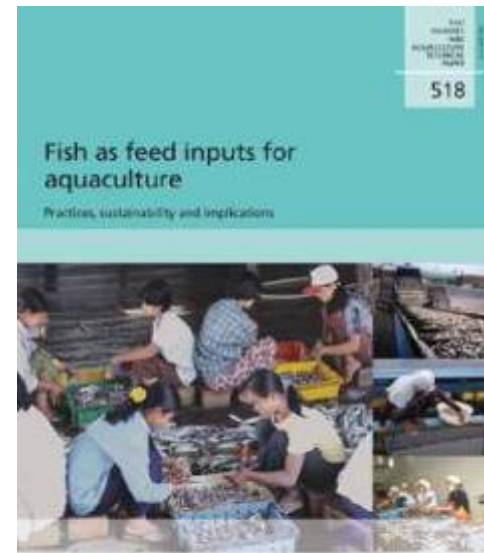


# The use of wild fish as aquaculture feed and its effects on income and food for the poor and the undernourished

[www.fao.org/docrep/012/i1140e/i1140e.pdf](http://www.fao.org/docrep/012/i1140e/i1140e.pdf)

**Ulf N. Wijkström**  
FAO Consultant

- *The idea of landing large quantities of anchoveta, or sand eel, or most of the other species used in feed fisheries, and using them to provide food for the poor is a laudable objective, but unrealistic*
- *.....there does not seem to be any foundation for the argument that aquaculture threatens the sustainability of South American reduction fisheries and, therefore, endangers the food security of those who are already undernourished or the income levels of the poor in Chile, Peru or anywhere else*



**But he says :** *Where feed fisheries are not managed sustainably, aquaculture today constitutes an important threat to world fish stocks because of aquaculture's reliance on fishmeal and thus on reduction fisheries*

- Most fisheries have been poorly managed at some stage
- Significant improvements have been made in the last ten years
- For example Peru now has some of the best managed fisheries in the world:

**Table 6. Average performance scores for the 53 countries.**

Country	Average score	Country	Average score
Peru	6.42	Sweden	3.82
Namibia	5.10	Pakistan	3.81
USA	5.10	Indonesia	3.80
Germany	4.90	Japan	3.78
Poland	4.82	Australia	3.78
Norway	4.71	Spain	3.77
Senegal	4.70	Taiwan	3.75
Chile	4.67	Thailand	3.74
South Africa	4.64	Viet Nam	3.70

## Ranking Maritime Countries By The Sustainability Of Their Fisheries<sup>1</sup>

Suzanne Mondoux<sup>a</sup>, Tony Pitcher<sup>b</sup> and Daniel Pauly<sup>b</sup>



# Responsible Management Of Fisheries

- World's largest feed fishery – the Peruvian anchovy – now well managed
- Europe re-building their feed fisheries
- Still concern over feed fisheries in Asia – mostly due to a lack of fisheries information
- It is becoming increasingly important to be able to demonstrate responsible fisheries management of the raw material



# Eco-Efficiency Of Fishmeal & Fish Oil

- Seasonal excesses of less desirable fish and inedible by-products are collected
- They are efficiently converted into concentrated stable products which can be economically shipped to where they are required



IFFO estimates 2008





# The Eco-Efficiency Conversion Of Whole Fish To Farmed Fish And Crustacea Has Been Misrepresented

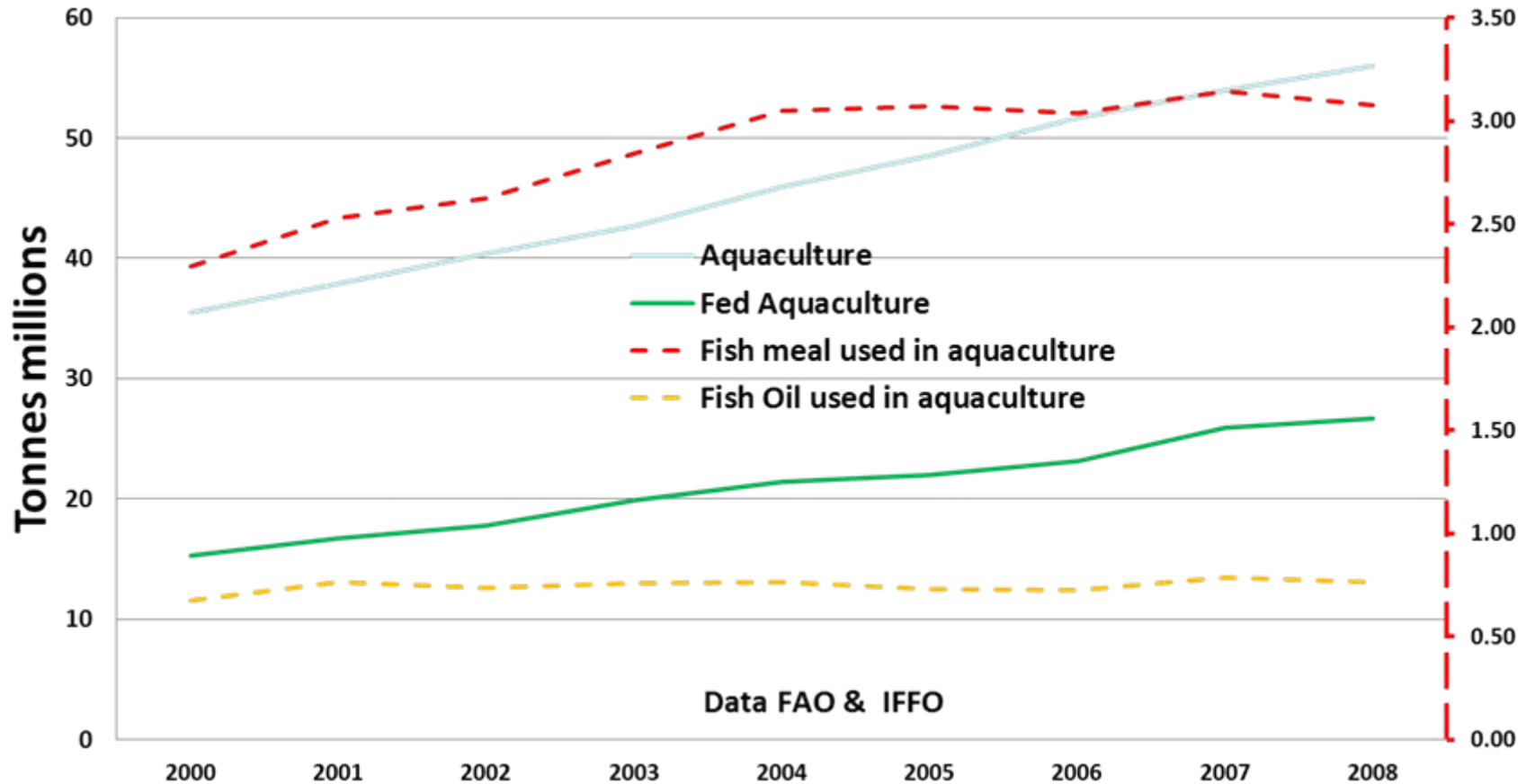
**Total Mass Balance and resulting Fish-In-Fish -Out Ratios**  
 thousand tonnes (fish-in-fish-out ratio based on whole fish in to whole fish out)

	FO	FM	Water	Total RM	Whole Fish	Farmed Production	FIFO
Chicken	0	440	1178	1619	1214	N/A	N/A
Pig	0	1263	3380	4643	3482	N/A	N/A
Other Land Animals	0	160	428	588	441	N/A	N/A
Other oil uses	110	0	294	404	303	N/A	N/A
Human Consumption	126	0	337	463	347	N/A	N/A
Crustaceans	28	786	2178	2992	2244	4673	0.48
Marine Fish	115	738	2285	3138	2354	2337	1.01
Salmon & Trout	604	916	4069	5588	4191	2365	1.77
Eels	15	186	537	738	554	244	2.26
Cyprinids	1	130	350	481	361	13037	0.03
Tilapias	18	143	430	591	443	2737	0.16
Other Freshwater	15	180	521	716	537	2102	0.26
<b>Aquaculture Sub-total</b>	<b>796</b>	<b>3079</b>	<b>10371</b>	<b>14246</b>	<b>10684</b>	<b>27495</b>	<b>0.39</b>
<b>Total</b>	<b>1032</b>	<b>4942</b>	<b>15990</b>	<b>21964</b>	<b>16473</b>		

IFFO 2008 estimates published OECD 2010



# Global Aquaculture Production Has Continued To Grow While Usage Of Fishmeal And Fish Oil Is Static





# Static Supplies Of Marine Ingredients Are Not Limiting Aquaculture Growth

- The move from agri to aqua will continue for fishmeal
- Fishmeal inclusion levels will decrease as it increasingly becomes a strategic ingredient
- Fish oil will increasingly be valued for its omega-3 content with increasing volumes going for direct human consumption
- New sources of long-chain omega-3 may well come from algae and GM plants



# Contaminants In Marine Ingredients

- Persistent organic pollutants (e.g. Dioxins) are found in some marine ingredients, particularly fish oil from Europe where environmental levels are highest
- However, tight regulations are now causing environmental levels to fall
- Cases of deliberate adulteration (e.g. melamine) have been reported, most recently in Asia
- Tighter monitoring and regulations now introduced in most countries
- But producers and traders still need to demonstrate good practice and traceability



# So There Is Continued 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



# Reassuring The Value-Chain About Fisheries Management

- FAO Code of Conduct for Responsible Fisheries is the only internationally recognized measure of good management
- MSC standard certifies fisheries that are managed according to FAO Code
- Currently small volumes of fishmeal & fish oil available from MSC approved fisheries – more under assessment
- It can be very slow and very expensive to undertake an MSC assessment



# IFFO Recently Launched Its Global Standard For Responsible Supply (IFFO-RS)

- RS is a B-to-B initiative following the ISO-65 Standard
- 3rd party auditable standard ensures responsible raw material procurement & good manufacturing practice
- The standard requires an applicant to demonstrate that the factory:



- ❑ Sources its whole-fish raw material from fisheries managed according to the FAO Code
- ❑ Avoids the use of IUU fish
- ❑ Manufacturers under a recognized quality control scheme to ensure product safety & purity

IFFO-RS therefore covers both the critical areas of concern for the industry.



# IFFO-RS Progress To Date

- Multi-stakeholder group including fishmeal & feed producers, farmers, processors, retailers & environmental NGOs worked to produce the standard.
- Launched to producer members in October 2009
- First factory was awarded certification in February 2010
- As of end September 2010 there were 47 fully certified factories in 4 countries utilising 6 approved fisheries
- This represents around 25% of world production of fishmeal and fish oil
- There are more factories in assessment
- Factories utilising fisheries by-products can now apply for approval under a recently launched extension to the RS standard
- The IFFO-RS standard is under continuous development

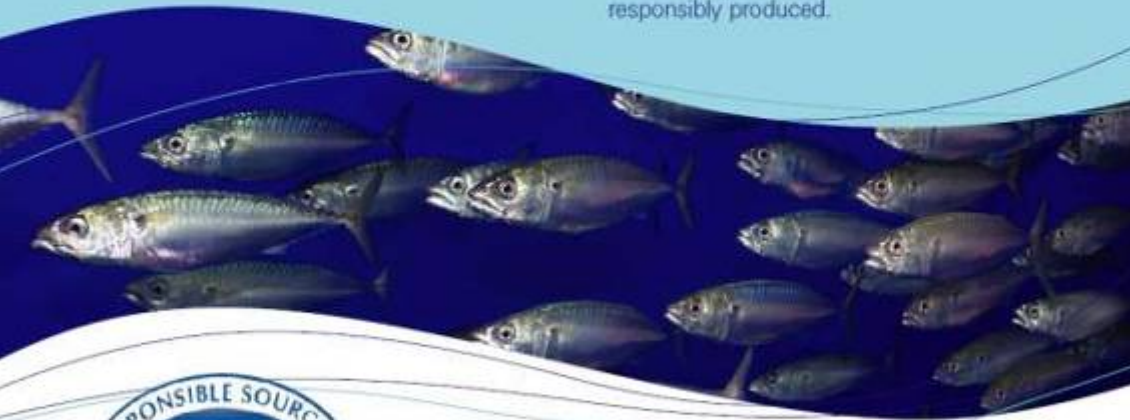


# Global Standard for Responsible Supply (IFFO RS)



## Certification programme for fishmeal and fish oil

Supplies of fishmeal and fish oil from factories which have been independently audited and certified as complying with the IFFO RS, first entered the market in 2010. The IFFO RS programme assures the animal feed, food and nutraceutical value chains that these key ingredients are both responsibly sourced and responsibly produced.



"THE FIRST LINK IN A FULLY CERTIFIED AQUACULTURE SUPPLY CHAIN IS IN PLACE"

[www.iffo.net](http://www.iffo.net)

## For More Information





# MSC & IFFO RS Are Different Things

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

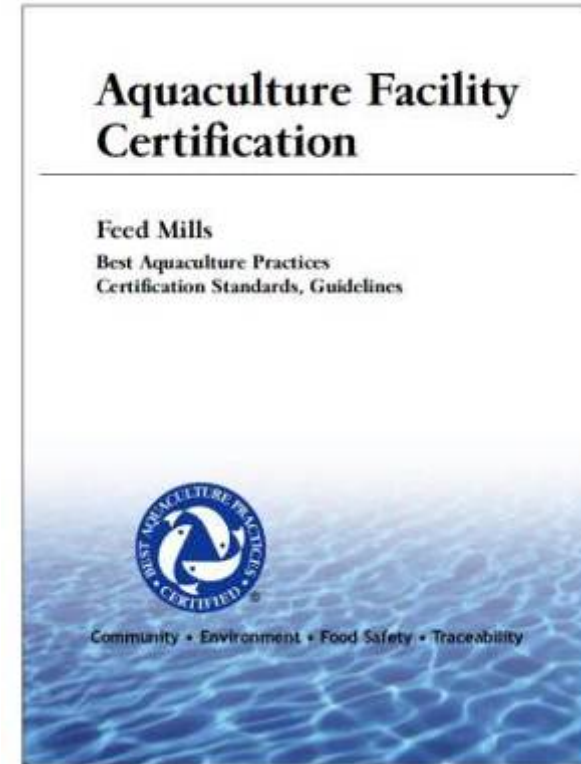


The MSC's fishery certification program and seafood eco-label recognise and reward sustainable fishing.



# IFFO-RS and BAP Standard

- IFFO-RS along with MSC has been deemed an approved standard for fishmeal & fish oil within the BAP Feed Mills Standard
- Standard 3 states: *After June 1, 2015, 50% of all fishmeal and fish oil from reduction fisheries shall be certified as compliant with approved standards*



# IFFO-RS Improvers Programme Under Discussion

- Concern that factories in some countries will find the RS Standard difficult to achieve
- No wish to dilute the current IFFO-RS standard
- Desire to bring about fishery and factory improvement where required
- May require government commitment
- May require access to capital funds for investment in factory & fisheries management
- IFFO in discussion with a number of different parties including FAO on structure & implementation of a structured programme



# IFFO-RS Improvers Programme Will Consist Of:

- Formal 3<sup>rd</sup> Party audit to identify areas of IFFO-RS non-compliance in the factory including both the raw material and the production process
- Agree a structured Action Plan of improvement
- Plan to include milestones along a defined timeline
- Final goal to be full certification to IFFO-RS Standard
- Formal audits will ensure compliance with the agreed Action Plan
- A compliant factory will be able to claim that it is participating in the IFFO-RS Improvers Programme



# So What Should Fish Farmers Do To Demonstrate Responsible Behavior When Buying Feed?

- Talk to your feed producer and find out where the fishmeal comes from
- Alaskan Pollock fishmeal which is imported into China comes from an MSC certified fishery
- A lot of the Peruvian anchovy fishmeal imported into Asia is now IFFO-RS approved as is some menhaden from USA
- But you need to check - not all Peruvian anchovy meal is IFFO-RS
- To fully demonstrate commitment to responsible behavior you should consider being certified against the GAA Best Aquaculture Practice standard, including feed purchase from feed mills

