

# WORLDWIDE TRENDS FOR FISHMEAL AND FISH OIL – PRODUCTION, SUSTAINABILITY AND MARKET

**Andrew Jackson**

**Oslo**

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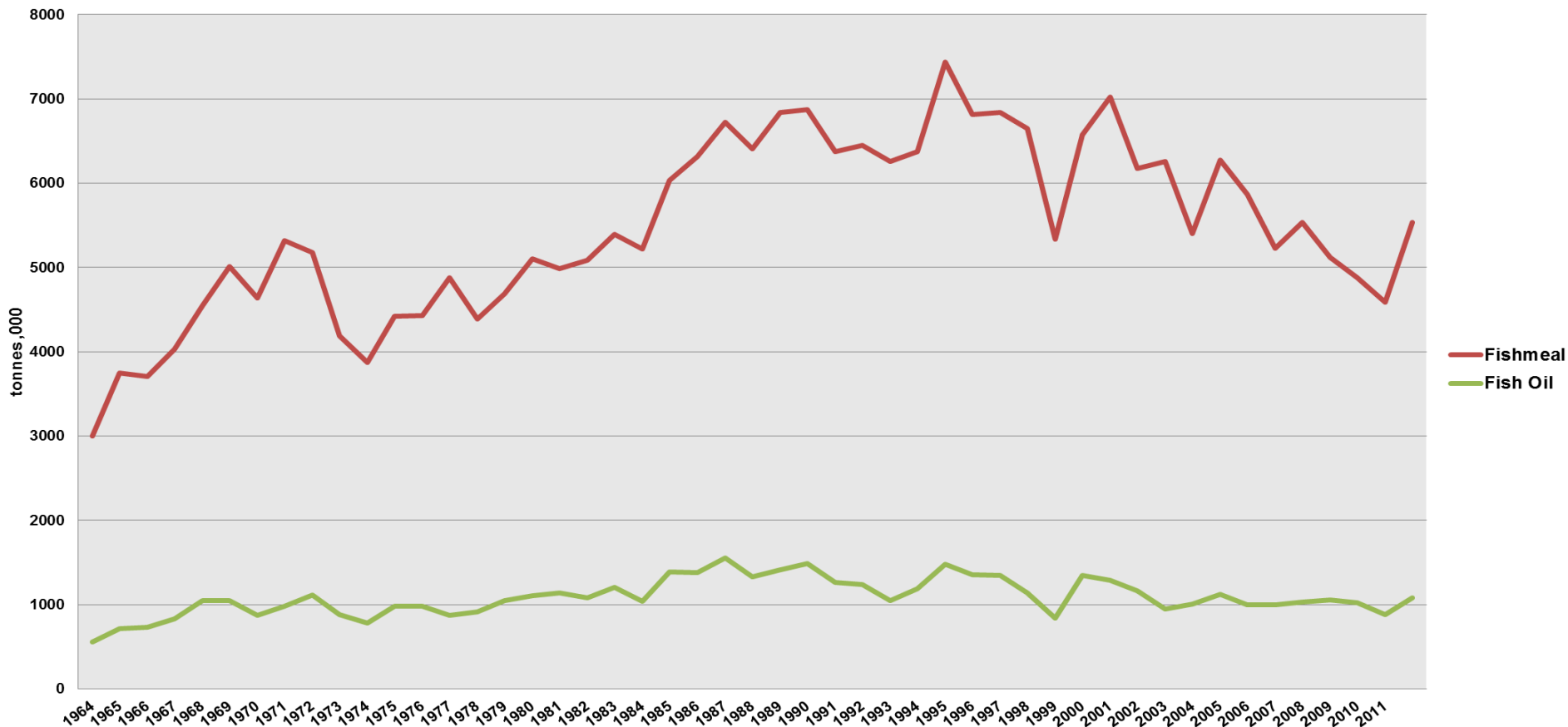
- **IFFO is the global trade association representing marine ingredient producers and others in the supply chain.**
- **Represents over 50% of world production and 75% of trade in fishmeal and fish oil worldwide with producers in Europe, South America, Africa, USA, China and India.**

# SUPPLY



# FISHMEAL & FISH OIL PRODUCTION

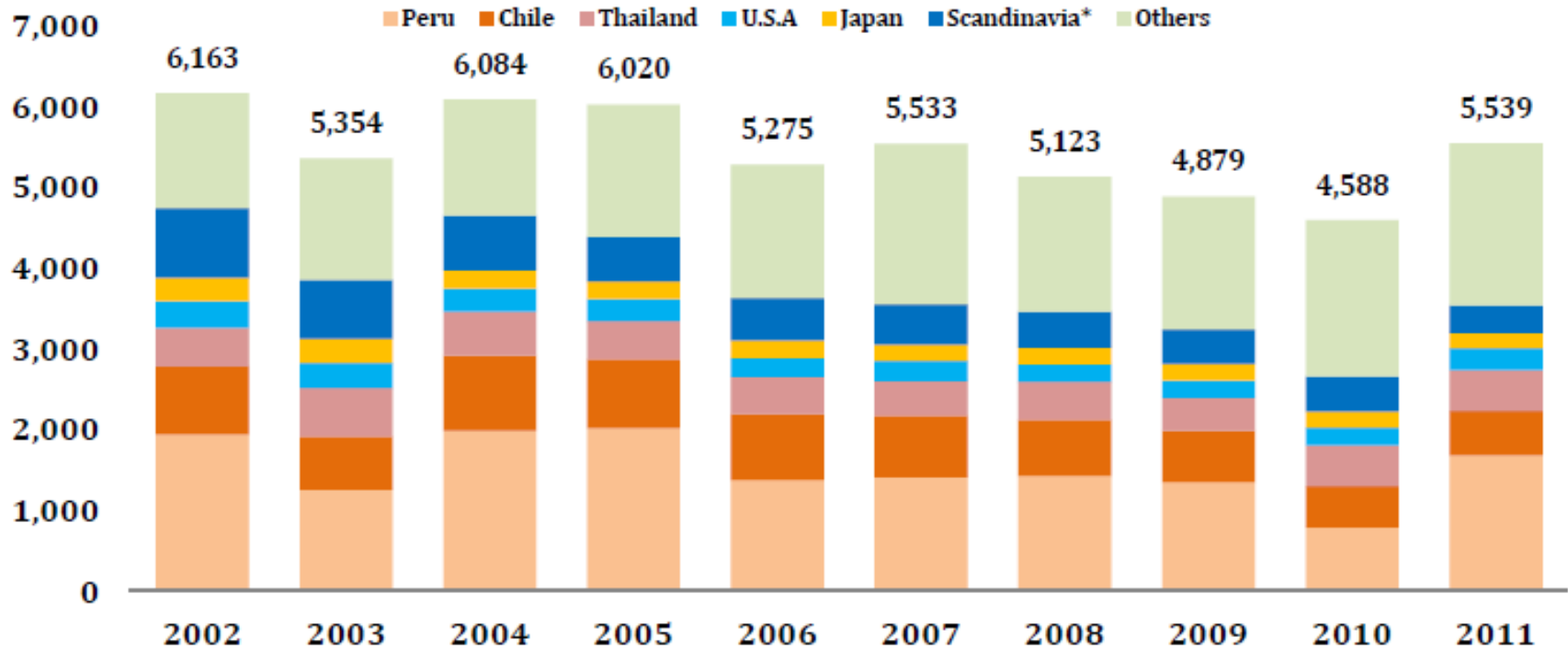
Global Fishmeal & Fish Oil Production 1964-2011  
thousand tonnes



# FISHMEAL PRODUCTION

FIGURE A

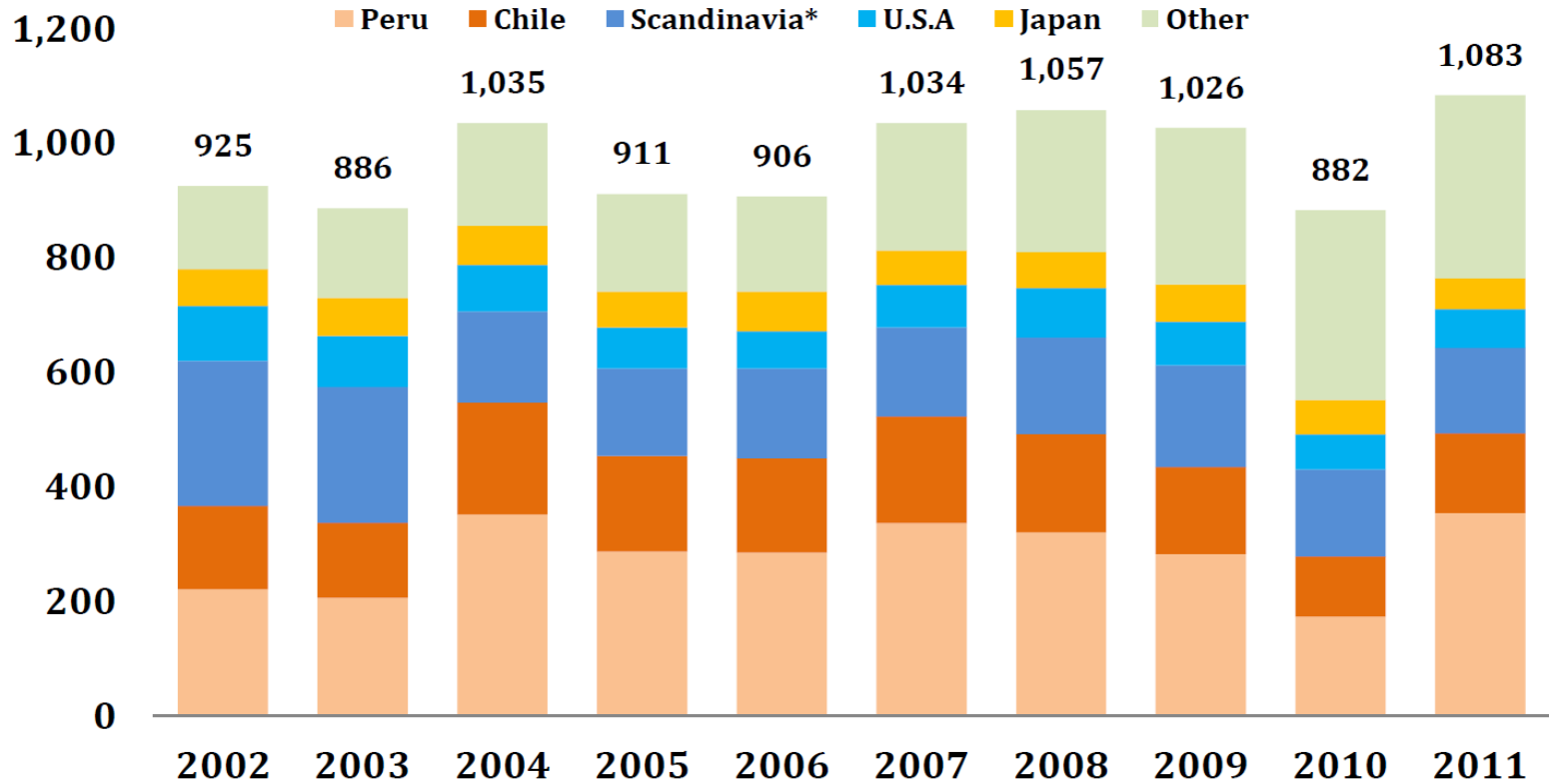
## WORLD FISHMEAL PRODUCTION MAJOR PRODUCER ('000 mt)



# FISH OIL PRODUCTION

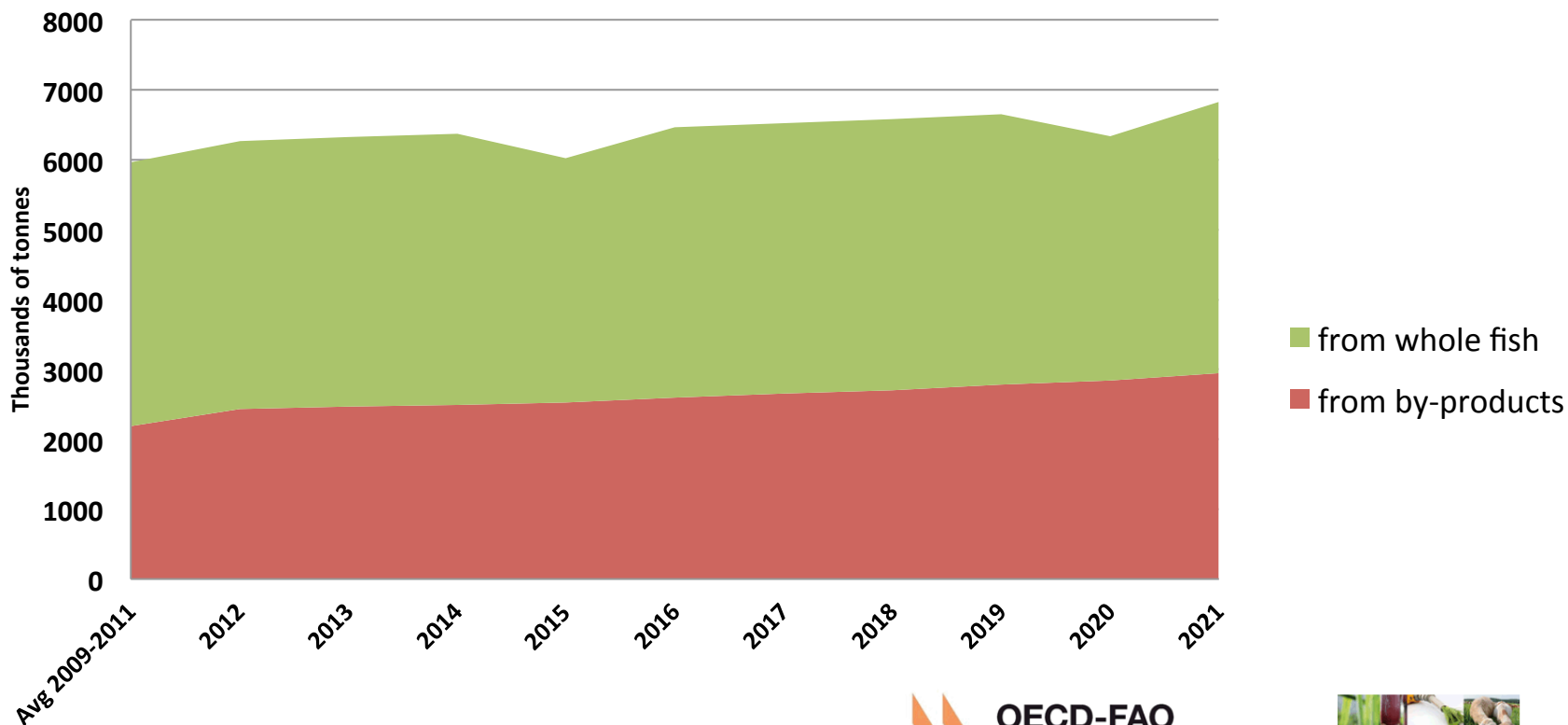
FIGURE I

## WORLD FISH BODY OIL PRODUCTION MAJOR PRODUCERS ('000 mt)



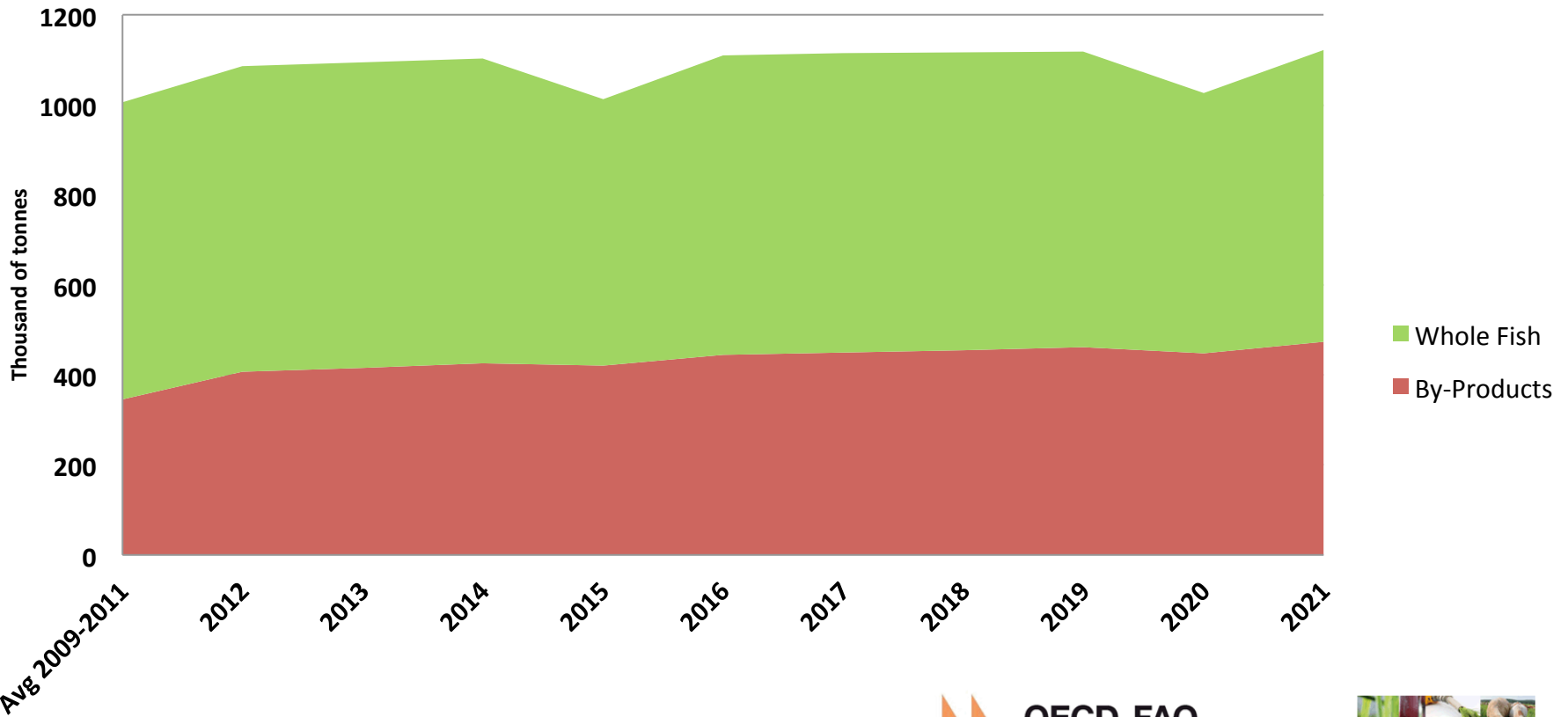
# INCREASINGLY FISHMEAL IS COMING FROM BY-PRODUCTS

## Estimated Fishmeal Production



# THE SAME IS TRUE FOR FISH OIL

## Estimated Fish Oil Production





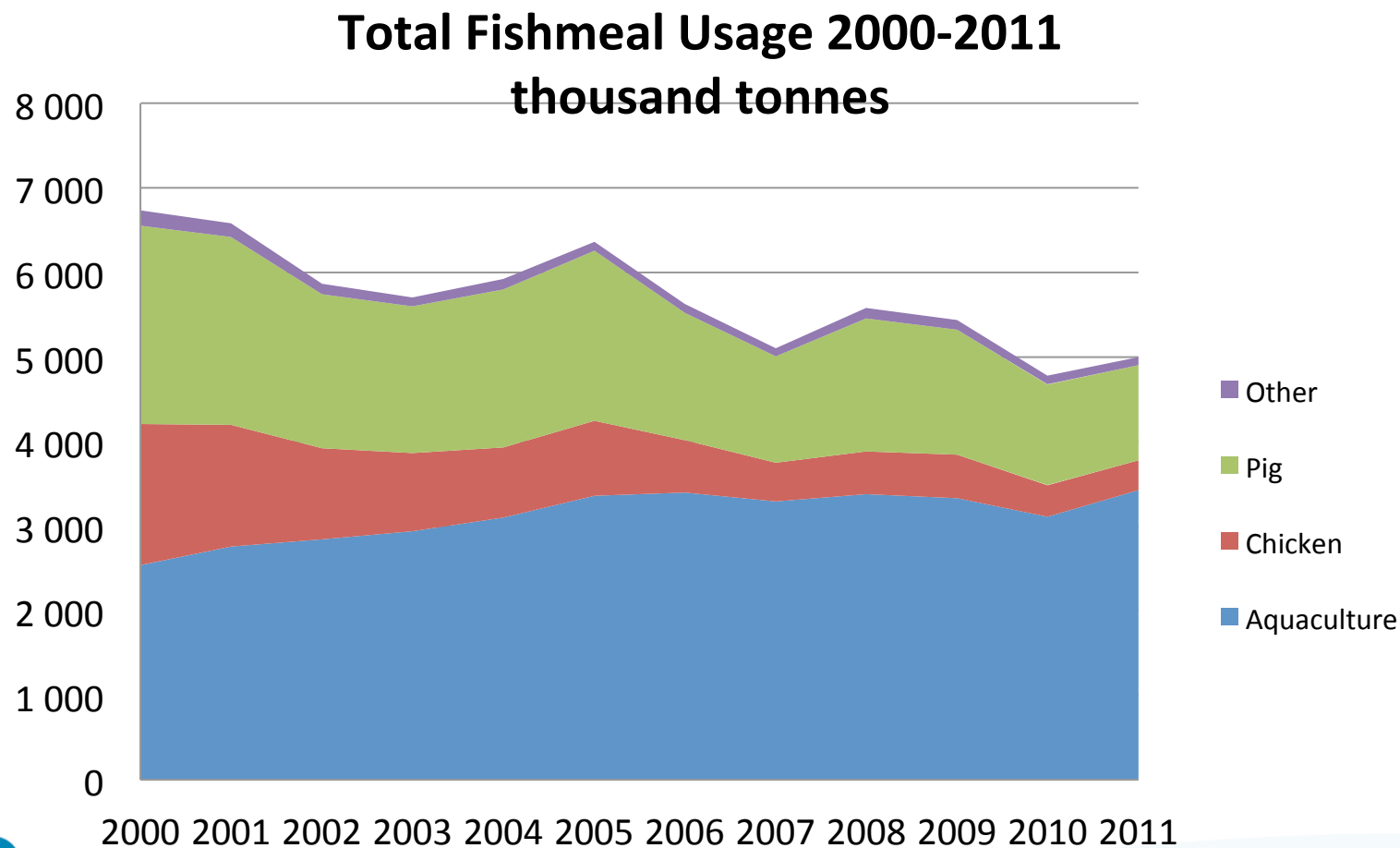
# OUTLOOK FOR RAW MATERIALS

- The availability of raw materials is holding back the growth of marine ingredients
- Fewer whole fish are available due to precautionary fishing and more going for direct human consumption
- Rising value is making more by-products available
- Aquaculture by-products are increasingly providing raw material for marine ingredients

# DEMAND

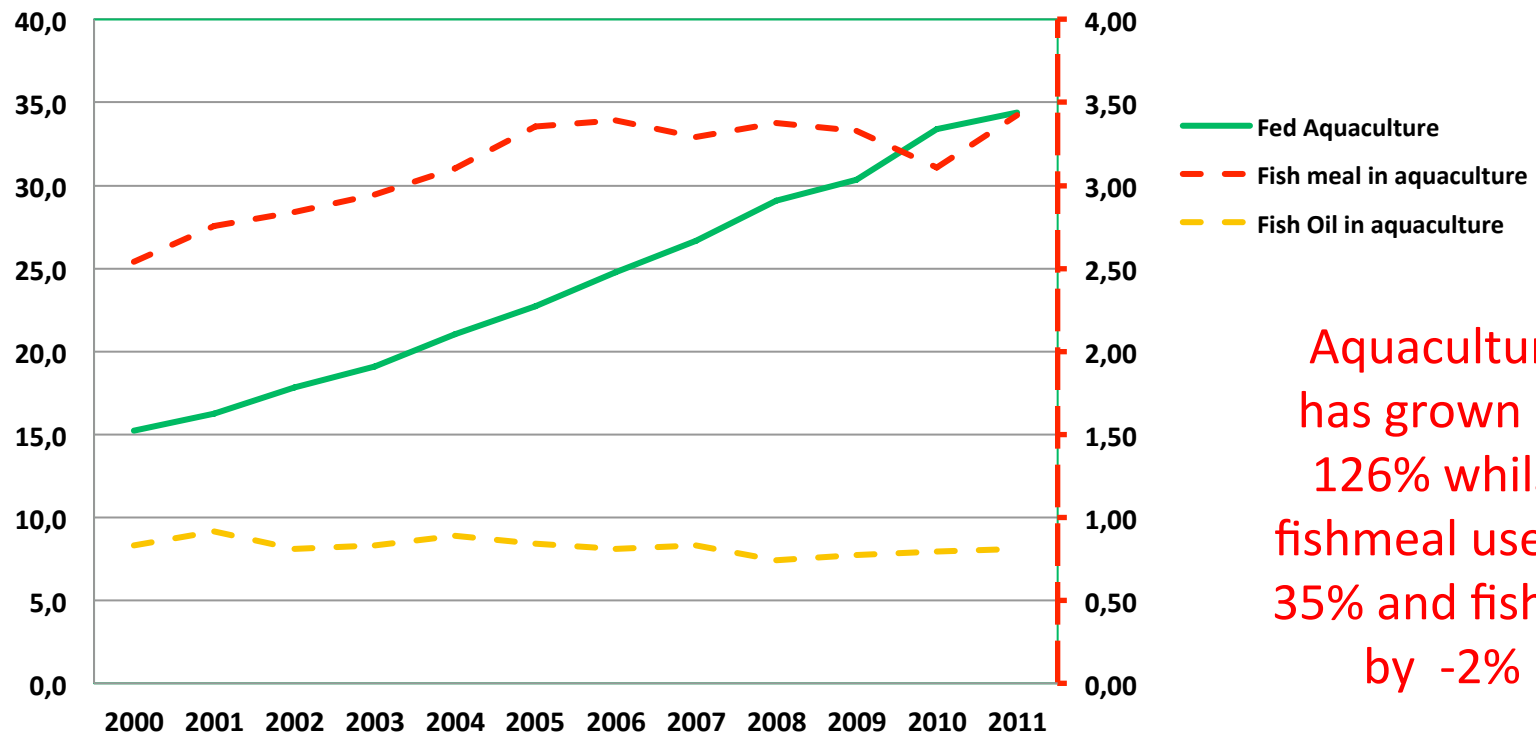


# CHANGING DEMAND FOR FISHMEAL FROM DIFFERENT MARKETS



# STRONG GROWTH IN AQUACULTURE WHILST LESS GROWTH IN USE OF MARINE INGREDIENTS

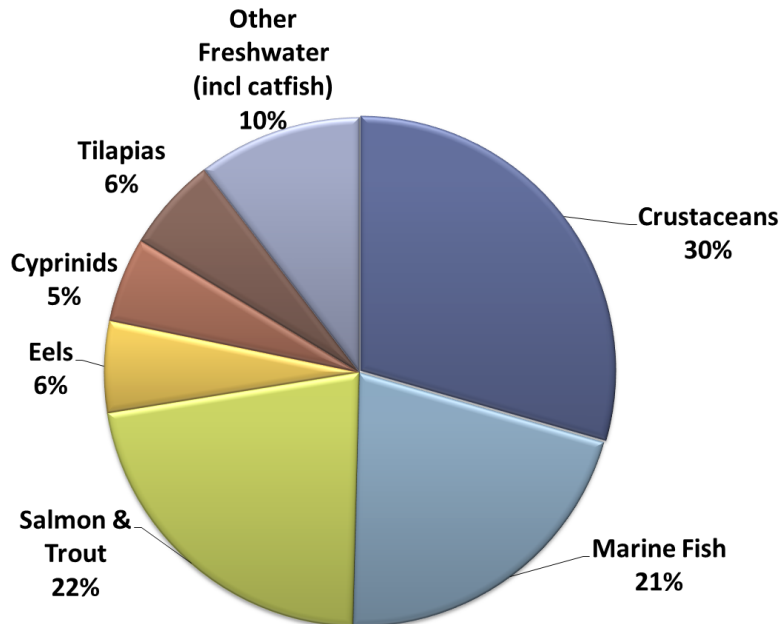
Global Aquaculture Production with fishmeal and fish oil usage 2000-2011 tonnes millions



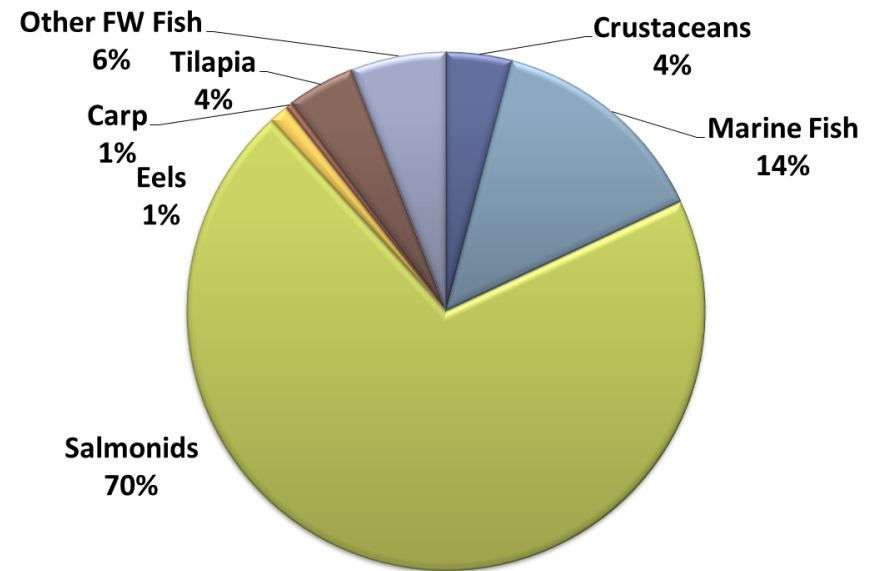
Aquaculture has grown by 126% whilst fishmeal use by 35% and fish oil by -2%

# MARINE INGREDIENT USE IN AQUACULTURE

## Use of Fishmeal in Aquaculture 2011

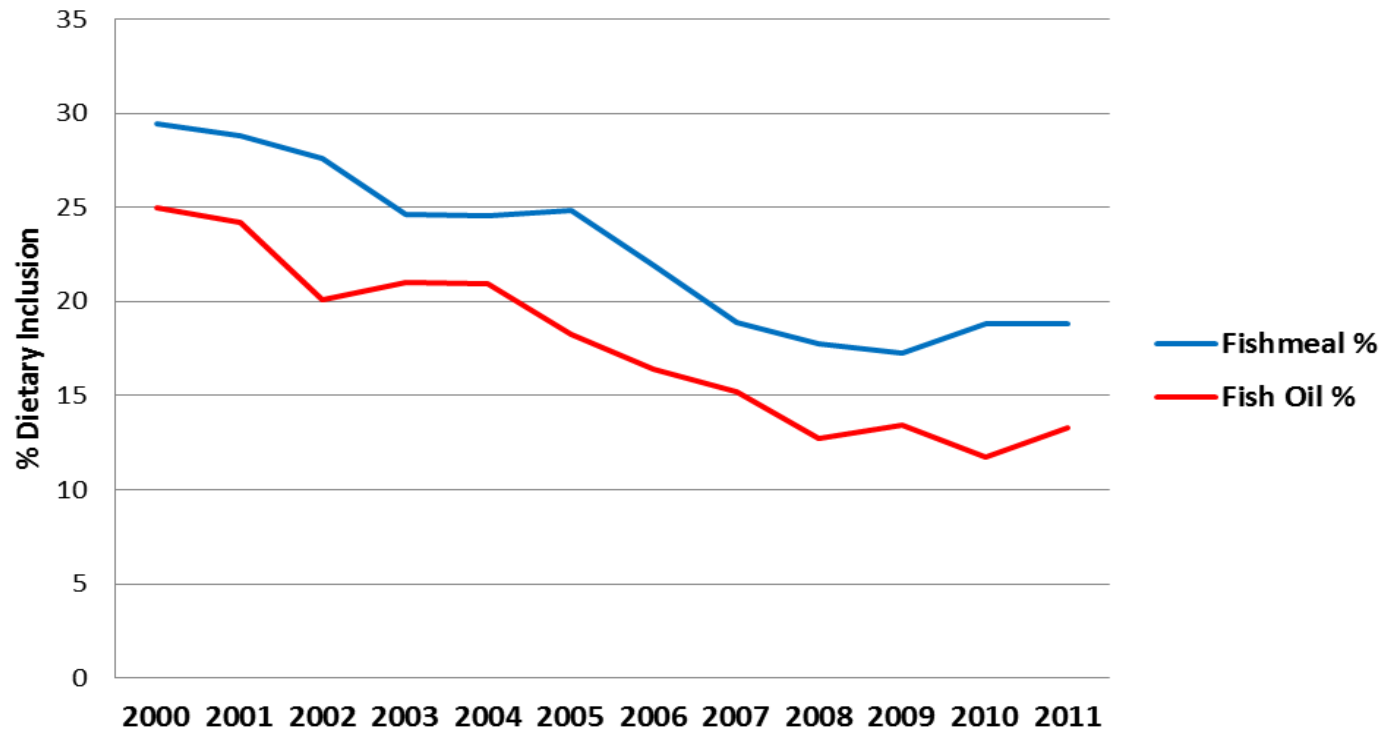


## Use of fish oil in Aquaculture 2011



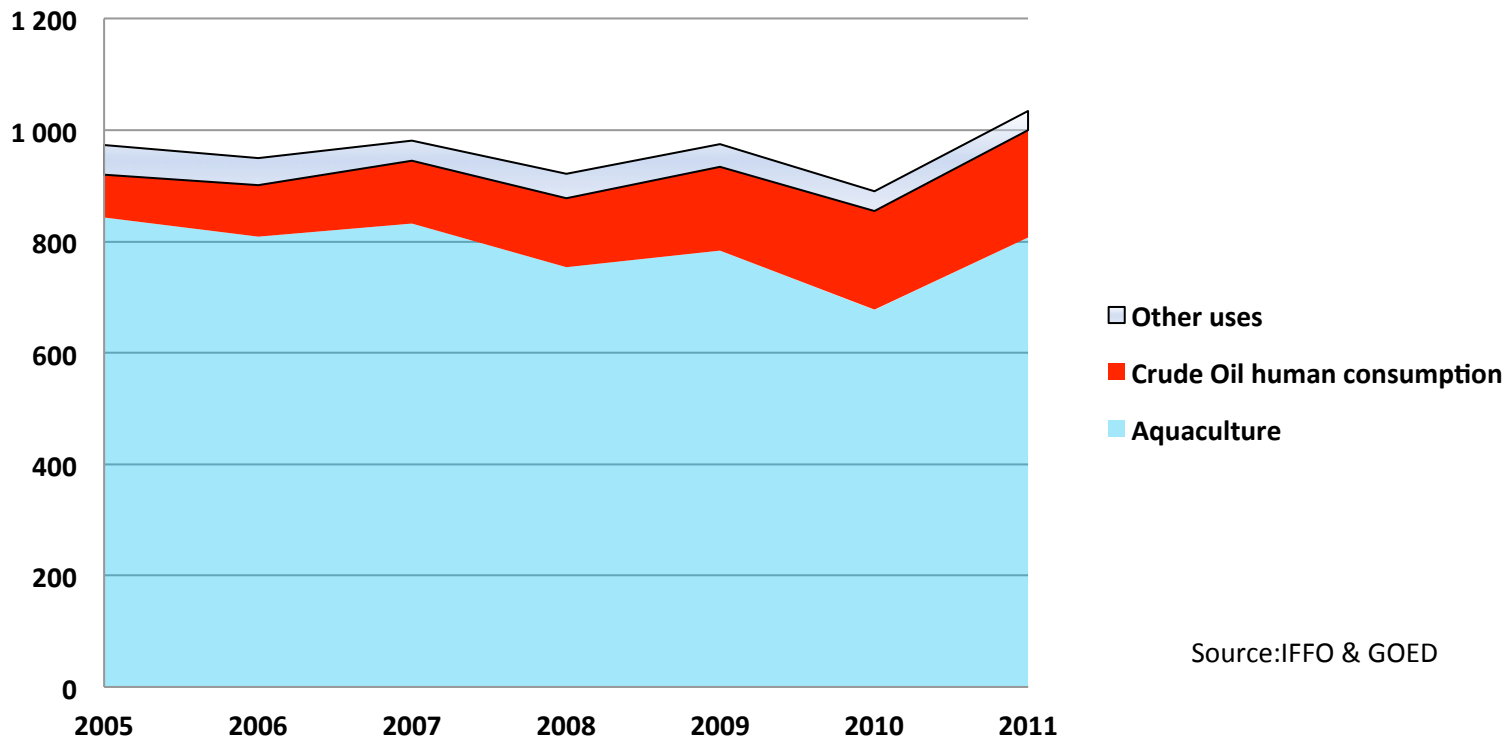
# INCLUSION LEVELS IN DIETS ARE FALLING

Inclusion levels of marine ingredients in Salmonid diets 2000-2008



# INCREASING VOLUMES OF OIL GOING FOR DIRECT HUMAN CONSUMPTION

Global Fish Oil usage (tonnes ,000)  
2005-2011



Source:IFFO & GOED

# OUTLOOK DEMAND

- **Fishmeal**

- Continuing demand from specialist pig & poultry diets
- Aquaculture will continue to be the biggest user – reducing inclusion levels will be compensated by growth in volumes
- Small but growing volumes for direct human consumption

- **Fish Oil**

- Growing volumes for direct human consumption
- Salmon will continue to use significant volumes to maintain health claims (what about tuna?)
- Essential fatty acid requirement of other aquaculture species will continue to be a significant user



# SUSTAINABILITY



**90%**  
ALL LARGE PREDATORY FISH  
INCLUDING TUNA, SHARKS,  
SARDINES, COD, & HALIBUT  
ARE GONE

**27 MILLION**  
TONNES OF FISH ARE  
THROWN OUT  
EACH YEAR!

**80%**  
OF THE WORLD'S FISHSTOCKS  
ARE ALREADY FULLY  
EXPLOITED

SCIENTISTS PREDICT THAT  
CURRENT TRENDS CONTINUE  
WORLD FOOD FISHERIES  
COULD  
**COLLAPSE ENTIRELY  
BY 2050**

WWF

Dear Mr. Simon Conway, President of the Council of European Fisheries Ministers:  
**DO SOMETHING HISTORIC. END OVERFISHING. NOW.**

EUROPE IS WATCHING YOU

The European Parliament and the Fisheries Ministers also have the responsibility to ensure that the EU's Common Fisheries Policy is implemented in a way that respects the science of sustainable fisheries. Without an immediate EU initiative which respects the science of fisheries, fish stocks will collapse.

For more information: wwf.eu

# FISHMEAL & FISH OIL SHOULD ONLY BE MADE FROM RESPONSIBLY SOURCED RAW MATERIALS

- Increasingly buyers/consumers are looking for reassurance about sourcing of marine ingredients
- Very little raw material from “Sustainably” certified fisheries
- What there is comes mostly from by-products of MSC certified fisheries



# FISHMEAL SHOULD ONLY BE MADE FROM RESPONSIBLY SOURCED RAW MATERIALS

- Six years ago IFFO decided a Responsible Supply standard was needed
- Working with multi-stakeholder group including eNGOs & retailers a standard was developed
- Unit of certification is the factory which must responsibly source raw material and responsibly produce meal & oil
- Whole fish raw material must come from fisheries that are managed under FAO Code of Conduct for Responsible Fishing



# INCREASING VOLUMES OF IFFO RS CERTIFIED MATERIAL ARE AVAILABLE

- First factory was certified in 2009
- Around 40% of global fishmeal and fish oil production is now certified
- Chain of Custody standard also available



**THANK YOU**