

# Krav til bærekraft – Salmon Aquaculture Dialogue og ASC som eksempel

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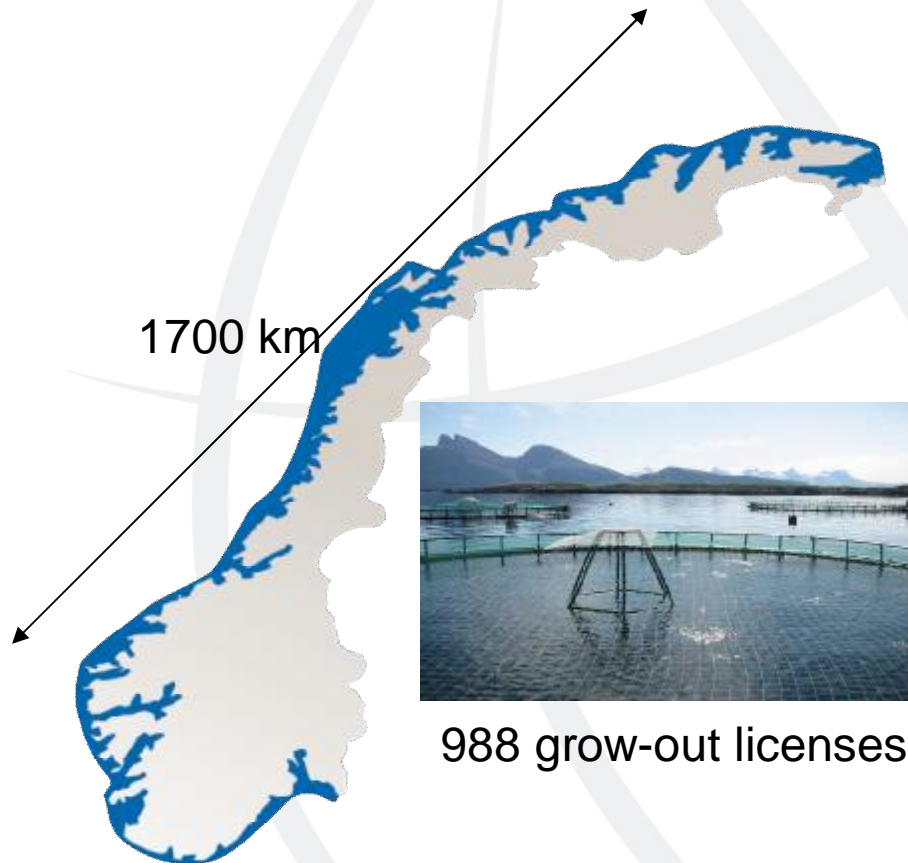


Strategisamling FHF - FoU verdikjede laks  
Rica Hell Hotell 2 juni 2010

  
**marineharvest**  
excellence in seafood



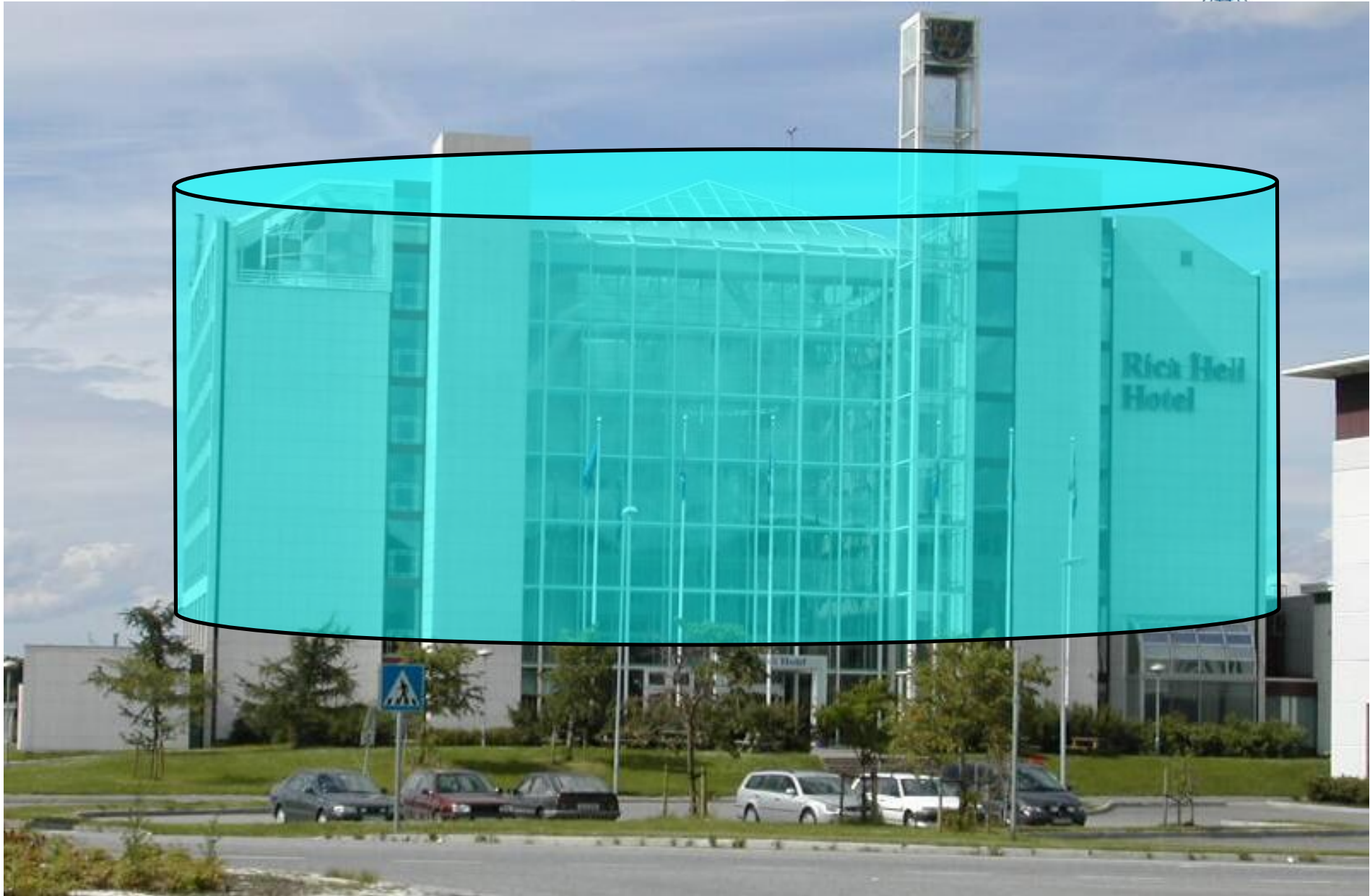
## Norway's success formula



- Long sheltered coastline with temperate water (Gulf Stream) and 90 000 km<sup>2</sup> within the sea boundary
- Visionary, innovative, hard working and dedicated people
- Willingness to invest
- Political support
- Strong regulations
- Good collaboration between research, regulators and industry
- Steady growth in market demand for salmon (5-10% annually)

# 40 years of technology development

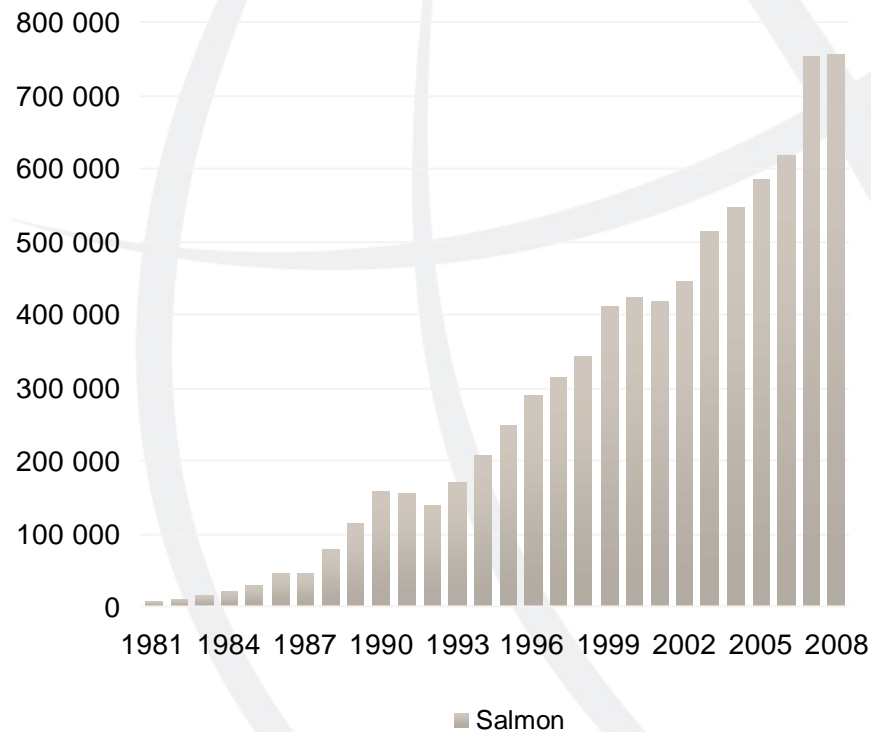






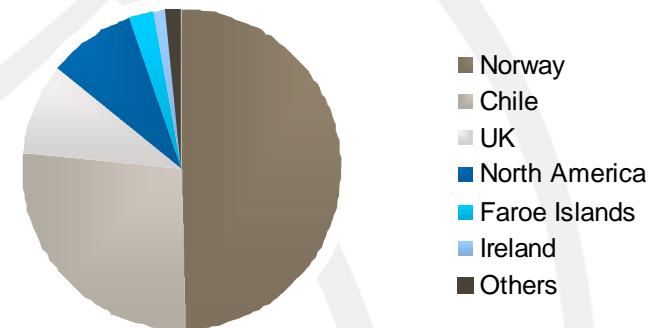
# A fast growing industry

## Norwegian salmon farming growth in tonnes produced

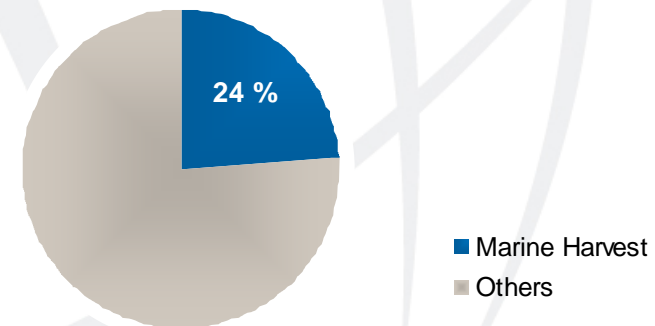


Source: Salmon World 2009, Kontali

## Global volume split per region (2008)



## Market share Marine Harvest estimated global production 2009

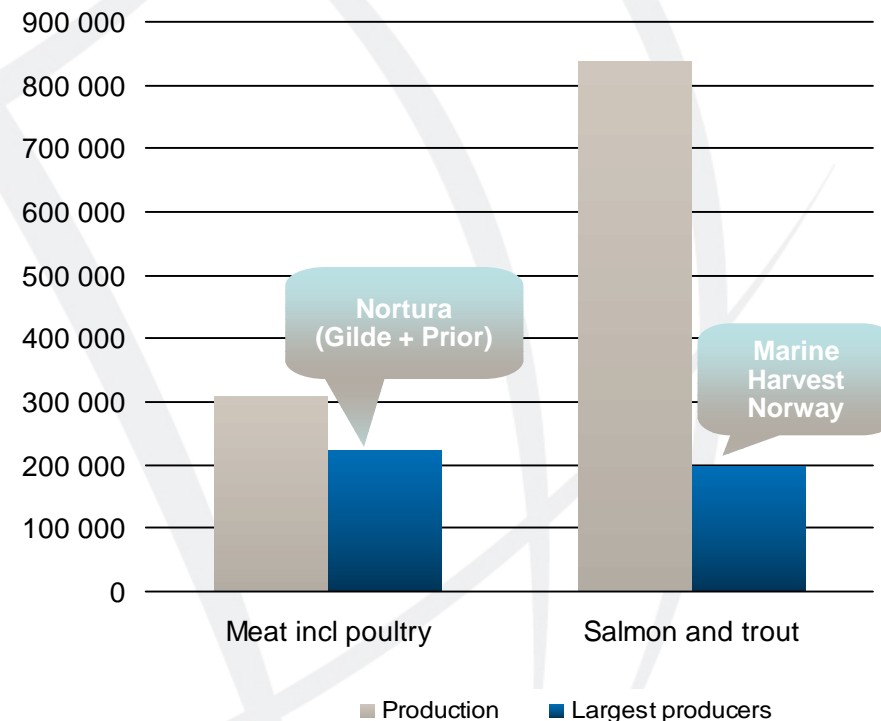


Source: Salmon World 2009, Kontali

# Salmon is the No.1 farmed animal in Norway

- Annual production 800.000 tonn, close to 3 times that of meat production
- Represents 4 billion meals/year
- 23.7 billion NOK in export value in 2009 (2.9 billion €)
- Creates close to 20 000 jobs (including supplier industry). Most of them in rural areas on the coast
- Trend towards increased local processing (value adding)

## Total production of meat and fish in Norway (slaughter weight tonnes)\*



# Trend towards third party certification

- Label Rouge Fresh Salmon
- Label Rouge Smoked
- BRC
- GlobalGap
- ISO 14001 and 9001
- PGI (Protected Geographical Indication)
- Code of Good Practice (Scotland)
- Freedom Food (Scotland)
- GAA BAP
- Aquaculture Stewardship Council (ASC)  
(under establishment)



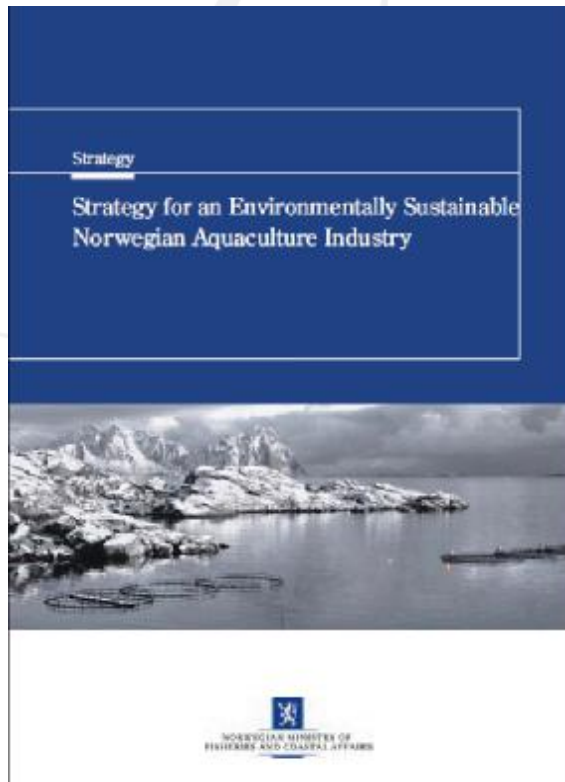
**GLOBALG.A.P.**  
**SIGES SalmonChile**







# Governments establish strategies for sustainable aquaculture production

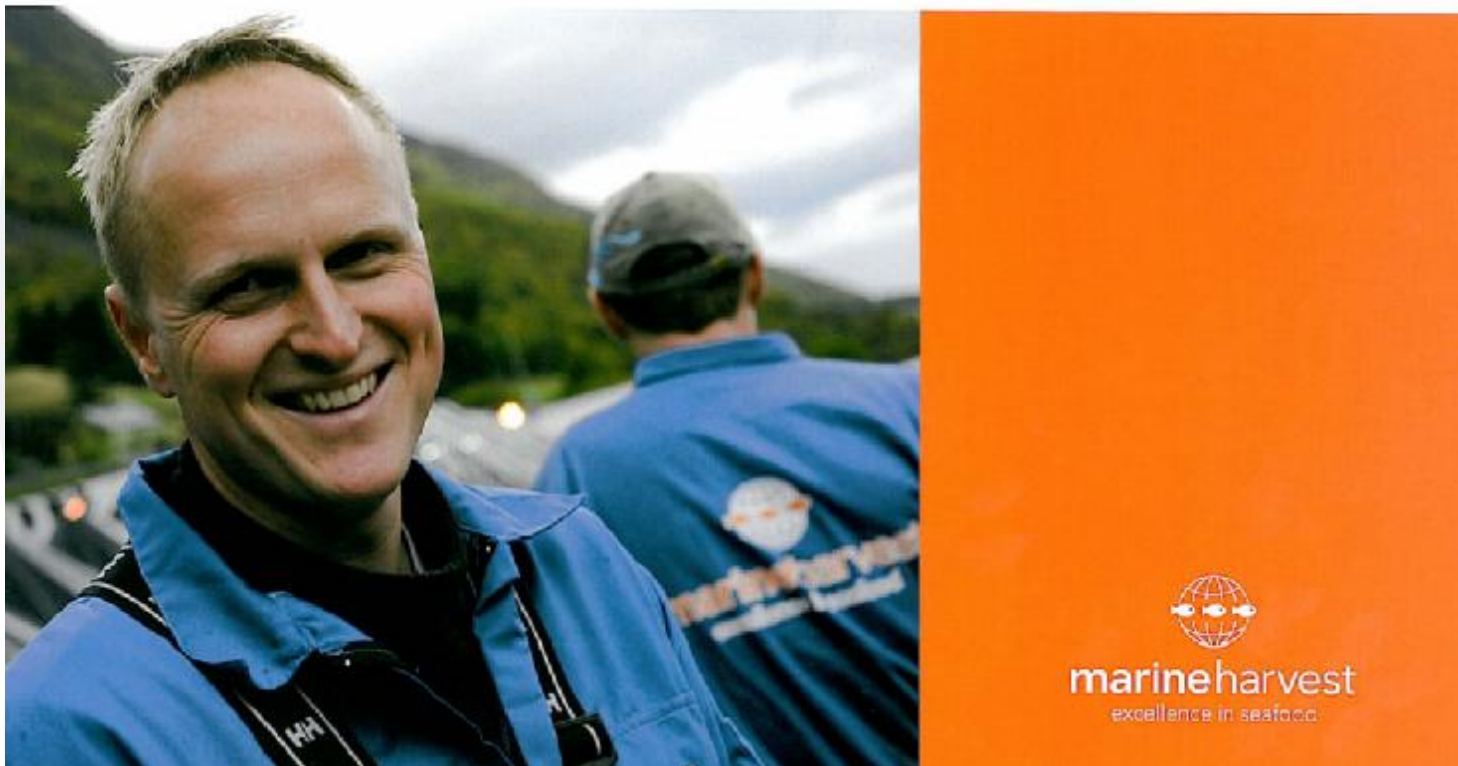


- Genetic interaction and escapes
- Pollution and emissions
- Disease
- Area utilisation
- Feed and feed resources

# Openness and transparency is a must



## Sustainability Report 2008



## WWF state that fish farming can be sustainable

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*"Farmed fish is an excellent source of protein and, when produced well, helps protect the environment. I am totally convinced that aquaculture is the most sustainable way to feed the world."*



**Jose Villalon**

**Director**

**WWF Aquaculture Program**

## WWF has initiated the Aquaculture Dialogues

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- Recognizing the need to continue to engage a broad and diverse group of people in the development of standards for responsible aquaculture, WWF has initiated eight roundtables, called Aquaculture Dialogues. More than 2,000 people -- farmers, conservationists, academics, government officials and others -- are participating in the Dialogues. They are creating standards that will minimize the key negative environmental and social impacts for the following 12 species: shrimp, salmon, abalone, clams, mussels, scallops, oysters, *Pangasius*, tilapia, trout, *Seriola* and cobia. When finalized, the standards will be given to a new organization, the Aquaculture Stewardship Council, that will be responsible for working with independent, third party entities to certify farms that are in compliance with the standards.



# The Salmon Aquaculture Dialogue

- The Salmon Aquaculture Dialogue (SAD) is a multinational, multi-stakeholder, and science-based forum
- The goal of the Dialogue is to credibly develop and support the implementation of measurable, performance-based standards that minimize or eliminate the key negative environmental and social impacts of salmon farming, while permitting the industry to remain economically viable



## How is SAD governed?

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- A Steering Committee guides the Dialogue process and serves as the decision-making body of the Dialogue
- The organizations represented on the Steering Committee are WWF, the Coastal Alliance for Aquaculture Reform (CAAR), Fundación Terram, the Norwegian Seafood Federation (FHL), the Pew Environment Group, Canadian Aquaculture Industry Association (CAIA), SalmonChile, Skretting, and Marine Harvest





## When will the standards be completed?

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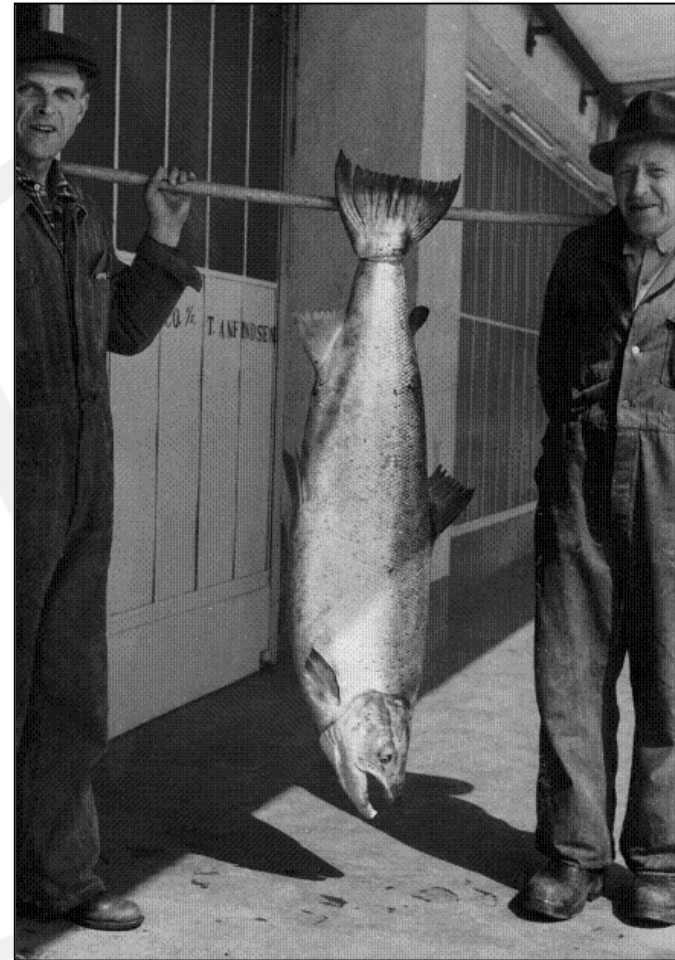
- Draft standards planned to be posted for public comment by end of June 2010.
- Complete suite of standards expected finalised by end of 2010 and will be handed over to the ASC





## Key areas under discussion in the SAD

- Minimising negative impacts on wild salmonids by minimising escapes and transfer of disease and parasites (sea lice) from farmed to wild salmonids
- Minimising discharge from farms (chemicals, medicines, feed waste) in order to maintain healthy water and sea bed conditions
- Reducing the dependency on marine feed raw materials
- Improving social standards
- Reducing conflicts with other stakeholder groups (indigenous people, wild fish interests, etc)

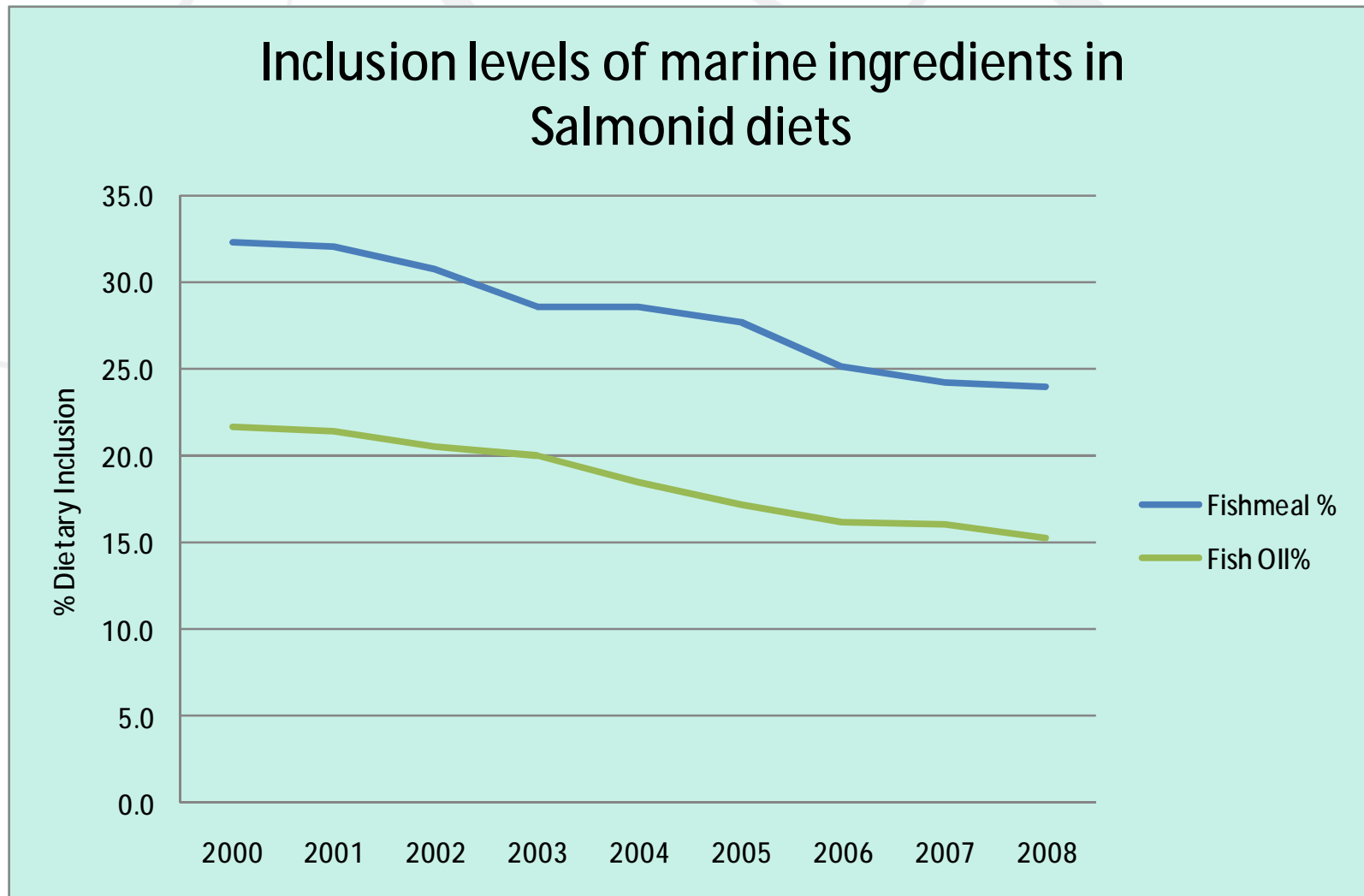




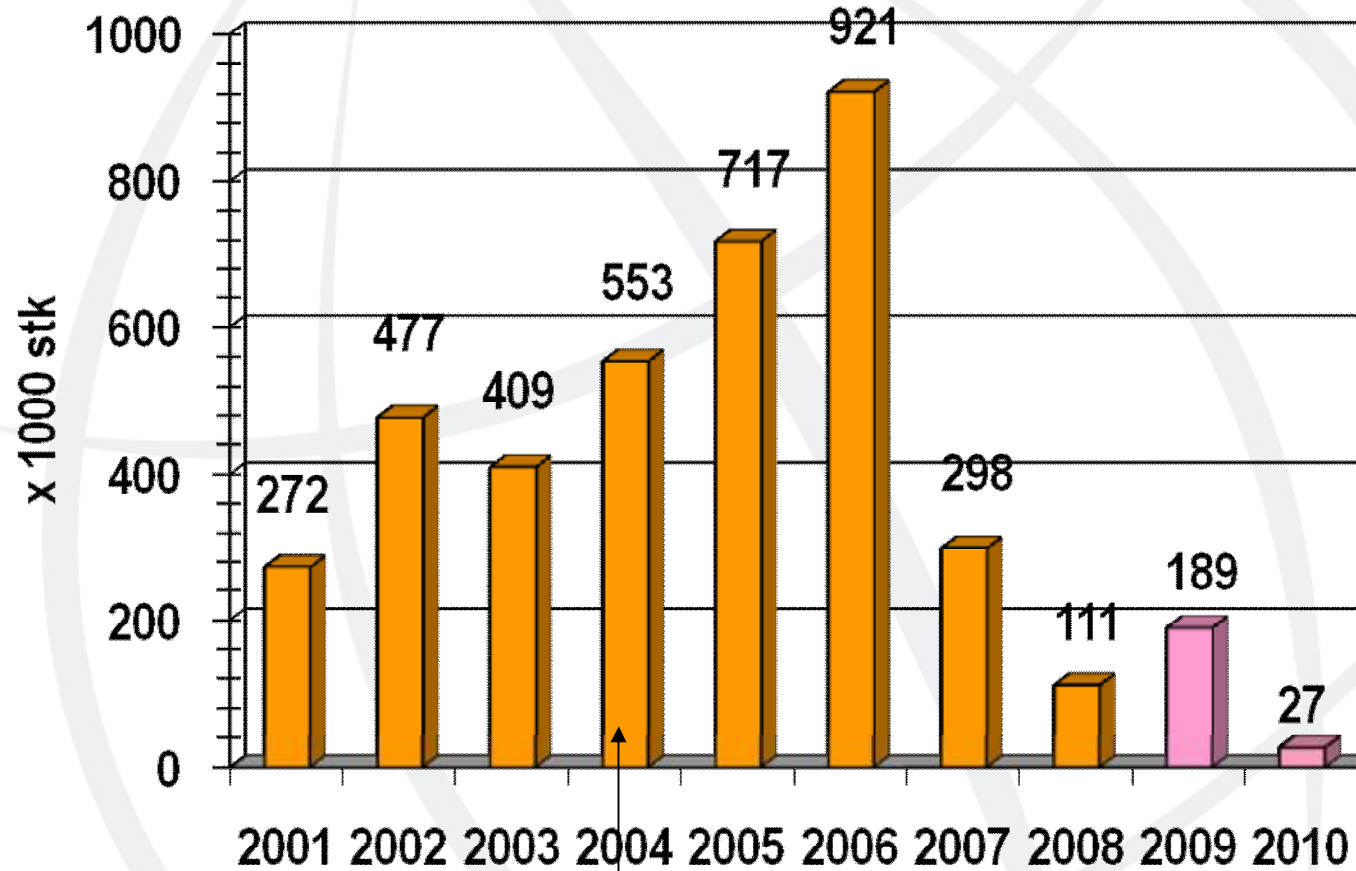


# Going forward

# We must continue to reduce our dependency on fishmeal and fish oil



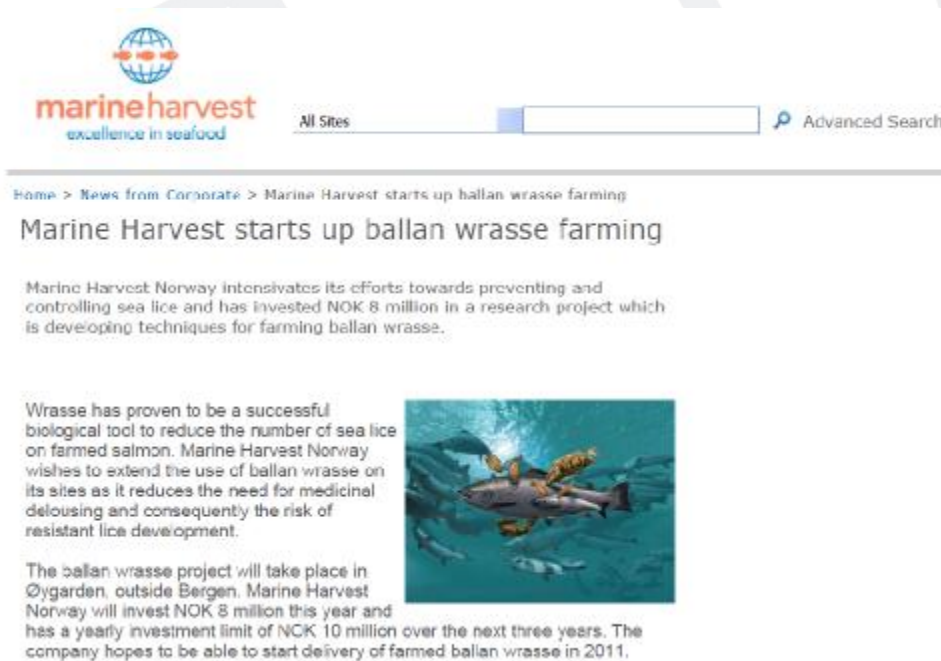
# Reduce escapes



Introduction of new obligatory standard (NS9415)

# Establish new tools for sea lice control

- Vaccines
- Feed additives
- Breeding
- Wrasse




The screenshot shows a news article from the Marine Harvest website. At the top is the company logo and a search bar. The article title is "Marine Harvest starts up ballan wrasse farming". The text describes the company's investment in sea lice control research. A photograph shows a salmon with yellow wrasse attached to its side. The article concludes with investment details and a target start date for 2011.

Home > News from Corporate > Marine Harvest starts up ballan wrasse farming

## Marine Harvest starts up ballan wrasse farming

Marine Harvest Norway intensifies its efforts towards preventing and controlling sea lice and has invested NOK 8 million in a research project which is developing techniques for farming ballan wrasse.

Wrasse has proven to be a successful biological tool to reduce the number of sea lice on farmed salmon. Marine Harvest Norway wishes to extend the use of ballan wrasse on its sites as it reduces the need for medicinal delousing and consequently the risk of resistant lice development.



The ballan wrasse project will take place in Øygarden, outside Bergen. Marine Harvest Norway will invest NOK 8 million this year and has a yearly investment limit of NOK 10 million over the next three years. The company hopes to be able to start delivery of farmed ballan wrasse in 2011.

# Improve our understanding of how the size of a fish farm relates to the magnitude and spatial extent of its *benthic impacts*



# Maintain the perception of salmon as a tasty and healthy, omega 3 rich product



# Takk for oppmerksomheten!

