

Green Growth of Danish Aquaculture

Bestaq, Tallinn, November 11

By Karl Iver Dahl-Madsen

President, Danish Aquaculture

Why is EU Aquaculture not developing?

- We are talking much about aquaculture
- But we are not producing more fish!
- Stagnant at 1.3 mio. tons / yr.
 - <yearly increase in global aquaculture
- Norway is doing right
- Misguided and disproportionate environmental regulation

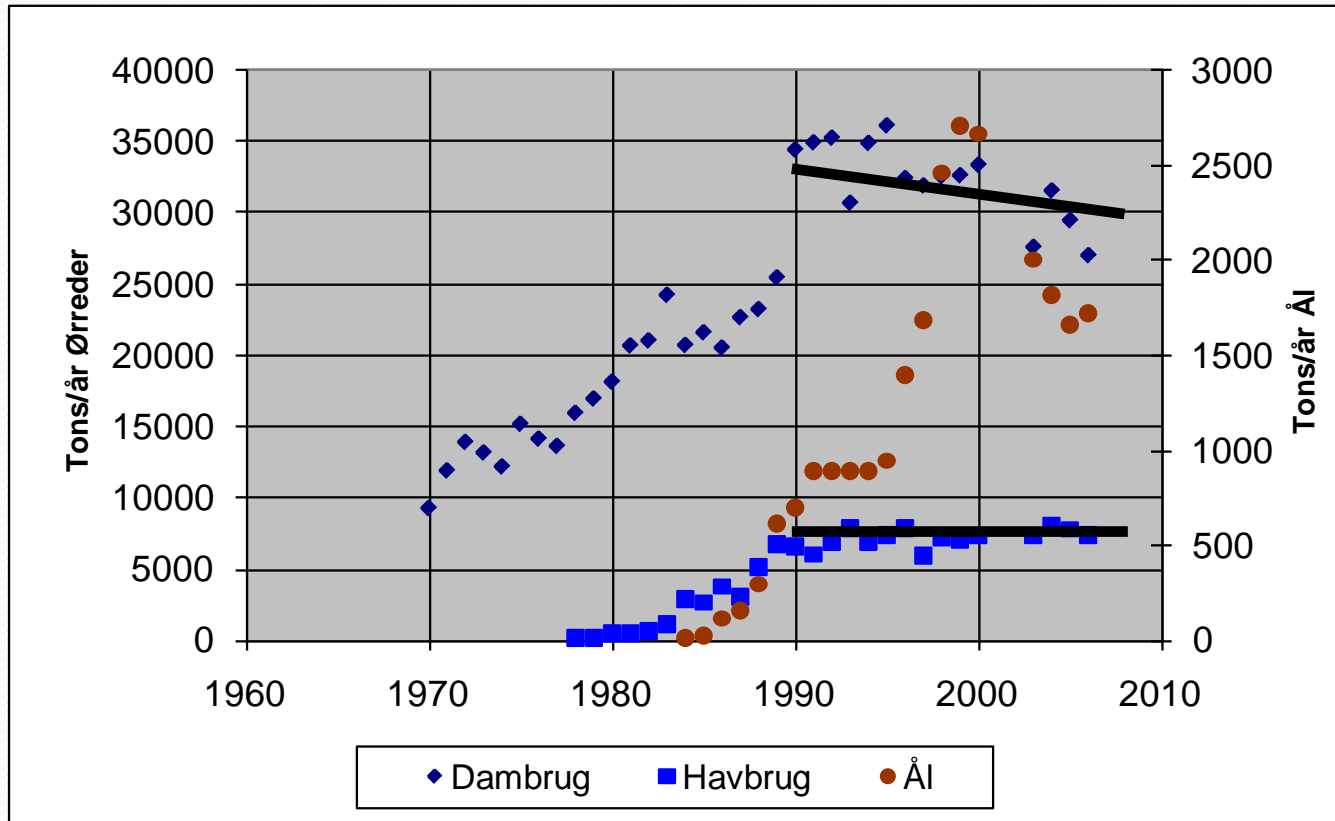


European Regulation & Monitoring

- The political and (bureaucratic) reflex reaction, when identifying a new problem:
- Make Command & Control regulation
- Smother the Industry in Red Tape and hope that waiting out for years will make the industry quit
- The future is incentives for the industry to make its decoupling and a partnership with authorities and NGO's



The Sorry State of Danish Aquaculture?



Stagnation! Misguided and disproportionate environmental regulation

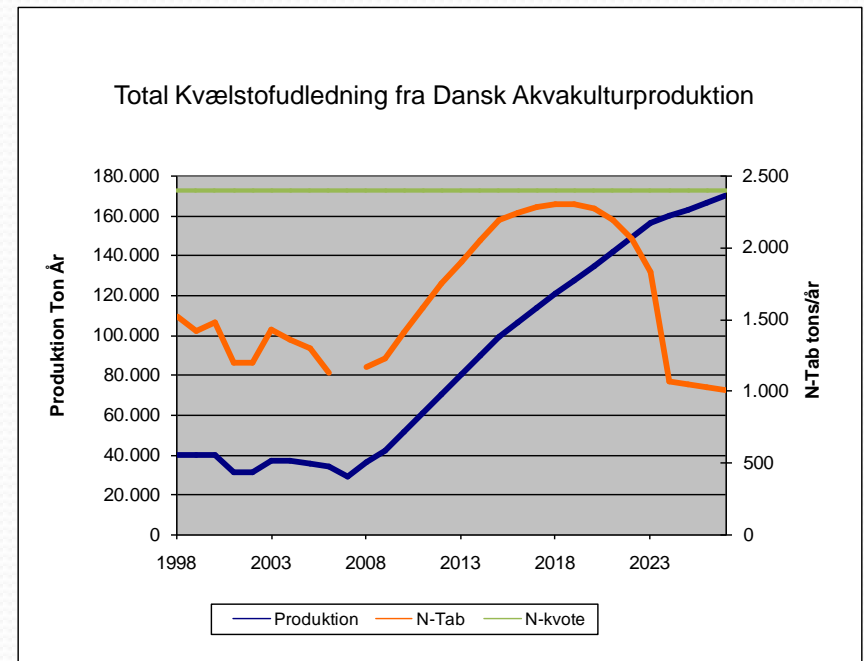
The National Aquaculture Committee



- Composition:
 - Government, Industry, NGO's
- Aim:
 - A deal on production and environment
 - Efficient Regulation Based on Discharge Permits and Env. Quality Criteria
 - One Aquaculture Law
- Finished May 2010
- Political decisions still lacking

Strategic Frame: From Whip to Carrot

- *Rewarding* the aquaculturist for doing the right thing:
- Fullfilling environmental goals



The Whip does not work!

- *No growth in Denmark contrary to political will. Caused by inefficient and inflexible environmental regulation.*
FOI, 2010
- The regulation has harmed as well the production as the environment
- Goes for Agriculture too!



Dansk Akvakulturs Offer to Denmark

- Production increase to 180.000 tons / år
- To a value of 4 bio. DKK
- 2000 new jobs in remote areas
- Fulfilling env. objectives
- Optimal passage of fauna



Model Trout Farms

- Changing half of the production to more recirculation in 5 years
- Intaking 10 times less water using groundwater



Danish Model Trout Farms
Technology and Environmental Impact
AquaNor, Trondheim 15 August 2009

Speaker: Lisbeth Jess Plesner
Dansk Akvakultur, Danish Aquaculture Organisation

Alfred Jokumsen: DTU Aqua, National Institute of Aquatic Resources, Denmark



DTU Aqua, Technical University of Denmark

The Model Trout Farm Concept

- Using Recirculation
- Concrete raceways
- Sludge traps and sludge ponds
- Bio filters
- Constructed wetlands/Plant lagoons
- Water intake max. 15 l/s (100 ton production/year)
- Long residence time (min. 40 h)
- Transport and aeration by airlift



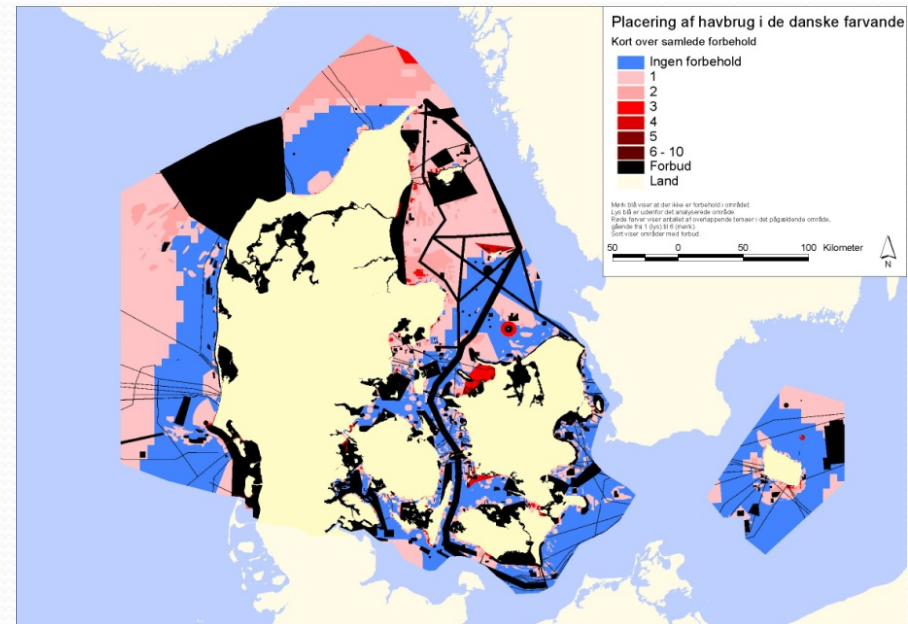
What Do DA Want?

- Political Decisions:
 - Discharge regulation & BAT minimum
 - Optimal Allocation of Nitrogen

| | Dambrug | Havbrug | Total | Kommentarer |
|----------------------------------|---------|---------|-------|----------------------------------------------------------|
| "Handlingsplanen" | | | 2400 | |
| DA's plan for Grøn Vækst | 1200 | 1200 | 2400 | Ønskes stadig, men kan vente på kommende drøftelser om N |
| Akvakulturudvalget / DA's ønsker | 1000 | 600 | 1600 | Er absolut nødvendige her-og-nu |
| Nuværende teoretisk udledning | 1000 | 350 | 1350 | Beregnet for dambrug ikke målt |
| Nuværende faktisk udledning | 700 | 300 | 1000 | Målt og beregnet på basis af den faktiske produktion |
| MiM / Vandplaner | 450 | 350 | 800 | Vandplanernes tal |

Enemy of the Environment: The Danish Environmental Ministry

- Working (slowly)
- Conservative
- Wants to run our farms
- Discharge regulation is safer
- Water intake from streams

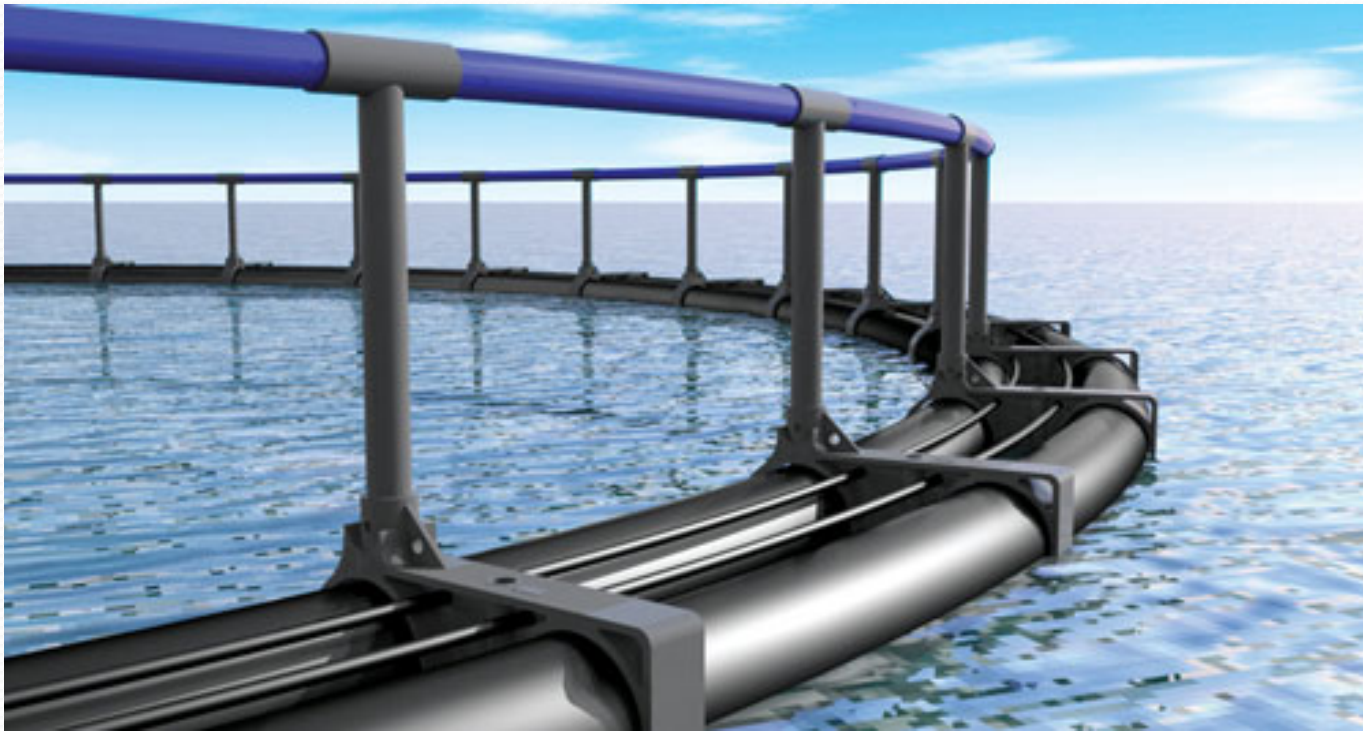


Producing Food on the Oceans

- Land areas are pressed:
Use the sea
- Much room: 110.000 km² danish seas
- Water is in ample supply
 - 1 ton of wheat demand 1000 ton of fresh water
- Nutrients and CO₂ in excess
- Grow more mussels and seaweed
- 2 Billion USD / yr on one % of the Danish Seas
- Pilot project in the North Sea?



Seafarms in The North Sea



Feed Supply?

- Global NGO's
 - WWF, GreenPeace
- Sources for protein and fat
 - Business as Usual: Caught fish
 - Plants on land: GMO
 - There is ample space on the sea



Forbrugerpolitisk direktør i COOP Danmark, Mogens Werge, får overrakt "Fishy Business Award 2008" af Hanne Lyng Winter fra Greenpeaces havkampagne. COOP kom på en sidsteplads i Greenpeaces 2. rangordning af danske supermarkeder efter deres fiskeprodukters bæredygtighed.

Baltic Seafarms

- RAS systems are only part of the solution
- We need Baltic Sea Farms
- Brackish water is perfect for salmonoid culture
 - Baltic Salmon!
- Allocate nutrients to sea farms



Status

- NGO's and Industry agree to fight the Bureaucrats
- *What about U*

MILJØMINISTERIET
MODTAGET
16 MRS. 2009

Til
Dansk Akvakultur
Danmarks Sportsfiskerforbund
Kommunernes Landsforening
Danmarks Naturfredningsforening

Ministeren
J.nr. MST-106-00299
13 MAR. 2009

Kære interesseorganisationer

Tak for jeres brev af 2. februar 2009 til fødevarerministeren og jeg. Efter af-tale med fødevarerministeren svarer jeg nu på vegne af os begge.

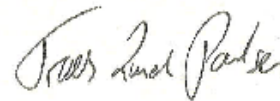
Jeres henvendelse er et interessant indspil, og vi ser jeres ønske om at kombinere vækst i erhvervet med en miljømæssig forsvarlig udvikling som værende i god tråd med regeringens ambition om at afkoble vækst og foru-nering i de brancher, hvor dette er muligt.

Vi deler jeres opfattelse af, at der netop på akvakulturområdet er et meget stort potentiale for at forene miljøforbedringer, fremme af ny miljøvenlig tek-nologi og bedre produktionsmuligheder. Derfor vil vi inden længe præsentere nogle forslag til initiativer, der kan fremme en grøn omstilling af akvakul-turområdet.

Vi ser også positivt på jeres forslag om at nedsætte et akvakulturudvalg. Et udvalg kan for det første supplere den allerede igangsatte proces, hvor vi sætter nogle initiativer, der kan have en umiddelbar positiv effekt på pro-duktion og miljø. For det andet kan et udvalg bidrage til en udvikling af de langsigtede målsætninger for erhvervet. Det er vores forventning, at et akvakulturudvalg kan fungere til udgangen af 2009, og at udvalget skal i gang hurtigst muligt. Derfor vil vi snarest udarbejde et forslag til, hvordan arbejdet kan tilrettelægges og invitere jer til en drøftelse herom.

Med venlig hilsen

Troels Lund Poulsen



Discussion

