

Market administration in the world fisheries

By
Torbjørn Trondsen
Professor, dr. scient
The Norwegian College of Fishery Science
University of Tromsø
Norway

www.fishmarketing.com

International Trends

Developments over time in Fisheries structure & administration

1. Caching capacity build up in profitable fisheries
2. Over fishing => Fish stock & catches decrease
3. Fishing gear regulation: mesh size, use of gear
4. Entry restriction => license regulation, no new enter
5. Total allowable catch (TAC) regulation => The race for fish
 - TAC harvested fast: Olympic fishing
 - Economic disaster for all participants
6. Allocation of TAC into individual vessel share quotas (IQ)

International Trends

Developments in Fisheries administration & structure

7. Merging of individual quotas allowed
8. Fewer vessels & companies, more capital , less product innovation & jobs
9. The pressure towards the resources is sustained
 - ⇒ Economic pressure for more merger
 - ⇒ Political industrial pressure for higher TAC

International Trends

Developments in Fisheries administration

10. Counter acting political forces mobilized

- Increasing protests from local communities and fishing groups that loose jobs and rights to quotas
 - Eg. Iceland, New Zealand & US
- The Governments are pushed to find alternative methods for quota allocation, like
 - Time limitation of the quota rights
 - Reallocation of quota shares between vessel groups
 - Distributed of new quota shares through auctions

International Trends : Initial allocation

- **Grandfathering: The first resource allocation principle in most countries**
 - A Historic Emergency Solution
 - The harvesting rights allocated after catch history
- Develops value chain monopolies
 - Concentration of rights on few hands and geographic regions.
 - Privatization of the resource (monopoly) rent extraction in fisheries
 - Creating “Lazy monopolies” less interested in innovation
 - Unfair: keeping qualified, creative and may be more value adding firms out

International quota auction experiences

- **All quota auctions are failing**
 1. When the concentration of fishing rights reaches a certain level
 2. When proper anti collusion regulations are absent
- **Collusions among ITQ owners are counter acting auction markets.**
 - Fishing companies are not willing to pay the government for the quota rights!

International quota auction experiences

- **Elements of corruption occur in closed small quota markets**
 - Collusion between fishing companies and politicians
 - Highest risk when low public attention of fisheries management

Auction system success

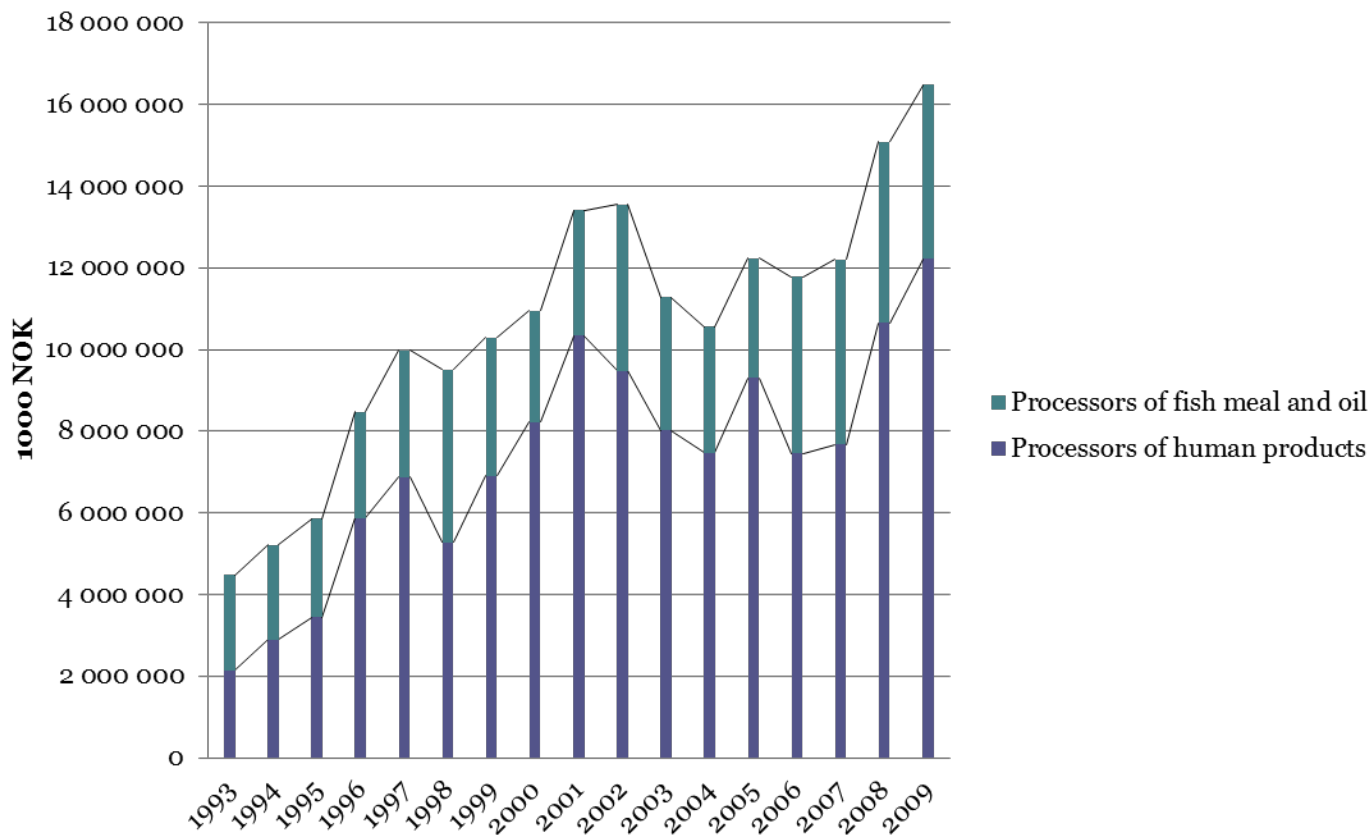
- Dependent of a strong legal framework and institutions for the *Public trust* management
 - A reliable TAC regulation
 - Counteracting collusion
 - Openness for new comers and innovative entrepreneurs
- The benefits
 - Motivation of innovative investments
 - Diversification of the industry structure
 - Improving the industry's market position and contribution to the society

Landing auctions open the production chain for entrepreneurship

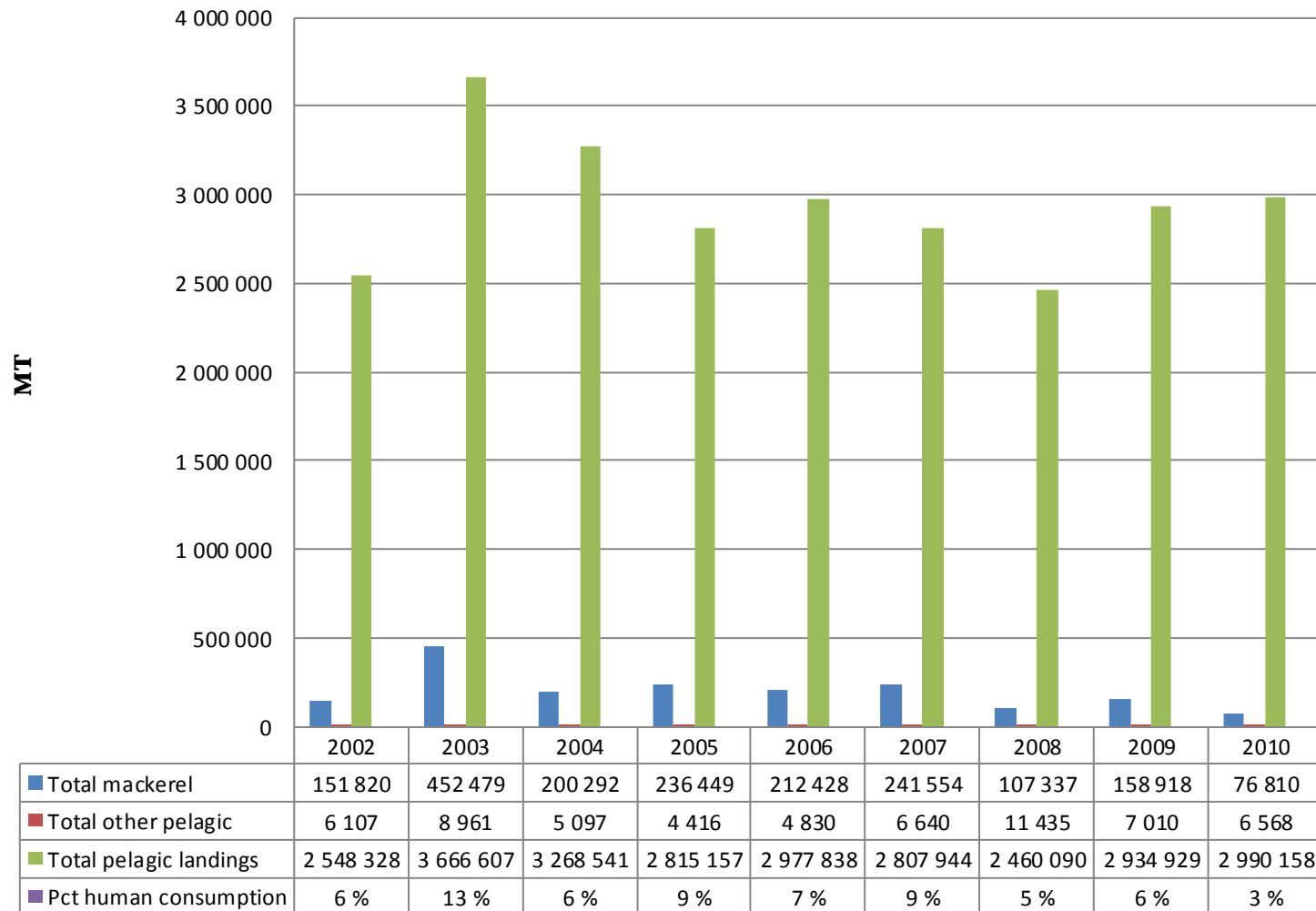
- Are working well when protected by strong anti-collusion regulations
- **All processors get access to raw material to competitive prices**
- **Norway**
 - All pelagic fish landings sold through electronic auctions.
- **Iceland**
 - 20% of all landings in Iceland sold through fresh fish auctions
 - Auction price set reference price for all landings according to trade union agreements
- **EU**
 - Regulated landing auctions in all major ports supported by economic guarantees from EU

The Norwegian example

Sales value Norwegian pelagic processing companies 1993-2009



Chilean export of pelagic species for human consumption



Sources: Landings: Subsecretaria de Pesca, Chile. Export data: Norway statistics/The Norwegian Export Council according to Chiles official export statistics

Allocation of benefits from pelagic processing

| Average 2003-2009 | Export of products for human consumption | | Export of fish meal | |
|-----------------------------|--|-------------------|---------------------|----------------------|
| | Norway | Chile | Norway | Chile |
| Landings | 1 195 474(a) | 236 835(b) | 483 563 (a) | 2 698 094 (b) |
| <i>Man-year employed</i> | 2100(c) | | 789 (c) | |
| <i>Labor costs/sales</i> | 8,6 % (c) | | 9,2 % (c) | 5,3 % (d) |
| <i>Raw fish costs/sales</i> | 67 % (c) | | 64 % (c) | 45 % (d) |
| <i>Other costs/sales</i> | 11,3 % (c) | | 17 % (c) | (C)19 % (d) |
| <i>Capital rent/sales</i> | 2,7 % (c) | | 5,4 % (c) | 20 % (d) |

Sources (a) Statistics Norway , (b) Subsecretary de Pesca, Chile. The real landings are higher calculated from actual fishmeal production. (c) Calculated from Bendiksen. (several years): Driftundersøkelsen i fiskeindustrien, Nofima AS, Tromsø, Norway, (d) Industry estimates, Chile

Why high Norwegian share of human products?

- A clear governmental policy to maximize the production for human consumption
 - Seen as an ethical obligation
- Regulations against the use fish good for human consumption as raw material for fish meal
- The landing auction give all entrepreneurial processors access to raw material
- Only 8% (average 2003-2009) of Chilean pelagic landings is exported as human consumer products. Why?

Challenges and industrial barriers

- **Chile has the workforce, but SMEs have no access to raw material for human consumption**
- The fish meal industry controlled by the quota owners has been very profitable for investors
 - Lack of capital incentives among the incumbents for innovation into human products!
 - **What happens when the salmon prices are falling?**
- **BUT: More jobs in human consumption industries**
 - **Norway: Shortage of workers, no unemployment**
 - Products: Semi-processed round frozen fish
 - 5% more jobs 2005-09 per tons raw material than the fish meal industry
- **Strong world market for small pelagic fish products for human production.**
 - **Need for market oriented entrepreneurial investments**

The “Lazy monopoly” threat

- Profitable businesses can be maintained by collecting the resource rent from fish meal production
 - without improving production and market-oriented efficiency through innovation activities into more diversified market products
 - like the wine and other industries facing market pressure
- Firms with monopoly rights will become lazy in market- and product oriented innovation activities
 - like all kinds of organizations and individuals relying on monopoly resource rent collection
- Without competition, the innovative efficiency will decrease over time.
 - When the industry are dominating by firms with monopoly power
 - in a position to block the entry of new and aspiring firms,
 - **Vulnerable industry structure when markets change**

Who owns the fish?

- *The Public trust = The commons*
- The government has a administration role on behalf of the trust
- All members in the society have the same right to the resource rent
- Coastal communities (not individuals or businesses) may have special historic rights
- How to utilize the resource for all members of the society not only some interests groups?

Public tender auctions give all in the society the same opportunities

- **Bidding of a share of a total quota**
 - Against cash or other values, as public services after public wants
- **Pre-qualification might be required**
 - like licenses, financial guarantees or certificates

The benefits of independent public auctions

- **Motivation of competition! the best win!**
- **Maximizing the resource rent and job creation by**
 - **Strengthen pressure for investments in innovation, jobs and growth**
 - **Opens access for qualified aspiring firms bringing inn new ideas and initiatives**
 - **Preventing lazy monopolies relying on tapping resource rent**
 - **Collecting the resource rent (royalty) for the Public trust**
 - **A potential investment source for benefitting the entire industry and fishing communities**

How to counter act deterring pricing?

- Strong regulation needed (Adam Smith)!
- **The big companies may temporarily pay high quota prices to keep smaller entering firms out**
 - Their bid price can be leveled out on the free quota
 - The newcomers have to pay the auction price for all their quotas.
- **Recommendation.**
 - *the same quota price paid in the auction may also be charged for the quotas allocated on grandfathering principles.*

How to counteract concentration of industrial power?

- By credit to smaller companies counteract the power from firms with “deep financial pockets”
 - Quota payment after the fish is sold.
- By regulation of maximum quota shares on single firms.

How to counter act collusions?

- **By running anonymous internet auctions**
 - like in the internet auctions on “Ebay”.
 - **BUT:** The number of potential bidders may be too low in many fisheries for an efficient electronic auction process.
- **An alternative tender auction**
 - Calls for sealed anonymous tenders practiced in public construction or research projects or in allocation of oil, mineral or aquaculture licenses.
 - Practiced in the Geoduck auction in US

How to counter act market disturbance when changing allocation system?

- The TAC share offered for auctioning may be increased step by step
 - as the present Chilean law opens for
 - For example: **5% first year 10% next year etc.**
 - Will ease the transition from a grandfathering allocation system to a market-oriented competitive system.
- The incumbents are given time to restructure their business to a new competitive environment

How to keep high transaction efficiency?

- High cost efficiency in both public quota auctions and private quota trading by applying modern information technologies.
 - The transaction costs in fresh fish auction markets 1-2% which also includes physical logistics of products

Concluding remarks

International experiences

- More jobs and values may be generated from the limited fish resources by efficient **regulations** of
 - A science based **independent TAC management** and **efficient catch control** aiming for maximal **sustainable harvest** of the fish stocks
 - Allocation of quotas and landings through **auctions counteracting monopoly** power open for **entrepreneurial effort**
 - IQ auctions for the industrial
 - Landing auctions (for the artisanal)

A note about statistics

| | | 2008 | 2009 |
|---------------------------------------|-------|----------------|------------------|
| Export of fish meal | | 487 021 | 611 714 |
| Export of human products | | 120 780 | 167 937 |
| Export of aquacultured fish | | 598 987 | 498 693 |
| | | | |
| The use of pelagic fish | Yield | | |
| To fish meal export | 21 % | 2 319 148 | 2 912 924 |
| Export of human products | 100% | 120780 | 167937 |
| To domestic aquaculture | 200 % | 1 197 974 | 997 386 |
| Sum use of pelagic fish | | 3 637 902 | 4 078 247 |
| | | | |
| Total reported pelagic catch | | 2 807 944 | 2 460 090 |
| Unexplained supply of landings | | 829 958 | 1 618 157 |