



DIRECTORATE GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT B: STRUCTURAL AND COHESION
POLICIES

FISHERIES

THE NORTH SEA BROWN SHRIMP FISHERIES

Executive Summary

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Abstract

The purpose of the study is to provide Members of the European Parliament's Committee on Fisheries with a clear description of the North Sea Brown Shrimp (*Crangon crangon*) fisheries and markets in the Netherlands, Germany and Denmark.

The survey is conceived as an information document. It addresses production issues (economic and social relevance of the production, profitability of the fleets, environmental impacts) as well as marketing issues (organisation of the industry, role of major wholesalers and processors, prices and margins in the sector) and describes the application of the Common Market Organisation on the brown shrimp.

EXECUTIVE SUMMARY

Background

The brown shrimp sector currently deserves specific attention for at least four reasons:

- the economic and social importance of the sector: in three Member States (Netherlands, Germany, Denmark), which represent 95% of the total North Sea production of brown shrimps the fishery industry has a significant economic and social importance (more than 500 fishing vessels are concerned);
Brown shrimp fisheries have a long tradition and a considerable economic value in the countries' fishing sector; furthermore they play a significant role in the tourism and the identity of the regions concerned.
- the social and ecological debate: nature organizations such as the WWF and the North Sea Foundation have put the North Sea brown shrimp in the green column of their fish-purchase guide for the stock assessment part, considering that the species is not under threat and is relatively insensitive to the fishing effort; but these NGOs are concerned about bycatch (young flatfish in particular) and the damages done to sea bottom by beam trawls.
- the ongoing reform of CFP and CMO: the Common Market Organisation of the fisheries products offers some tools (producer organisations, interbranch organisations, intervention mechanisms, guide prices, trade regime), some of which have been used by the stakeholders; some of these instruments proved to be little effective or ineffectively used;
- the Netherlands Competition Authority (NMa) considered that the agreements on fish quotas and minimum prices for North Sea shrimps as well as the agreements to exclude a new trader did not fall within the scope of CMO regulation and constituted infringements of Article 81 of the EC Treaty and section 6 of the Competition Act. NMa imposed fines on POs in the three member States and on wholesalers. The case has not been settled for good yet.

Aim

The aim of the present study is to provide Members of EP's Committee on Fisheries with a clear description of the North Sea brown shrimp (*Crangon crangon*) fisheries and the North Sea brown shrimp market in the Netherlands, Germany and Denmark.

The study is conceived as an information document for Members and is organized in two parts.

The first part describes the fisheries, in particular:

- the evolution of the North Sea brown shrimp production by country,
- the economic and social relevance of the industry by country,
- the economic performance of the fleets in this fishery (and especially the beam trawler fleets),
- the environmental impact of demersal beam trawling in the North Sea,

- the brown shrimp fishery management.

The second part describes the markets and provides a description of the application of the Common Market Organisation on the brown shrimp, including:

- price and intervention measures,
- possible impact of the autonomous suspension of tariff duties for another shrimp species (*Pandalus borealis*),
- producer organisations,
- extension of rules,
- possibilities for the creation of an interbranch organization.

The second part also describes the organization of the industry and the proceedings initiated by NMa. Information on the status and perspectives for MSC certification on North Sea brown shrimp fisheries is provided as well.

Findings

The three Member States under review represent 95% of the total European production. The Netherlands is the biggest producer (47% of total EU production), followed by Germany (38%) and Denmark (9%).

The Netherlands has the most powerful vessels, which furthermore fish mainly continuously, reaching the highest average landings per vessel (105 t in 2010). Denmark has a very effective fleet due to most modern vessels and effective fishing schemes. The German fleet counts a high share of smaller and older vessels with a strong seasonal fishing pattern and very little winter fishery.

The brown shrimp is amongst the top 5 species (in terms of value) for the Dutch and German fleets. Dutch and German beam trawlers in the 12-24 m length category are almost entirely depending upon revenues from brown shrimp, whereas Danish beam trawlers also primarily target brown shrimp but go partly on flatfish and have the option of changing towards sandeel.

Dutch and German vessels are distributed along the entire coast line, playing an important role for tourism in providing picturesque harbour scenery.

In the present configuration of the fleet (500 vessels), shrimp fishing cannot be profitable with a shrimp first sale price under 2,75 €/kg (under the hypothesis of a gasoil price at 0,60 €/kg). With a fleet reduced to 375 boats, the break-even point would be a shrimp price of 2,31 €/kg.

The present stock sizes are very high and show no sign of overfishing.

In the framework of the MSC certification process management plans have been developed in the three MS. They are not yet finalized and still likely to undergo some changes.

The EU market is controlled at more than 80% by two Dutch companies, HEIPLOEG and KLAAS PUUL, which buy about 30 000 tonnes of brown shrimp a year. Brown shrimp appears to be a profitable activity for processors.

The brown shrimp makes a 14 day trip to Morocco for peeling. The heavy use of preservatives (benzoic acid, sorbic acid) ensures a longer product life.

Belgium is the main consumer market (more than half of the total EU market for brown shrimp), followed by the Netherlands and Germany. More than 90% of the market is composed of peeled shrimps. The main market for unpeeled shrimp is France, followed by Belgium.

Conclusions

In the last months **the situation on the brown shrimp market clearly deteriorated**. The low price of fish (sole, plaice, cod, flounder, ...) in the auction has urged fishermen to go to shrimp instead of fish, which has led to overproduction of brown shrimp and low prices, all the more so as these fishermen licensed for both shrimp and fish fishing have a bigger catching capacity. Some actions (blockades of processors' plants) have shown in 2010 that fishermen are concerned about the power of processors. CMO tools have not allowed to avoid the worsening of the situation and the price paid to fishermen in the beginning of 2011 makes **most shrimp vessels unprofitable**.

The overproduction has also a negative impact on the quality of the final product: big quantities of brown shrimps are frozen and later on defrosted and mixed with fresh shrimps.

The application of the CMO has had very little impact on the brown shrimp market.

The price regime (guide price, withdrawal price) did not prevent prices from decreasing sharply at the end of 2010-beginning of 2011.

The withdrawal tool has been very little used by POs involved in brown shrimp fishing, and almost exclusively by the Danish PO. In 2009 withdrawals have represented 0,66% of landings at EU level.

The regulations opening and providing for the management of an autonomous Community tariff quota for the cold water prawn (20 000 t/year at 0%) do not have any impact on the brown shrimp sector since market segments for *pandalus* and *crangon* shrimps are quite independent.

The organisation rate of brown shrimp fishermen is quite high (88% at EU level) but dissents between POs (in Germany as well as in the Netherlands) and the fear of NMa considerably limit POs' action.

At the retail stage brown shrimp in small packaging reaches price levels which make **processors' and retailers' business profitable**. For the major processors brown shrimp represents about 25 to 30% of the total activity, the rest being made mostly with tropical shrimps, but brown shrimp is for them the product which offers the bigger margin possibilities.

The **brown shrimp stock remains in good state**, as it is recognized by NGOs which focus their criticism on by-catches and "bottom touching" fishing techniques. The catching level of the last years (around 35 000 t) does not jeopardize the stock.

Main solutions considered by fishermen's organisations to go out of the economic crisis are the MSC certification and the TAC and quota system.

Management plans are being developed in the three MS under review but as all fishermen or at least most of them should be under similar schemes, there will be no differentiation of the product on the market and thus a price increase linked to the label is dubious. But the label should guarantee the access to the market in the long run since major retailers plan to delist fishery products without MSC label in short/medium term. In the Netherlands the renewal of shrimp licenses by the Ministry will be linked to the holding of a MSC certification.

It should be easy to catch the same shrimp quantity with a fleet downsized by 25%.

Recommendations

Discard levels of brown shrimp can be reduced by various methods:

- Adjusting mesh sizes to the commercial sizes of brown shrimp, i. e. much wider than the legally acceptable 16 mm, possibly 22 to 24 mm.
- Replacing traditional diamond meshes by square meshes in the cod end.
Square meshes reduce by-catch of small round fish (gobies, gadoids, smelt...) and can help to reduce the number of small sole getting pinned in diamond meshes.
- Applying veil nets most of the time (less or no exemptions).
- Survival of discards can be improved.
- Avoiding shallow waters (0 – to 3 m e.g.).
- Reducing fishing effort from June to August.

The TAC issue is under debate among fishermen and POs and **should be deepened**. In particular we recommend that social and economic consequences are studied in detail.

The economic difficulties of the sector are linked to the level of the price paid to fishermen, which does not allow in the last period to make shrimp fishing activity profitable, and to the size of the fleet, which is deemed too big, especially in the Netherlands, where most fishing areas have to comply with Natura 2000 principles. With a **reduction of the fleet by 25%** the first sale price necessary to reach the profitability level for fishermen would be 43 eurocent lower.

There is still room for improvement of quality of the shrimp caught (hygiene on board, optimization of cooking time, use of food grade grease, ...) and the leading processor has started a quality related payment (with a premium of 0,50 €/kg for the best quality). The **development of simple codes of conduct for fishermen** should be a good way to secure better prices.

On-going MSC certification processes should be completed in the course of 2011 or in the beginning of 2012 and secure the downstream actors of the sector.