FISHERY COUNTRY PROFILE	**Food and Agriculture Organization of the United Nations**	**FID/CP/GRL** **October 2004**
PROFIL DE LA PÊCHE PAR PAYS	**Organisation des Nations Unies pour l'alimentation et l'agriculture**	
RESUMEN INFORMATIVO SOBRE LA PESCA POR PAISES	**Organización de las Naciones Unidas para la Agricultura y la Alimentación**	

GREENLAND

See the Fishery and Aquaculture Country Profile for Denmark

GENERAL ECONOMIC DATA

Area:	2 175 600 km^2
Area not permanently covered by ice:	341 600 km^2
Shelf area (to 200 m):	approximately 500 000 km^2
Length of coastline:	approximately 44 087 km
Population (2003):	56 000

FISHERIES DATA

Commodity Balance (2001):

	Production	**Import**	**Export**	**Total supply**	**Per capita supply**
	tons in live weight				kg/year

Fish for direct human consumption	151,925	677	147,851	4,751	84.8
Fish for animal feed and other purposes	6,500				

Estimated employment (2001):	
Primary sector:	3 400
Secondary sector:	2 400
Trade (2002):	
Value of imports:	US$ 698 000
Value of exports:	US$ 236 million

Marine fishery

Shrimp

Shrimp fishing has its origins in West Greenland, where the majority of the fishing still takes place. Later on profitable fishing was discovered on several occasions in East Greenland, which is characterised first and foremost by unusually large - and therefore valuable - shrimps.

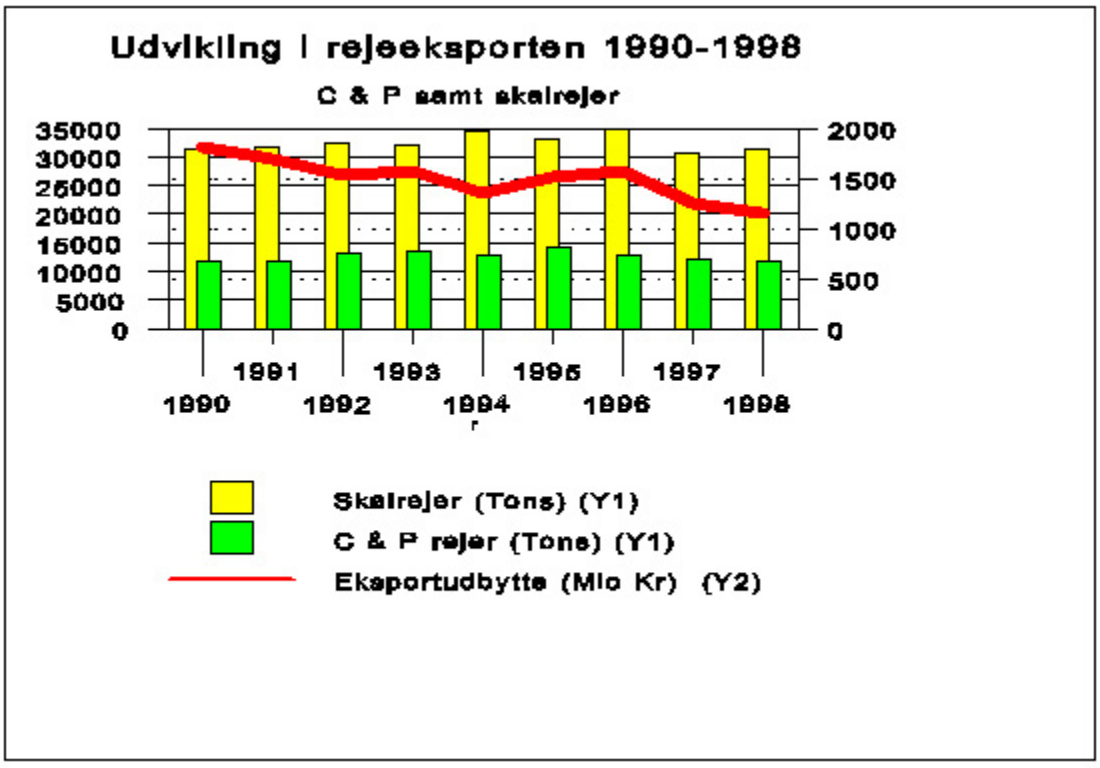
There are two fleet components that participate in shrimp fishing, namely the cutters which exclusively fish to supply Greenland's land installations, and the production trawlers - the so- called sea- cookers - that typically have a right to process 75% of their catches on board.

Greenland has rights to shrimp fishing in the Svalbard zone, in Russia and in the Flemish Cap area. With few and minor exceptions, however, the boats stay at home, not least due to the fleet structure reorganisation already mentioned which has given the individual shipping company a suitable quota to exploit the ships' capacity fully here at home.

So far, an export return of DKK 1.5 billion per annum has been considered to be a satisfactory export return for the whole of shrimp fishing.

If one presents the fisheries based on the official export figures for cooked and peeled shrimps respectively, as well as whole shrimps, through the 1990s, one obtains the following picture:

Figure 1: **Development of shrimp exports 1990- 1998**



Cooked and peeled and whole shrimps
Year
Whole shrimps (tons) (Y1)
Cooked and peeled shrimps (tons) (Y1)
Export return (million DKK) (Y2)

Figure 1: As far as exports of both whole shrimps (yellow columns) and cooked and peeled shrimps (green columns) are concerned, the 1990s have shown a stable quantities trend. Prices have not been as stable and there is a pronounced fall in 1994 which is repeated in 1997. As far as whole shrimp prices are concerned, the market for large whole shrimps in Japan as far as large quantities are concerned was replaced by a market for smaller whole shrimps in China. The price difference for the two product groups is markedly to the disadvantage of the China shrimps. As far as cooked and peeled shrimps are concerned, the market is now first recovering after the large quantities from the fishing on Flemish Cap largely smashed the market. If one wishes to convert the figures for fishing, the yellow columns are fairly accurate. The export figures for cooked and peeled shrimps should be multiplied approximately by three to achieve the quantity of shrimps hauled up from the sea. Around two- thirds of the shrimp's weight comprises the shell, head and legs.

Through the adoption of the 1990 Fisheries Act, Greenland's parliament introduced the concept of individually fully transferable quotas in shrimp

fishing at sea. A points scheme which is also based on transferability was previously introduced into coastal shrimp fishing.

From 1 January 1997, the regime was further changed so that all shrimping vessels in Greenland - i.e. 13 production shrimp trawlers, 2 semi- production trawlers and 74 fresh shrimp trawlers - each operate on the basis of their own fully transferable boat quota.

The transferability applies both for the quota share (a fixed percentage of the TAC) and for the annual quota (the number of tons that corresponds to the percentage for the relevant year), so that one can either choose to trade a quota permanently or for one year at a time.

This individual transferability resulted in a reorganisation of the fleet structure which extended over several years and which has entailed a significant reduction in the number of vessels. At the same time the quota ratios for the individual vessel have naturally improved sharply. Today all vessels in ocean- going shrimp fishing have a quota that secures them a sound operating economy as the legal catch quantity per annum lies at around 2,500 tons.

At the same time, the quota is so high as far as the individual vessel is concerned that the old problem of rejecting small shrimps has largely been eliminated.

Cod

As a result of migration from south- west Iceland breeding grounds, in the autumn of 1990 cod disappeared "overnight" from Greenland, and all Greenland cod shipping companies had to leave the country through bankruptcy and sales of vessels.

The result was a series of negotiations with both Norway and Russia which resulted in a quota exchange that at least provides some basis for retaining at least some vessels, a fishing capability and the necessary sales channels.

Greenland today has two fillet trawlers that fish for cod and haddock in the Barents Sea in accordance with agreements with Norway and Russia, and which also supplement their employment opportunities with Greenland halibut in our domestic waters.

The situation for cod exports thus looks like this if depicted graphically:

Figure 2: **Development of cod exports 1990- 1998**

All products from all areas

Year
Export quantity (tons) (Y1)
Export return (million DKK) (Y2)

Figure 2*: the figure documents in full the almost catastrophic situation when cod disappeared.*

Greenland halibut

Greenland halibut are well on the way to occupying a very important position in Greenland fishing.

Prices for this fish have largely demonstrated an unchanged increase over recent years, and in the Davis Strait, Greenland shares a stock with Canada - a stock which in contrast to Greenland halibut stocks elsewhere in the Atlantic still seems to be flourishing.

As well as being a valuable object for Greenland's fishermen, the Greenland halibut at sea also constitutes a valuable component in both the agreement with the EU and in the quota exchange arrangements with both Norway and Russia.

At home, there is both inshore and offshore fishing for Greenland halibut. In the fjords, in the local authority districts of Ilulissat, Uummannaq and Upernavik, there is largely fishing which is performed during the summer from both small yawls and cutters, while in winter is it performed through the ice and using dog sleds.

In the Davis Strait halibut stock are shared with Canada. In order to preserve the stock, it is presently forbidden to fish more than 85 per cent of a given national quota using a trawl. The rest has to be caught using a line. Also, it is forbidden to fish offshore for halibut using a gill net. This ban is primarily caused by the risk of losing a net which can continue phantom fishing at the bottom over long periods.

In East Greenland the stock is shared with Iceland and the Faeroe Islands. In order to preserve the stock in this region, negotiations have been initiated between the three "host nations" to seek conditions for improving the stock.

At present efforts are being made to secure a higher quality for the landed catches so that the fishermen can maintain the same level of earnings based on smaller landed quantities.

There is no doubt that Greenland halibut fishing in Greenland has come to stay. Developments over the very recent years are clarified in the following graphical representation:

Figure 3: **Development of Greenland halibut exports 1990- 1998**

Offshore and inshore fishing
Year
Export quantity (tons) (Y1)
Export return (million DKK) (Y2)

Figure 3: If one compares this figure with the previous one, which outlines the development of cod exports, one can see two opposite developments. Both in respect of export quantities and export return, the development for Greenland halibut has been almost explosive over recent years and the pressure on the stock grows.

Scallops

The Greenland scallop enjoys great popularity, especially in France.

West Greenland preserves a good stock of scallops and a significant commercial fishing of the species has taken place since the beginning of the 1980s.

At present, it is the factory ship-based production and there are four boats to share the scallop quota permanently available year by year.

Production proceeds as follows; the scallop is opened manually, and the adductor and gonads - the mussel's reproductive organs - are removed and frozen.

This manual production makes the fishing interesting from an employment viewpoint as a large workforce is required for this work.

Greenland's production with gonads was for a long time unique, and there is much to indicate that despite strong competition from China and South America the Greenland mussel has retained its popularity due to its fine quality. In 1995-96, a thrust was experienced in the market not least from China, which with its low prices was about to the pull the rug away under Greenland’s products. The price for mussels fell by 50% during a few months, and for about six months the Greenland fleet lay more or less idle as a single vessel could be employed on crabbing while another one started production of mussels without gonads for the American market.

Since these dramatic events, the scallop price has fluctuated up and down and presently lies at a level just below average. The latest reports from the market, however, confirm customers' desire to experience the high Greenland quality.

For the West Greenland scallop stock, this makes especially relevant that fact that the Nuuk area is the only place with large- scale occurrences of scallops which are found in the open water area. In all other places ice formations prevent fishing all year round.

These natural conditions may provide excellent protection for the stock, but

in Nuuk this has led to not inconsiderable over- taxing of the stock, so that protective measures have now been introduced and there is also a provisional ban on further increase of the fleet.

Trials are also being carried out in Nuuk with "replanting" of mussels from nutritionally poor fields to the areas where catches of very large mussels have been experienced but where the stock has sharply reduced due to high pressure from fishing.

However, it proved that such "replantings" cannot be performed in the same relatively easy way as was the case, for example, with European common mussels. The scallops that were moved had already stopped their growth due to nutritional problems and - unfortunately - it has not been possible to establish any real growth in the "planted" individuals.

This fact will naturally lead in the short term to a tightening up of the quotas especially in the Nuuk area. It is a positive fact that it is the industry itself that is actually asking for tighter regulation.

It can also be mentioned with regard to the scallops in Greenland that the shell height for the individual scallop should be 60 mm before it can legally be caught. In cold waters the mussel will be between 11 and 13 years old before it achieves this size.

The importance of scallop fishing for both micro- and macro- economy can be read off approximately from the following graphical representation.

Figure 4: **Development of scallop exports 1990- 1998**

The whole west coast
Year
Export quantity (tons) (Y1)
Export return (million DKK) (Y2)

Figure 4: As the red curve shows, 1996 was not the first time that scallop prices fell, but good quality has hitherto always brought Greenland's exports back on track, as also occurred in 1997. The kg prices shown in the above graph fluctuate from the highest level at DKK 83.26 in 1991 to DKK 51.76 on average in 1996. However, the large number of jobs in the fishery play a greater role than the export revenue.

Other fish

There is still some fishing for salmon and char, as well as the uvaq (fjord cod), and the catfish is also included to a certain extent in this.

The three most potent species for future Greenland fishing on a large scale,

however, are without doubt the ocean redfish, crab and capelin.

As far as the capelin is concerned, two Greenland boats are active in catching this species. Both boats are registered in East Greenland, have Icelandic ownership and operate almost exclusively based in Iceland, which is also involved in the three- party co-operation where Greenland, Norway and Iceland have agreed to fish for capelin in each other's fishing territory and they have also divided the TAC between them.

As far as the redfish is concerned, in 1998 a Greenland shipping company - together with an Icelandic company - invested in a large trawler which fishes for this species. It is still too early to predict the prospects for success for this initiative.

As far as the crab is concerned, however, it is probably found in large quantities along the whole of the west coast of Greenland and there is a political wish to operate fishing of the species. Trial fishing arrangements have been set up and Royal Greenland A/S presently has two production plants at its disposal where the requirement is that crabs are landed live for further processing. During 1998, on a private initiative, a processing vessel will also be included which primarily services the crab fishers in the area around Paamiut.

Very recently a large ocean-going fishing ship has also been put into fishing and there is increasing optimism, even if prices are not quite in line with expectations.

It has been decided - as for the shrimps - to focus on both ocean-going and inshore fishing. In contrast to the shrimp catchers, however, the crab catchers have problems as the crabs must be landed live. This is not necessary where shrimps are concerned.

There is presently much to indicate that the best quality originates from the land- based factories, but exploitation of the stocks at sea may make factory ship input even more necessary.

If one looks at the development of crab fishing and exports, this is outlined as follows over the last four years:

Figure 5: **Development of crab exports 1995- 1998**

The whole west coast
Year
Export quantity (tons) (Y1)
Export return (million DKK) (Y2)

Figure 5: Catch quantities and return curves fluctuate sharply in the crab

statistics. However, there is still optimism, not least after the use of a large production vessel documented the occurrence of crabs at sea. However, there is much to indicate that the best quality and thereby the best prices are obtained for land-based production.

Finally, it is species such as sharks and sea urchins that could in some likelihood be used in commercial fishing.

Inland fishery

No commercial inland fishery takes place and the only valuable species present is Arctic char (Salvelinus alpinus). This fish is subject to some (mainly subsistence) fishery when it migrates from the sea to the freshwater spawning grounds.

Aquaculture

There is no aquaculture at present. Farming of salmon and Arctic char has been considered and tested on a pilot scale, but the climate and other natural conditions make it too costly to be commercially feasible.

Utilization of the catch

Almost all commercial catches are landed and processed for export. Due to the limited population and easy access to fish, only a limited part of the commercial production is consumed domestically.

State of the fishing industry

Most of the industrial infrastructure was established by the Danish Government during the 1960s, and taken over by the Home Rule Government in 1984. The factories were then mainly equipped for cod filleting and shrimp peeling. A major re-structuring has since taken place, reflecting the changed resources and landing patterns.

The Home Rule-owned activities have lately been divided between Royal Greenland Ltd., who takes care of the commercial and export-oriented activities, and Nuka Ltd., who take care of domestic market supply and run a number of small-scale factories located in villages, and two processing and packing facilities in cities. Nuka Ltd. receives substantial subsidies from the Home Rule Government.

Economic role of the fishing industry

Greenland society is almost solely dependent on natural renewable resources. Export of fish products account for more than 93 percent of all export.

Subsistence fishery and hunting are activities deeply embedded the nation’s culture, and practised by most of the population.

Cooperation with other countries

The fishing agreement existing between the EU and Greenland also

stipulates quotas for the Faeroe Islands.

The elements in the agreement are a specific quantity of fish which is made available for each protocol period to the EU by Greenland, and financial compensation is offered accordingly by the EU. It also involves Greenland fish and shellfish, and production of the same, having free access to the Community's market and the protocol finally contains a provision according to which attempts will be made to bring about joint undertakings between EU shipping companies regarding fishing of Greenland stock. In such cases further support is offered from the EU.

Where the set of agreements with the EU operates with fish for money, Greenland's bilateral agreements with Norway and Russia operate solely with actual quota exchanges. The background to the agreements is the lack of any opportunity to fish for cod in Greenland and as well as the framework agreements each set of agreements consists of a protocol in which the quantities are negotiated annually.

With regard to the redfish, an agreement exists with Greenland, Iceland and Norway as partners and the principle in this agreement is an appropriate exploitation of the stock through a right to fish in each other's waters.

Finally, an agreement has also been concluded between Greenland and the Faeroe Islands which based on the nation community are sitting together in the delegations which attend to tasks in the regional fora such as NAFO, NEAFC, NASCO, NAMMCO, and so on.

The table below shows the estimated first-hand value of the different nations' activities in Greenland. The period is from and including 1995 to and including 1998, which is identical with the period for Greenland's third fishing protocol with the EU:

Figure 6: **Fishing in Greenland**

All nations – first-hand value
Year
Greenland
EC
Faeroe Islands
Norway
Iceland
Japan

Organisational structure

The Greenland Fisheries Act is a framework act which gives the home-rule

government sitting at any time a right to extend authorisations.

The two leading Greenland organisations in this respect are KNAPK, which is an organisation for coastal fishing and catches, and APK [Greenland Sea-fishery and Export Association], which has both the ocean-going trawlers and the Greenland sales and export companies as members.

On the coastal fishery side, organisational life has recently been enriched with an independent association for shrimpers in the Disko Bugt.

According to the Fishing Act, the home-rule government is obliged to appoint a Fisheries Board, where the two organisations have seats together with Royal Greenland, which is owned 100% by the Hjemmestyre. As well as this, the Ministry for Industry also sits on the Fisheries Board. It is KNAPK and APK which take turns to hold the chair for the board, and home- rule government is obliged - still in accordance with the Fisheries Act - to consult the Fisheries Board on certain well-defined fishery questions of a certain quality.

Research

Basic fisheries research is carried out by Greenland Institute of Natural Resources, under the Greenland Home Rule Government. It was established in Greenland in 1995 as a successor to the Greenland Fisheries Research Institute located in Denmark, that was closed at the same time.

The Institute operates the research vessel R/V Adolf Jensen and the modified commercial trawler M/Tr Paamiut.

Internet links

Greenland Home Rule Government: http://www.gh.gl/

Statistics Greenland: http://www.statgreen.gl/

Royal Greenland: http://www.royalgreenland.com/

Facts on Greenland: http://www.odci.gov/cia/publications/factbook/gl.html

Greenland Institute of Natural Resources: http://www.natur.gl/