

Summary

The world's cod stocks are in a dramatic decline and global catch of cod has gone down by more than 70% in 30 years. In 1970, the total global catch was around 3,1 million tons, while in 2002, the total catch was down to 890.000 tons. If such a trend continues, the world will have no more cod in less than fifteen years. The worst example of disappearing cod stocks is that of the North American fishery, where there is a decline by more than 90 percent since the early 1980s when catches were around 5-600.000 tons a year. In European waters the total catch of North Sea cod is now just 25% of what it was 15 years ago. In 1987, the North Sea fishery gave

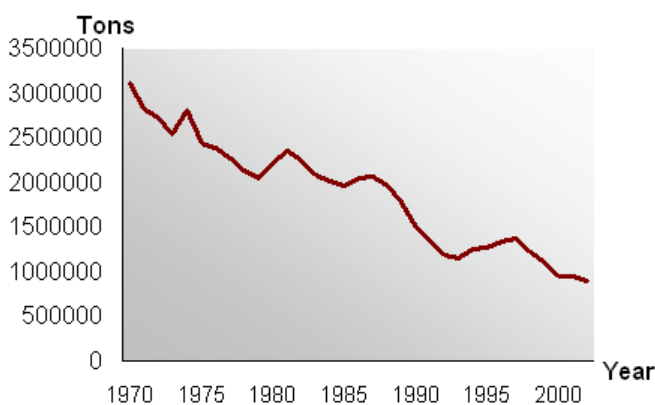
the large Northeast Arctic cod stock, scientists warn that the fishing pressure is not in line with the precautionary approach.

Fish stocks often have large scale natural fluctuations. Such changes, and what causes them, are not well understood, challenging both scientific methods of estimating stocks and managers of fish industry depending on a stable economic resource. It is a global problem in fisheries management that overinvestment in the fishing sector leads to short term economic demands not allowing for the flexibility needed when managing a resource that has significant natural changes. In addition, illegal fishing increases the pressure on fish stocks. Commercially exploited fish stocks often show trends towards earlier maturation and in Canada such change was clearly seen before the cod stocks collapsed.

Fisheries management has traditionally lacked transparency and public participation has been very limited. Such closed management without public interest and understanding has also led to a lack of trust from the public and from politicians. Media have a focus on illegal activities and declining cod stocks. Such focus creates a seafood market that is increasingly sceptical towards the fishing industry. Retailers and consumers are increasingly interested in information on where the fish is caught and if the stock is sustainable. There are several consumer guides to sustainable seafood available, giving the recommendation: "Don't eat Atlantic cod because it is overfished".

Commitments to sustainable fishing

In 1982, the UN Convention on the Law of the Sea, UNCLOS was adopted, giving coastal states the sovereign right over resources in their waters, including a commitment to conserve and manage in order to avoid over-exploitation. After the Rio meeting in 1992, states realised that fishing activities is one of the major threats to global biodiversity. The U.N. Straddling Fish Stock agreement was developed to produce a methodology for practical use of the precautionary approach and represents a total shift in international fishery management, emphasising the need for sustainable fishing, ecosystem protection, conservation of biological diversity, and the use of the precautionary approach. The Norwegian Government has for years been committed to manage its marine resources sustainably and to reduce overall fishing capacity based on a broad political agreement. However, a new report from the Parliament's Auditor General (Riksrevisjonen) concludes that the Norwegian Government fails in their management, since the precautionary approach is not being followed and the overall fishing capacity has increased.



Total global catch of Atlantic cod was in 1970 around 3.1 million tons. In 2002, total catch was down to 890.000 tons, a reduction of more than 70 %. (FAO Fishstats 2004)

around 180.000 tons of cod, while in 2002 it gave only 40.000. Also in the Baltic Sea, the cod stock is seriously depleted, where the catch is less than half of what it was 15 years ago. The only cod stocks that still support large fisheries are the ones outside Iceland with an annual catch around 200.000 tons and the world's largest cod stock in the Barents Sea, with an estimated catch in 2004 of almost 500.000 tons. This stock is managed by Norway and Russia through their joint fishing commission.

Despite the sad fact of continuously declining cod stocks over the last 30 years, overfishing of cod continues because of failing fisheries policies based on short-term economic interests. The codstocks on the east coast of Canada collapsed due to overfishing in the early 1990's – and there has been no recovery. The North Sea cod may be going the same way: Scientists have for several years called for a total stop in fishing. Despite these warnings, the involved countries, EU and Norway, continue their disastrous fishing. The same is happening in the Baltic where the coastal states allow a total catch that is twice the volume recommended by scientists from ICES (International Council for the Exploration of the Seas). Even in the Barents Sea, where Russia and Norway manage

State of the cod stocks in the Barents Sea

The world's largest cod stock lives in the Barents Sea. Here, in the Arctic waters along the Norwegian and Russian coasts, cod still plays a vital role in the rich marine ecosystem. It's main prey are capelin and herring, being fish species which utilise plankton. Northeast Arctic cod is the ICES official name for the cod in the Barents Sea, a stock divided into two genetically different groups; the oceanic cod and the coastal cod. The oceanic cod migrates to the coast of Norway for spawning, but lives in the Barents Sea for the rest of its life-cycle. The coastal cod is stationary and it and spawns and lives in the Norwegian fjords. At certain times of the year, these stocks can be situated in the same areas, resulting in a mixed fishery.

ICES collects and analyses data on fish stocks, and gives advice to governments on how they should manage fish stocks. Every year ICES evaluates the status of the Northeast Arctic cod and gives advice on how much fish can be taken, recommending quotas based on the precautionary approach. Earlier, some illegal fishing was calculated into ICES' models to avoid over-estimating the cod stock. However, illegal fishing is no longer accounted for, meaning that actual fishing is probably higher than what the scientific advice is based on.

State of the oceanic Barents Sea cod

The last ICES-evaluation of the oceanic Barents Sea cod came in June 2003. ICES concludes that the stock is growing and is within so-called safe biological limits, meaning that the spawning stock biomass (SSB) is well over the precautionary SSB limit set at 460.000 tons. However, ICES expresses serious concerns about high fishing pressures and illegal fishing. In November 2003, the joint Norwegian-Russian Fisheries Commission set the fishing quotas for 2004 to 486.000 tons, ignoring the scientific advice of a total catch of less than 389.000 tons.

Since 1998, the quota for cod has been significantly higher than the limit set by ICES and the stock is therefore defined as being fished outside safe biological limits because the fishing pressure is too high. There are reasons for concerns:

- The age structure of the stock has changed as a result of high fishing pressure over time. The majority of the spawning stock consists of first-time spawners. Eggs and larvae of first-time spawners are less viable than those of other mature fish and the overall spawning period is reduced when the spawning stock consists of fewer age groups. ICES address the need to rebuild the age structure of the stock.
- There are indications of large-scale discards and unreported landings. This problem could be widespread, with illegal catches estimated to be almost 100.000 tons annually. Control and monitoring systems are not sufficient to deal with such problems.
- Despite political will to reduce fishing capacity, overall capacity in Norwegian waters has grown significantly since 1990. The trawler fleet has increased its

capacity by more than 70 per cent. Over-capacity contributes to an increased pressure on the cod stocks.

WWF urges the Norwegian and the Russian Governments to apply the precautionary approach and set cod quotas in accordance with scientific advice from ICES. Secondly, there is an urgent need for stronger control of all fishing activities in the Barents Sea, and WWF asks for immediate action from the two Governments to reduce illegal fishing. Thirdly, overall fishing capacity must be reduced to take away pressure on fish species such as cod.

State of the coastal cod

In June 2003, ICES recommended a full stop in the fishery for coastal cod in the Barents Sea. The stock is now declared to be outside safe biological limits because the SSB is dramatically low and fishing pressure is too high. The stock has declined continuously since 1994, and there seems to be no recovery. ICES urged for a recovery plan, and the Norwegian Government produced a plan that will come into force in May 2004. However, the plan is insufficient for protecting and rebuilding the stock, missing out on important means such as closed areas, time and fishing gear restrictions and further monitoring and research.

- At present, the biomass of the spawning stock is the lowest observed in the time-series extending back to 1984.
- Fishing pressure increased from 1991 to 1999, although the stock was already historically low. ICES advised a full stop in fishing in 2004. This was ignored by Norwegian fisheries authorities, who allowed a fishing quota of 20.000 tons.
- ICES asked for a recovery plan that should be developed and implemented as a prerequisite to re-opening the fishery. The plan has come, but fails to protect the coastal cod on several points.

WWF urges for a sufficiently strict and efficient recovery plan for coastal cod, where closed areas and clear restrictions on fishing are included. Until this plan is implemented, wherever possible, no fishing should take place.

New threats to the Barents Sea cod

Today, the main impact on the ecosystem in the Barents Sea is fishing. This can change, as there are major plans of increased industrial development in the area. Both the Russian and Norwegian Government are planning petroleum activities in the Barents Sea and transportation of oil with ships is growing significantly. An oilspill from a ship or petroleum exploration in the spawning area or during the spawning season for cod could have a severe negative impact on the stock. There are indications of fish farming impacting local cod stocks by disturbing historical spawning grounds. A slowly growing cod farming industry could end up having an impact on wild cod, with troubles such as disease transfer or genetic interbreeding with escaped farmed fish. In addition, WWF

fears that future climate change can add a further pressure on fish stocks in the Arctic.

There is an urgent need for a true precautionary approach in the fishery management in the Barents Sea. It must take into account the uncertainty in research and stock estimates, the problem of unreported and unregulated catches and the growing threat from pollution and climate change. Both Norway and Russia are committed to adopt ecosystem based fisheries management, as defined by the UN code of conduct for sustainable fisheries. Simplified, basic elements are that the management should:

1. Be based on the precautionary approach
2. Have clear goals and objectives
3. Have indicators and plans for monitoring
4. Have decisive rules for quota setting
5. Be a totally open and transparent process that includes all stakeholders and allows and encourages public debate

In chapter six of this report, WWF draws the conclusion that the Barents Sea cod stocks are not managed in line with the ecosystem approach. It fails totally on point one and partly on point four and five, as the existing decision rule allows a higher fishing pressure than what ICES recommends and because the current management, despite improvements, still exclude stakeholders, such as NGOs, from the management process.

Conclusion

The examples from Canada and the North Sea show how vulnerable cod as a species is to overfishing. The cod stock in the Barents Sea is the last remaining of the great cod stocks and the fishing industry in the area is part of a thousand year old tradition. It is the Governments of Norway and Russia whom have the total responsibility for ensuring that there will be cod in the Barents Sea for the next thousand years also. Today's management is not sustainable in the long term. Scientists and the market express concern over today's failing management, and now is the time for a change.



Drying cod in Lofoten – This thousand year old tradition is now in threat.

Norway and Russia can succeed with their cod management in the Barents Sea. By doing so, they can help rebuild trust of the fisheries sector within the minds of the public and the politicians, and also in a highly sensitive seafood market.

WWF urges Norway and Russia to:

- Use the precautionary principle and set fishing quotas in accordance with scientific recommendations.
- Produce and implement a plan to reduce illegal fishing activities

WWF urges Norway to:

- Where possible, immediately close the fishing for coastal cod
- Produce and implement a sufficient recovery plan for coastal cod
- Reduce overall fishing capacity

WWF also challenges the Norwegian Government to use the forthcoming management plan for the Barents Sea to take a lead internationally in showing how ecosystem based fisheries management can be used to protect the worlds largest cod stock – and its ecosystem.

WWF would like to see consumers around the world asking where the cod they buy is fished, ensuring that it comes from a legal and sustainable fishery. Consumers should also express their concern about decreasing cod stocks when buying cod.