



Sustainable Seafood¹

INTRODUCTION

Despite commitment to restore global fish stocks to sustainable levels by 2015 whenever possible, consumption of fish is rising at increasingly unsustainable levels. The total food fish supply and hence consumption has been growing at a rate of 3.6% per year since 1961, while the world's population has been expanding at 1.8% per year². Species that were considered specialty items only a few years ago are now being purchased on a regular basis. New species regularly appear on the EU market as major commodities e.g. Nile Perch, pangasius. Seafood also plays an increasingly important role in healthy, balanced diets. And the exploitation of the oceans and their resources puts at risk the ability of oceans to continue to provide food, other economic benefits and environmental services to humankind.

Seafood is in danger of falling into short supply. According to an FAO (Food and Agriculture Organisation) survey, in 2008 of the marine stocks monitored by it: 53% were estimated to be fully exploited, 28% overexploited, 3% depleted and 1% recovering from depletion, 3% of the stocks were estimated as underexploited and 12% as moderately exploited³. "Recent research (Worm, B. *et al*, 2006) on the role of biodiversity in marine ecosystems has even projected, based on historical analysis of existing data, the collapse of all marine fish stocks by the year 2048⁴". This dramatic decline does not just endanger life in the depths of the oceans. Entire industry sectors and thus numerous jobs are also at stake. Fisheries policy therefore ranks high on the EU political agenda.

The International Council for Exploration of the Seas (ICES) reports annually on the state of many fish stocks in EU waters and recommends specific levels of catch quotas for the EU. In the past, these recommendations have not always been followed. In response, environmental and commercial organisations have sought to establish criteria for measuring and confirming sustainable practices and management of fish stocks and using the market to encourage demand for products that meet these criteria. Throughout the European market, several such certification schemes have been established and accepted as offering progressive means for organisations to demonstrate their active role in improving the state of fish stocks⁵. Mostly, they are adopted as B2B, but a few have found a role in communicating with the consumer as well. Of these the most used in Europe are the Marine Stewardship Council (MSC) and Friend of the Sea (FoS).

Besides sustainable fishing, fish-farming can also provide a future-oriented solution to shortage in supply. The FAO indicates that, from 2012, half of the fish consumed in the world will come from aquaculture: more than 50 million tonnes of fish and sea-food are already bred in fresh-water and ocean hatcheries. Innovation is very strong in fish farming, and more is possible, if well supported by science and research.

¹ Seafood includes wild and farmed fish from saltwater and freshwater

² http://www.who.int/nutrition/topics/3_foodconsumption/en/index5.html

³ The State of World Fisheries and Aquaculture, 2010 – FAO Rome 2010 p.35
<http://www.fao.org/docrep/013/i1820e/i1820e.pdf>

⁴ The role of supply chains in addressing the global seafood crisis, UNEP,
<http://www.unep.ch/etb/publications/Fish%20Supply%20Chains/UNEP%20fish%20supply%20chains%20report.pdf>

⁵ There are more sustainability initiatives than there are for any other animal protein source

However, intensive fish farming can have negative aspects: aquaculture practices might cause environmental damages when habitats are altered to accommodate fish farms, when waste products pollute surrounding waters and when chemicals, medications or excrements enter the food chain. Aquaculture fish species also require a certain amount of feed derived from wild caught fish stocks. So, aquaculture and high-density fish farming activities must be balanced by the safeguard of wild stocks, i.e. that the potential value of aquaculture in terms of providing food security, revenue and an alternative food source to wild-caught fish, and the negative aspects. To address these concerns, a number of governments and private initiatives have introduced guidelines or certifiable standards for fish farming that are internationally recognised to serve as general, valid benchmarks for responsible aquaculture operation. International organic associations like Naturland have also been relying on ecological aquaculture.

It is worth noting that there are many standard setting bodies offering certification for fisheries and aquaculture. Agreeing equivalence between standards requires a formal benchmarking process. The absence of such a process has resulted in several NGOs carrying out comparative studies and highlighting differences between standards that cause confusion for retail buyers and some more aware consumers. There is a proposal to establish a global organisation to manage this process, the Global Sustainable Seafood Initiative.

In addition to public authorities' efforts to address illegal fishing and improve stock conservation measures, producers and retailers started a set of measures to prevent by-catching and to avoid illegal fishing by using traceability and to promote local fish species. In their purchasing guidelines they prohibit some fishing methods like some kinds of bottom trawling, dredging, etc. The EU and several member states support best practices such as these initiatives and have adapted their system of subsidies for fisheries.

Producers and retailers have been working together as well as with NGOs to develop a sustainable seafood assortment: delisting endangered species, promoting certified products (type I labels), support of sustainable aquaculture standards and providing information to consumers about sustainable fish products. Environmental NGOs and consumer organisations support these efforts by providing information to consumers. Consequently, European consumers are increasingly aware of the loss of marine biodiversity and the need to address the issue.

SCOPE

This issue paper mainly deals with the environmental impacts of fishing and aquaculture, the safeguard of existing stocks and measurements to balance the growing demand for seafood products and the overfishing threat. It should help producers and retailers to identify good seafood sourcing practices and to sensitise relevant stakeholders to make the responsible choices. There are many social and economic aspects relating to sustainable seafood sourcing. However, in the framework of this issue paper, only the environmental elements will be taken into account.

TRENDS

Fish consumption in the EU is currently of 13 million tonnes per year which represents 20kg per person per year. It varies substantially from region to region. It is highest in Portugal (55kg/year) and lowest in Central and Eastern Europe (<5kg in Hungary, Romania and Bulgaria).

Fish consumption is likely to continue to increase in the future. In the EU it is expected to increase by some 1.5 million tonnes by 2030.

Fish consumption patterns are also changing. There is more demand for frozen and processed fish. Nowadays between 60-90% of all fish is purchased in supermarkets and fish consumed in restaurants, canteens etc is also on the rise.

Consumers across Europe seem to be increasingly interested in obtaining positive assurance about seafood products which has led to a proliferation of certification schemes.

LEGAL FRAMEWORK

The fisheries and fish farming policy are amongst the most regulated sectors of the EU. Amongst the most relevant legislations are **Council Regulation (EC) No 2371/2002⁶ on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy Council, Regulation (EC) No 104/2000⁷ on the common organisation of the markets in fishery and aquaculture products**, currently being reformed, and **Council Regulation (EC) No 1005/2008⁸ establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing.**

The **EC Regulation 16/2012⁹ as regards the requirements concerning frozen food of animal origin intended for human consumption** requires providing business to business additional information for traceability purposes, and consumers, on request, with the catch date. In addition, there is a range of horizontal rules on consumer information, also applicable to fish products.

The development of a more competitive and environmentally-friendly aquaculture sector is in the major focus of the European Fisheries Fund (EFF) and the EU research programmes. In 2009, the Commission proposed a strategy for the future development of European aquaculture¹⁰. Dynamic and sustainable development of an EU aquaculture industry is also supported by **Regulation (EU) No 304/2011¹¹ concerning use of alien and locally absent species in aquaculture**, as well as by the general Community framework of organic production rules: **Council Regulation (EC) No 834/2007¹² on organic production and labelling of organic products.**

OPPORTUNITIES AND BARRIERS

Seafood consumption is on the rise in the EU because, among other factors, it plays an increasingly important role in healthy and balanced diets. Fish contains plenty of high-quality protein and more healthy fatty acids, iodine and selenium than other foods.

On the other hand, fish supply has stagnated worldwide and decreased by 30% over the past 10 years in the EU. Therefore, besides offering more fish products bearing environmental labels, many

⁶ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:358:0059:0080:EN:PDF>

⁷ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2000:017:0022:0052:EN:PDF>

⁸ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:286:0001:0032:EN:PDF>

⁹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:008:0029:0030:EN:PDF>

¹⁰ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0162:FIN:EN:PDF>

¹¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:088:0001:0004:EN:PDF>

¹² <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:189:0001:0023:EN:PDF>

retailers have turned to imported products and to sustainable aquaculture as a means of meeting increased seafood demand.

Moreover, considering that the EU is a net importer of fish products (some 9 million tonnes a year), it has the possibility of influencing and raising the fishing standards worldwide.

If managed sustainably, fish is not only a very good protein source, it also has a lower environmental impact compared to other animal protein.

Opportunities

- With demand for seafood remaining robust in the EU, higher revenues for fishermen, producers and retailers are possible
- Increasing public awareness of the environmental impact of fisheries and aquaculture
- Producers and retailers with a comprehensive and credible seafood purchasing fish strategy might have a competitive edge
- Type I label certification schemes for sustainable seafood products already exist and schemes for sustainable aquaculture are in place and/or under development
- Science-based lists of PET (protected, endangered or threatened) species and/or information by environmental NGOs provide retailers and consumers with indications as to which species populations are under pressure. This requires that the species are correctly identified and their origin is known, as data regularly updated.
- On-going reform of the Common Fisheries Policy which could put a regulatory framework in place that ensures long-term supply of sustainable seafood if the right political decisions are made.
- Global Sustainable Seafood Initiative can contribute to harmonise consumer information about sustainable seafood

Barriers

- Dependency on availability for fresh fish (spawning area)
- Lack of harmonised compliance and enforcement of existing/new legislation
- Existing consumption patterns of seafood deter consumers from consuming different species
- Insufficient supply of sustainable seafood products under existing schemes
- In some markets, a strong concentration on a few species: offer and demand for less common fish species are weak
- Certification schemes are complex and expensive, especially for SMEs e.g. the need of a chain of custody certification for each warehouse and shop in order to sell, for example certified fresh fish
- Consumer confusion resulting from different evaluation of stocks and management systems by NGOs
- Shortcomings of the various certification schemes and their multiplication, the need to effectively tackle such issues as scope, independence, transparency, standardisation etc.
- Differing ranking systems can prove confusing for retailers and some ranking tend to favour retailers with limited range of fish products
- Access to certification by small fisheries (high administrative and economic costs)
- Absence of political commitment
- Lowering of certification standards due to the increasing demand

CONCLUSIONS

Key challenges

- Ensuring a sustainable management for the highly complex and diversified seafood product category
- Reconciling the growing demand for seafood products with a reducing fish population and sometimes unsustainable fishing and aquaculture practices
- Maintaining the price of seafood products at an affordable level for all
- Introducing sustainability criteria for imported fish at a level where suppliers do not leave the European market
- Recognising and supporting non-certified, but sustainable fisheries, especially small local ones
- Obtaining appropriate assurance on the legal status of seafood products

What retailers can do

- Support traceability and avoid IUU fishing (illegal, unreported and unregulated fishing) and some critical fishing methods
- Work with their suppliers and align their sourcing policies with the principles and objectives of environmental sustainability, promoting non-destructive fishing techniques and aquaculture techniques
- Promote environmentally friendlier fisheries and aquaculture practices
- Help and support initiatives that improve the health of the oceans and state of fish stocks and that have the ultimate aim of offering more certified and traceable seafood products
- Inform consumers about seasonal variations and promote fish in season
- Diversify the range of fish products and promote less-known species to ease pressure on the more vulnerable fish species
- Not promote, and consider not selling PET species
- Inform consumers about more sustainable ways of buying/consuming seafood (species to buy, size) and offer information material, including seasonal recipes
- Promote high quality and sustainably produced seafood products

What fishermen, aquaculture producers and processors can do

- Increase the range of certified products, when relevant, and in the absence of other communication channels
- Support traceability and avoid IUU and some critical fishing methods, prevent by-catch
- Implement environmentally friendlier fishing and aquaculture methods
- Increase supply of less-known environmentally friendlier species
- Improve energy efficiency in fishing and aquaculture
- Co-operate with other actors of the food supply chain towards an enhanced sustainability of the whole sector

What policy-makers can do

- Member states to implement and enforce the FAO code of conduct for responsible fisheries¹³ into their national management strategies
- Address the issue of stock management

¹³ <http://www.fao.org/docrep/005/v9878e/v9878e00.HTM>



- Establish better accountability for what is caught, and a clear process that leads to the adoption of environmentally friendlier catching techniques
- Fight against IUU fishing with industry, in a more effective way e.g. by establishing a community register of vessels engaging in IUU fishing and for member states to effectively make use of their blacklists, as well as establishing a public database to verify the legal status of catch certificates
- Establish a strong regulatory framework to encourage the uptake of sustainable fishing and aquaculture methods, including fish imported from non-EU countries
- Put in place consistent communication on the basis of the scientific knowledge and criteria provided by international organisations etc. which retailers can use to develop their sourcing policies
- Encourage the uptake of more environmentally friendly fishing and aquaculture technologies
- Encourage efforts to minimise the number of by-catches
- Support fishermen who use fishing techniques that allow better working conditions, greater equity of the system and quality
- Support traceability efforts in connection to IUU
- Support sustainable small scale fisheries

What others can do?

Environmental NGOs:

- Work together towards a common methodology to evaluate stocks, species and management schemes in order to produce consumer guides based on this common methodology
- Continue working with retailers and other partners of the supply chain

Consumer organisations can:

- Review their ranking techniques of retailers with regard to fish in order to better integrate diversity

Together:

- Sensitise consumers to the issue of overfishing and encourage consumption of “alternative” fish products
- Put sound science at the basis of all decisions.