Report 15/2012 • Published April 2012

Sustainable seafood on the French market:
Expectations and attitudes of large scale buyers

Pascale Baelde,Marie Christine Monfort and Frode Nilssen

Nofima is a business oriented research institute working in research and development for the aquaculture, fisheries and food industry in Norway.

Nofima has about 470 employees. The main office is located in Tromsø, and the research divisions are located in Averøy, Bergen, Sunndalsøra, Stavanger, Tromsø and Ås.

Main office in Tromsø
Muninbakken 9–13
P.O. box 6122
NO-9291 Tromsø
Norway
Tel.: +47 77 62 90 00
Fax: +47 77 62 91 00
E-mail: nofima@nofima.no

Internet: www.nofima.no

Nofima AS
P.O. box 6122
NO-9291 Tromsø, Norway
Visiting address:
Muninbakken 9–13,
Tel.: +47 77 62 90 00
Fax: +47 77 62 91 00
nofima@nofima.no
www.nofima.no

Business reg. no.:
NO 989 278 835 VAT

Report

ISBN: 978-82-7251-979-6 (printed)
ISBN: 978-82-7251-980-2 (pdf)

Report no: 15/2012

Accessibility: **Open**

Title:
Sustainable seafood on the French market: Expentations and attitudes of large scale buyers

Date: 11.04.2012

Number of pages and appendixes: 26+7

Author(s):
Pascale Baelde, Marie Christine Monfort and Frode Nilssen

Project no.: 20753

By agreement with:
The Norwegian Seafood Research Fund

Contractors ref.: FHF # 900273

Three keywords:
Sjømatmarked, Bærekraft, Frankrike

Summary:
Denne rapporten tar sikte på å belyse den markedsmessige betydningen av bærekraft knyttet til sjømatprodukter. Fokus er på industrielle kunders oppfatninger og strategiske betraktninger. Bærekraft er et upresist begrep, og brukes til tider som en slags samlebetegnelse for ulike dimensjoner av bærekraft; dokumentert bærekraft i fiske og forvaltning, miljømessig gode fangstmetoder, og dyrevelferd langs hele verdikjeden for å nevne noen. På den andre siden forstås også bærekraft i en langt videre betydning, som involverer tre overordnede dimensjoner; Økonomi, Miljø og Samfunn. Selv om det normalt i liten grad dette begrepsapparatet som utløses i forbindelse med kjøpsbeslutninger, viser det seg at franske industrielle kunder, særlig supermarkedkjeder, legger stor vekt på disse tre faktorene der blant annet sosialt ansvar for arbeiderne som produserer varene er en viktig dimensjon. Det har således vist seg at kulturell kontekst i noen grad påvirker perspektiv og opplevd betydning av bærekraftbegrepet. Fokus i dette arbeidet er å identifisere industrielle kunders oppfatning av og holdning til bærekraft, med sikte på å avdekke i hvilken grad dette gir seg utslag i kundekrav som stilles om bærekraftig fiske, produksjon og forvaltning overfor dagens eksisterende og eventuelt nye leverandører.

Table of contents

1 Background and Objectives

Seafood consumption in Europe has increased continuously over the past two decades, but the consumption varies from country to country and from region to region. One of the key European markets for seafood is France. According to the Marine Stewardship Council (MSC) fifty-seven MSC-labelled seafood products are currently distributed in France, and an increasing number of French retailers are considering to add MSC-certified product lines, mainly represented by the two large supermarket chains, Casino and Carrefour. The Saint Etienne-based retailer, Casino, began to offer MSC-certified seafood in October 2007 and is now selling 18 MSC-labelled products. Carrefour is currently offering 11 MSC-labelled products.

Sustainability related to economic activity has received increased attention over the past decades. This trend has also been seen increased attention within the seafood industry and among its stakeholders. One of the main arguments that have been driving this trend is the need to maintain a sustainable fishery by avoiding overfishing and to develop more effective fisheries management regimes. Poorly implemented control- and management regimes have often failed to curb the fishing effort, prevent over fishing and avoid environmental degradation. Increased pressure from the trade and other stakeholder has generated a relatively strong motivation within the fishing industry to strive towards a substantiated sustainable fishing practise. One result hereof is that various sustainability schemes have gained ground over the past decades. There is, however a significant lack of consistency between the various schemes, and the comprehension and emphasis on the different aspects of sustainability tend to vary across countries (Parkes et al 2009).

Thus, professional buyers' concern about the concept of sustainability, and their understanding of what this concept stands for, vary greatly between countries and between companies. Consumers' perceptions and expectations on the subject vary also greatly between countries. This adds complexity for producers in providing the right information, the one expected by market players. This research is aiming to look into this matter by investigating the attitude of French seafood buyers with respect to environmental considerations and seafood sustainability policy.

This research will focus on the level of awareness and understanding of the concept of sustainability among the professional seafood market in France; that is the professional buyers in supermarket chains, wholesalers and some key processors in France. **What does sustainability mean to French seafood buyers/ traders, and to what extent is the topic on the agenda of seafood buyers in their general everyday buying. In that respect it is also important to look into to what extent this translates into their purchasing policies and practices.**

2 The French public debate on environmental issues and sustainability

The degradation of the environment caused by intense human activities entered the public debate at international levels in the early nineties (Rio summit 1992) and gained in intensity from the early 2000s. Media coverage of current and potential climatic disasters, of conflicts over natural resource shortages and call for public and private interventions reached a climax during 2009, but only led to the mitigated Copenhagen Global Warming Summit where many European delegates participated.

France sees herself as an intermediary country when it comes to sensitivity towards environmental questions and sustainability issues in general. The general perception is that the attitude towards the important of sustainability issues related to food production is lying somewhat between the “very environmentally conscious” Nordic countries, including Germany, and the “less concerned” south European ones (Monfort 2008). The For sustainable consumption and production, the idea for the French government is to act in accordance with consumers and producers in sharing responsibility for changing both purchasing behaviour and manufacturing practices, to integrate sustainability into the whole life-cycle of products and services. It is an overall strategy to develop an environmental labelling structure and strategy so that products are directed towards and encouraged to use more sustainable choices. Looking into the latter, one may ask; how important is the public debate on these issues today and how does it influence consumers’ behaviour and how does it impact the supply chain?

In France, questions about the consequences of human activities on global warming and the loss of biodiversity gained momentum during the presidential campaign in 2007. The well known, and charismatic journalist and TV producer Nicolas Hulot managed to get major political parties to rally his environmental chart. Shortly after being elected in 2007, the current French president called for a vast public consultation on ecology, the so called “*Grenelle de l’Environnement*”. This comprehensive process was organised around six thematic workshops, one of which being concerned with biodiversity and natural resources. In January 2008, after months of discussion with numerous stakeholders (NGOs, industry, consumers’ association and the like), 238 recommendations were made. Few, if any of these have translated into concrete actions yet, but this much publicised forum has contributed to raise public consciousness on environmental issues.

Growing public concern over social and ecological issues is one of the strongest trends that have shaped consumers’ habits in the last decade. Like in other countries in, consumers in France tend to rely on and assign social responsibility with regards to both social and environmental aspects to producers and suppliers such as supermarkets, restaurants and manufacturers. The main issue related to the concept of sustainability is however mainly related to factors such as child labour, ethical working conditions, and environmental impacts of production. Between 1995 and 2007, the proportion of French people quoting « environmental degradation » as a major concern jumped from 6.5% to 19.5%. Yet, consumers have a rather vague understanding of this complex topic (Crédoc 2009).

What comes first to their mind includes the amount and recycling of packaging, the use of chemicals in food production, the carbon footprint attached to products, and energy saving (water, electricity). There seems to be misperception and confusion in consumers' knowledge between the concepts of "sustainable", "environment friendly" and "organic". Most people buying "organic" food are convinced that they contribute to "sustainability" whenever they buy this type of food (Crédoc 2009).

In the specific case of seafood products, consumers' understanding of sustainability issues is even less pronounced. However, attention has increasingly been drawn towards these issues through media coverage of issues related to endangered species such as bluefin tuna, deepwater species, dolphins and whales. The notion of sustainable fishing and the concept of eco-labelling of fish products have been brought to public attention since 2004 and onwards mainly as a consequence of the active NGO initiatives directed towards large scale operators (mainly retailers and processors).

In 2007, France Agrimer, a public organisation in charge of promoting seafood products, commissioned a study to define which criteria would be the most relevant for a national ecolabel for seafood. After a number of meetings with fisheries stakeholders, it was agreed that the label would not be limited to environmental and quality matters, but should also include social criteria. The process was carried out within the frames of the "*Grenelle de l'Environnement"* initiative and recommended that a national ecolabel for fisheries products should be developed (recommendation number 89). Today, three years after the end of the national consultation process, concrete actions are still to be seen. It had been expected that 10 fisheries would be certified against the national standards by 2011. But the decision process is slow and according to promoters these national standards will not be ready before the end of 2012.

Beside this Business to Cconsumer ecolabel, France Agrimer has also initiated the creation of a B to B label named "Responsible Fisherman". This scheme is very much inspired from the Responsible Fishing scheme developed by the UK Seafish Industry Authority[1]. Fishermen who comply with a number of rules will be publicly recognised as acting 'responsibly'.

It must be said, though, that over the past 3 years, and despite much government financial support, little has come out of these two projects so far. The fishing community has received sufficient information to understand that some sort of labels were underway, but have seen too little concrete actions to feel concerned. Especially, the potential financial and non-financial costs/ benefits of the labels have not been assessed and advertised.

[1] http://rfs.seafish.org/

3 Methodology

The main objective is to identify and describe some of these differences and also to explain why such differences occur. Although the main thrust lean towards the descriptive mode, this research also has explorative aspects due to the aspiration of exploring “new empirical ground”.

According to the textbooks on research methods, descriptive research is used when one are concerned with measuring and estimating the frequencies with which things occur, or the degree of correlation or association between variables (Kent 1993). This is at the core of the objective of this research, namely to identify the positions (persons) and their participation and influence in the purchase decisions.

Collection of data for subsequent analysis and interpretation is always a challenge. While one often wish to produce as good results as possible by including a large number of respondents and other information sources, the inevitable problem of compromise always arises. The, perhaps, two main factors that calls forth the noble art of compromising is constraints of time and economic resources. The need to compromise does, hence, lead to a set of choices that obviously affects the design of the research related to sampling, and design of the data capture instrument.

The study at hand has the ambition of bringing new empirical insights about specific aspects of the buying criteria in the French food distribution channel. The research results reported here are drawn from two strands of information: first hand and secondary information.

The secondary information is drawn from the existing body of knowledge documented in scholarly as well as industry journals, and commissioned research reports of different kinds. In addition we have used internet sources to monitor and reveal formal policies held by the industry actors, NGOs and other relevant stakeholders.

Quite often, the researcher is faced with the question of selecting a sample of a population that is subject to investigation. The reason for this is that the total number of individuals in the population is so large that it is not possible to include all of them.

In this instance the total number of the population is limited to a selection of actors in the seafood distribution chain in France. The selection is a kind of purposive sampling where we have sought respondents that cover the major volumes of fish that flows into the French seafood market.

The research was carried out from October 2010 to March 2011. The research involved in-depth interviews with key seafood companies and retail companies. The companies were selected in order to secure reliability of the data. The selection of respondents is chosen in order to cover the major part of French seafood market: they represented all segments of the market -retail, catering and industry- and all distribution steps –import, wholesaling, and retailing.

A large proportion of the respondents and their organizations are also connected to an informal network of seafood buyers “the *Responsible Fishing Network”*, moderated by

Seafood consultant Marie-Christine Monfort through which information on seafood and environment are disseminated. Being a member of the network indicates openness to the subject.

The majority of the interviews are carried out on the basis of face to face interviews. In a few cases phone interviews were used. We let the company designate from their team the person most able to answer questions on seafood sustainability.

In addition, we run three interviews with leading NGO specializing in marine preservation, seafood industry and markets: WWF, Greenpeace and Seafood Choice Alliance.

4 Results of the interviews

4.1 The sample

Over 25 companies were contacted to be part of the project. Despite the busy period prior to the Christmas season most of them (20) accepted, showing their interest in the issue of sustainability and a curiosity in the results of this research. In contrast, two large scale players refused to contribute to the study, most probably reluctant to discuss this sensitive subject.

The 20 companies included:

- Importers/ traders whose core business is to buy seafood abroad and organise the shipment of products and sales further down the distribution chain;
- Wholesalers whose core business is to collect seafood from various sources (national, international) and sell further down the distribution chain to restaurants, other wholesalers and fishmongers;
- Seafood industrialists whose core business is to process fresh or frozen fish and other seafood from a raw or semi-processed products into a ready to eat format;
- Large scale retailers including supermarkets and freezer centers who are responsible for the distribution of over 60% of all seafood (fresh and frozen);
- Institutional restaurants which are organised in chains, and which business is to supply both centralised and not centralised kitchens and serve a large number of outlets.

Independent restaurants and fishmongers were not interviewed due to their highly atomised organisation, their limited part of the market and time constraints of the study.

Market shares in the seafood marketing channel between different categories are shown in Table 1.

Table 1 Market share in the seafood marketing channel distributed on types of companies

Segment	Retail structured	Retail independent	Institutional Catering	Independent Commercial Catering
Market share (in volumes)	60 %	12 %	8 %	20 %
Study coverage	Covered by the study	Not covered	Covered by the study	Not covered

Overall, these companies buy a total of circa 70-80,000 tonnes in equivalent live weight of Norwegian seafood products per year, out of a total of over 450,000 tonnes. All but two companies buy seafood products from Norway on a regular basis.

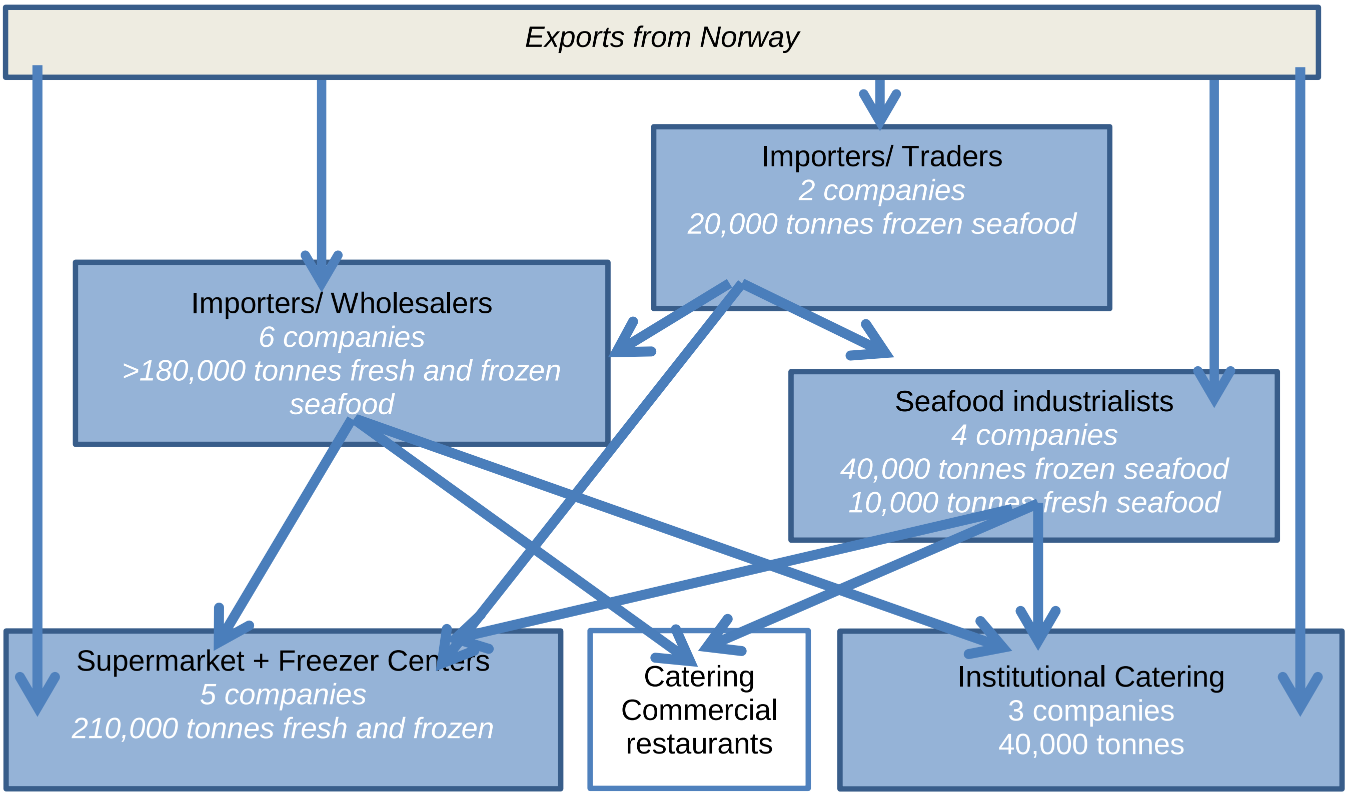


Figure 1 Types of companies

Depending on the size and specialty of the company (all food, only seafood, all forms of seafood, only fresh, etc), we interviewed people from the top management (General managers in small and medium sized companies), from purchasing departments (buyer, director) and from quality and sustainability departments. Most interviews were run with staff from the purchase and quality departments; with only one respondent entirely dedicated to sustainability (Table 2). One interview was run with three people from the same company, each representing a different department, and in two companies the interviews included two persons.

Table 2 Profile of respondents by department

Department	**Number of interviews**
Purchase Department	10
Quality & Sustainability Department	9
Sustainability only Department	1
General Management	4

4.2 General sustainability policy

Fifteen out of the 20 companies said to have a sustainability policy, more or less structured. It varieson the continuum from formally written and structured long term plans with specific objectives, to a few lines in the general management programme. Several large scale companies (retailers, caterers) have developed a comprehensive sustainability policy, available to the general public on internet, through a Corporate Social Responsibility (CSR) report. In general the sustainability policies refer to energy and water savings, products quality and limiting carbon emissions. There are, however a few that have specific seafood, or fish purchasing policies. One example is the large international catering company Sodexo. In June 2011, Sodexo made a global commitment for sustainable fish and seafood.

“Sodexo will source sustainable fish and seafood in all the countries where it operates by 2015”.

The plan involved two intermediate steps:

- By August 2011, Sodexo should no longer serve any seafood species which are identified as beingat risk.

- By 2012, the majority of fish covered by international contracts is sustainably sourced.

According to the company Sodexo's Sustainable Seafood Initiative is part of it’s global roadmap for sustainability “Better Tomorrow Plan”. The commitment to source sustainable seafood is one of 14.

Better Tomorrow commitments to improve Nutrition.

Yet another example is the large retailer Carrefour. Although the official overarching sustainability policy of the retailer is framed within “Responsible sourcing” Carrefour has instituted a specific sustainable fishing policy in pursuit of four objectives:

- Greater sustainability for seafood products;

- Ensuring that new products come from sustainable sources;

- Combatting illegal fishing;

- Increasing awareness and training Carrefour employees and consumers.

The five interviewed companies which had no overall sustainable policy were typically:

- small to medium size companies, and

- intermediaries in the seafood distribution chain, between producers and end sellers (i.e. wholesalers, traders).

4.3 Specific seafood sustainability policy

This section describes how seafood companies, which have a defined and formally expressed sustainability objectives, organise their purchase of seafood. How do they apply their overall sustainability policy to seafood products?

Commitment to seafood sustainability varies greatly between operators, from no action at all, to a well-structured seafood purchasing policy. Human resource investment goes from no particular time devoted to the question to one person dedicated full time (one case) or part time to the topic.

Ten companies out of the 20 have integrated specific seafood sustainability criteria in their policy. Two more companies have written down some specific conditions for the purchase of products sold under their private labels, and only for those products for the time being. Three companies said to be considering developing specific rules in the future. One company had precise and quantified objectives: to buy and sell 100 % certified sustainable seafood (wild and farmed) within 5 years.

Five have not integrated the concept of sustainability at all in their purchase activities and have taken no concrete actions. These companies have neither felt internal motivation nor external pressure to do so. Three are regular buyers of Norwegian seafood products; two others are sporadic buyers.

Table 3 Level of formalisation of corporate sustainability policies

Type of organisation	Global sustainability policy	Specific seafood sustainability policy
Retailer 1	Yes	Yes
Retailer 2	Yes	Yes
Retailer 3	Yes	Yes
Retailer 4	Yes	No
Retailer 5	Yes	No
Wholesaler/ importer 2	Yes	No
Wholesaler/ importer 3	Yes	No
Wholesaler/ importer 4	No	Yes
Wholesaler/ importer 6	Yes	Yes
Catering 1	Yes	No
Catering 2	Yes	Yes
Catering 3	Yes	Yes
Industrialist 1	Yes	Yes
Industrialist 2	Yes	No
Industrialist 3	Yes	Yes
Industrialist 4	Yes	Yes
Wholesaler/ importer 1	No	No
Wholesaler/ importer 5	No	No
Trader 1	No	No
Trader 2	No	No

All respondents agreed that buying of legal fish is in itself not a sufficient criterion in order to ensure a sustainable seafood production, and that a wider set of criteria need to be applied. The buyers are, thus, to an increasing degree demanding documentation confirming that the products are produced in accordance with strict criteria related to the notions of sustainability, environmental concern and responsibility in production. For example the seafood producer "Findus" have got a list of ten principles for purchasing seafood where legality, transparency and sustainability are three central criteria. The recently introduced anti IUU regulation[2] was also mentioned by most of the traders traders as being a positive move towards sustainability. One of the respondents (a processor) did however emphasise that; "*there is still black fish on the market*" and another one confessed "*about 70% of my purchases have a catch certificate, no more*". This indicates that as one move upwards in the marketing channel away from the supermarkets and other outlets that meets with the end user, there may be a slightly more relaxed attitude to the sustainability issue.

[2] Since January 2010 the first, all seafood entering the EU market shall be accompanied with a catch certificate, confirming that the fish was taken by a registered vessel.

Table 4 Structured policy versus ad-hoc actions

	Probing for and avoiding potential sources of problems	Identifying necessary actions	Emphasises the importance of complying with rules	Educating staff	Educating clients
Retailer 1	x	x	x	x	x
Retailer 2	x	x	x	x	x
Retailer 3	x	x	x		x
Retailer 4	x	x			x
Retailer 5	x	x			x
Wholesaler/ importer 1	x	x	x	x	
Wholesaler/ importer 2	x				
Wholesaler/ importer 3	x	x	x	x	
Wholesaler/ importer 4					
Wholesaler/ importer 5					
Wholesaler/ importer 6	x	x		x	x
Trader 1	x				
Trader 2					
Catering 1	x	x			x
Catering 2	x	x			x
Catering 3	x	x			
Industrialist 1	x	x	x		
Industrialist 2	x	x	x		
Industrialist 3	x	x	x		
Industrialist 4	x	x	x	x	x

4.3.1 Actions related to purchasing criteria: Delisting of species and suppliers

Eleven companies said to have delisted endangered species from their purchases compared to four which said to have not considered delisting any species.

The companies which have not delisted species are:

- Industrialists who buy a limited selection of species, especially demersal whitefish, which have been certified as sustainable (MSC certified for most fish stocks), or
- Intermediaries who simply buy what their clients require, with no or limited means, and no benefit, to influence them.

Most often mentioned delisted species include bluefin tuna (*Thunnus thynnus*), orange roughy (*Hoplostethus atlanticus*), sharks, especially deep sea sharks **(***Centrophorus squamosus, Centroscymnus coelolepis)* and porbeagle *(Lamma nasus*). Blue ling (*Molva dypterygia*), grenadier (*Coryphaenoides rupestris, Macroronus berglax*) and Greenland halibut (*Reinhardtius hippoglossoides*) were also mentioned several times. Atlantic halibut (*Hippoglossus hippoglossus*) was mentioned twice. Two companies said to avoid North East Atlantic cod *Gadus morhua* (all areas included) in favour of Pacific cod *Gadus* *macrocephalus*. One company said to have delisted *Gadus morhua* from European Union fisheries in favour of cod from Norway and Iceland.

Table 5 How to buy sustainable seafood?

Company	Delisting species	Delisting suppliers	Buying and promoting MSC	Cooperating with NGOs
Retailer 1	Yes	No	No	Yes
Retailer 2	Yes	No	Yes	Yes
Retailer 3	Yes	No	Yes	No
Retailer 4	Yes	No	Yes	No
Retailer 5	Yes	No	Yes	No
Wholesaler/ importer 1	No	No	Yes	Yes
Wholesaler/ importer 2	No	No	No	No
Wholesaler/ importer 3	Yes	No	Yes	No
Wholesaler/ importer 4	No	No	No	No
Wholesaler/ importer 5	No	No	No	No
Wholesaler/ importer 6	No	No	Yes	Yes
Trader 1	No	No	No	No
Trader 2	No	No	No	No
Catering 1	Yes	No	Yes	Yes
Catering 2	Yes	No	Yes	No
Catering 3	Yes	No	Yes	Yes
Industrialist 1	Yes	No	Yes	No
Industrialist 2	No	No	Yes	No
Industrialist 3	No	No	No	No
Industrialist 4	yes	No	No	No

Bluefin tuna, deep sea shark and orange roughy are species which stocks are in undisputed poor status. They are also placed high on the agenda of NGOs, Greenpeace and WWF in particular. The bluefin tuna fishery has received intense media attention (TV programme, regular national and regional press articles) in the past few years. These negative media reports, combined with the fact that the consumption of bluefin tuna in France is rather low, has no doubt been a great incentive for large scale buyers choosing to delist this emblematic species. The poor status of shark species has also been widely mediatised.

Others species, such as blue ling or grenadier, have been delisted by some companies only. The divergence of diagnosis comes from the lack of information on stock status, the difficulty in accessing it, or the difficulty in interpreting uncertain or even contradictory information. Considering the number of species and the number of analysts working on them, the task is indeed considered to be very complex for non-experts.

Several companies are turning towards aquaculture non-carnivorous species (tilapia, pangasius) instead of wild fish from fragile stocks.

The NGO traffic light red/orange/green lists, namely the WWF and Greenpeace lists, are well known to respondents. The lack of precision in these lists was mentioned by several respondents, who said not to follow the prescribed advises.

Several large scale companies have established their own list(s) of species distinguishing species they should not buy, species they may buy and species they should preferably buy. The construction of these lists is in all cases made internally, based on a mixture of data including NGOs lists, the Seafood Choice Alliance guide and scientific reports from amongst others RFMOs such as NEAFC. Sometimes, it was made in collaboration with WWF France. No respondent said to have delisted species because of the fishing gears used to catch them (beside dynamite and poison). One said to avoid buying fish from pelagic trawler during the spawning season. Two others said they felt that deep sea trawling would be banned in the future. Three companies said to prefer longliners caught fish (especially tuna), another preferred creel caught Norway lobster (*Nephrops norvegicus*) to trawl caught.

4.3.2 Delisting suppliers

Amongst companies which have put in place some sustainability criteria, none have delisted a supplier for not complying with these criteria. They explained that it takes them a long time to establish trusted relationships with their suppliers and that delisting one would significantly disrupt the running of their businesses.

4.3.3 Size of the fish

Beside the status of the stock, the size of the fish is another criteria used by some buyers. It is widely accepted that to ensure the sustainability of a stock, fish should not be captured until they have reached their size at maturity, which is when they can reproduce. For professional buyers, this usually means to comply with legal sizes set by the government. For some species however, the legal size is too small for marketing and they tend to select larger fish (‘*there is little to eat on a 160g lemon sole’*).

4.3.4 The MSC label

All respondents was aware of the existence of the MSC as a label for sustainable seafood. They did not necessarily have a clear understanding of the purpose and workings of this label, but they clearly positioned themselves in favour or against. Currently it is only Carrefour aming the supermarket chains that use the MSC label their own consumer products in store. There are howevere a few processors that are engaged with MSC on consumer packages. **In February and March 2012, Findus, Labeyrie, Connétable and the** MSC **in partnership with the Carrefour Group join forces to launch les Jours Bleus (the Blue Days), a nationwide in-store campaign in** France**. The campaign aims to promote certified sustainable** seafood **in** France**. It brings frozen, chilled and canned products into a promotional display, at the front of stores.**

Some respondents, mostly intermediaries, considered the MSC as a “*pure marketing gimmick*” and had a strong negative opinion related to it. They also admitted having no real understanding of the scheme.

Eleven companies said that they would consider to buy MSC products on a regular basis:

- Six considered it to be the best available label today to ensure “sustainable wild seafood”.
- Five bought MSC seafood only to meet their customers’ requirements, especially demands from Switzerland, Germany, Austria.

These companies said that they were not concerned about the recent critiques by ONGs of the MSC certification process and its credibility. In their opinion the MSC label will have to answer the critiques, but on the whole it remains the most serious label.

In January 2010, three industrialists selling MSC labelled products (Labeyrie, Findus, Chancerelle) and one large scale retailer (Carrefour) organised a special national wide campaign in retail shops of this chain. The primary objective was to show consumers that by choosing MSC-labelled seafood they were making a positive difference to our world's oceans. The success was far from what was expected, as it attracted very little public attention. Nevertheless, they will all renew the event. “We are ahead of consumers on that matter” explained one of the promoters.

Some considered that the MSC label was weak as it does not take into account neither the social aspects of the fishing industry, nor the quality of the products "*You can buy from China MSC Gadus macrocephalus and even Gadus morhua certified fish that have been double frozen, where neither fish quality nor working conditions are guaranteed*".

Consumers do not know the MSC label and thus do not ask specifically for MSC certified products. In fact, consumers rarely ask for sustainability guarantee at all when it comes to seafood.

The largest proportion of MSC products on the market are frozen products.

Saithe in the English Channel and the North Sea were the first French fisheries to be MSC-certified in March 2010. Purse seine caught sardines of Brittany was the second one three months later and several others are being evaluated at the moment.

4.3.5 Other sustainability labels

When it comes to wild seafood, Friends of the Sea was mentioned by one respondent. The French labels (B to C ecolabel and B to B responsible fisherman label) on which public authorities are working were never mentioned.

Four companies mentioned the Mr Goodfish programme, of which two said to consider using the Mr Goodfish species list in the near future. This programme initiated by the Nausicaa aquarium in Boulogne sur Mer and promoted by Genova (Italy) aquarium and La Coruna aquarium (Spain) offers so-called positive lists of species caught by fisheries said to be sustainable, both on environmental and social grounds. The two main criteria underlying the lists are the fishing season and the proximity of the fishery to markets. Commercial partners of this programme include fishmongers, wholesalers, and restaurants. No supermarkets are yet partner of it.

Two companies mentioned the Responsible Fishing Alliance which promotes Nile perch from Victoria Lake, based on environmental and social criteria.

Two companies said to buy fish guaranteed by Bureau Véritas, a French private certification organisation. This organisation also elaborates in-house standards to certify fishing boats. These standards, not made public, are said to cover both environmental and social aspects.

In the case of farmed seafood, some respondents said that they tried to buy fish farmed according to the Globalgap scheme; others preferred the WWF aquaculture dialogue. Two respondents said they would like a wider diffusion of the ASC certification.

So far, no label guaranteeing aquaculture sustainability has received a solid and widespread recognition among French buyers. There is still some hesitation over which label or initiative to trust. Organic labels are the ones being most recognised by consumers, not sustainability labels, not yet. Thus companies find it easier to communicate on the organic attributes of aquaculture products than on the sustainability of wild caught species. Sometimes, there tends to be some amalgam between organic and sustainable.

The market has reached a point where several labels or brands or allegations attached to seafood refer to sustainability. This reflects the absence of consensus at industry level, and the possible risk of confusion at consumers' level.

4.3.6 Fresh *versus* frozen, wild *versus* farmed seafood

Nine out of the 20 companies questioned buy both fresh and frozen seafood, five buy fresh products only and six buy frozen products only. The issue of sustainability is tackled very differently according to their respective field of operation. Fresh seafood wholesalers tend to have less advanced sustainability policies compared to frozen seafood traders. As an example the two frozen fish traders interviewed were MSC certified; only one of the fresh fish dealer was.

The distribution channels for wild fresh seafood are far more complex compared to the better structured and organized frozen and farmed fish industries. The wild seafood market is characterized by a large variety of species (over a hundred), a wider diversity of fishing communities using various fishing gears, more small scale operators and limited traceability. Tracking down wild fresh fish and ensuring continuous supply is a challenge for traders. Several buyers mentioned that they buy a large proportion of fresh seafood 'on the spot market', that is with no or little premeditation and according to what is available. With this type of purchase little information is collected beside the species names, the area/ country of catch and the price.

In comparison, buyers of frozen and farmed seafood usually deal with a limited number of species. On the market, these products are traded on a contract basis with less frequent purchases. This gives time to buyers to check with their suppliers the production and processing conditions.

Traceability is a key element to sustainability, and is far from being effective on wild fresh seafood. Most respondents said to meet difficulties in obtaining reliable information, including on products from French fisheries, compared to frozen and farmed seafood. Consequently, buying sustainable is easier for farmed fish compared to wild fish.

4.3.7 Control of progress

No companies have tools for measuring progress of their actions towards sustainability.

4.4 Motivations for developing a sustainability policy

What makes private companies engineer a relevant sustainable policy? There are several factors.

4.4.1 Role of media

All companies, whether they have developed a specific sustainability policy or not, agreed on the important role of media (TV, radio and newspapers) as an opinion maker.

Bluefin tuna was mentioned repeatedly. "*Massive media exposure of bluefin tuna contributed to affect sales of all sorts of tuna*", "*the salmon lice story shown on TV made our sales drop* *for a couple of weeks after the programme was shown*". "*Darwin's nightmare film*[3] *has definitely had some impact on the image of Nile perch and made us change our supplying policy*".

The role of media is important in alerting on all sorts of problems, including environmental ones. This is well understood by all actors of the fishing and farming industries, including public authorities, producing organisations, individual producers and NGOs (see section 3.5.).

4.4.2 Market driven forces

All intermediate buyers (importers, wholesalers) explained that they organised themselves to provide their clients with sustainable seafood as requested. The movement they say is clearly market driven.

This is especially true for MSC certified products.

- Three out of four industrialists said to buy and sell MSC certified products to "*get access to specific markets requesting this label*";

- the two frozen fish traders said to buy MSC certified in order to be able to respond to bids requesting this certification, even though they had little knowledge and confidence in the signification of the scheme.

4.4.3 Brand value and image of the company

What better tool than the brand to convey the image of a company? All of the ten companies with their own label or brand have developed a seafood sustainability policy, more or less sophisticated. Eight of them have adopted MSC on some of their branded products, in addition to other instruments.

Despite the fact that consumers themselves rarely question the sustainability of seafood products, long established companies with a positive public image (retail, catering) consider that today buying sustainable products is becoming essential to maintaining this public image. The brand is a vector that carries the specific values of the company. Quality and good value for money attributes are the historical ones. Sustainability is a most recent attribute and will continue to grow. Social responsibility is emerging.

Moreover, high competition between companies contributes to heighten their sense of social responsibility. "*Buying responsible may become one of our differentiating factors*" explained one supermarket seafood purchase manager.

Communicating on sustainability issues is a difficult matter for these companies. For the time being, most of them adopt a defensive attitude, protecting themselves from potential critiques in the media or from their clients. Except for sporadic and highly mediatised communication campaigns about the delisting of charismatic species (bluefin tuna, sharks for example), they restrain from advertising much about their in-house sustainability initiatives. Their raisons are not always clear cut, but there is often a fear of backlash attached to their initiatives,

[3] This multi awards winner documentary film launched in 2004 reports the environmental and social effects of the fishing industry around Lake Victoria in Tanzania.

backlash from ONGs blaming them for not doing enough or backlash from some of their stakeholders impacted by their decisions. Respondents explained that today they were not ready to communicate, but that they will do so in the future. They first need to consolidate their seafood sustainability programme and be sure that it is effective. Most confessed that this multi-facetted matter is very complex and difficult.

Nonetheless, in periods of high media fuzz about one or another seafood sustainability problem, some large groups are tempted to advertise some of their good actions. During spring 2010, one retailer run a nation wide press campaign explaining that it will remove four species from its product offer, estimated to account for less than 0,5 % of their total purchases. This illustrates the gap observed in some cases between declarations and reality.

Intermediate players are far less concerned by their image; they are not a driving force in the sustainability picture.

4.4.4 Shareholders

The role of shareholders and their preferences on the matter was not often referred to. Four respondents clearly mentioned that they have to evaluate the economic performance of the decision they take: "*Sustainability has a cost*", "*I work for shareholders who expect a return on their investment. The company will not buy sustainable if it prevents it from reaching that goal*"; "*Our goal is to nourish people and to feed shareholders*". "*Why should we impose ourselves constraints when others don't".*

Moving towards environment friendly purchasing is considered as an economic burden, as long as there is no obligation to do so. "*Caring for the environment would mean to stop buying whiting (Merlangus merlangus). I can't, because my competitors will continue to do so, the market will not stop buying and I will lose market shares*".

But could it generate revenues? No respondent mentioned this, but several referred to the importance for them to protect, or at best enhance, their reputation as a "responsible" company. The hope is to prevent their customers from switching over to a competitor, to stimulate loyalty and to increase brand value through consumers' awareness. One respondent made it clear: "*Sustainability does not raise revenues*".

4.5 The role of NGOs

The role of environment NGOs in the fishing and aquaculture industries is several fold. In depth interviews have been run with the three major NGOs operating in France on marine issues: WWF, Greenpeace and the Seafood Choice Alliance (The Alliance).

Greenpeace was mentioned ten times as being the number one environment NGO influencing the public opinion. "*They run spectacular campaigns*" "*their analysis are often relevant*", yet they are perceived to underestimate the social impact their proposals may have, such as a decline in the fishing activity. WWF is another important opinion maker according to six respondents. No other NGOs were cited as to educate or alert public opinion on seafood related issues.

WWF has been the first to be really active, followed a few years later by Greenpeace and the Alliance. WWF and Greenpeace focus on issues concerning the production sector (fishing fleet capacity, impact of fishing methods, etc.), while The Alliance focuses on the buying practices of retailers and caterers.

4.5.1 Their strategies

There is a clear difference between their respective operating strategies: Greenpeace preferring offensive actions to alert public opinion and refusing all potentially compromising partnership situation; at the other end of the scale, the Alliance prefers spending time sensitizing people and building relationship between them; in between these two extremes the WWF undertakes some highly visible campaigns as well as more time consuming, behind the scene work in partnership with major economic players.

Greenpeace and WWF have a higher public visibility and there is no doubt that they succeed in influencing consumers and politicians. Greenpeace is the ONG provoking most disquiet amongst professionals in the seafood chain, as they never feel fully protected from a damaging media release by Greenpeace. Interestingly, as much as Greenpeace is being considered a threat because of its strict demands and potential threats of sanctions, recent efforts by WWF to work more in partnerships with key players seems to provoke suspicion all around. The association of WWF with the MSC also creates suspicion of commercial interests.

Meanwhile, the Alliance, far more discreet and very little known just four years ago in France, is slowly gaining recognition and visibility. Not the same visibility that WWF and Greenpeace have with the public and politicians, but a visibility with professionals in the retailing and catering sectors, who are attracted by the Alliance's 'softer', neutral and more pragmatic approach.

4.5.2 Their influence

It is difficult to measure the influence of each environmental NGO, but their combined influence is growing. It is not really a matter of which NGO has the greatest influence, but how their differing approaches complete each other. This growing influence is expressed in several ways:

- NGO in general are taken more and more seriously, benefiting from the growing public concerns about sustainability issues.

- The three NGO work in different and at times competing ways, but everyone knows and recognizes that they all aim at similar goals. Thus, seafood professionals can make comparison between them and chose the one to ignore and the one to listen to. If anything else, this generates thinking and debates about how to address sustainability concerns.

- The trend towards increasing partnership approach means that NGO have more influence from inside the companies. Some staff working for the companies, who may be personally concerned about sustainability issues, may find themselves in a better position to initiate actions.

- NGO have traditionally been most active on the fishing side of the seafood chain, but they are paying more and more attention to the role that the post-production sector can play in promoting fisheries sustainability. They repeatedly ask professional seafood buyers to develop more structured and rigorous purchasing policies and practices.

4.5.3 Their messages

- Reduce sale, and consumption, of seafood and increase the proportion of sustainable products on the market.

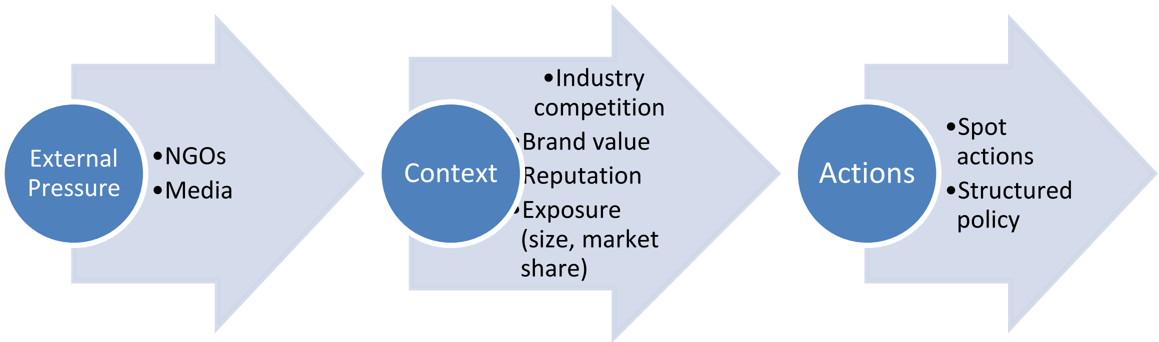
- Policies on purchasing sustainable seafood products must be based on a global vision and cover the whole integrated seafood chain.

- Private enterprises must communicate more about their sustainability initiatives.

4.5.4 Trends

All three organisations are quite opportunistic. They grab issues to rise or possibilities for collaboration as they come. Out of the 20 respondents five said to get advises from NGOs (one of the three mentioned) to engineer their purchasing policy. Getting their assistance may be seen as an insurance against risk of attack[4].

The higher the external pressure the more advanced the sustainable policy.



4.6 Obstacles and difficulties

Putting in place a workable sustainable seafood policy encounters several difficulties and obstacles.

Sustainability is a complex issue; it covers the environment, the social and the economic dimensions. On its own, the environment aspect includes several highly technical and scientific subjects, some of which still disputed, and requires a high level of knowledge. Several companies considered that taking into account the social conditions of workers along the distribution chain is as important as the environmental elements.

Setting up a solid sustainability policy induces extra cost to market operators which may be perceived as a threat to their competitiveness. The extra cost includes on the one hand the

[4] The USA food retailers are all linked in a way or another to environmental NGOs. Source Howard Johnson, personal communication (2010).

direct cost related to engineering the project, educating personal, and on the other hand the possible higher price to pay for accessing sustainable sources, certified or not. Hidden costs related to loss of opportunities have also been mentioned. "*Europe is losing attractiveness as a seafood market, as it asks too much and pays too little*" "*The Chinese are not as demanding as European buyers*". Several respondents said that in a period of shortage of supplies, when buyers on the international market are not so demanding, the risk to miss contracts is high when adding sustainability criteria on purchases. And in most cases they confessed to not take the risk.

Some hoped that the extra cost would, eventually, be offset by marketing benefits.

In-house obstacles have been detected in several large organisations.

- The understanding of sustainability issues may vary between different departments within a company;

- The primary objectives of the sustainability department (for example remove unsustainable species) may be contradictory with operational objectives of the purchase department (make business, generate margins);

- Amending buying practices internally when the external context has not changed much yet is difficult;

- Motivation to move towards sustainability is rarely evenly distributed all through an organisation. The most dramatic example comes from chains which regroup independent operators (retailers, wholesalers) under the same name. The central bureau has limited power over the buying strategies of individual sites.

Even when a well-structured, understood and accepted sustainability policy is developed, difficulties for obtaining the right product and/or the correct and comprehensive information from suppliers remain and may impede the implementation of this policy.

All through the project it was repeatedly said that dealing with farmed and frozen products was less complicated than with wild seafood, as more reliable information is available and traceability assured in most cases.

5 Conclusions and recommendations

5.1 How does the French market tackle sustainability issues?

The trend towards sustainability is moving towards a wider use and acceptance in the industry and trade. Most likely there will be a trend where the industrial actors will try to secure their purchases from guaranteed sustainable sources. This trend will certainly be fuelled by private companies rather than by government initiatives. It is clear to a majority of large size seafood companies that the current legislation regarding the production and post-production processes does not ensure the sustainability of seafood available on markets and that private initiatives are to be considered.

In the absence of public regulations, nothing will happen if the market or its components don't request it. So-far all actions in favour of seafood sustainability have been taken under the pressure of large scale operators who operate in a highly competitive environment and have a name to defend. All reported actions have been initiated to limit risks on reputation and brand value.

5.1.1 Different approaches and strategies

Different organisations have developed different environmental strategies according to their position in the supply chain. Some companies don't do any more than what is expected by their customers, others have set up a proactive strategy and policy.

Responsible seafood policies are developing fast amongst large scale operators and cover an increasing number of products lines. These policies may be partial (concerning only a few species, based on a limited number of criteria criteria) or global (involving setting up criteria all along the entire purchase chain).

Engineering a coherent seafood sustainability policy requires specific competences. Some companies have developed in-house expertise, defining their own sustainability criteria internally, with or without the support of environment experts, fisheries researchers, or NGOs. Others have chosen to rely entirely on external skills and services (via certification schemes).

For the time being, small scale traditional operators (fishmongers, restaurants, their suppliers), who represent a large share of the market, do not feel really concerned and are far less active. They passively comply with market conditions.

A shift from non-sustainable species to more environment friendly ones has started. It concerns for instance a positive move towards Norwegian cod at the expenses of North Sea cod. The move from wild species to farmed fish illustrates a developing strategy. Several companies also favour non-carnivorous farmed fish (tilapia, pangasius) at the expenses of carnivorous farmed species.

5.1.2 Difficulties

Difficulties met by companies wanting to set up a sustainbility seafood policy include the lack of motivation of some players (both internally and externally), the perceived negative cost/benefit balance, the absence of information, the operational complexity at the implementation stage. Several respondents also pointed out the difficulties to reconcile the conservation message of buying less seafood to preserve fish stocks with the commercial need to respond to the growing demand for seafood and sell more business. Some multifood players said to be tempted to promote food other than seafood.

The development of a global policy and a focused seafood strategy has only been observed in companies which face intense external pressure. This is the case of companies facing high competition and which have a reputation or a brand to defend.

Most respondents mentioned the lack of information as a major obstacle to implementing an effective sustainability policy. They referred to scientific information on stock status as well as traceability information. Not all players have access to the same information or have identical skills to process them. In order to reduce the risk of trading species not complying with their sustainability ambitions, seafood buyers have to multiply their sources of information. The ability to deliver robust information on the products they sell can give suppliers a competitive advantage.

5.1.3 Communication

Communication to increase consumers' confidence in the sustainability of seafood on sale may focus:

Either on the sustainability of the item itself. The end buyers are told to "buy this fish; it comes from a sustainable fishing operation" (ecolabel, fish card).

Or on the responsibility of the seller. The message given by retailers, processors, caterers becomes "buy our fish; it has been carefully selected by us and comes from sustainable fisheries" (specific procurement procedure, branding strategy).

Seafood companies tend to be on the defensive and reluctant to communicate much about their sustainability initiatives. With such complex matters, and weary of media backlash, they first want to be confident that their initiatives are going to be effective. Furthermore, limited consumers' interest on the issue does not create much incentive to communicate. Only a few companies have communicated so-far on seafood sustainability. It must be recalled that the two major buying criteria for food remain year after year the quality of ingredients and the price, in this or the reverse order. Sustainability comes far behind.

5.1.4 Lack of consensus

At the moment there is no one-stop solution for seafood buyers to deal with sustainability issues. Seafood third party certified ecolabels such as MSC or ASC offer an interesting option to secure environmental friendly products, yet it is not fully satisfactory. First, it only concerns a limited range of products, far from representing what the market absorbs, both in terms of volumes and diversity. Secondly it does not cover the social dimension, high on the agenda of some market operators.

Each company deals single-handedly with sustainability. There is no coordination, no common standards. Every company goes its own way, using identitical or different resources, promoting practices which may be similar or divergent. This all looks like a costly mess to ensure corporates' differentiation strategy.

Sustainability is not a one dimension subject. All respondents mentionned in one way or another that it should be viewed as a combination of environment, social and economic elements. Second party certifications (Bureau Véritas) covering both the ecological and social dimensions are clearly competing with third party ecolabel (MSC). The two French projects which intend to integrate these dimensions in public labels were not mentioned by respondents.

5.2 Image of Norwegian fishing and farming industries

On average, the Norwegian fishing and aquaculture industries enjoy a good image and professionals are considered as serious and competent. When asked to comment about Norwegian seafood products, the fishing industry seemed to be fairly well perceived, especially with regards to its management. Aquaculture however suscites more scepticism. Respondents complained about the lack of transparency and questionned the impact of farming on ecosystems.

In general terms, they would appreciate getting precise information on:

- The feed given to farmed species,
- The fishing gears used and stock status of some wild species.

Norway's active promotion of farming carnivorous species also raised questions.Two large scale buyers said they would reduce their purchase of salmon in the near furure.

According to WWF France, Norway is considered to be linked, if not entireley responsible, to the environmental and social disaster of the Chilean salmon industry.

5.3 Recommendations

One thing is certain, the awareness of professional buyers, and to a lesser extent that of consumers, about the fragile status of marine resources will increase, thanks to NGOs' communication and intense media coverage. Today there is an information asymmetry where Norwegian suppliers have information that is needed but not accessible to their clients. This is perceived as a problem, as it may prevent them from making optimal business decisions. In addition, it may alter a trustful relationship.

5.3.1 Providing the right Information

Providing the right kind of information to the end buyers is becoming crucial. Yet, good and reliable information on such complex sustainability issues may be difficult and costly to produce, to control, and to distribute. Securing seafood sustainability induces a cost which is feared to reduce the competitiveness of operators.

For all these reasons, suppliers are invited to facilitate the work of their buyers in the matter. It is recommended to Norwegian private operators to secure full traceability of seafood products, whether farmed or wild, and to pass over to their clients comprehensive information on the environmental conditions of their productions.

In addition, it is suggested that Norwegian public authorities produce and make accessible relevant and credible information. The website www.fisheries.no is a very relevant tool. To reinforce its utility, two aspects need to be improved: publicity on the existence of the site and translation into French. Although, seafood operators are more and more English skilled, an easier access to this information would be highly appreciated.

5.3.2 Creating partnership

Some large scale buyers said that they would be willing to convey positive environmental information such as good fishing or farming practices, developed by one group of producers or the entire Norwegian fishing or farming community. "*If my Norwegian suppliers are able to provide me with solid information regarding their practices I am able to turn them into positive message to the consumers*". Direct cooperation between Norwegian suppliers and French large scale buyers on this specific issue may enhance competitiveness on both sides.

5.3.3 Surveying market

The present study describes the expectations of seafood businesses in early 2011. Yet, it is certain to evolve rapidly. Companies will move towards one label or another; will react positively or negatively to one supplying country's decisions or policies, will pay more attention to one or another criterion. The trend is clear but neither its pace nor the details of the requirements can be sure. Addressing sustainability issues is becoming a competitive necessity and we strongly recommend to the Norwegian fishing and aquaculture industries to set up an active surveillance tool to cover:

- Private operators' communication on seafood sustainability;
- Third party certification development and market shares;
- French public label development and penetration rate.

5.3.4 Organising focused workshop

This research work has highlighted the acute need of seafood buyers for information regarding fisheries and aquaculture sustainability. We believe that organising a focused meeting where representatives of buying and selling companies could exchange views and ideas would be very beneficial. We also believe that a good proportion of the companies which contributed to this study would be interested to join in.

This meeting would have for objective, among others, to identify the type of information needed, the modalities of its transfer (support, frequency, format). The primary output of such seminar would be to create a common understanding on how to best respond to growing sustainability requirements.

6 References

Credoc 2009 Centre de Recherche pour l ’Etude et l ’Observat ion des Condi t ions de Vie. Study on behaviours and opinions of the French population as regards environment

CSA (2009): Baromètre de consommation et de perception des produits biologiques en France Rapport 131p, Paris

Eurobarometer 2009

ISSA (2009): Etudes des attentes des consommateurs de produits de la mer frais et de leurs comportements sur la façade Aglia, Juillet 2009, 71p, Rennes

Kent, R Marketing research in action. Routledge. 1993

Mathé, T. (2009): “Comment les consommateurs définissent-ils l’alimentation durable? Cahier de recherche N° 270, décembre 2009, Crédoc, 68p, Paris

Monfort, M.C. (2008): Global Trends in Seafood and Sustainability, presentation seafood Summit, Barcelona, Spain

Parkes, G. S. Walmsey, T. Cambridge, R. Trumble, S. Clarke, D. Lamberts, D. Souter, and C. White. Review of Fish Sustainability Information Schemes – Final Report. MRAG. 2009

Salladarré et al.(2010): The Demand for Seafood Eco-Labels in France, The Berkeley Electronic Press, 2010

Annex 1: List of Respondents

Company	Respondent	In charge of	Products sold by the company	
			Food	Fresh/frozen
Retailer 1	Purchasing director	Fresh seafood	All	Both
Retailer 2	Quality and sustainability manager	All food	All	Both
Retailer 3	Purchasing director	Fresh seafood	All	Both
Retailer 4	Purchasing director + quality manager	Fresh seafood	All	Both
Retailer 5	Quality and sustainability director + sustainability manager + seafood manager	Frozen seafood	All	Frozen
Wholesaler/ importer 1	Commercial manager	Fresh seafood	Seafood only	Fresh
Wholesaler/ importer 2	Quality and sustainability director	Fresh seafood	Seafood only	Fresh
Wholesaler/ importer 3	General secretary	Fresh seafood	Seafood only	Fresh
Wholesaler/ importer 4	Purchasing director	Fresh seafood	Seafood only	Fresh
Wholesaler/ importer 5	Seafood buyer	Frozen seafood	All	Both
Wholesaler/ importer 6	Seafood quality manager	Fresh seafood	Seafood only	Both
Trader 1	General manager	Frozen seafood	Seafood only	Frozen
Trader 2	General manager + seafood buyer	Frozen seafood	Seafood only	Frozen
Catering 1	Seafood buyer	All	All	Both
Catering 2	Quality manager	All	All	Both
Catering 3	Quality manager	All	All	Both
Industrialist 1	General manager	Frozen seafood	Seafood only	Frozen
Industrialist 2	Sourcing manager	Frozen seafood	Seafood only	Frozen
Industrialist 3	R&D and quality manager	Frozen seafood	Seafood only	Frozen
Industrialist 4	R&D and quality manager	All seafood	Seafood only	Fresh

Annex 2: Minimum size

Minimum size used in one Supermarket Chain (hereby names S1)

	EU minimum size	Legal minimum size (weight)	Biological minimum size (weight of gutted fish)	Supermarket S1 minimum size
Sole	24 cm	120 g	220 g	170g
Turbot	30 cm	500 g	1070 g	1000 g
Brill	30cm	340 g	550 g	500 g
Plaice	27cm	200 g	385 g	400 g
Lemon sole	25 cm	160 g	290 g	300 g
Dab	23 cm (North sea) i.e. 130g ; 15 cm (North East Atlantic 48° N 18°W)	125 g	125 g	200g

Source: internal document

Annex 3: NGOs in France

	WWF	GREENPEACE	SEAFOOD CHOICE ALLIANCE
Goals/directives at international level	Inspired from the FAO directives for fisheries: • Stock status • Impact on ecosystems • Management systems	Long term goals by themes: • By 2020: 40% of oceans in marine reserves, end of whale fishing, of destructive fishing methods, of illegal fishing. • By 2050: Marine biodiversity and population back to their levels before industrial fishing.	• Communication and facilitation of collaborative work for oceans conservation. • Looking at the whole seafood chain from production to consumption.
Staff level in France (full time)	1.5	2	2
Objectives in France	• Integrate environmental issues into fisheries management • reduction in seafood consumption (better equilibrium between consumption and natural production)	• Reduce fishing power • Increase marine reserves • Ban deepwater trawling	Increase the proportion on the market of sustainably produced goods.
Start of actions concerning oceans and fisheries conservation issues (in France)	Over 10 years ago.	About 5 years ago.	4 years ago.
Overall strategy	Have recently (3 years ago) adopted a partnerships strategy with key economic players in order to put in place a continuous improvement approach. But, at times, engage into more offensive and media relayed campaigns on issues for which they want to see more rapid progress. With regards to seafood products, work mostly on issues related to the production sector.	A clearly stated offensive strategy aimed at provoking rapid changes, looking for maximum visibility and media coverage. Not into establishing partnerships in order to stay fully independent. With regards to seafood products, work mostly on issues related to the production sector.	Have adopted a non-militant strategy, preferring actions of communication, sensitisation and training. In France, works mostly with professional seafood buyers, helping them define sustainability criteria for their suppliers.

	WWF	GREENPEACE	SEAFOOD CHOICE ALLIANCE
Targets and percent of time dedicated	• State agencies – 80% • Key private enterprises	• State agencies – 80% • Fisheries organisations • Key private enterprises	• Seafood suppliers, caterers, training schools, fish shops – 60% • Fishermen, retailers, institutions (French and EU) – 40%
Examples of actions	• Lobby for the Common Fisheries Policy reform, annual quota setting, etc. • Partnership agreement with the largest French retailer (Carrefour) – Work on red lists and integrated seafood chains, increase of MSC products, etc. • Red listings	• Lobby for the Common Fisheries Policy reform, annual quota setting, etc. • Public alert via regular highly publicised campaigns on issues of the moment (bluefin tuna, deep-water trawling) • Public ranking of well known food retailers based on their sustainable buying policy (in process). • Red listings	• Species Guide: production and distribution of a book reporting stock status to professional fish buyers • Organization of the Seafood Summit in 2008 and 2010 • Training sessions on fisheries sustainability issues for apprentices in cooking and fish retailing schools. • Public campaign in collaboration with chefs
Perceptions with regards to retailers sustainable purchasing policies	• No real policy, actions are only driven by economics. Not doing enough. • Some increase in MSC products for sale, but very slow. • It's the individual conviction of some people that makes things progress. • Would like to see retailers communicating more about their sustainability initiatives.	• Greenpeace's engagement on this issue is small (aside from the questionnaire-driven public ranking of retailers) • Policies on sustainable purchasing practices are inexistent or too simplistic (buying a few MSC products is not enough). • Day to day fish buyers receive neither training nor directives on buying sustainable products. • Not impressed at all.	• Things are slowly getting better, conscience rising • The personal conviction of key people is essential • Large retailers are still slow, lack global vision and real engagement.
Most remarkable success	• Too early to know • Maybe: influence on Red Tuna quota, increase in MSC products on the market.	• Not discussed (rather pessimistic)	• Species Guide • Seafood Summit (2008, 2010) • Secured Relais & Chateaux's commitment to buy sustainable seafood products.
Which are the important fisheries issues in the near future?	• Fish toxicity (pollution)	• Same as today: overfishing, damaging fishing methods, waste of resources.	Not discussed.

	WWF	GREENPEACE	SEAFOOD CHOICE ALLIANCE
Message for Norway	• Fisheries management OK • Problems with aquaculture	• Problems with whale fishing • Fisheries management OK • Problems with aquaculture	Norwegian aquaculture producers need to take into account professional buyers' concerns about farming conditions and fish quality.

Annex 4: Questionnaire

Theme 1. Details of the company and Trade relationship with Norway

1. The name and activity of the company
2. Total turn-over and activity with Norway in %
3. Position of the respondent in the company

Theme 2. Sustainability's policy and organisation

4. Does your company have a sustainable department?
5. How many people does it employ (full time equivalent)?
6. Does your company have an environmental policy? Written? Open to public?
7. Does it specifically apply to seafood?
8. Did you rely on internal or external expertise to elaborate the practical guidelines of your policy?
9. Do you make a distinction between farmed and wild seafood?
10. Do you make a distinction between fresh, frozen, canned seafood?

Theme 3. Sustainability and seafood purchases

11. What are your quidelines? Do they express strict requirements or preferences?
12. Do you use criteria? Which ones?
    a. Certification? Which ones?
    b. List established by NGO? Which ones?
    c. Scientific information? ICES/ Ifremer/others; which ones?
    d. Fishing gears?
    e. Specific species?
    f. Other criteria?
13. Are you satisfied with these criteria?
14. How do you apply the criteria in practice? How do you check their compliance? Internally or with the help of external expertise?
15. Do you ask proves of the compliance of these criteria to you suppliers? documents? What type?
16. Back to MSC, does your company prefer to buy MSC products even if they are more expensive?
17. Are you aware and concerned about the credibility disputes that arose recently on MSC certification?
18. Would you consider changing to another label?

Theme 4. Factors underlying the sustainability policy

19. When did you first include environmental consideration in your seafood purchase policy? Give example.
20. What gave your company the incentive to do it?
21. What about today? Which are the stakeholders which influence most the definition of your policy?
22. In what way do they influence your policy? Pressure/ cooperation/ technical assistance?
23. Back to NGOs, which are the one that impact the most the public opinion?

a. WWF
b. Greenpeace
c. Robin des bois
d. Seafood Choice Alliance
e. Others

24. Which are the one that impact the most your policy? (Same list of NGO).
25. The concept of sustainability is taking momentum. How do you see the consequences on the market for the future?

Theme 5. Practical implications on your purchases and performances' measures

26. Have you delisted suppliers?
27. Have you delisted species? Give examples.
28. Have you changed sources of supplies, and moved to more sustainable origins? Give examples.
29. Which are the advantages/ difficulties you met with implementing your policy?
30. Do you measure the performances of your policy?
31. Have you got anything to say to the Norwegian suppliers, in that respect?

Other points

Which do you think are the main drivers for trends like environment issues?

According to your experiences, how do you feel that these opinion leaders act to get their views go through?

To which extent do you feel that the consumers emphasize sustainability and environmental concern when they buy fish from your company or competitors?

ISBN 978-82-7251-979-6 (printed)
ISBN 978-82-7251-980-2 (pdf)
ISSN 1890-579X