



# FISH. BUY, SELL AND LOVE.

Insights in information, sustainability and communication in the Dutch fishmongers sector.

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Part of a research conducted by Wageningen Economic Research Institute part of Wageningen University for the Good Fish Foundation (GFF)

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## **Executive summary**

The aim of this research was to investigate the communication about fish and sustainability at the fish shops and fish market stands (referred to as the fishmongers), with their fish suppliers and towards the customer. To find this, the following research questions were formulated:

- 1) According to the fishmongers, how is the cooperation and communication with their suppliers?
- 2) How and what do fishmongers (fish shop owners and market stand holders) currently communicate to the end consumer regarding fish and sustainability?
- 3) What are the reasons why certain information is shared and other information is not shared?

In order to answer the three main research questions a questionnaire was set up. This questionnaire was used for in total 10 fishmongers with fish shop and/or market stand together with or without other type of business such as a wholesale company. From these interviews the following conclusions came forward:

### **The conclusion**

All the fishmongers have access to the compulsory information, including information about sustainability, either through asking for the information or through an auction paper, bill and/or sticker with elaborated information. On top of that, nine fishmongers fully trust their suppliers with whom they build long term relationships. This trust is so strong that they rely on their suppliers to provide the good quality fish product and believe their suppliers can answer any concrete question they would ask them.

Despite all the fishmongers having access to the information, only three fishmongers going to communicate all the received information from their suppliers to their customers for two different reasons: EU labelling law and personal motives. Two fishmonger have these strong personal motives since they believe is of utmost importance for the existence of the worldwide fish population and ecosystems. This personal motivation seems to be the reason to persuade customers to be interested and passionated about fish and sustainability. In return, this could be why at these two fishmongers the customers are getting more interested in fish and sustainability (specie; where; when; and how is caught or breed).

In contrast, the other seven fishmongers communicate small amount of the received information from their suppliers to their customers. The main reason for six of these seven fishmongers to not communicate all the accessible information is because they feel the overall majority of their customers seem not to be interested in knowing all the information about fish and sustainability. This feeling comes from the fact that the overall majority of their customers do not ask for the information, including sustainability information. However, at the one remaining fishmonger of these seven fishmongers the customers are getting more interested in the information, including sustainability information, due to their curiosity, and not because of sustainability this fishmonger thinks. Despite this interest from the customers, this fishmonger feels not motivated to start communicate actively because if the customers want to know they will ask for the information.

### **Recommendations**

Most important recommendations are:

- The fishmongers should place the responsibility for communicating about fish and sustainability with themselves as well as to the customers and not leave the responsibility only to the customers.
- The way to convince the fishmongers is by having a clear plan for the future that is adjusted to their daily practice.
- Inform the customers in a simple and clear way what is sustainable fish and how they can use this information to make a sustainable choice.

## **Terms and concepts list**

ASC certification = Aquaculture Stewardship Council

EU labelling law = A labelling law created by the European Commission

FAO = Food and Agriculture organisation of the United Nations

Fishmongers = The fish shops and the fish market stands

FOS certification = Friends of the Sea

GFF = Good Fish Foundation

IUU = Illegal, unreported & unregulated fisheries

MSC certification = Marine Stewardship Council

MSY = Maximum sustainable yield

NGO = Non-governmental organisation

NVWA = Dutch food and consumer authorities (Nederlandse voedsel- en warenautoriteiten)

VnV = Association of the Dutch fish fishmongers trade (Verbond van de Nederlandse Visdetailhandel)

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# Chapter 1 Introduction

## 1.1 Background

Sustainability as a topic has been a concern and matter of discussion in many sectors for a long time now. As of recent, it has become a big issue for fisheries as well, as most research has shown that sustainability, the health of the world fish population and of the ecosystems, to be a growing concern (Sources: world ocean review, 2013; FAO, 2016; Garcia, S.M., 2003). When practices such as overfishing keep happening, ecosystems and fish stocks will collapse (Sources: Charlotte J, 2014; Bart van Olphen; NCR, 2 February 2016). What is more, ecosystems are responsible for soaking up quarter of all the carbon dioxide emitted by cars, factories and cities (Source: Grossman, N., Treerukuarkul, A, 2016). Therefore, different stakeholders try to keep an eye on the fish industry and the chain, with mostly the end goal to push the industry towards a more sustainable business, here the role of the government and the NGOs are discussed.

### *The role of the government*

For a long time the government has focussed its efforts on fishing companies. They have been regulating the fisheries, as well as stimulating sustainability, by the means of input (e.g., vessel and gear restrictions), and output control (e.g., no catch periods and quota). In addition, the EU has come with regulations on which fishing techniques fishers can use in the Nord Sea (Source: NVWA, July 2016). These are fishing techniques that are more sustainable due to less direct impact on living habitat.

However more recently the government started focussing on the consumers as well. In 2014, the European Commission came with a labelling law focussing on transparent communication to the end consumer. Since then, actors in the fish industry are required to increase the information on the sourcing of their products. The aim of the EU law is to protect the consumer (from misleading information), as well as to allow them to know what they are consuming and if the product is sustainable or unsustainable. This law applies to all EU countries, regardless of the given national labelling laws (Source: European Commission, 2015).

### *Role of the NGOs*

Other stakeholders that keep an eye on the fish industry are NGOs. They have organised many campaigns, fish guides and certifications schemes for the fish industry with the aim to instigate change in the consumer habits of people towards sustainable (responsible) seafood. The idea behind these actions is a belief that the voice of the consumer can push the fishing industry towards more sustainable and healthier practices. Here two actions are discussed: certification; Good Fish Guides.

### *Certification*

A way to provide companies in the fish supply chain as well as end consumers with information regarding sustainability is through certification. The idea behind certification is to create a logo as an easy market tool. This could be used to show to your consumers that the fish came from a sustainable fishery using sustainable fishing practices with as little negative impact as possible on



the environment. Or to show consumers the fish comes from fishery where the fishers or workers on the boat work under good circumstances.

Among the current certifications present today the biggest one is MSC (Marine Stewardship Council) for wild catch fisheries, The declining fish population led to the idea by WWF and Unilever to create a market tool (i.e., MSC) for consumers enabling the consumer to see in one glance if the fish product is a sustainably sourced product or an unsustainably sourced product. Other schemes are Friend of the Sea (FOS) for wild caught and bred fish and Aquaculture Stewardship Council (ASC) for bred fish. MSC, FOS and ASC focus on the impact on the environment. Nowadays, certified products like MSC and ASC can be found in an increasing number of countries worldwide such as Europe, America and Asia. An organisation that focusses on the social besides the environment is Fair-trade. International with the first fishery, located in Indonesia, worldwide under a fair trade certificate. Dutch certifications are for example DUPAN, Zilvervliet and Waddengoud.

### *Good Fish Guides*

Over the last years Good Fish Guides have been developed by NGO's worldwide. All Good Fish Guides are created mostly for consumers to have access to information that allows them to be able to choose for more sustainable fish. Also, the majority of these Good Fish Guides work with colour system, green standing for good fish and red for bad fish (Source: overfishing, 2016; Birgit I. de V. & Simon B, 2011). Examples of worldwide Good Fish Guides are: "International Seafood red list" by Greenpeace UK / International; "SeaChoice" in Canada by comprehensive national seafood program; "Sjømatguide" in Norway by WWF Norway; "Australia's Sustainable Seafood Guide" by Australian Marine Conservation Society; "Southern African Sustainable Seafood guide" by SASSI and WFF Southern Africa; "Live Reef Food Fish guide" in Hong Kong by WWF Hong Kong; and "VISwijzer" in the Netherlands by the Good Fish Foundation (Sources: overfishing,2011; WFF, 2016).

### *The Dutch Good Fish Foundation (GFF) and Dutch Fish guide<sup>1</sup>*

GFF is an organisation aiming to empower the supply chain and the final consumer to make the whole fishery industry sustainable through different projects. One of their projects has the goal to generate and spread knowledge and discover effective instruments to communicate fish knowledge and information regarding sustainability in the fish sector. Also, with the aim to increase the fish knowledge and understanding of sustainability among the actors within the fishing industries. One of such instruments present for longer time now in the fish sectors is the fish guide. The GFF took over the management of the fish guide (in Dutch, "VISwijzer") from the North Sea Foundation in 2014.

The Good Fish Guide is available in an app or in a document. The Good Fish Guide specifically works as a traffic light system. When using the app the consumer writes the trade name and a list appears with the available place and under which colour they are listed. There are in total four colours, which are the following:

- The certifications MSC and ASC, coloured blue, are evaluated as the most sustainable and responsible choice, so the best choice.
- Green stands for excellent choice. Fish comes from well managed aquaculture, or there is no overfishing taking place and at least as possible impact on the ecosystem.

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<sup>1</sup> The sources of the four paragraphs under this heading are: *Good Fish Foundation, 21 August 2015; Goedevis, 2016; Birgit I. de V. & Simon B, 2011.*

- Yellow stands for second choice. This is fish customers should consume the moment there is no green option available for the specific specie the customer wants to consume at that moment. The reason that is second option is because they are on the way to be totally sustainable but at the moment there are still small problems have to be solved. Examples of this, are the number of by catch could be lowered more or
- Red stands for fish that are better to be avoided by the customer. Because the impact on the fish population and problems present at the fishery or at the aquaculture farm are huge.

Different aspects determine if the fish is listed green, yellow or red. When this colour system was created this was based on the fish origin and fishing techniques. When the GFF took over, it broadened the Good Fish Guide to include new themes such fish season, illegal, unreported and unregulated fishing (IUU), social circumstances, and traceability. The information of the fish area and fishing technique or the MSC/ASC logo on the fish on the package or fish is needed to see if the specific fish, such as codfish, is listed as blue, green, yellow or red. For example, at this moment, all eel is only listed red meaning all eel should not be traded and consumed.

### Successes have been booked

The question now is, has there been booked already successes? In a research done by Globescan, three different stakeholders (sustainable leaders) ranked the Dutch government 5th worldwide when it comes to leaders in policy in sustainable development (Source: Globescan, 7 June 2016). For decades now, quotas and inspection to regulate fisheries in the North Sea have been done. As a result most of the North Sea fish stocks are inside maximal sustainable yield, known as MSY. In addition, there are other more sustainable fishing techniques present such as pulps, twin rig or flyshoot with less impact on the environment. Inspections on health safety and surveilling of the fishermen at Nord Sea are tightly regulated. Not so long ago NVWA caught a fishermen using prohibited fishing techniques. Immediately his licence of fishing was suspended (Source: NVWA, July 2016). NVWA is body of the government, under the Ministry of Economics, to control and ensure actors are obeying Dutch national and EU laws, such as the Dutch Commodities and the EU labelling law, in relation with food safety and health of the animals by doing inspections (Sources: NVWA, July 2016; Voedingscentrum, no date). This body controls the supermarkets and they are complying with the EU labelling law.

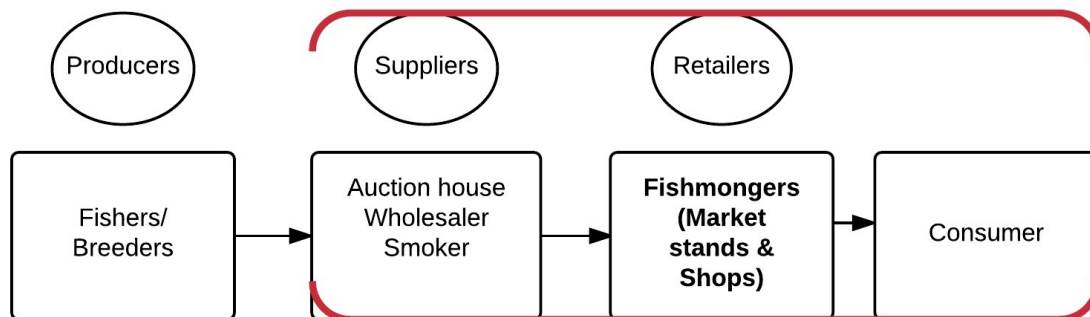
Regarding the goal of NGO and certification, namely, to push the consumer to be more concerned and choose for sustainable sourced seafood seems to be successful. According to research done by LEI, consumers are increasingly concerned about the Earth's environmental condition, including the depletion of ocean resources. Moreover, concern regarding the wealth of fish and related social aspects and ethics seems to be increasing (Sources: LEI, January 2014; Globescan, 2016). Therefore, it seems the campaigns are effective. Furthermore, there seems to be an increasing market demand for sustainable, responsibly sourced seafood, such as certified fish, by retailers and consumer (Sources: Rik B, April 2011; MSC, 2016).

Dutch supermarkets have played an important role in this increase in certified sold fish. Dutch retailers Albert Heijn (AH) have agreed that all fish sold in their supermarkets will be MSC certified by 2020. There are in total 4300 supermarkets in the Netherlands offering together 90% of the assortment as MSC or ASC certified fish in 2016 (Sources: CBL, 2015; Retail Detail, 2016). 60% of the fish is sold in the supermarkets, 22% in fish shops and 12% in the markets (Source: Detailhandel, 2016).

## Fishmongers are running behind regarding information exchange

From the previous it has become clear that supermarkets do actively communicate about certified fish and they seem to comply very well with the new EU labelling law. On the other hand, at the fish shop and market stand (referred to as fishmongers) there seems to be little communication regarding sustainability. Therefore this thesis focusses on the fishmongers. Figure 1 on the next page shows where the fishmongers are located in a whole Dutch supply chain. The part encircled is the part of the chain this research focus on. The bold text is the target group of this research.

Figure 1, fish supply chain and the target group



There are two main sources that showed the little communication regarding sustainability at the fishmongers. These sources consist of two articles published by the Volkskrant that report that (specialist) fish shops and market stands (street trading) do not sell or actively communicate about certified fish, like MSC and ASC, even when bought certified (Sources: Volkskrant, 2015 at 02:00 and 06:00). Furthermore, it was observed that only 15 fish shops of 815 shops in 2016 are officially MSC certified (Sources: NCR, 2016; Consultancy, 2016). In order to be able to actively communicate with the MSC certified logo they need to be MSC certified. Once a market stand or shop is MSC certified they have to comply with a traceability system ensuring honest and open communication in the chain. In that way they can ensure the consumer they are consuming responsible sourced seafood. Finally, according to a sample taken by GFF, hardly communication takes place regarding the origin of the fish (catching areas) and the fishing techniques (Source: Good Fish Foundation, 2015). This in spite of the fact that EU labelling law, or known at the government as the regulation (EU) Nr. 1169/2011, specifically for fish industry obligates the actors to share the fish origin and fishing techniques among other information to the end customer (Source: European Commission, 2015). This is why this thesis focus on understanding if and why the communication about fish and sustainability at the fishmongers is limited.

## 1.2 Problem statement

From the previous sections it has become clear that there seems to be little communication regarding the EU labelling law, sustainability or certification from the part of the fish shops and markets.

However, organisations such as the GFF, and the Dutch Fish Association still believe that the place to stimulate the exchange of information and to push consumers into becoming more critical

about the fish they buy is at the fishmongers. (i.e., street trading). In their view, these fish shops and market stands could be a key location to start exchanging more information on sustainability in the fish sector.

Therefore, GGF among others organisations would like to have more insight why, how and what fish at the fish shops and market stands communicate about sustainability and fish related info to end customer. These insights can help organisations such as GFF on what to focus when improving the communication and sustainable practices at the end of the chain, namely the fishmongers and the hospitality sector. Now, the objective of this research can be described and the research questions can be formulated, see next part 1.3 Objective and research questions.

## 1.3 Objective and research question(s)

### 1. 3.1 Objective

The aim of this research is to get more insight in the communication about fish and sustainability by the (specialist) fish shops and street trading (market stalls), between them and their suppliers, and finally towards the end consumer regarding sustainability and fish related information.

There are two reason for focusing on (specialist) fish shops and street trading. One is because these are the places where the widest arrange of marine species are being sold to consumers. At the same time, consumers come to these places for better quality and fresh fish, presumably more sustainable fish too (Source: LEI, 2014).

Therefore, the GFF thinks these places could be an effective place/forum to communicate sustainability to consumers. This idea connects to one of the GFF's goals for the coming years is to work on traceability, for which communication and information sharing in the value chain are important elements.

### 1. 3. 2 Main research questions and sub questions

This lead to the following main research questions. The **main research questions** are:

- 1) For the fishmongers, how is the cooperation and communication with their suppliers?
- 2) How and what do fishmongers currently communicate to the end consumer regarding fish and sustainability?
- 3) What are the reasons why certain information is shared and other information is not shared?

In order to answer the main research questions the following **sub-research questions** were asked:

- A) Which fish products do fishmongers offer to their clients?
- B) What type of suppliers do fishmongers communicate with?

- C) How and what do fishmongers communicate with their suppliers?
- D) According to fishmongers, which knowledge is present with their supplier, and with themselves?
- E) What do fishmongers know about the legal obligation (EU, 2014) to share product information (such as catch area and fishing techniques) to the end consumer?
- F) What is the actual content shared by fishmongers to end consumer?
- G) What channels do fishmongers use to communicate about the actual content?
- H) What does seafood sustainability and certification mean to fishmongers?
- I) According to the fishmongers, who and what are the characteristic of their customers?

These questions were answered by doing a literature investigation, conducting interviews and analysing the results of the interviews. In chapter 2 a deeper literature review is done on sustainability and communication. In chapter 3 the methodology describing the steps taken to finally answer the main questions. In chapter 4 and 5 the results are displayed when they have been analysed. Finally, in the last three chapters the discussion, the conclusion and recommendations can be found.

## Chapter 2 Communication and sustainability: literature review

This chapter explains in more detail what can be understood by sustainability and communication. These two important concepts are mentioned in the background as well as in the main and sub research questions. First there are two conceptual frameworks. This is followed by first an explanation of sustainability and after an explanation of communication.

### 2.1 Conceptual frameworks

The vet orange words shows the focus points in this research. The central group is the fishmongers as seen in figure 2. These fishmonger communicate different messages with their supplier and customers through different channels. Figure 3 shows the different message possibilities. Figure 4 shows through which different channels this message can be communicated. The next subchapter after the three figures explains first what can be defined under sustainability, a possible message of communication seen in figure 3. In the third subchapter what is involved when looking at communication, visually showed in figure 2, 3 & 4, is explained in more detail.

Figure 2, The focus of the research within in the fish chain

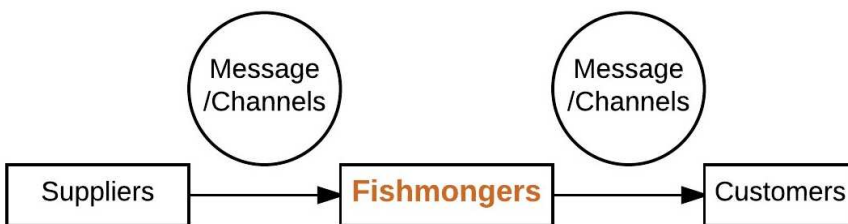


Figure 3, The communication message

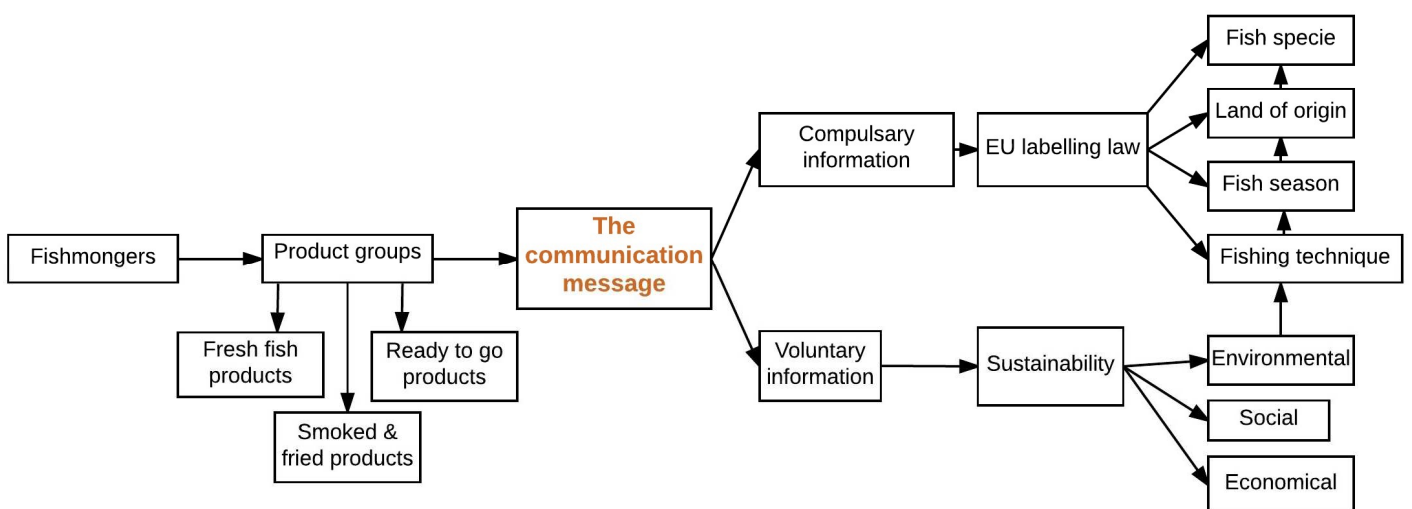
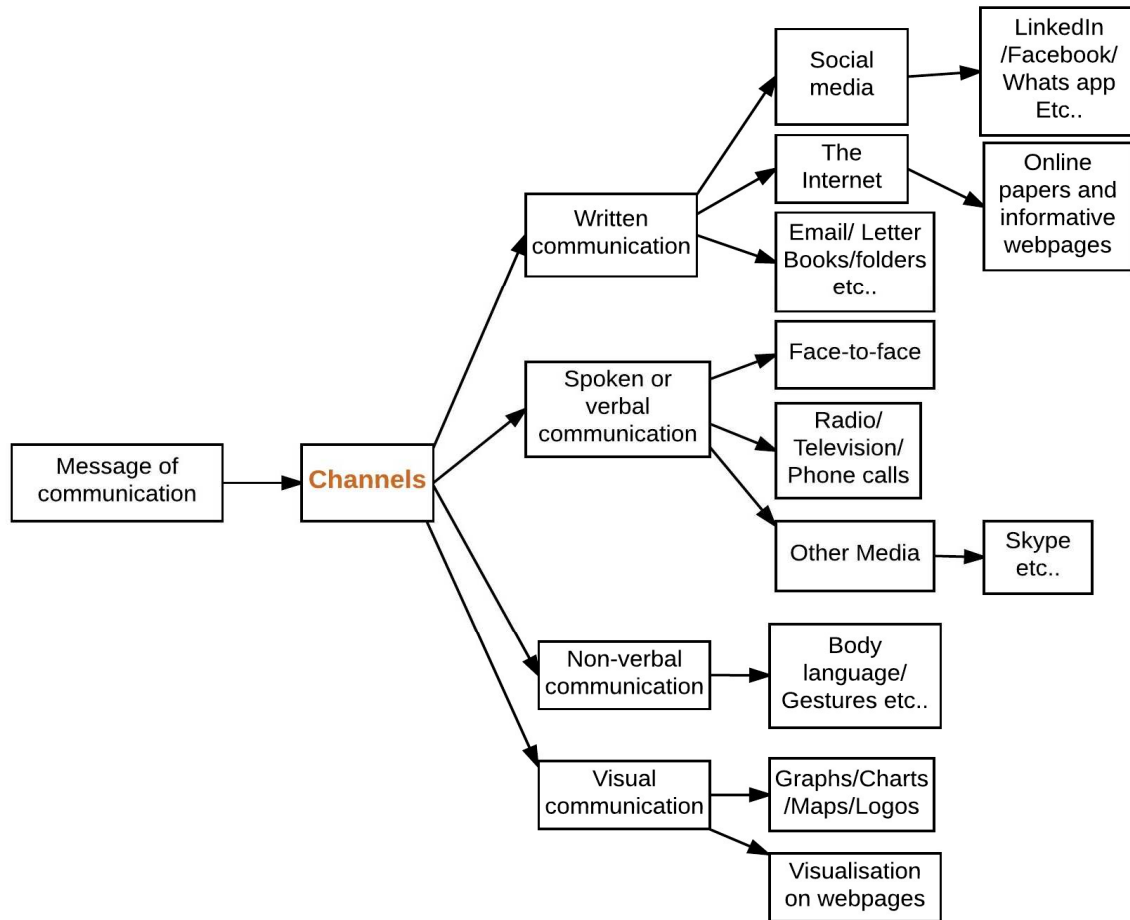


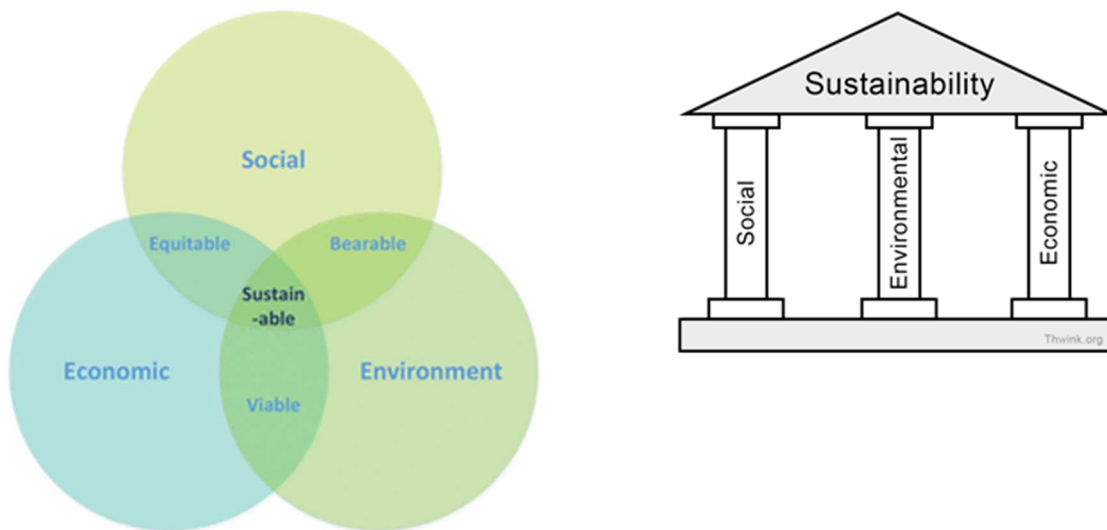
Figure 4, Communication channels to transfer the message



## 2.2 Sustainability

Sustainability as a concept is widely accepted and used. Sustainability can be defined through three pillars, namely environment, social and economics. This can be illustrated in a sustainability Venn diagram (or pyramid), as shown in the pictures, figure 5, below:

Figure 5, Sustainability Venn diagram and Thwink's diagram  
Source: Circular Ecology, 2015; Thwink, 2014



One could say that true sustainability is reached when the three pillars are balanced in equal harmony. If the three pillars were in harmony, then nature would not suffer from the exploitation by humans and humans could benefit from what nature gives us (to the equal and economical benefit of everyone) (Source: Circular Ecology, 2015).

When talking about sustainability, the term sustainable development cannot be excluded. Many definitions have been given regarding what sustainable development is. The most common definition, however, is that of the Brundtland Commission in 1987, which states the following “sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. This is the concept used in this research.

In other words, sustainable development is the pathway to sustainability. When sustainability, and therefore sustainable development, does not happen long term issues or problems take place. This in return, effects the living circumstances for the next generations. Currently, sustainability issues are present in every sector in the society. This is no different when looking at sustainability within the fisheries.

### Sustainability issues in fisheries

When looking at sustainability in the fish industry, there are still many different sustainability issues in the fish sector. Problems in fisheries are overfishing, destructive fishing techniques and fish food & antibiotics in aquaculture. Recent discussed topics are animal welfare and traceability in relation to combat illegal, unreported and unregulated fisheries (IUU fisheries).

#### *Overfishing*

According to FAO, quarter of all the sea fish populations being exploited are being overfished. Meaning the population is fished down, not giving the fish populations time to reproduce. Another quarter the pressure on fish population is still low and there is room to fish more. Finally, half of the fish population are exploited at the maximum level (Source: FAO, 2016). Due to overfishing, there are more and more endangered species in the world. Additionally, due to overfishing over 80% of



the large predatory fish have disappeared in the last 50 years (Source: Charlotte J, 2014). To control the total catch governments implement quotas or also called TAC. TAC stands for the total allowable catch. Another implementation is no catch periods. These no catch periods are during the mating season and reproduction season. Therefore, for example the Alaska wild salmon, only can be caught during a short period of time.

#### *Destructive fishing techniques*

Destructive fishing techniques are bottom trawlers and dynamite fishing (Source: Charlotte J, 2014). These fishing techniques cause high destruction of habitats, therefore ecosystems. On top of that, bottom trawlers took everything what was in their way. Even though with the fact that ecosystems are responsible for soaking up quarter of all the carbon dioxide emitted by cars, factories and cities (Source: Grossman, N., Treerukuarkul, A, 2016) Nowadays, fishing techniques in many places in the world seem to get more and more sustainable. In addition, more governments are prohibiting certain fishing techniques. For example, in the Nord Sea not all fishing techniques are allowed (Source: NVWA, July 2016). Another important aspect comes with fishing techniques is by catch. By catch is species are not targeted such as dolphins, turtles in many cases. By catches can cause high pressure on vulnerable species. One other consequence affecting ecosystems is lost gear. When animals like dolphins are caught in lost net they die very easy (Source: Charlotte J, 2014). When is wild fish caught with the lowest by catch as possible, determines if the fish comes in the Dutch Fish Guide as a good fish or bad fish.

#### *Fish food & antibiotics in aquaculture*

These three processes in aquaculture can also have a huge effect on the ecosystems as a whole. To breed one pound of salmon five pound of wild fish is used for oil and 1.3 pound of fish meat (NOAA fisheries, no date). This put even more pressure on the already maximal exploited or overfished wild stocks. Antibiotics can kill many of the species living in the surrounding waters. Many antibiotics released by fish act as poison for the environment and on the health of the consumer. The moment a person consumes many breed fish full of antibiotics the person build up resistance against this antibiotics which would not work anymore when getting sick. The moment applying less antibiotics and more try to copy a natural processes more management is needed. This is also because fish that are crowded together are more vulnerable for diseases. Therefore, the easiest way is to apply many antibiotics to have the least change there is an outbreak of diseases killing most of the stocks. If a fish is pure or healthy fish, means not many antibiotics are supplied, determines if the fish comes in the Dutch Fish Guide as a good fish or bad fish.

#### *Animal welfare; handling and killing of animals*

For already a longer time, animal welfare has been more and more important but only now there is concern about animal welfare in fish by non-governmental organisations and consumers. According to research done by Melissant C., in 2014 there is also more and more concern from a consumer side on how animals are threaten, especially in aquaculture. This is because the wild fish population are decreasing (Source: Melissant C, 2014). Furthermore, in aquaculture the way animals are killed are being more highlighted by non-governmental organisations. For Good Fish Foundation, one of the 5 aspects determining if the fish comes in the Dutch Fish Guide as a good fish or bad fish.

### *Traceability and combatting illegal, unreported & unregulated fisheries (IUU fisheries)*

EU is the first union worldwide creating regulations with the aim to prevent the import of illegal caught fish, or also known as illegal, unreported & unregulated fisheries, or known as IUU fisheries (Source: CBI, 1 January 2014). IUU fisheries mean fish caught by boats that are trying to find loopholes in the law or selling the fish to black markets where the amount of fish is never registered. According to FAO, with the IUU fisheries included probably the total world catch is about 1/3 more than the current world catch (Source: FAO, 2016) .

To prevent or get a hold on IUU fisheries traceability of the product is really important. For the Dutch Fish Guide good fish has to be traceable back to the original source, the fishermen or where it is bred.

### *Working circumstances*

According to a research done by the environmental justice foundation (EJF), slavery in Thailand's Seafood Industry is happening. People and children are forced to work on the boats for long hours, in bad working circumstances for almost no money (EJF, 2014) . A documentary by Dean Irvine, Saima Mohsin, and Kocha Olarn told the stories of Thailand's fish workers that were working 20 hours a day, starving, suffering regular beating from the captain and were refused the right to return home when they asked (CNN, 2015). Working circumstances determines if the fish comes in the Dutch Fish Guide as a good fish or bad fish.

## 2.2.1 Operationalisation:

Different sources have been used to define the indicators for the pillars mentioned in figure 5 (Sources: Goedevis, 2016; Real Food Forager, May 29 2012; MSC, 2016; NRC, 2 February 2016). The following indicators belong to social, economical or environmental sustainability:

### For the social pillar:

- Labour conditions;
- Child labor;
- Forced labor;
- Health and safety;
- Discrimination;
- Official acknowledgement of good practices when fishermen address the social aspects of fisheries such as prevention of illegal, unreported, and unregulated fisheries (IUU fisheries). This can be through certifications; IUU fisheries can cause unfair competition;
- Animal welfare

### For the economic pillar:

- Opportunities such as new markets;
- A possible increase in income;
- Job security for future generations;
- Security of income
- Improved livelihood
- Educational opportunities for the children

### For the environmental pillar:

- Land of origin;
- Fish season in relation with total annual catch and overfishing or not;

- Species related to vulnerability and population size;
- Fishing techniques determining habitat destruction and by-catch;
- Input (e.g., Antibiotics and energy) and output (e.g., CO<sub>2</sub>, contaminants or escaped species in aquaculture);
- Healthy status of fish population around the world.

### Focus indicators of the thesis

In this thesis the focus will be on four indicators as they are set out in the EU labelling law: species population; land of origin; season; and fishing techniques. These indicators are important because they can help to determine if fish is sustainable or not. Furthermore, these indicators are also in the focus of GFF's view on sustainability.

Species, land of origin and season are closely related, while the vulnerability of species populations varies (due to, among other things, when and how long the mating season is). Every specie has a period of reproduction adjusted to also the ecological processes found at the area. When the specie are fished away during the reproduction and resting period or also called during the season, it has big impact on the fish population as the fish specie do not get the change to stabilise the population. Therefore, putting more pressure on already vulnerable ecosystems and fish population. Furthermore, the moment the specie is caught during most of the year or whole the year, specie is caught inside and outside the fish season the annual catch is increases exponentially putting even more pressure on fish populations leading to big decreased in fish populations.

The fishing techniques are really important to take into consideration when looking at ecological sustainability; the by-catch, the habitat damage, and the potential quantity that can be caught varies with the given fishing technique are all playing a role. These aspects can have huge an impact on the ecosystem.

## 2.3 Communication: process of information sharing

In simple words, communication is the sharing information, ideas, and beliefs through words or body language between a sender and recipient. Communication within the fishery industry, as in many other sectors, is challenging (Source: Flaxen D.L. Conway, 2000). As there different interest groups in the fish industry with different backgrounds and needs (Source: Flaxen D.L. Conway, 2000). When talking about communication, there are two concepts involved. This is the communication process and communication strategies.

### Communication process

The communication process can be described as the way information is send and is received. Within the communication process, you have sender(s) and recipient(s) involved that are encoding and decoding the exchanged messages. When choosing the way, the channel chosen by sender should fit with the message this person wants to transfer. When a message is not clear or not right channel is chosen, misunderstanding can take place in any stage of the communication process. Then, the receiver interprets or understands the message differently than intended or as

transferred by the sender. Whereas, the desired outcome of any communication process is understanding <sup>2</sup>.

Within the focus of this thesis, the central group receiving and sending information are the fishmongers (see figure 2). These fishmongers are receiving information from the supplier and sending information to the customer (see figure 2).

The decoding process of the final recipients group, in this case the customers, is not in the scope of this research. Therefore, the customers are also not interviewed in this research.

The reason for not including the decoding process of the customers is because the focus on this thesis is on the communication at the fishmongers receiving information from the supplier and sending information to the customer, not between the fishmonger and the supplier and the fishmonger and the customer.

### Communication strategies

The second concept that needs operationalisation is the communication strategies. The communication strategies can be classified into three topics with three related questions. The three topics are the channels or communication tools used to communicate between person and a person, the content of the message, and between which audience and its characteristics is communicated. For this three topics, the following three main questions could be asked which are elaborated further on: 1) What? 2) How? 3) Who?

#### *1) What: the content (see figure 3)*

The research question "What does a business wants to communicate?" also takes into account the content, the message, and/or the story that they want to be conveyed to the target group. In this thesis the target group of the fishmongers is the fish-buying customer. When a person, in this case the fish-buying customer, contextualises the transferred message, send by the fishmonger in this case, and selects new information out of interest, this person increases his or her knowledge. In the fish industry there is compulsory information, set out in EU labelling law and voluntary information, including sustainability and certification (see figure 3). Further explanation on the compulsory information and voluntary information is given below.

#### *Compulsory information: EU labelling law*

There is information that has to be shared. The EU labelling law (No 1169/2011)<sup>3</sup> set outs the content the fish industry has to communicate to finally the end consumers, on top of the national laws on labelling and transparency that are present in each European country. The Netherlands has separate laws, like the commodities law (in Dutch called "Warenwet") or protocols on allergies and hygienes. The following information among others is prescribed by the EU labelling law (No 1169/2011):

For unpacked or fresh products:

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<sup>2</sup> The sources of this paragraph are: studies, no date; skillsyouneed, 2011-2016

<sup>3</sup> The Dutch guide on the EU labelling law can be found on the following website:

[http://ec.europa.eu/fisheries/documentation/publications/eu-new-fish-and-aquaculture-consumer-labels-pocket-guide\\_nl.pdf](http://ec.europa.eu/fisheries/documentation/publications/eu-new-fish-and-aquaculture-consumer-labels-pocket-guide_nl.pdf)

- Trade name
- Latin name
- Fishing area
- Season
- Fishing techniques
- Allergens
- Date of freezing for not processed products

Added information for packed or processed products:

- Name and address of packing company
- Ingredients
- Weight ingredients
- Added ingredients:
  - Water when >5% of the weight
  - Proteins of non-animal origin
- For mollusks date of packaging

#### *Voluntary information: Sustainability and certification*

Besides information that companies are obliged to share, there is also voluntary information sharing. This can be for example additional information on sustainability. However, important sustainability aspects connected to environmental sustainability are prescribed in the EU labelling law, namely fish species; fish origin; season; and fishing techniques (see figure 3). Nevertheless, the information connected to social and economical sustainability are not prescribed in the EU labelling law and are therefore totally voluntary. Even more, could be when interviewing the fishmongers they connect their view on sustainability to more social and/or economical sustainability. Or the fishmongers connect also mainly to environmental sustainability. Anyhow, the fishmongers view on sustainability will come forward in the chapter 4 & 5 findings.

Furthermore, another voluntary option to communicate sustainability towards the end consumer is through certification (logo's). Therefore, certification can be seen as a tool that communicates information on sustainability. Every certification has developed different standards to assess social, economic and/or environmental sustainability. The majority of the certifications that are available for the fish industry mainly focus on environmental sustainability. When actors choose to work with certified products they have to follow the rules and standards set by the certification organisation. But not one certification, or in fact the organisation behind the certification, obliges the actor to share or show actively to end customer that they are working with certified products. A business can choose to actively show to their customers they have certified products by putting the certification logo on the product or through another channel.

#### *2) How: communication channels (see figure 4)*

When talking about communication channels the following question comes forward, namely,

“Which communication tools does a business use to communicate the information to the customers?”. There are four categories of communication including (see figure 4)<sup>4</sup>:

- Spoken or Verbal Communication: face-to-face, phone calls, radio or television and other social media such as Skype.
  - Non-Verbal Communication: body language, gestures, how we dress or act, and even our scent.
  - Written Communication: letters, e-mails, books, magazines, the Internet with for example online paper or informative webpages or via social media such as LinkedIn and Facebook.
  - Visual communication: graphs and charts, maps, logos and other visualisations on webpages.
- Every channel has of course its own barriers, its own advantages, and its own disadvantages. An example of a visual fish communication tool is the Dutch Fish Guide (see more explanation in the background), in form of a document and application that attempts in a simple way to communicate to consumers which fish are sustainable and which are not (Goedevis, 2016).

### *3) Who: the customers*

The final question of "How does a company adapt their communication to their business target group?" is also important, as every audience or business target group has their own ideas and values, which in turn influence how the message is received and interpreted. Consequently, to reach effective communication within a business is important to understand their business target group. In this way, the businesses can adjust the marketing to the needs of the business target group. As said before, in this thesis the target group of the fishmongers are the fish-buying customers. Therefore, why certain information is shared and other information is not shared by the fishmongers can be related to type of fish-buying customers they serve as a business.

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<sup>4</sup> Four categories come from the following sources: studies, no date; skillsyouneed, 2011 - 2016

## Chapter 3 Methodology

### 3.1 Research design

In this research, two methods have been used, namely desk research by doing literature investigation and the field research in form of interviewing fishmongers.

The desk research was on:

- EU labelling law and sustainability (see chapter 1 & 2)
- Communication (see chapter 1 & 2)
- Comparison with results of other researches (see chapter 6)

The steps of the field research were:

- A) First the interviews were set up. When setting up the interview questions about the channels used, about the content (compulsory and voluntary information) and about how they see their customers were sure to be included. Furthermore, one checklist was made based on the EU labelling legislation. Therefore, could see in one overview what information fishmongers communicate and what not.
- B) After setting up this interview a trial interview was done to verify the answers would provide the answers regarding the fishmonger's communication, with their supplier and towards their customers.
- C) Than defining the target group (see part 3.2 description of target group).
- D) Moving on to gathering of data by conducting and recording the interviews.
- E) Next step was writing out the recorded Interviews and sent to the interviewees for verification.
- F) Pre final step was the processing and analysing (see 3.3 data processing and chapter 4 & 5 findings).
- G) The final step was writing report.

### 3.2 Description of target group

#### *Dutch fishmongers and their suppliers characteristics*

The Dutch fishmongers are distinguished in two main groups, namely fish shops and the street trading. Below, there is description of fishmongers types present within in two groups.

The following marketing formulas are distinguished for fish shops<sup>5</sup>:

1. "The [given] fishmonger's traditional range. This shop or kiosk sells mostly to the traditional range and local consumption is possible. This kind of shop or kiosk sell fresh fish in form of a whole fish or a filet."
2. "The fish shop / delicatessen. In addition to selling fresh fish, this type of store has/sells/provides comparatively a lot of processed or caterer's products (sandwiches, fish soups, salads, dishes and

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<sup>5</sup> The four formulas derive from the following source: *Productschap vis, 2011*

the like). Almost always some products can also be enjoyed on the spot. Furthermore, it is not unusually for this kind of (specialist) fish shop to do catering for the hospitality businesses."

3. "The fishmonger lunchroom with fish shop. This shop includes space for dining, the sale of fish and fish products, and catering activities. Here, consumers can have lunch or dinner, as well as a cup of coffee with something."

4. "Some businesses have a fish shop and also do street trading. Most of the time, such fish shops also have one or more sale vehicle(s) or stall(s)."

According to Consultancy, a quarter of total 815 fish shops in the Netherlands in 2016 are concentrated in the province Nord-Holland (Source: Consultancy, 2016). The least number of fish shops are concentrated in the province Flevoland.

When looking at street trading, the following marketing formulas are distinguished<sup>6</sup>:

1. "The stall in the commodity market."

2. "A wagon for selling at markets, festivals, and/or events. Compared to the entrepreneur who has a market stall, the products of a sales vehicle can be better cooled." (Productschap vis, 2011).

Nowadays, more businesses combine fish shops with street trading: in addition to fish shops as a point of sales, they also have stands at commodity markets. This allows more direct contact with new customers, who in turn then come to the fish shop as well. More places to sell their product can also be very important to maintaining a successful business in an increasingly competitive market.

In addition, the fish shops and market stands also work with suppliers. There are different types of suppliers. The following types of suppliers can be distinguished:

- Processors: where fish ingredients or whole fish are physical changed or processed into other products (for example, businesses that make salads for supermarkets). These processes can be filleting, breeding or conserving by freezing for example.
- Wholesalers/distributors: They buy fish products in big units for example at auctions or directly from the fishermen. Wholesaler take legally possession of the fish products meaning the moment something goes wrong during the trade it is their responsibility. Distributors do not take legally possession of the fish products meaning the moment something goes wrong during the trade is the responsibility of the person who sold them the fish products. Both sell in smaller units to next actors in the chain (shops, market stands or to business in the hospitality sector).
- Smokers: smaller, traditional fish smokers are very rare. Today, fish smoking is primarily done in the form of bigger to mass production.
- Auctions: The auctions is a space to unload and sort the fish and temporarily store it. Besides this space, there is a hall where the auction itself takes place. There are three quality categories, namely A, E, and B. A quality fish stands for fresh fish caught daily, E quality fish stands for fish caught in the last few days, and B quality is caught or frozen fish that is at least

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<sup>6</sup> The two formulas derive from the following source: *Productschap vis, 2011*



one week old. In total there are 11 big auctions places and some smaller ones located around the Lake IJsselmeer.

The interviewees characteristics

**Fishmongers:**

The ten interviewed fishmongers had different types of businesses, see figure 6 below. The fishmongers had selling points in different places in the province South Holland, North Holland and Gelderland. Table 1 on the next page shows the cities where the companies had selling points. The reason to conduct most of the interviews in North Holland, is because of the high concentration of fish shops in North Holland (CBS, 2015). One company was chosen number one fish specialist in the category fish shops and another company was chosen second in the category street trading. One company was chosen because the owner started the company and their vision on fish all from a marketing perspective. Another company was chosen because it has a shop and a wholesale division at the same time. Furthermore, companies with family generation were included, with different number of selling points (see figure 6 below) and different selling points at different places per fishmonger (see table 1 below). In this way, it was tried to reach a balance between fish shops and market stands with different backgrounds.

Figure 6, Quantity and types of selling points per fishmonger

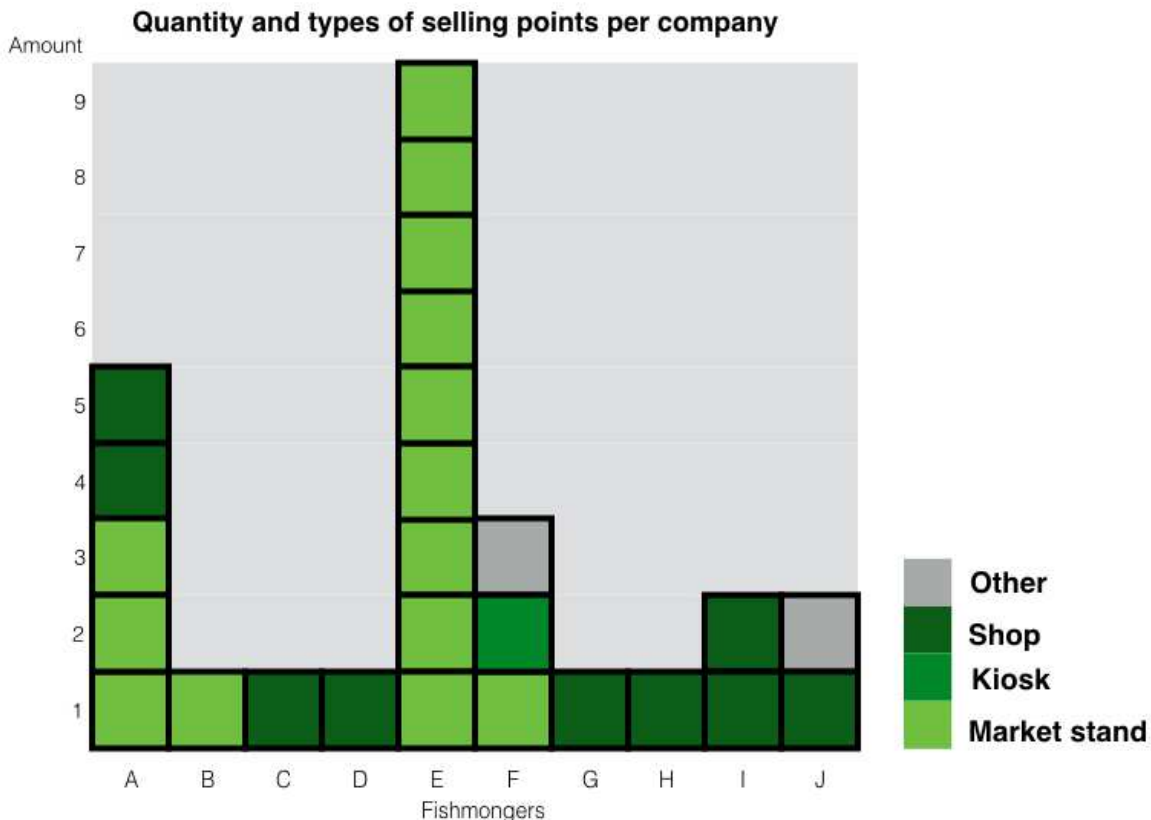


Table 1, location of the selling points

Companies	Locations
Fishmonger A	Amsterdam
Fishmonger B	Volendam
Fishmonger C	Heemskerk
Fishmonger D	Volendam
Fishmonger E	Amsterdam, The Hague, Hilversum, Weesp, Landsmeer, Schagen & Monnickendam
Fishmonger F	Haarlem
Fishmonger G	Amstelveen
Fishmonger H	Purmerend
Fishmonger I	Arnhem & Velp
Fishmonger J	Den Helder

Furthermore, all the interviews were done by one person talking directly to the owner, except at one company. At one company, the interview was with a full time employee due to owner's personal circumstances. In total every interview took at least 1,5 hours until a maximum of 2,5 hours.

### Suppliers:

Two suppliers were interviewed. The first supplier was a company with a wholesale division and a shop (J). The second interviewed wholesale company wanted to cooperate when they heard about what the aim was of this research. After the interview, it was decided to use this wholesaler as an expert within this research related to the aspect of sustainability within the chain and fish sector. The reason for this is that the interviewed fishmongers mentioned his role as a pioneer regarding sustainability in the sector.

### 3.3 Data processing

The following data processing took place to analyse and come with a conclusion:

- 1) The recordings interviews were written out. The written answer per question per interview were compared to see similarities or differences.
- 2) The answers from the interviews were compared with the finding from the literature study on communication and sustainability as well as with other research regarding this topic.
- 3) Programs used to analyse, compare, and visualise the quantitative data were EXCEL and in a program called Keynote. This was only a small part as most of the data was qualitative.

## Chapter 4 Findings related to communication between the fishmonger and its suppliers

### 4.1. Assortment, its turnover and most consumed products

When looking at the assortment, three main product groups can be distinguished: 1) fresh fish products (including filet and herring), 2) smoked & fried fish products and finally 3) ready-to-go products (salads, pasta and homemade products). Each group has its own turnover that varies between the companies as shown in figure 7 below. From figure 7 becomes clear that the highest turnover comes from product groups with the fried & smoked fish and/or fresh fish (including herring).

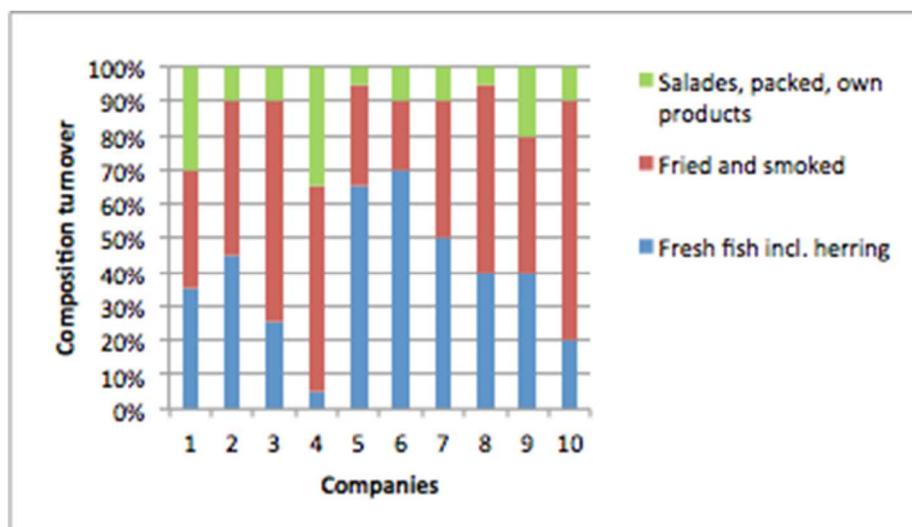


Figure 7, composition turnover per product group per fishmonger

#### The most consumed product(s) by the customers

However, when looking into the main products purchased by the customers at the fishmongers, the most consumed product at six fishmongers is fried fish. Two of these fishmongers had their selling points located in a touristic place, namely Volendam. The tourists want to try the typical fried Dutch products. Among the typical Dutch fried products the tourists try mostly cod/pollack or other white fish like haddock parings. Cod/pollack or white fish parings, which is fried cod/pollack or other white fish like haddock, can be consumed during the whole year.

At the other four fishmonger the most consumed product is fresh fish. Two of these fishmongers with specifically salmon as the most consumed product are located in substantially richer areas. This is because fresh salmon is a more expensive product than fried products such as fried cod. For the other two fishmongers the most consumed fresh fish product is not that straightforward. The first one of these two fishmongers said the most popular fresh fish product depends the season, the type of dinner and occasion. When there is the herring season (May - July/August) many customers come to consume herring. When looking at the type of dinner, people buy salmon and tuna when they want to make sushi. When looking at the occasion people prefer mostly mackerel or trout for barbecue purposes. The second fishmonger said the most popular fresh fish product

that they sell varies per selling point. In total they have 7 selling points and therefore, a wide range of client types with different fish preferences.

Within this can be seen that among the most consumed products are not the ready-to-go products, like salads, pasta or pizza's. Nevertheless, some of the fishmongers think there is a booming business for this type of products. Therefore, as well as in other sectors, these ready to go products can be very important for the further marge. Therefore, can increase as in important asset in the total turnover of the company. Also, it is a trend among the fishmongers to prepare these products themselves. They all said the benefit of preparing these products themselves is depending of knowing exactly which ingredients go into the dish, the quantity as well as the quality. Therefore, they can tell their customers exactly what the ingredients are. Nowadays, this is becoming more important because fishmongers notice that customers are asking more frequently about the ingredients due to allergies. Furthermore, by preparing these ready to go products together with the fried fish products at the counter, the fishmongers are not obligated to share the information as defined in the EU labelling regulation, including the information related to sustainability. This could be a reason why all the fishmongers do like it like this because it is more convenient and it is maybe an easy way to avoid the regulation or to avoid the discussion on sustainability; consciously or unconsciously. However, the exact reasoning for preparing at the counter should be revised and checked with the fishmongers.

## 4.2 Cooperation and information exchange between fishmongers and their suppliers

These paragraphs deals with the communication between the fishmonger and the supplier regarding the cooperation between fishmonger and the supplier, the received information from the supplier and voluntary information exchange on fish and sustainability.

The following questions of the interview are related to this part:

- A) Where do you buy your fish? How is the stock acquisition/purchase of the business organised?
- B) Which standard information do you receive and how?
- C) Do you ask specifically about sustainability? Yes/No, why?

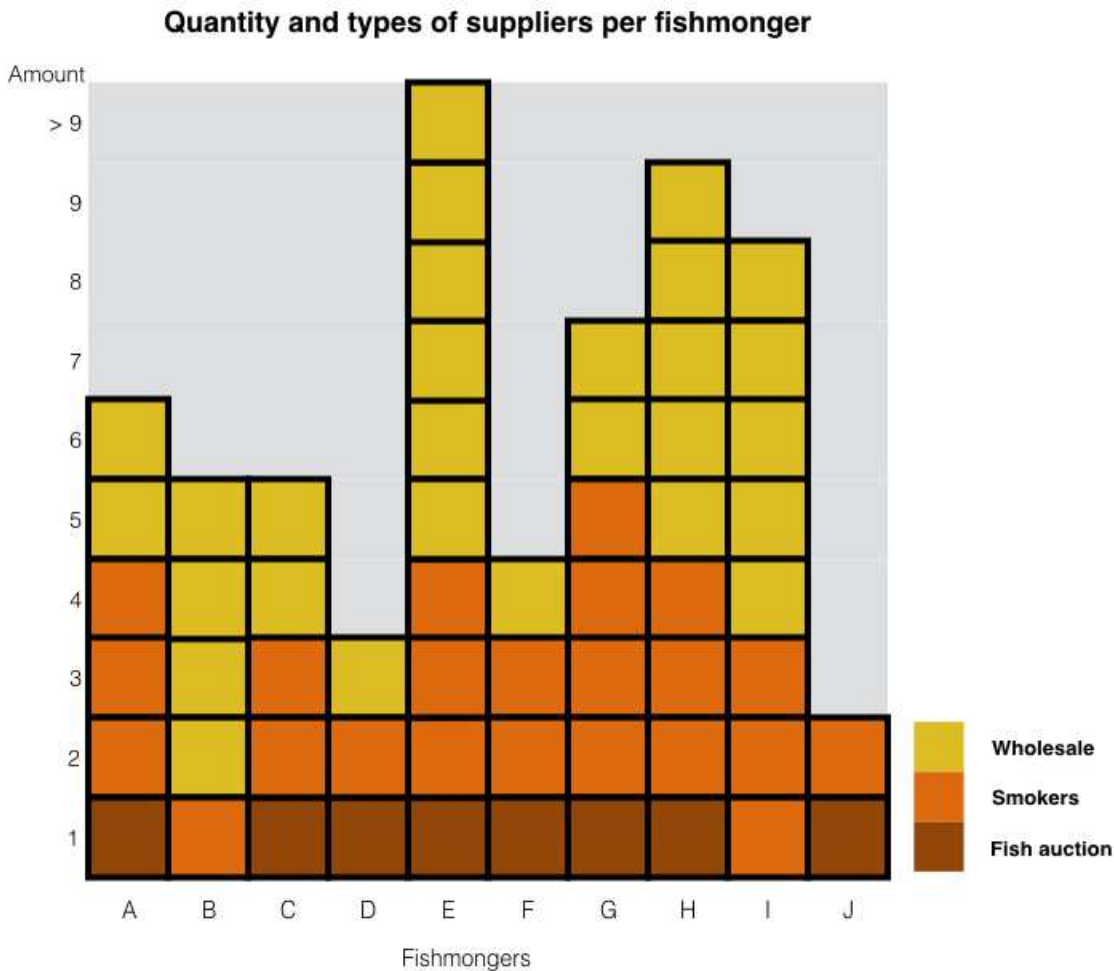
### *The cooperation between the fishmongers and their suppliers*

To be able to offer the assortment, all the fishmongers worked with different types of suppliers to get the fish products. Figure 8 on the next page shows the types of suppliers (see description suppliers types in 3.2 Description of target group) and with how many suppliers the fishmongers worked with over the past years.

Regarding the suppliers, all the fishmongers have more than one supplier with whom they have built good and long term relationship with. A long term relationship and reliability that is built on trust that the supplier will deliver the quality products they want. The trust is shown by the fact that all fishmongers are confident that the supplier could and would answer any question they would ask them honestly. In here, trust is the key to reliability. Therefore, the moment the trust is broken too often the fishmongers search for another supplier. Nevertheless, for these fishmongers this did not happen in the last years because they all have this good and long relationship with their suppliers at this moment. Due to this good and long term relationship with their suppliers, these supplier have been the same ones during the last years. However, one of the ten fishmonger does not have fully trust persons because everybody can tell any story. Therefore, he still sometimes

visits his suppliers to have reinsurance and at the same time see what they are doing. As the owner explained; *“Everybody can try to fool a person and tell the person what he/she wants to hear. In order to assure the trustworthiness of the information, it is better to verify yourself. Another option is to work with certified suppliers to have more security they are working as sustainably as possible and communicate honestly”*.

Figure 8, quantity and suppliers types



So, all the fishmongers say they get the product they want from the supplier. When looking at the fish they want to sell to their customers quality is of utmost importance for all the fishmongers. For all ten fishmongers quality stands for high meat weight, and freshly caught resulting most of time in stronger taste. For six fishmongers the price is not important as long as they have their best quality fish. For four fishmongers the quality is important but it needs to be for the right price. One of these four fishmongers quoted, *“If all consumers who can are willing to pay a higher price for quality and especially sustainable fish, than I would also sell only the most sustainable fish despite the price”*.

These quality products are delivered by three types of supplier (see legend of figure 8 above). The three different suppliers types have the opportunity to specialise in the type of product they deliver. For the three products group the trading with the suppliers works as follow:

- Starting with the fresh fish products, for which eight fishmongers go to the fish action and two buy all the fresh fish from wholesalers. The eight fishmongers go to auction themselves to check and see the quality of the fish before they purchase it. In this way, these eight fishmongers said they have more control over the end products they are selling to the customers. Furthermore, the other

two fishmongers buying all the fresh fish from wholesalers do so, because in that way everything is taken care of by the wholesale company. One of these fishmonger stated, *"Sometimes when I go to the fish auction there is almost nothing. As it is a long drive, as a company we are wasting too much time and money on this. Therefore, at the moment we work with a wholesale company. This assures us have always fish to sell"*.

- On the contrary, within the smoked and fried product group, all the smoked fish the fishmongers purchase comes from specialised smokers. One company stated, *"Smoking fish is a separate profession at itself"*. Besides that, to smoke the fish in the shop self would financially not break even.

- Finally, the fried and ready to go products (salad, pasta & other home made products) are made of fresh fish or de-frozen they bought at the auction house themselves or from a wholesaler. As said before, these fried and ready to go products are prepared by themselves from fresh fish and other ingredients.

In conclusion, there are three type of suppliers that deliver specific products (see next two tables below). This specific products are used again for the different products groups offered to customers as defined by the fishmongers.

*Table 2, type of supplier and offered products*

Type of supplier	The offered products	Used in which product groups
<b>1. Smoker</b>	Smoked fish	Smoked products & ready to go products
<b>2. Auction house</b>	Fresh whole fish products	Fresh fish products & Fried product & Ready to go products
<b>3. Wholesale</b>	Fresh products (including filet, frozen)	Fresh fish products & Fried product & ready to go products

*Table 3, the specific supplier(s) per product group*

Product groups	The specific supplier(s) per product group
<b>Fresh fish products, including herring</b>	Auction house and wholesale
<b>Smoked products</b>	Smoker
<b>Fried products (homemade products)</b>	Auction house and wholesale
<b>Ready to go products (homemade products)</b>	Smoker, auction house and wholesale

### *The information fishmongers receive from their supplier*

Clearly, when fish products are traded between supplier and fishmonger, information exchange is present but how much and how depends on the supplier. In the end, there is a two way information exchange each of them containing a different amount of information:

- The first one is information exchange through a bill with limited information. There are three fishmongers that only receive a bill (fish species, quantity & price). They do not receive any extra information, including sustainability information (land of origin, fish season & fishing technique), from their suppliers if they do not ask for the information. When comes to suppliers giving a bill with limited information, it is on paper or through email. Also, one of these three fishmonger chooses the best quality fish from the selection of the wholesale company that is situated at the

auction house. She said that she is not getting the information displayed on the auction paper (see figure 9) but only gets a bill with limited information from the wholesale company and other suppliers.

- The second one is formation exchange through an auction paper, bill and/or sticker with all the compulsory information. The remaining seven fishmongers do receive all the compulsory information, including sustainability information, on an auction paper and/or bill and/or sticker. These contain the following information connected to sustainability: fish boat (code), fish origin, fish season and fishing techniques. When it comes to the auction paper, the fishmongers see the auction paper because before she/he starts bidding the fishmonger does a walk before through the auction hall to check the quality of the fish together with the provided information that is offered. In addition, new technology is used with the bidding at the auction house. Bidding, and information exchange in general, has become more digitalised according to some of these seven fishmongers. Now, the fishmongers can register at the auction house for bidding on-line. So, the bidding can be done from home and a company can even participate in two biddings at the same time. This increases the chance to get the good quality fish for the right price. Disadvantage is that it is not possible to do a physical walk through the auction hall to see the quality. Therefore, the fishmonger has to trust the quality label given per fish. Figure 9 presents an example of an auction paper. When it comes to a bill, some supplier send the bill in paper and some suppliers through email. One fishmonger request to get the receipt through email quoting, " *I want to receive the receipt through email because this again saves paper*". When comes to sticker, the sticker is on the box or on the paper around the fish. Figure 10 is example of a sticker.

Figure 9, auction paper



An auction paper usually present the following

information, for example (see figure 9):

- The code of the fisher boat: WR 17
- The name of the fishing company: Simon Koorn Visserij
- Place of origin: IJsselmeer)
- The fishing technique: Beam trawl
- The date of the fishing trip: A
- The weight: 31kg
- Etc...

Figure 10, sticker



A receipt or sticker usually present the following information, for example (see figure 10):

- Latin name: *Scomber Scombrus*
- Production company (packing): Mooijer Volendam BV. PO Box 146, 1130 AC Volendam
- Place of origin: Nord Sea (FAO271Va)
- Expiring date: 21-06-2016
- The weight: 4 KG
- The fishing technique: Trawls
- Etc..

### Voluntary information exchange

Besides the information the fishmongers receive from the supplier the fishmongers have the possibility to ask for information regarding fish and sustainability. The motivation for voluntary/free exchange of information is based on personal interest. They all said the supplier would, if the supplier knows, answer any question they would have. Figure 11 shows whether or not fishmongers ask the suppliers specific information related to sustainability (fish origin, fish season or fishing technique) and/or related to fish or money (price, why this price, quantity).

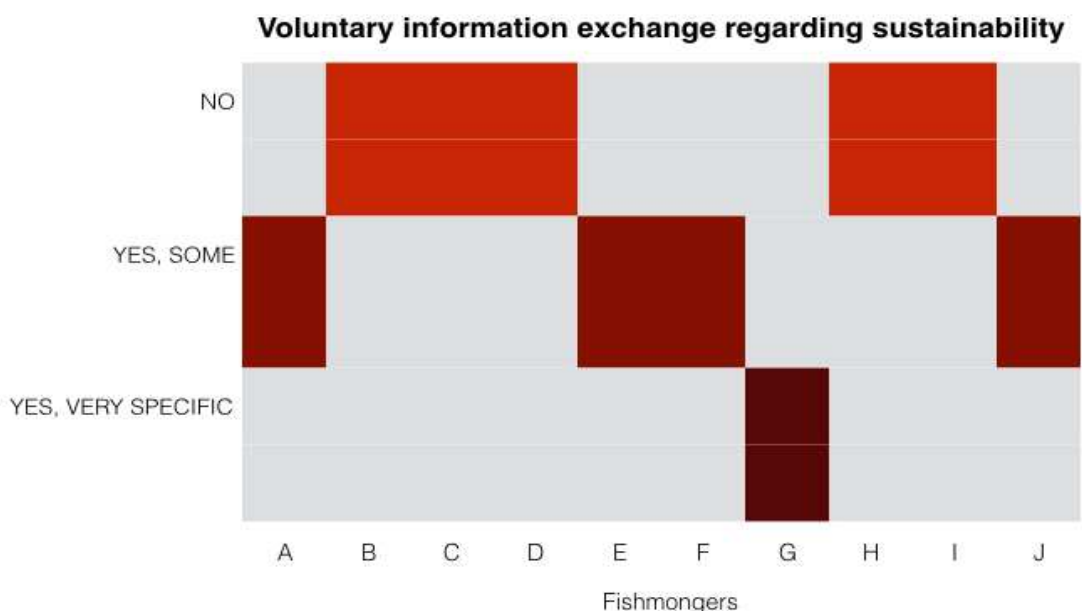
Figure 11, Voluntary information exchange regarding sustainability



From figure 11 it becomes clear that half of the companies ask no (extra) sustainability information, including the three fishmongers (B, C & D) that only get a bill with the sort, price and amount. These three fishmongers said they could see from the characteristics of the fish (colour and physical appearance) where the fish is coming from. This is due to their long experience in working with fish or because they were fishers themselves. One of these three fishmongers (B) stated that after a certain period of time his suppliers and himself know exactly from which ship the fish comes from and how it is caught. Furthermore, this fishmonger specifically highlighted that as a person he has no interest in knowing or asking for further information from his suppliers, because his customers do not ask for the information.

Moving on, the other two fishmongers (H & I) not ask for sustainability information and the four fishmongers (A, E, F & J) ask for some sustainability information, because they already received the compulsory information, including sustainability information. The fisher boat (code), fish origin, fish season and fishing techniques can be found, among other information, on an auction paper, a bill or a sticker. They stated that with this information they can already determine if it is a more sustainable fish. Therefore, there is no need to request further information. For the rest, the information exchange face-to-face is about the species, the quantity, the price and the specific price. Besides that, every of these six fishmonger has its own motivation also to request for no or almost no information, namely:

*First fishmonger (H)* specifically told is not interested in confirming or keeping the information from the supplier because customers do not ask for the information, including sustainability information



(country/place of origin, fishing season & fishing technique). This fishmonger even threw away the auction paper during the interview (see figure 9).

*Second fishmonger (I)* said, besides receiving the information already, many fish is already more sustainable because of TAC implemented for fish species.

*Third fishmonger (A)* confirms the information related to fish of the season as the fishmonger only wants to sell fish of this season to his customers. Information related to determining if it is fish of the season are: 1) fish specie 2) Country/place of origin 3) date of fishing.

*Fourth fishmonger (E)* has the information to know if it is sustainable fish. Only discuss about why this certain price and quality for certain specie or discuss how the business are in the fish sector. Also, stated that after a certain period of time they know exactly from which ship the fish comes from and how it is caught, so know the fishermen practices. Therefore, also know the boats delivering best quality and/or with the least impact on the environment.

*Fifth fishmonger (F)* wants to purchase only sustainable (certified) fish as it is important for further existence of fishing. Therefore, really look at the delivered information. However, she trusts the information her suppliers give.

*The last fishmonger (J)* stated that after a certain period of time they know exactly from which ship the fish comes from and how it is caught, so know the fishermen practices. Therefore, also know the boats delivering best quality, the fish that is caught in the season and the boats with fishing technique with low impact on the environment. The information needed to choose more sustainable fish which they try when financially there is room.

The last remaining fishmonger (G) asks for specific information related to sustainability and emphasises that this is of most importance to be more critical as a fishmonger for the future of fishing. The owners of this specific company only wants fish caught in the season and with certain fishing techniques, namely longline and standing net. The reason they mentioned was these are fishing techniques with the lowest by-catch. The owners know what they want. This fishmonger believes very strongly in selling only sustainable fish. For caught wild fish the most sustainable fishing technique for him are longline or standing net. Also, when purchasing breed fish the owners only want breed fish that has at least impact on the environment as possible. The former owner, still involved in the assortment of fish they sell at the shop, even visited a breeding farm in Norway to check how the practices are. The owner communicates all this sustainability information actively to his customers

In conclusion, the majority of fishmongers receive compulsory and sustainability information and therefore, do not ask for further information besides specie, quantity and why a certain price. On top of that, the fishmongers believed any question about specific information such as the fishing techniques or fish origin the suppliers are able to answer. Therefore, according to the fishmongers they can get all the information they need from their suppliers in case customers do want to know.

### 4.3 knowledge about the purchased fish

Another step was to see if the fishmongers had the knowledge about the information they received of the popular consumed products. The conclusion was that all the fishmongers, except one fishmonger, did know the source of the most popular fish products. Still, all the fishmongers were aware about fish seasons, such as it is not worth to sell plaice (fish species) in December, January and February, due to their low meat weight.

Nine fishmongers knew where the most consumed fish product of their company was caught, and most of them knew when it was caught, by heart. In addition, all were aware about when the fish season was of a certain specie. These fishmongers have the knowledge and knew by heart, because:

- Six of these fishmongers received elaborated information (country/place, fish season, fishing techniques etc...) through an auction paper, a bill or sticker.
- Furthermore, some fishmongers stated they could see due to characteristics of the fish where it came from. Even more, some of the fishmongers have been fisherman themselves. Therefore, three fishmongers who only got a bill knew where the fish came from.
- Through years of working with the same suppliers and/or purchasing fish from the same fishermen the fishmongers knew the background of the fish, such as how the fish was caught or cultivated in aquaculture.
- Finally, the fishmongers remembered where the fish came from and other information, or put information together in one map behind the counter, because they find it important to be able to answer any questions by the customers. In addition, the owners themselves or the staff felt that the owners should have the knowledge of the fish because as a business want to know which fish they are selling.

Furthermore, the one remaining fishmonger, the exception of the other nine fishmongers, did not know this information or kept the information despite receiving the compulsory information, including sustainability information. Even more, the owner did not even look at the received information from the supplier because his customers do not ask questions regarding country/place of origin, fish season or fishing technique). Therefore, there is no direct benefit for this fishmonger to know or keep the information.

## Chapter 5 Findings related to communication between the fishmonger and its customers

### 5.1 Information exchange between the fishmongers and the customer

This chapter deals with the communication between the fishmonger and his customer. For this, there was a look at different aspects, namely: the knowledge on the EU labelling law and the actual content shared by the fishmongers; the communication channels (for examples see figure 4, page 14); and the view of the fishmonger on sustainability as well as on certification; and communication regarding certification.

#### 5.1.1 The EU labelling law and the current information sharing with the customer

First is about the content has to be shared according to EU labelling law. Secondly is about how many of the EU labelling law content, including the information about sustainability, is actually shared. The following instruction and questions of the interview were used for this sub chapter:

- Fill in the checklist (see appendix 9.2 checklist).
- Which knowledge do fishmongers have regarding the EU labelling legislation? Which standard information do you communicate with the consumer?
- Which of this information should be shared to end consumer according to EU labelling law (Nr. 1169/2011)? Do you agree with this or think certain information is unnecessary? Do you agree with this or think certain information is unnecessary? Why?

#### *The knowledge and view of the fishmongers regarding the EU labelling law (compulsory information)*

All the fishmongers say they know about the existence of the EU labelling law but only two fishmongers know the exact content of the law. These two fishmongers are going to communicate all the compulsory information by putting all the information in a map. One is going to add the information to already existing map. The other one is going to make a whole new map with the information. One of the two fishmongers making a map even did a course about the labelling law. The owner did a course because as a business they have to comply with the law. This fishmonger quoted, "You have to follow the law. Even when your customers, what in mine case is, do not know or do not ask about all the specific information. You still have to share the information due to the law". Therefore, this fishmonger is going to start to requesting all the information from their suppliers, instead of only receiving a bill with limited information (price, amount & quantity) at this moment.

So it can be seen there are only two fishmongers that follow the law. However, for the purpose of sustainability and transparency within the fish chain an important aim is to create the situation in which every fishmonger follows the legislation. In order to create this situation the fishmonger's opinion on the EU legislation is important which came forward during interview question, namely, the fishmongers feel that the legislation is not adjusted to how the business of a fish shop or a market stand is in practice. The reason for this is because not all the information has a purpose or is important when looking at sustainability. An example is the Latin name of a specie. In addition, they state it is unrealistic to put huge amount of information on one small sticker or card because it

gets unorganised, and the majority of the information will not be read by the customers. Besides that, all the fishmongers said a big fault is that there is no control for the following of the EU labelling legislation at all. As a consequence, the majority of the fishmongers seem to feel even less the pressure to comply with the legislation or get to know the legislation.

During the interviews when asking about the opinions on the EU labelling law, the circumstances in which they would follow the law also appeared. The eight fishmongers that do not 100% follow the law would follow the law when it would be more straight forward and in line with the daily business practices. Additionally, the eight would follow the law when there is more control on following the law by the governmental institutions.

Additionally, the fastest way these eight fishmongers would not have a problem to get to know and communicate all the content set out in the EU labelling law is when customers start to ask for all the compulsory information. The reason six fishmongers mentioned that the customers will not read the compulsory information is because they seem not be interested at all or very little in the sustainability information (fish season, fish origin & fishing techniques). Therefore, there is no necessity to get to know the exact content for this six fishmongers.

Nevertheless, two of these eight fishmongers communicate most of the information (>90%) without knowing the content of the EU law. One of these two fishmongers communicates without knowing more 95% of the content of EU law, except for the Latin name and the date of freezing, because the customers ask for this information out of curiosity for the fish background. Another of these two fishmongers communicate actively almost all the information of the EU law (more 95%), except for the Latin name, due to his passion to push the customers to think about sustainability.

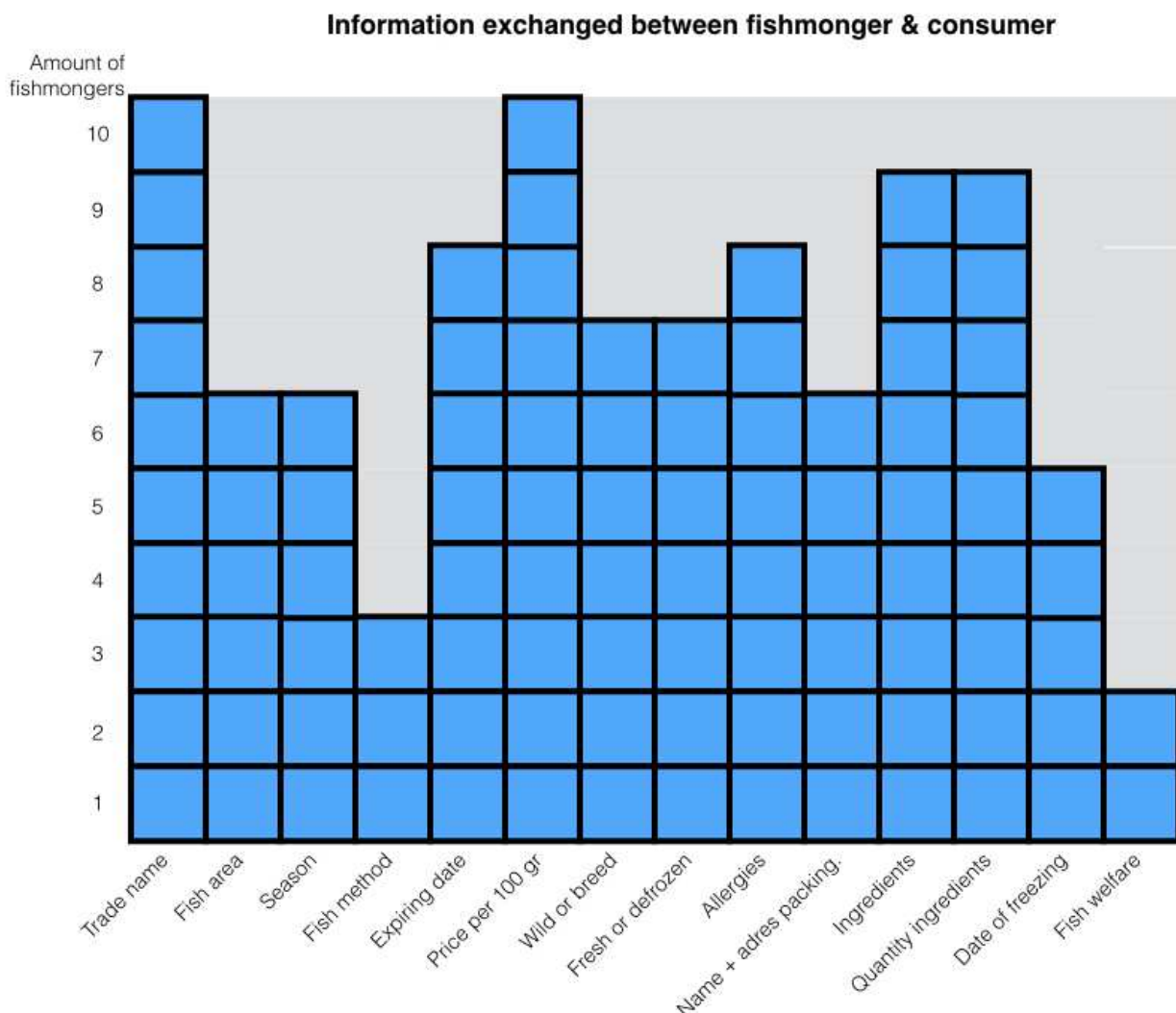
#### *Actual content shared by the fishmongers to their customers*

From the previous paragraphs can be seen that the majority say they do not feel the pressure to share all the information set out in the EU labelling law, including the sustainability information, to their customers, despite receiving all the compulsory information from their supplier. Nevertheless, there is communication regarding the compulsory information, including sustainability, to the customers among the ten fishmongers. Figure 12 on next page presents the information shared and by how many fishmongers the information is shared. There are two fishmongers (F & G) currently communicating all the information seen in figure 12. There is one fishmonger (E) communicating all the information seen in figure 12, except for the date of freezing and animal welfare. The other seven fishmongers communicate some of the information seen in figure 12. When it comes to the sustainability information (fish area, fish season & fishing techniques) these seven fishmongers communicate one of the three or either non.

To start with there is the information not connected to fish sustainability such as ingredients, quantity, address of packing company and date freezing (for frozen products) that is communicated with the customers. The date freezing (for frozen products) and address of packing company is shared with the customers when the product is sold packed. Nevertheless, the fishmongers have small amount of pre packed such as sour herring or frozen packed products such as Asian shrimps they sell to end customer. For the rest, the pre packed products from wholesale, smoker or auction house are sold unpacked.

From this, the ingredients and quantity of the ingredients together with the questions: “What fish dish can I prepare?”, “How long can you keep the fish?”, “Is this wild fish or bred fish?” and “Is fresh or de-frozen?” are asked weekly by the customers at all the ten fishmongers. Nevertheless, only two fishmongers put information on the fish card that relate to the fact if the fish is caught in the wild or farmed and fresh or de-frozen. Moreover, many customers seem only to want wild caught fish that is fresh, and not de-frozen fish. Customers do not realise that, when is frozen immediately on the boat or very soon after being caught the freshness stays till the moment the fish is de-frozen. The fishmongers feel this knowledge among other facts is not present with the customers. This is confirmed by the fact that customers do not ask for the date of freezing, when is sold unpacked but frozen to end customers. One of two fishmongers explains to his customers how it works with freezing fish and de-freeze after in relation also to the freshness. This fishmonger is also the one of these two fishmongers only two putting it on his fish card whether the fish is de-frozen fish or not.

Figure 12, Information exchanges between fishmonger & customers



When it comes to providing information directly connected to fish environmental sustainability (see sustainability literature review) shared by six fishmongers is the fish area. Four companies put on the fish card (see figure 13, example of fish card, at page 39) the country/place of origin (fish area). The fish card with this information is mainly provided by the fresh fish products. Three fishmongers do this because partly “Where is the fish caught or where does

the fish comes from” is a standard weekly question by their customers. The last fishmonger of the four put the country/place of origin on the fish card because of the EU labelling legislation. Furthermore, the other two fishmongers do not put the information on the fish card but provide the information when consumers ask this information. One of these two fishmongers is asked frequently by the local Den Hague customers for the fresh fish product because they are curious. For the other one of these two fishmongers the question is only asked by the tourist coming to Volendam. These tourists ask if the fish was caught in the water surrounding Volendam because they are curious and have no idea about the fish background of the typical Dutch fish products. But the customers of the two fishmongers not putting it on a fish card do not ask further questions related to sustainability; fish season or fishing technique.

Furthermore, the second information directly linked to fish environmental sustainability, shared by six fishmongers is the fish season. For three fishmongers “When is the fish caught?” is a standard question by their customers. These were the same fishmongers that had the weekly standard question “Where is the fish caught” by their customers (see paragraph above).

Other two fishmongers said customers asking about the season of the fish depends on the species. One of these two fishmonger has many tourist as customers. They are curious about the typical Dutch products. They want to know if the season already started for typical Dutch product (smoked eel and herring) to try out. At the other fishmonger there is a popular Dutch product such as codfish and plaice for which customer ask about when fish season starts. At these two fishmongers the customers do not ask further questions related to sustainability; fish origin or fishing technique.

At the final of these six fishmongers, new customers ask why they do not have certain fish species or much less fish diversity than other fishmongers in the city. Than this fishmonger explains they only work with fish of the season. At this fishmonger the customers do not ask further questions related to sustainability; fish origin or fishing technique.

Finally, the third information directly linked to fish environmental sustainability, shared by three fishmongers only is the fishing technique. These are the same three fishmongers with the weekly questions: “Where and when is the fish caught or breed?” by the customers (see two paragraphs above).

At two of these fishmongers “How is the fish caught?” is a standard weekly question by their customers. Furthermore, these two fishmongers communicate actively face-to-face about fish and sustainability (country/place of origin, fish season & fishing technique) themselves as well because they said it is important to discuss sustainability with the customers, either interested or not interested in sustainability. Because if practices in the fish industry do not change, there will be no fish left.

The third fishmongers of the three said sometimes, monthly or less, customers ask about the fishing method. This fishmonger thinks customers ask about the fishing technique, together with where and when fish is caught, more out of curiosity than they are worried about consuming sustainable sourced fish.

When comes to the information important for the fishmongers is the information connected to quality. Because quality in combination with or without price and sustainability is of key importance for the fishmongers as they want to sell only the quality (sustainable) fish to their customers and the aspect is what separates them from the supermarkets. For all the fishmongers quality stands for the high meat weight, and freshly caught resulting most of time in stronger taste. Freshly caught is in relation to fish that is sold as fresh as possible to customers the moment they purchase the fish. The fish with the highest meat weight is during the season. During the season means fish

caught outside the mating and breeding period. For the fishmongers the visibility of the quality is what distinguishes them from the supermarkets. Furthermore, the long build relationship with the customers and to be able to deliver visible good quality (priced) fish seem to be important for the fishmongers to be able to stay competitive with the supermarkets in the future. According to the wholesale company X, when looking at sustainability selling seasonal fish is the first step towards going to a more sustainable fish industry. This gives the opportunity for the fish populations to repopulate. Nevertheless, according to wholesale company X and one fishmonger the fishing techniques and other sustainability aspects are the next important aspect to look at.

### 5.1.2 The channels the fishmongers use

In this paragraph there is a look which channels there are used to communicate the content discussed in the part above. In order to find it out, during the interview the following questions of interview were asked:

Which communication channels do you use?

Why do you use these communication channels and not others?

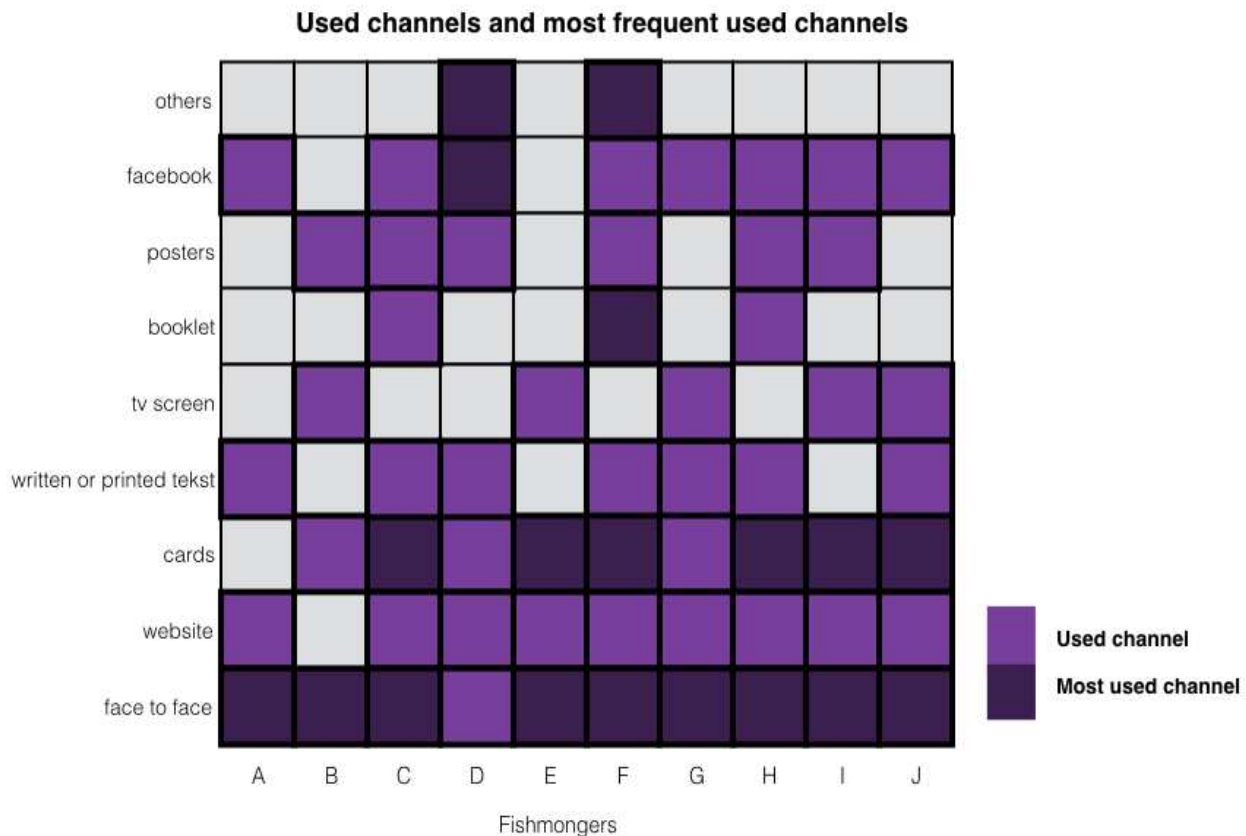
Which communication channel do you use standard?

Do you know the VISwijzer? If yes, what is your opinion about the VISwijzer?

Have you ever seen your customers using the VISwijzer?

From the interviews it becomes clear that the information is shared through different channels. Figure 13 shows the channels used by the ten fishmongers. A dark purple colour stands for the channels most frequently used.

Figure 13, Used channels and most used channel





All the fishmongers use various channels to communicate different information related to EU labelling law or sustainability with their customers online or at selling point. The shops or kiosks communicate with more diverse channels and are more active online (Websites, Web shop and Facebook pages) than the market stands. All the shops also offer seafood dishes with different marine species on the website. The fishmongers notice seafood dishes are popular products customers look at, because new customers come to the shop asking for a seafood plate they saw on the website. One fishmonger also has a web shop. This fishmonger notices that there is an up going trend to order fish products on their web shop. An explanation for this could be there is a general trend in ordering more food products more online instead of going to a place to buy the food.

When it comes to the information on a fish card it is for fresh fish products and fried products more straightforward to write on a card basic information such as the fish origin, the fish season and the fishing techniques, because one has to write only the information for one specific fish. Whereas, with the ready to go products most of the time more ingredients are involved. Therefore, all this information does not fit easily on one small card. Nevertheless, the information on a fish card at all the fishmongers is the price, business logo, the trade name. As said before, only four put also the fish area for the fresh fish products and of which to put if wild or breed, or fresh or de-frozen. Next figure is an example of a fish card with the following information: specie, price per 100 gram and business logo.



Figure 14, example of fish card

Although all interviewees say they communicate face to face, only one company seems to do this as a clear strategy. Even though, seven fishmongers said face-to-face is also the easiest communication channel. Furthermore, they said face-to-face is the best way to build a long term relationship with the customers. One company quoted, *"Face-to-face advertisement is the fastest way to gain a positive or negative image of the business"*. For these reasons also, this fishmonger does not use any cards, no posters even no chalkboards. The only text the owner does communicate is: *"We go to the fish auction ourselves"*. All interviewed fishmongers said when somebody buys fish directly at the auction, that person is basically buying the fish directly from the fishermen.

Another channel which can be used by the customers is the Dutch Good Fish Guide app. In the next section the Dutch Good Fish Guide will be elaborated further upon.

#### *The Dutch Good Fish Guide (VISwijzer)*

As said before in the background, dutch fish guide is a tool, created by the North Sea Foundation and later taken over by GFF, to help customers making a more sustainable choice when buying fish. Nine out of ten owners of the companies knew the Good Fish Guide. Although they all (except

one) say they know the Good Fish Guide, only two also use and like it. These two fishmongers also said when they took the time to really look into the fish guide by reading the instruction of how the app works it is actually quite logical. Four fishmongers indicated it is a good helpful tool, nothing wrong with it, but they do not use it. The other three fishmongers had small problems with it because according to them some species should not even be promoted in the app. This feeling was really strong with panga. One interviewee said panga is one of the most contaminating and unhealthy fish products in terms of the antibiotics applied to the fish. Furthermore, the output coming from panga aquaculture pollutes the rivers, ending up polluting the sea. Therefore, these three fishmongers refuse to sell panga at all for health reasons and not for sustainability reasons. When customers ask why they do not sell panga they give these arguments like health and sustainability.

So although almost all fishmongers know the Good Fish Guide, seven fishmongers state that they have never seen their customers using it. Six of these seven fishmongers indicate that a possible reason for this would be that the Good Fish Guide is too complicated. One fishmonger said most customers (people) seem not to think about sustainability of fish yet. This fishmonger quoted, *“I know the Dutch Fish Guide, but almost nobody knows about it and do not think about sustainability when buying fish. He thinks the popularity of the Dutch Fish Guide is therefore not big”*. The seventh fishmonger was the one that did not know it the app. Therefore, the app was shown to be able to say if his customers use it. This fishmonger says have not seen their customers using this app. At the remaining three fishmongers the Good Fish Guide is almost never used by the customers. One fishmonger said maybe max two percent of the total customers last year used the Good Fish Guide. This fishmonger said the Good Fish Guide can have effect in combination with campaigns of NGOs. The example the fishmonger gave happened a few years ago. The plaice was listed only as red specie in Dutch Fish Guide. On top of that, campaigns propagated the bad/alarming situation the specie was in. A small group of people, for whom sustainability seem to be very important, started to spread the word to other people. As a consequence, the demand dropped giving the population time to recover. Therefore, cooperation between different institutions could be more effective. This should be investigate separate to see the relation between these effects and if it could be good tool to start to spread more awareness among actors, including customers, about the fish they sell and they consume.

Despite the low use of the guide among the customers, the most active fishmonger (G), most strict one when purchasing sustainability fish, also actively promotes Good Fish Guide to his customers. The owner says it's hard to make them actually starting to use it. Because it's too complex to quickly understand how it works or clients are too busy with other stuff in life. The reason for asking questions related to sustainability, including the Dutch Fish Guide, is because the owner find it important to push consumer to become more critical by learning about fish. Therefore, the owner self frequently asks questions or talks about fish and sustainability to or with his customers. Despite promoting the Good Fish Guide to the customers, over all the years has only seen few persons use it.

The organisation behind the Dutch Good Fish Guide uses criteria (see literature review) to define the sustainability of a fish, in which certification is seen one of the most sustainable choice (see background). But now it is interesting to look at what sustainability and certification means for the fishmongers. This is described in the next part.

### 5.1.3 Sustainability according to the fishmongers

Below is described how fishmongers look at sustainability. For this, the following question can be used:

- What does sustainability mean to you?

To start with, all the fishmongers mainly link sustainability to environmental sustainability but they do not connect sustainability directly with the EU labelling legislation. They recognise/acknowledge that some aspects of the EU labelling legislation is addressing sustainability: fish specie and origin in relation with vulnerability, fishing techniques in relation with habitat destruction & by-catch, fish season in relation with total annual catch and overfishing or not.

So, the fishmongers link sustainability to the environment in different ways. However, the common line in the way most of the fishmongers see sustainability is “looking into the future”. Therefore, the current environmental impacts are important as the impacts effect the future of fish industry. In the end, looking into the future means fishery practices done in a way the future generations also have the possibility to continue working in the same business. This way of looking at sustainability is in line with the statement of Brundtland commission, namely, “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

During the interview when asking what sustainability means for the fishmongers the current problems within the fish sector also came forward. Firstly, all the fishmongers see overfishing as a really big danger for the future of fishing and the fish sector they all seem so passionate about and endure so much. Furthermore, during the interview talking with the fishmongers also came forward that to get to 100% sustainable fish sector is going to be difficult. Especially, if it does not stop to be all about the money, the consumers do not get more critical when buying fish products, if consumers and actors are not willing to start to pay more money and if there is no clear strategy and action plan for the fish industry how to get there. However, clear strategy and action plan with the steps to be taken is not easy to define. As one fishmonger stated, *“The most difficult part is to have perfect balance between people, planet & profit. Furthermore, most of the time is impossible to predict how the nature will react exactly even when have there is idea how works out. Many times another not predicted problem appears. The only way sea fish populations can really recover is when they are left alone for long period of time. But for many people is the only income and therefore not an option to say to them they cannot fish anymore. You have to come with alternative”*.

Finally, from the question what sustainability means for them solutions for present problems came forward as well. All fishmongers agreed that things have to change in the fish industry before there is really no fish left. As one quoted *“Small problems become in the end bigger problems”*. Adding up, other given solutions for problems were:

- The best salvation for most of them (n=7) is to sell only fish of the season. This protects the fish stock, the quality of the fish sold and in the end the future of fishing and fish industry. This a first step but the fishmongers acknowledge other practices (fishing techniques & fish origin) have to be taken into account.
- Some fishmongers said the law obeying to land the by-catch at shore (CBI, 1 January 2014) should be adjusted to specific species. This can be determined by looking at the probability of the species to die or survive when thrown back into the sea. When they die makes more sense to land the by-catch at shore. For example elvers, which are young eel, are resistant and survive after

being caught so would be more logical to throw them back. When fishermen are obligated to bring them to the shore, the species population is not benefitting. The population would stay more stable when the smaller ones that are being caught are thrown back in the sea so at a later stage they can reproduce as well. Therefore, a law or protocols that forces the fishermen to bring all by-catch to shore should be adjusted per species. The also injured or already dead fish can be used for example for consumption as well for the fish meal in aquaculture or pet food.

- All species should have quota. Quota are the total allowable catch (TAC), based on the vulnerability of the species population. Quotas can also be related to the fish of the season.
- For one interviewee sustainability is also dealing with the plastic in the ocean. Plastic should be prohibited but an alternative has to come especially in the fish industry, and for transportation as well.
- For one other company sustainability is also dealing with food waste; to stop throwing food away.
- Moreover, it was suggested that a solution should come for the fish oil and meal, food for the fish breeding, in the aquaculture sector. Now to breed fish wild fish is needed, two times amount of the quantity of breed fish, to produce the fish oil and meal to feed the fish. Therefore, putting even more pressure on the already majority overfished stocks. One company even specifically said, as long as there is no solution for food supplements in breeding fish, aquaculture is unsustainable.

In all the solutions given it can be seen that certifications is not considered as a specific solution. So, next interesting step is to see how the fishmongers see certification. For example if certification in their eyes stands for sustainability and if they communicate actively about certified fish to their customers.

#### 5.1.4 Certification according to the fishmonger

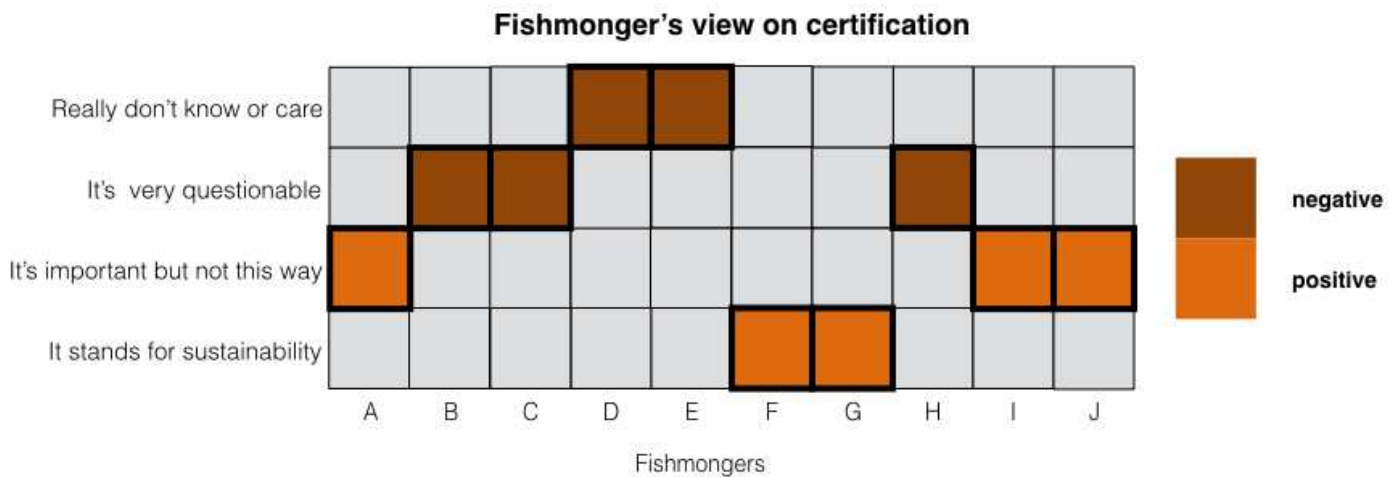
Certification is a marketing tool to make the choice for customers to choose for sustainability fish easier (further explanation in background and literature review). Examples of certification are MSC, ASC and Friend of the sea. Specifically in this sub chapter, there is first a look at how fishmongers see certification, secondly if they purchase certified fish and finally if they communicated about certified fish to their customers. The following questions of the interviews were used for this:

- Do you think certification stands for sustainability?
- Do you purchase certified fish? If yes, the whole assortment or part of the assortment?
- When buying certified fish, do you communicate this to your clients actively?
- When fishmongers sell certified fish: do you know if your business has to be certified as well to allow to sell certified? Do you know the reason for this?

##### *The fishmonger's view on certifications*

Figure 15 on next page shows how the ten fishmongers look at certification. This went from certification stands for sustainability to do not know/have not looked into it/do not care about it. The Y as in this graph was determined by comparing similar answers and categorise them in this four views on certification.

Figure 15, Fishmonger's view on certification



The two fishmongers (F & G) passionate about sustainability think certification stands for sustainability. The other eight fishmongers go from; it might be important but not the way it is, to; not care or have not dived into it. The reasons that fishmongers say certification is questionable or being important but not this way, are:

- Certification cannot fully guarantee all fish is always coming from sustainable sources. Therefore, making the story more beautiful than it is. Because it is impossible to control all the actors in the chain. As two companies said, anybody can make up a story or falsify papers.
- People use the certification to justify everything they do. Different fishmonger saw this happening with herring. They promote largely the herring they have. Promoting that fish is MSC certified could suggest immediately the whole business is sustainable. One said, *"if I want to sell certified, want to make a statement with that, sell than really only sustainable fish. Go for it 100% and not just half"*.
- One fishmonger said MSC codfish is caught with huge ships in big quantities fishing for months. According to this fishmonger, in the Netherlands and for himself sustainability means the relation between the fish quantity and the population. Therefore, this fishmonger has serious doubts regarding MSC certification story.

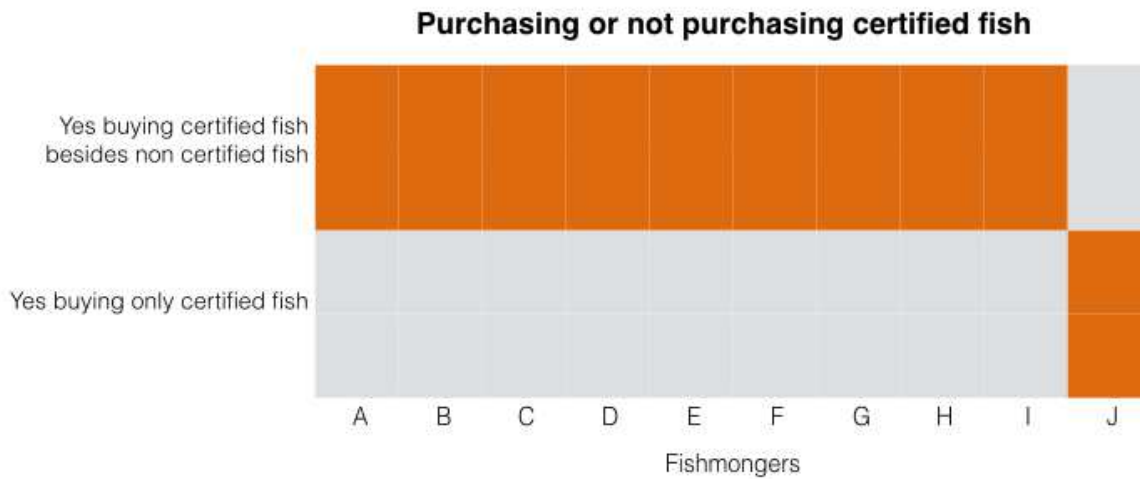
Fishmongers purchasing or not certified fish

The question now is if these doubts about certification influence the act of buying certified fish and selling it actively to the end customer. Despite having doubts about it all the fishmongers buy: 1) or only certified fish, 2) or buy certified fish besides non certified fish. Figure 16 on next page shows how many fishmongers purchasing certified fish besides and non certified fish and how many fishmongers only purchase certified fish.

The reasons among the ten fishmongers to purchase certified fish are because of the sustainability choice, because the specific specie is only offered certified such as Haring and/or the better quality fish is the certified fish. When comes to the only fishmonger purchasing all the fish certified (see figure 15), this fishmongers stated, *"The only way we can buy always certified fish is by having a much smaller assortment. Also, by having a smaller assortment as a fishmonger have more control on the fish self and the bookkeeping"*. Furthermore, the two fishmongers stating certified fish

stands for sustainability (see figure 14) have their own reasons to not purchase all the fish certified even if they would like too. One of the reason is they cannot buy certified fish only because not all fish species are offered certified, especially when only working with fish in the season. Additionally, they said it is also important to have in mind that not all sustainable sourced fish is always certified. The reason for this is because especially small fishermen cannot afford the costs for certification.

Figure 16, Purchasing or not purchasing certified fish



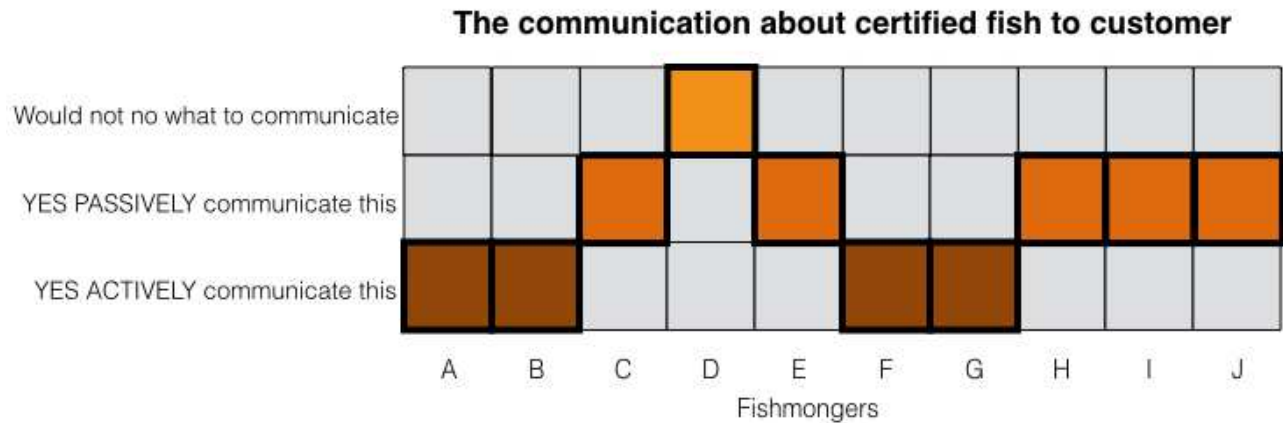
Fishmongers communication about certifications with the customer

The next question is to see whether the fishmongers actively communicate about the certified fish to their customers. Active communication about certified fish can be done by putting the certification logo on the card or on the fish itself for example by a tag. Or by communicate about the certified face-to-face in which the customers have to trust the fishmongers to be telling the truth. Figure 17 below are examples of certification logos. Furthermore, figure 18 on the next page shows how many fishmonger actively communicate about certified to end consumer face-to-face or by showing the logo.

Figure 17, The MSC, ASC and Friend of the Sea certification logos



Figure 18, Active or no active communication regarding certified fish



Six of the fishmongers do not actively communicate about certifications to their customers because the minority or no customers ask about certification. One said, *“Would not be wrong to sell actively certified fish, because standing still is going backward. So if the subject ‘sustainable fish’ would be hotter among the consumers I would be more pushed to dive into this”*. Still, when a single customer once a while ask, these six fishmongers honestly tell if the fish is certified or not.

Four fishmongers actively communicate about certified fish. Among them two fishmongers are going to actively communicate about all the purchased certified fish to their customers. These two fishmongers are the same fishmongers communicate actively about sustainability from own motivation as they believe sustainable is of utmost importance for future existence of fish (see part 5.2.2 page 46). Furthermore, these two fishmongers see their customers getting more interested in fish background and consuming more sustainable sourced fish. Therefore, these two fishmongers are going to put a logo on the fish cards because they believe in certifications will lead to a better future and see customers asking more and more about certified fish. The other two fishmongers only communicate actively a small amount of certified fish because the logo is already on the package so it is convenient. These two fishmongers do also not see customers getting more interested. One of these two fishmongers has only the DUPAN logo on the small amount of smoked eel packages. For the rest this fishmonger does not communicate about certified fish at all. The second fishmonger who communicates actively about small amount of certified fish believed that for the tuna the Friend of the Sea Yellowfin certification tuna is most sustainable tuna at this moment. Therefore this company stands behind the logo on this specific package. Friend of the sea (figure 16, third logo) has more species certified under their certification organisation. Nevertheless, this same fishmonger stated, *“If I want to make a real statement I should not sell tuna at all. But this is not possible because if I do not have certain products, like tuna, people go to another fishmonger”*. The other nine fishmongers confirm this: not having certain products in the assortment, means losing financially too many clients. When repeatedly saying, *“No, I do not have this product to their clients, the clients go to another fishmonger”*. The important products that fishmongers always need to have in their assortment are tuna, salmon, fresh codfish and seasonal herring.

Furthermore, only 4 fishmongers knew one has to be certified themselves or comply with certain rules to officially have permission by certification organisation, such as MSC, to use the certification logo's like MSC (see first logo figure 16) when selling the fish. This is the reason why one of these four fishmongers, instead of putting the MSC logo on the card, puts responsible

caught fish on the card. The other six fishmongers did know about the possibility to get certified but not about the fact that one has to be certified to have permission to actively communicate about certified fish. Remarkably is that the two who use the sustainable logos like MSC actively are part of these six fishmongers did not know about it. Still, none of the fishmongers are considering to get certified themselves at this moment for two important reasons. One because it is very expensive and secondly there is no way to earn the money back. The reason for not earning back the money is because the demand for certified fish from the customers is still too low. Six fishmongers said specifically almost no customers ask if the fish is sustainable or if it is MSC certified. One fishmonger quoted, *"If two times a week somebody would ask about certified fish that would already be a very high number"*. The other four fishmongers said nobody ever asks for certified fish. They said, especially MSC certification, benefits the supermarkets and therefore is an unfair system. For the MSC certificate supermarkets work together which makes the cost as low as possible per selling point/company. One fishmonger quoted, *"If more fishmongers would cooperate to get MSC certified, the costs would be much lower. But this is going to be difficult because every fishmonger is a small island, doing their own thing. Supermarkets are working together. The reason why they can officially sell all the fish MSC certified"*.

Until now, the communication between supplier and fishmonger, and fishmonger and customers has been highlighted. The final part there will be to look at how the fishmongers see their customers and a sum up of the reasons for the fishmongers to actively or not actively communicate about fish and sustainability.

## 5.2 The reasons for (not) sharing information from the perception of the fishmongers

First, this part will look at how the fishmongers see their customers. For this the following interview questions were used: 1) - A Dutch newspaper, the volkskrant (2015), stated that consumers come for quality and fresh fish, do you notice this with your consumer? So yes, can you explain how you know? 2) What do your clients know about fish? How can you tell? What do you think is important criteria for consumer when buying fish? Finally, the reasons for actively communicate or not actively communicate about fish and sustainability is put together. For this all the questions and findings till now are used, together with this final question: What are the most important reasons to share or not share information?

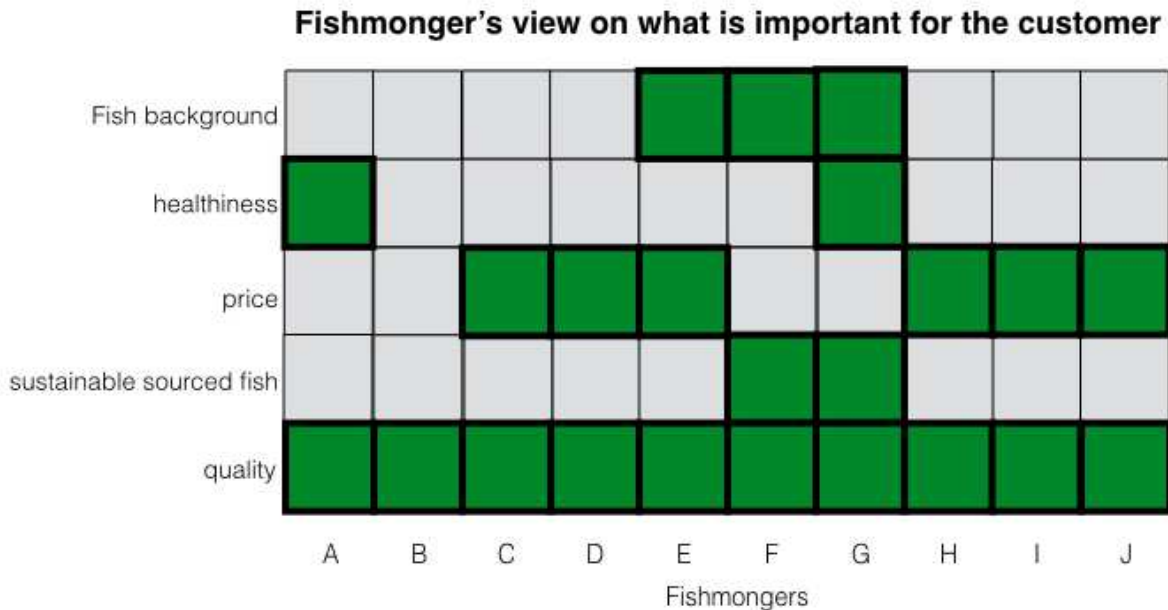
### 5.2.1 how fishmongers see their customers

Till now, there has been a look at how the fishmongers communicate and look at the EU labelling law, sustainability and certification. However, during the interview also came forward how the fishmongers see their customers. As a matter of fact, it is very interesting to see what the fishmonger's perspective on the customer is given that in the literature review it was revealed that business adjust their marketing strategy and way of communicating to the business target group. Therefore, the question arises if this is also the case with the fishmongers. In the previous outcomes (chapter 4 & 5), this came forward already. Fishmongers said they do not communicate all the compulsory information, including sustainability, because customers seem to be interested. At least possible deferred interest in knowing all the fish background or sustainable aspects is not coming forward from their customers asking for it at seven fishmongers. But what is important to their customers than according to the fishmongers. This is explained in the next two paragraphs.



Figure 19 below shows the fishmonger’s perspective on their customers which over the last increased in numbers due to nutrition organisations and cooking programs increasingly promoting fish as healthy. However, in the graph can be seen that all the fishmongers say quality and not healthiness is one of the most important criteria for their customers. It should look good, taste good and have a good price. Only two fishmongers mention the health aspect of fish together with the quality as being important to their customers, price is not as important

Figure 19, Fishmonger’s view on what is important for the customer



Moreover, the fishmongers said the children of the parents are the future customers. The fishmongers want the children when they become an adult to come to their business instead of going to the supermarkets. To remember the good quality fish their parents bought and brought home. The good quality fish they, the future customers, enjoyed as a child. Being good quality fish as in being sustainable fish is only important for customers of two fishmongers for whom price seem to be of less importance.

Furthermore, according to all the fishmongers, the majority of the customers seem to be more willing to pay higher price for a good quality fish than a more sustainable sourced fish. But good quality fish not always stands for more sustainable fish. A possible reason one fishmonger gave is that the customers also seem not to know what sustainable fish exactly means because of the all the mixed messages. This can be important bottleneck for the majority customers to not deal with sustainability when buying the fish as they do not know what to pay attention to or what to ask for regarding sustainability. However, to confirm this further investigation should be done by interviewing customers themselves. Furthermore, this fishmonger said the moment there are mixed messages and its get too complicated actors, including fishmongers, also seem to put the topic aside. This fishmonger stated, *“The moment when something gets too complicated many fishmongers and customers look the other way. This has been seen with sustainability, including certifications and the Dutch Fish Guide. The organisations are telling different stories saying different things. So for the fishmonger and customer sustainable sourcing is like looking for/searching for a needle in a haystack”*.

## 5.2.2 Reasons for actively or not actively communicate about fish and sustainability

Besides that fish shops in general seem to have more modern technology presents at the selling points and always seem to have a website or even web shop, than market stands. The further information exchange and the way of communication seems to be based more on personal believes and considerations than the fact the communication is at a fish shop or at a market stand. Next page the personal motivation, distracted from all the previous findings, behind why seven fishmongers do not actively communicate and three fishmongers do actively communicate are summed up.

### **Three fishmongers actively communicating, because**

- There are three fishmongers communicating or going to communicating all the compulsory information set out in the EU labelling law and/or about sustainability to their customers. The motivation to do this is different per fishmongers, namely, the following:
  - Because of the EU labelling law (C)
  - From own motivation and because of the EU labelling law (F).
  - From own motivation (G).
- The first fishmonger get only a bill with the fish specie, quantity and price. Therefore, this fishmonger is going to gather the information by requesting the information from the supplier, relying on the ability to see the fish country/place of origin from the physical characteristics and searching basic information such as the Latin name on the Internet. The second and third fishmonger get all the information from their suppliers on an auction paper, receipt and/or sticker.
- The first fishmonger is going to communicate all the compulsory information set out in the EU law because she strongly believes the law is something they have to follow. This fishmonger thinks all the actors in the chain should follow the current laws concerning the fish sector. This fishmonger sharing information is not because of customer's interest. Therefore, if the law would not exist this person would not start to communicate actively elaborated information about fish and sustainability.
- The second fishmonger communicates actively about sustainability because she believes sustainability is of utmost importance for the existence of the worldwide fish population and ecosystems. Also, she is going to communicate actively all the compulsory information because of the EU labelling law. This personal motivation seems to be the reason to persuade customers to be interested and passionated about fish and sustainability. In return, this could be a reason why this fishmonger sees the consumers are and are getting interested in fish, and in consuming more sustainable sourced fish.
- The third fishmonger communicates actively about sustainability because he believes sustainability is of utmost importance existence of the worldwide fish population and ecosystems. This personal motivation seems to be the reason to persuade customers to be interested and passionated about fish and sustainability. In return, this could be a reason why this fishmonger sees the consumers are and are getting interested in fish, and in consuming more sustainable sourced fish.
- The second and third fishmongers say that they see a high increase in the number of customer consuming fish and among these customers a higher number interested in fish, and that are

concerned about consuming more sustainable sourced fish over the last years. One of these two fishmongers said sustainability should be a concern always as this fishmonger quoted, *"The consumption of fish went up in the last few years due to also the promotion on how healthy consuming fish is. However, at the same times comes the responsibility to address sustainability in the fish sector. Because there is already high pressure on fish population and ecosystems. So this only increases when the demand goes up, but if sustainability does not become a priority big problems in the future will grow only more and professions in the fish sector will disappear"*. Therefore, this fishmonger said have to keep educate customers about sustainability, especially the ones who get the information of the internet but do not understand much about sustainability.

### **Seven fishmongers not actively communicating, because**

- One of these fishmongers see customers getting more interested in the fish background out of curiosity or because they want the good quality fish but not because he thinks they are concerned about consuming more sustainable fish. Furthermore, "Where is the fish caught" and "When is the fish caught" are weekly questions and the question "How is the fish caught is asked sometimes, namely, monthly or less. Despite the higher frequency of customers asking, the only information related to sustainability this fishmonger communicates actively is the country/place of origin on a fish card with the fresh fish products, not with fried & smoked and ready to go products. The reason for to not actively communicate further information is because customers will ask what they want to know and they will get an honest answer.
- The other six fishmongers gave as number one reason for not sharing elaborated information, including the information related to sustainability (fish area, fish season & fishing technique), actively or not actively because customers do not ask. Therefore, there is no direct reason for these fishmongers to start to communicate actively. As one fishmonger quoted, *"Why if the customer do not ask would we share the information. There is no use for us or direct benefit for us"*. Another fishmonger quoted, *"It is laziness not to be active in communication, because why if people do not want to know would you make them wiser than they already are or are not"*. At the same time, these fishmongers said they do not have the time to tell the whole story behind sustainability and all the obligated information to every customer. Customers have to wait much longer than and many probably would not have the patience to wait. Therefore, customers seem to be the king to whom as a business are adjusting the communication. One fishmongers quoted, *"When your whole life you work with fish you cannot see the fish as a fish; it is a product to sell"*.
- A hot topic among their customers is allergies, because of the connection to personal health. When it comes to health there is directly personal risk involved and customers can associate with. But this reasoning should be investigated further.
- Due to the low frequency of customers asking for elaborated information, the fishmongers seem not to feel the pressure to start actively communicate all the compulsory information, including sustainability. Even though, the majority of them do receive all the compulsory information, including sustainability, from their suppliers. The reason for the low frequency of customers asking questions about fish sustainability could be because they have less association with fish. Therefore, are less concerned about sustainability. But this should be investigated further.
- Furthermore, fishmongers do not have the time to tell the whole story behind sustainability and all the obligated information to every customer. Customers have to wait much longer than and many probably would not have the patience to wait.

- Additionally, the majority of the fishmongers do not think certification stands for sustainability or think it is good it exists but not the way it is now. Furthermore, some fishmongers do not know always what is sustainable or whether there is truly sustainable fish. In addition, to actively use the MSC logo or promote MSC, a certificate is needed. But to get that certificate the fishmongers first has to make high costs compared to not a higher turnover per certified product due to the low interested and demand by the customers and there are limited fish species certified. These are all reasons to not start actively communicate about certification by putting certified logo on a card.
- Furthermore, to put all compulsory information on a small fish card is not realistic and inconvenient. More logical is putting all the information in a folder. The moment customer at six fishmongers start to ask questions, out of curious rather than being concerned about consuming sustainable fish, related to either fish area or fish season mostly for fresh fish product observed during interview. However, this should be investigated further among customers.
- Finally, these fishmongers feel the majority of their consumers seem to be interested in information on quality rather than sustainability. Even though, the customers hear more stories related to sustainability due to the active spreading of information by the NGOs. Nevertheless, the majority of the fishmongers feel that many customers seem not to know what to do with all the published information regarding fish and sustainability and that the fish knowledge is still very limited. As an example one fishmonger stated, *"When I think a customer really knows something, I also start to ask question about the subject. Then I find out the person copied the information from the Internet but has no idea what it really means"*. Another company said, *"I feel like my customers ask where the fish is caught out of curiosity but not because with this information they would know if it is a sustainability fish or it is not a sustainable fish. Most of them do not ask any further questions related to sustainability"*. All in all, the customer's fish knowledge should be investigated further among the customers themselves.

To sum up, the majority of the fishmongers seems to be putting the responsibility with the customer. As the customers are not asking many questions about all the information set out in the EU law, including sustainability (fish origin, fish season and fishing method) the majority of the fishmongers are not feeling the pressure to share all these information. However, there are three going to communicate actively all the compulsory information. All three fishmongers from their own personal motivation.

## Chapter 6 Discussion findings

After having the results a next is step is to discuss how valid the information is by first reflect on this thesis and after by comparing the outcomes with the findings of other research.

### 6.1 Reflection on this thesis

First of all, the question is if in the provinces where the interviewees had no selling points the fishmongers would answer similar to the interview questions. Because only fishmongers with selling points in North Holland, Gelderland and South Holland were interviewed. In the second part of this chapter the outcomes of this thesis are compared to the findings of other research. When other research had similar outcomes, the probability of similar answering increases.

Secondly, something to take into account is that only a small number of fishmongers were interviewed. However, this research is part of bigger research done by LEI, part of the Wageningen University. A next step in their research is Internet surveys. Interview surveys are done to reach a broader number of fishmongers. The results of these interviews are used to see important aspects to concentrate on in the Internet survey.

Finally, only fishmongers and suppliers have been interviewed but not the customers. However, when analysing the data, the way the fishmongers see their customers came forward. The following consumer groups came forward:

A) The consumers are more concerned or find consuming responsible sustainable sourced seafood important. They can also afford to buy more expensive products.

B) The consumers who are interested in consuming responsible sustainable sourced seafood but cannot afford expensive products.

C) The consumers can afford responsible sustainable sourced seafood but do not care about sustainability. They just want the cheapest product.

D) The consumers care about quality and want good quality fish products. Good quality fish does not mean sustainability fish but can go together with sustainability aspects like fish caught in the season.

E) The tourists, interested to try typical Dutch fish products. The typical Dutch products are fried parings (fried cod/pollack or other white fish) herring and smoked eel.

Nevertheless, this is based on the feelings and observation of the fishmongers. As this based on the observation of the fishmongers conducting a survey among the customers buying the fish at the fishmongers gives a more realistic image how the customers themselves see the communication about fish and sustainability with the fishmongers. Therefore, one of the recommendation is to do a customer research. Also, to investigate the customer's fish knowledge further among the customers themselves.

### 6.2 Comparison of this thesis with the findings of other research

Now, it is interesting to see if this research can be compared with findings of other research. Even though not many research were found, the following four research could be used to compare.

A research done by Maarten M. in 2013, also looked into the current communication situation in the fishmonger trade. In total 12 fishmongers were interviewed. The conclusion of this research is in line with the conclusion of this research, namely, the majority of the fishmongers do not actively communicate about information on fish or sustainability. From the results, the following outcomes of the research were in line with the outcomes of this research:

- 1) Clients seem not to be interested in sustainability. At least, possible deferred interest is not coming forward by asking for information (Maarten M., page 5)
- 2) Another problem coming forward during some of the conversations, is the customer is not really fast prepared to pay more for sustainable products (Maarten M., page 7)
- 3) There is awareness that other selling points, especially the supermarkets, can easier and better profile themselves. The communication from the fishmongers to the consumers has to be simple and easy in practice and should not be too time-consuming time for the fishmonger (Maarten M., page 7)
- 4) The fishmongers that are truly active in the field of sustainability are a clear minority. Reasons to think about sustainability vary. In some cases, the conviction that it is badly needed plays a role (Maarten M., page 5)

A research done by Global scan for MSC came forward the majority of the customers find security to have fish in the future important and more half of the customers said they trust the MSC logo. In this research, seven out of ten fishmongers did not feel the same. They felt the overall majority of their customers still do not care about it, do not have time to get into sustainability topic or to get to understand fish sustainability. A possible explanation of different point of views is in the research done by Global scan there was no separation between the customers going to the supermarkets and the customers going to the fishmongers. Furthermore, an exact number of concerned customers per participated countries was not found in the research. Therefore, there is a possibility there is no high concentration of concerned customers in the Netherlands.

In research done by Annelies D., et al. in 2015, more half of the interviewed customers said they never or sometimes look at certification or sustainability of the products. This is in line with outcome of these interviews where the majority of fishmongers say the majority or none of their customers seem to be interested in certification or in sustainability at all.

The claim of articles that there is not always open communication about sustainability and fish background some of the fishmongers of this research said indeed they have seen this. An example is saying to customers is the codfish when is really pollack. Or they know there is dishonest communication taking place in the supply chain. However, they seem to say they are not part of the fishmongers that are not communicating honestly to the end consumer. The fishmongers said they were completely honest to their consumers and trust the communication of their suppliers. The question is of course if the fishmongers would admit dishonest communication during an interview. For this, going undercover is the best way to find out how reliable the claims are the fishmongers make. Therefore, to find out how honest the communication is in the fishmonger sector.

## Chapter 7 Conclusions

After analysing the data, coming with the results and comparing it with other research conclusions can be made, based on the main research questions:

The first research question was: *“For the fishmongers, how is the cooperation and communication with their suppliers?”*. This is the outcome:

To start with, all the fishmongers work with more than one supplier with whom they have built a long term relationship delivering the goods they require. And that is fish from a good quality. The majority of the fishmongers want the best quality whatever the price is. For the minority it is the price/quality relation. Trust between the fishmongers and their suppliers seem to be the key to a reliable fish quality.

Secondly, all the fishmongers have access to or receive all the compulsory information, including sustainability information, from their suppliers. The majority of the fishmongers receive all the information from their suppliers through sticker, bill or auction paper. There are only three fishmongers that receive also a bill but only with limited information (specie, quantity and price). However, all the fishmongers believe that their suppliers can answer any specific question, such as the fishing date, if necessary.

The second and third research question were: *“How and what do fish shops and market stands currently communicate about fish and sustainability towards end consumers?”*. And *“What are the reasons why certain information is shared and other information is not shared?”*. These were the outcomes:

Despite the fishmongers receiving or having access to all the compulsory information from their suppliers, including information regarding sustainability, not all of this is being communicated to the customers. The information that is mostly communicated towards customers is related to how to consume the fish and is related to personal health. The latter is information about the expiring date, allergies, if its fresh or de-frozen fish.

There are only three fishmongers that will communicate actively about fish and sustainability to the customers. The first fishmonger does so, because of EU labelling legislation. The second fishmonger does it, because of EU labelling legislation as well as from personal motivation. The third fishmonger is communicating this kind of information, because he/she is motivated to do so. This motivation comes from a strong believe that sustainability is of utmost importance for the existence of the worldwide fish population and ecosystems. Furthermore, this personal motivation seems to be the reason to persuade customers to be interested and passionated about fish and sustainability. Customers seem to be more comfortable to ask the second and third fishmonger mentioned above questions and are interested in the fish background and in consuming sustainable fish. A possible reason for this could be that these two fishmongers are more active in sharing this kind of information with their customers.

In contrast, the other seven fishmongers seven seem not to feel the responsibility to be more pro-active in communicating about fish and sustainability towards their customers. They seem to make their customers responsible before starting to communicate actively about fish and sustainability.

Six fishmongers assume their customers are not interested in fish and especially sustainability, because their consumers did not ask many questions related to sustainability, fish guides or certification. At the remaining fishmonger customers ask more frequently questions related to sustainability (fish origin, fish season and fishing techniques). However, the owner thinks it is out of curiosity and not because their majority of customers are concerned about consuming sustainable fish. Despite this interest from the customers, this fishmonger does not feel motivated to start communicating actively since the customers will ask for the information instead.

Furthermore, the long build relationship with the customers and to be able to deliver good quality fish (whether or not fair priced) is important for the fishmongers to be able to compete with the supermarkets. As many fishmongers said that in the end the children of the parents, the current customers, are the future customers. The fishmongers want the children of their customers, when grown up, to come to their business instead of going to supermarkets. To remember the good quality fish their parents bought and brought home. The good quality fish they, the future customers, enjoyed as a child.

Therefore, to say that the business strategy or marketing strategy is connected to types of customers seems to be true. Additionally, a next interesting step would be to investigate further the fish knowledge from the customer's perspective and if customers notice that the fishmongers adjust the business to their needs as well. And investigate the interest or perception of consumers regarding sustainability in the fish sector

## Chapter 8 Recommendations

### Recommendation for GFF (Good Fish Foundation):

#### *For the fishmongers*

- Once talking about how future looks for the ecosystems and the fish population with the fishmongers, they all know what is going on. They all understand what the future will be for the ecosystems and fish populations when not everybody takes his or her responsibility. Therefore, telling them this story this will not push the fishmongers to change their communication
- It is very important to find the motivation of the fishmongers in their own point of view. Motivation related to their needs and their ideas. Three key words they relate to are: future of fishing and overfishing related to security for the future generations; quality related to total meat weight; and fish of the season. A further step is connecting this three key words to fishing technique and other sustainability aspects.
- To come with a plan for the fishmongers, it is very important it is a plan with clear steps and that it is to the point on how to tackle sustainability and communicate actively. One said; *"The only way we (fishmongers) may come on the same track is when there is a clear plan with clear short- and long term benefits and a clear explanation what the consequences are when we continue fishing this way and when customers continue eating fish at this rate"*. Furthermore this person said, *"First thing that has to happen is what the message and next steps want to communicate to the consumers. Only than we can send out one clear message to these consumers"*. When it is getting too | complicated consumers and fishmongers loose interest. When there is a clear plan with clear steps and to show how short term choices influence future scenarios directly, is an important start to bring the fishmongers together.



- In the case the fishmongers come together, organising one central organ like VnV regarding communication on sustainability would be much easier as well. To organise one central organ can be handy as decisions and implementation of it can be done more efficient among the Dutch fishmongers.
- This way it maybe could be easier to persuade fishmongers to stop laying responsibility only to the consumers. To push them to feel responsible and to be pro-active in their communication to the consumer. To convince them they do have an important voice in how fish practices are done in the fish industry and to convince the fishmongers they have the ability to push people to become more critical and aware of the fish they are consuming.
- The perfect scenario would be when all are only working with sustainable sourced seafood so consumers have no other option than to buy these type of products. However, the biggest problem is there is just not enough offer for all the fishmongers to sell only responsible sustainable sourced seafood. Therefore, fishmongers have to fuse or offer much smaller seafood assortment.
- The two key concepts GFF a good starting point is clear story connecting sustainability with future of fish for future generations in combination with fish of the season, quality related to meat weight and fishing technique.
- There is now a Dutch Fish Guide made for the fishmongers, based on GFF Dutch Fish Guide for consumers. With this is important is straightforward and easy to use. Use as a starting point connecting sustainability with fish of the season related to quality, namely the total meat weight, and fishing technique.
- Finally, the Dutch government could be implement a protocol in form of a fine for the fishmongers who do not follow the EU labelling law. The same principle that is done now when fishermen use prohibited fishing technique. When the fishermen are caught, his fishing license is taken away.

#### *For the consumers*

- As a start more lobby activities could be done to activate the customer. Also, the customers should get more direct lectures and guiding on sustainability and the importance of sustainability to create awareness. For example at schools a week of sustainability can be organised or interactive games about fish and sustainability can be designed. Kids will tell their parents what fish to buy or not to buy.
- Important next step is a one clear list, including questions, on how to implement and connect information when buying the fish. The moment the consumers start to ask more about the fish and sustainability the fishmongers would feel more pressure to communicate and think more about the fish itself and sustainability even more critically.
- Dutch Fish Guide could be simplified because according to these fishmongers the customers seem not to feel the need or the motivation to figure out how it exactly can be used. Some fishmongers said if a consumer takes the time to really look into the app and read instructions it is actually quite easy to use. But it is just not happening according to these fishmongers.
- Finally, an idea could be to put a board or other tool with fish of the season and behind if sustainable sourced yes or no in the fish shops and at market stands. Or other visual options displaying a message about fish sustainability. This can be a way to make the consumer more conscious and easier way to choose the more sustainably fish.

Recommendations for further research:

*What is worth looking into for understanding how to help in pushing the fishmongers to be more pro-active in communicating about fish & sustainability, and finally push the fish industry towards sustainability as well, is understanding the customers:*

- 1) This can be done by executing a survey among the fish-buying customers going to fishmongers. Also, as these ten fishmongers mentioned they see difference in customers buying behaviour to whom they adjust their business. Therefore, it is interesting to conduct a customers type research based on how different types of consumers think about fish and sustainability as well as how that is consuming behaviour which can be defined by income and nationality. Furthermore, income and nationality are two factors the interviewees think influence the customer's buying behaviour.

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## Chapter 10 Annex

### 10.1 Interview

1. Hoeveel fysieke verkooppunten heeft u als bedrijf en welke plaatsen?
  - Kramen, staat gelijk aan standplaatsen (waarom die plekken)
  - Winkels
  - Verkoopwagens
- 1.1 U functie binnen bedrijf is ....
2. Welke vis/visproduct verkoopt u meest? Waarom denkt u dit zo is?  
Wanneer ingekocht in en weet u waar de vis vandaan komt?
3. Waar wordt u vis ingekocht?
  - Groothandel, vissers, verwerker, afslag, rokerij (hoeveel?)  
Waarom meerdere en deze; (3) belangrijkste redenen
4. Hoe heeft uw bedrijf de inkoop georganiseerd?
  - Hoe en door wie? Hoe vaak wordt vis geleverd of haalt je je vis op voor aan verkooppunten? Belangrijkste criteria wanneer vis wordt ingekocht?
5. Welke informatie ontvangt u standaard en hoe?
  - mondeling, staat op de rekening etc..
6. Vraagt u specifiek om duurzaamheid of vis info? Ja/Nee, Waarom?
7. Koopt u voorverpakte producten die ook uitgepakt doorverkoopt? Ja/Nee. wanneer ja, communiceert u dit en waarom?
8. Welke channels (middelen) gebruikt u om informatie te delen? Waarom wel/niet (Wat zijn de voordelen en wat zijn obstakels van middelen die wel en niet gebruikt?)
9. Welke channel (middel) gebruikt uw als bedrijf standaard?
10. Welke informatie verstrekt u standaard (alle producten) aan consument?
- 11.1 Check list invullen (verse vis & gepakte vis)
- 11.2 Wat zijn de belangrijkste redenen informatie wel of niet (de obstakels/bepalingen) gedeeld
- 11.3 Weet welke informatie hiervan volgens de wet, (EU) Nr. 1169/2011, onder andere gecommuniceerd aan de consument zou moeten worden?
13. Wat vindt u van deze wet? Waarom?
14. Consumenten komen voor kwaliteit en verse vis wordt gezegd, merk je dat ook vanuit de consument? Ja/nee. Kunt u dat toelichten?

15. Wat weten uw klanten van vis (hebben ze kennis over vis)? Waar merkt u dat aan. Wat is leidend bij hun aankoop?

16. Kent u de VISwijzer? Zo ja, wat vindt u van de VISWIJZER? Gebruiken uw klanten de VISwijzer, ja/nee; ja, hoe vaak gebeurde (nooit, bijna nooit, soms, paar keer, vaak)?

17. Koopt en/of verkoopt u het als gecertificeerde vis? Zo ja hele assortiment of specifieke soorten? Waarom wel of niet? (Ervaren jullie voordelen, zoals bv meer inkomen/meer zekerheid, minder impact op milieu etc..)

18. Hoe informeert/communiceert met uw klanten hierover?

19. Wanneer ze gecertificeerd verkopen: Weet u of uw officieel shop apart gecertificeerd moet worden? De reden hiervoor?

20. Staat certificering voor duurzaam vind jij/u? Waarom wel of niet?  
Certificering, alle technische leiding, te begrijpen?

21. Wat betekent duurzaamheid voor jou?

- Manier van communiceren op aanpassen

22. Huidige omvang: aantal medewerkers en achtergrond (Als ze dat willen vertellen)?

- Opleiding: Allemaal of Meeste wel (meer dan de helft), sommige niet of 50, 50 of Paar (minder dan helft), meeste niet of Geen een
- Ervaring visindustrie, bijvoorbeeld zelf visser geweest: Allemaal of Meeste wel (meer dan de helft), sommige niet of 50, 50 of Paar (minder dan helft), meeste niet of Geen een
- Familie generaties, vader naar zoon, werken in bedrijf: Allemaal of Meeste wel (meer dan de helft), sommige niet of 50, 50 of Paar (minder dan helft), meeste niet of Geen een

23. Hoe is de omzet (in %)/afzet (in KG) opgebouwd in de kramen en/of verkoopwagen en/of winkels van afgelopen jaar 2016?

Kilogram, % vers (bevroren & niet bevroren & filet)

Kilogram, % gebakken, gerookt

Kilogram, % verpakt/salades

OVERIGE OPMERKING

## 10.2 Checklist

	JA	NEE	Waarom?
		Voor niet voorgepakte producten	
HANDELSNAAM			
LATIJNSE NAAM			
VISGEBIED			
SEIZOEN			
VIS METHODE			
HOUDBAARHEID DATUM			
PRIJS PER 100 GRAM			
WILD OF GEKWEEST			
VERSE VIS OF ONTDOOID			
ALLERGENEN			
		Verpakte producten	
NAAM + ADRESS VERPAKKINGSBEDRIJF OF IMPORTER WANNEER VIS VAN BUITEN EU KOMT			
INGREDIENTEN			
HOEVEELHEDEN			
DATUM OF INVRIEZEN VOOR NIET- VERWERKTE PRODUCTEN			





<b>TOEGEVOEGDE WATER (&gt; 5%)</b>			
<b>TOEGEVOEGDE EIWITTEN VAN NIET DIERLIJKE OORSPRONG</b>			
<b>MORE .....</b>	WAT (WHAT):		
		Duurzaamheid	
<b>DIEREN WELZIJN</b>	WAT (WHAT): bv. Verdoving (seduction)		
<b>ONREGULEERDE, ILLEGALE EN NIET GERAPPORTEERDE VISSERIJ</b>			
<b>MEER (MORE) .....</b>	WAT (WHAT):		

### 10.3 Other figures

Figure 20, channels communication between supplier and fishmonger

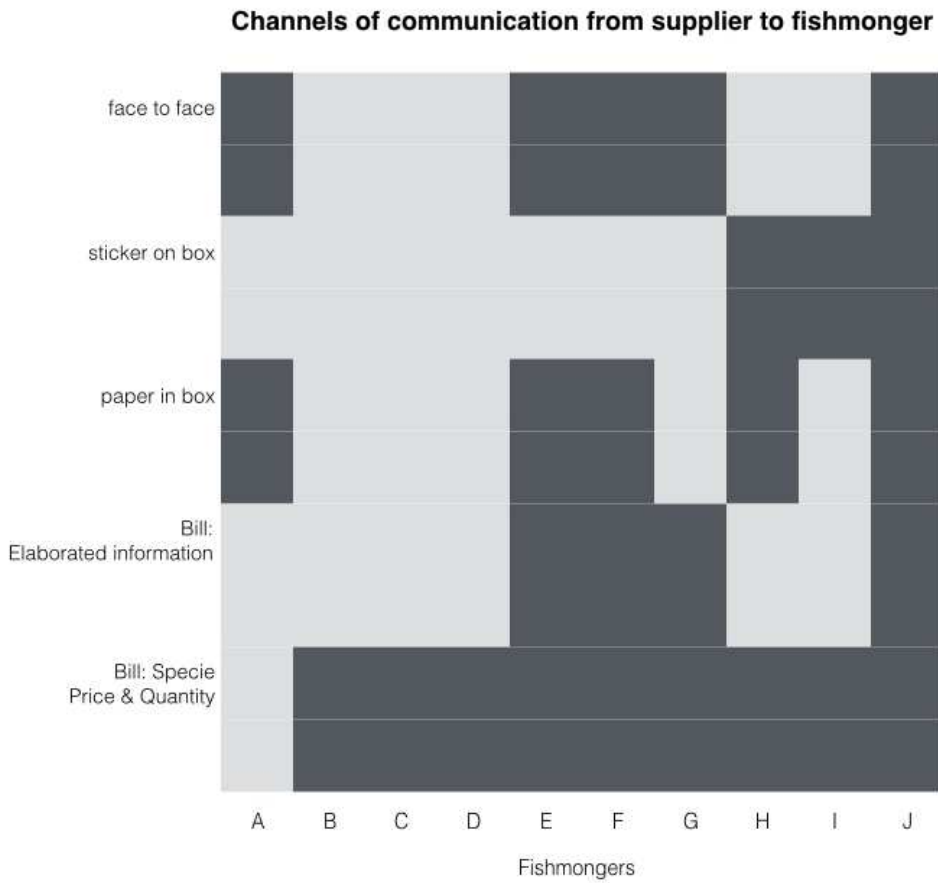


Figure 21, fishmongers and Dutch Fish Guide

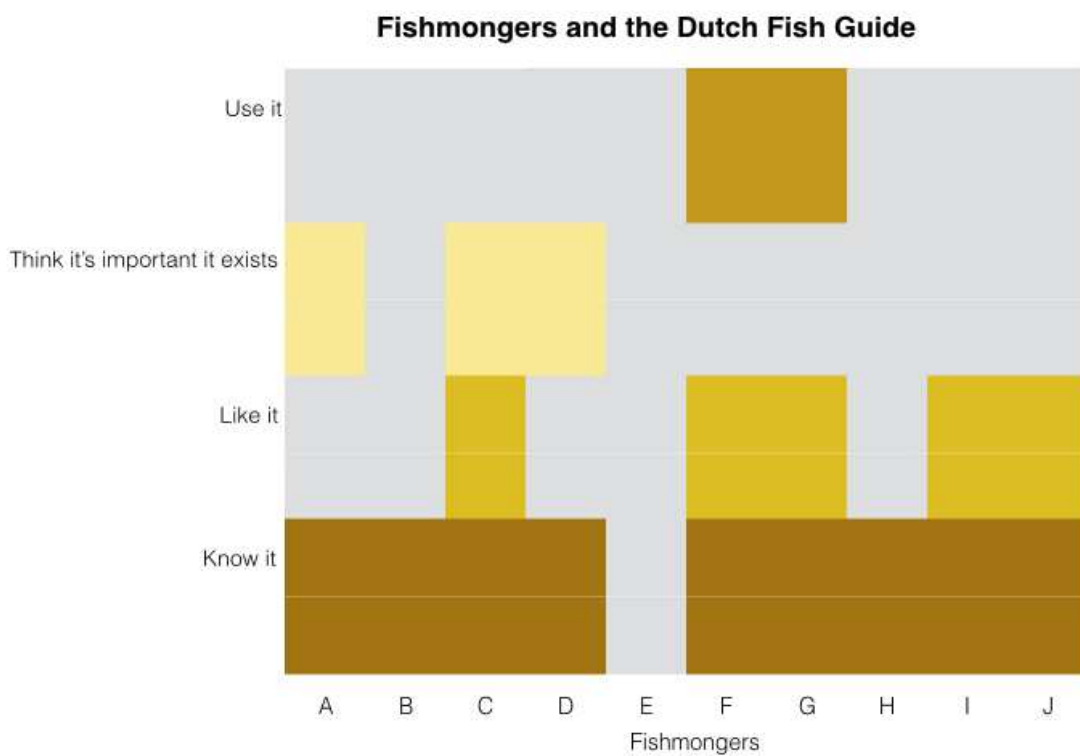


Figure 22, The use of Dutch Fish Guide by customers

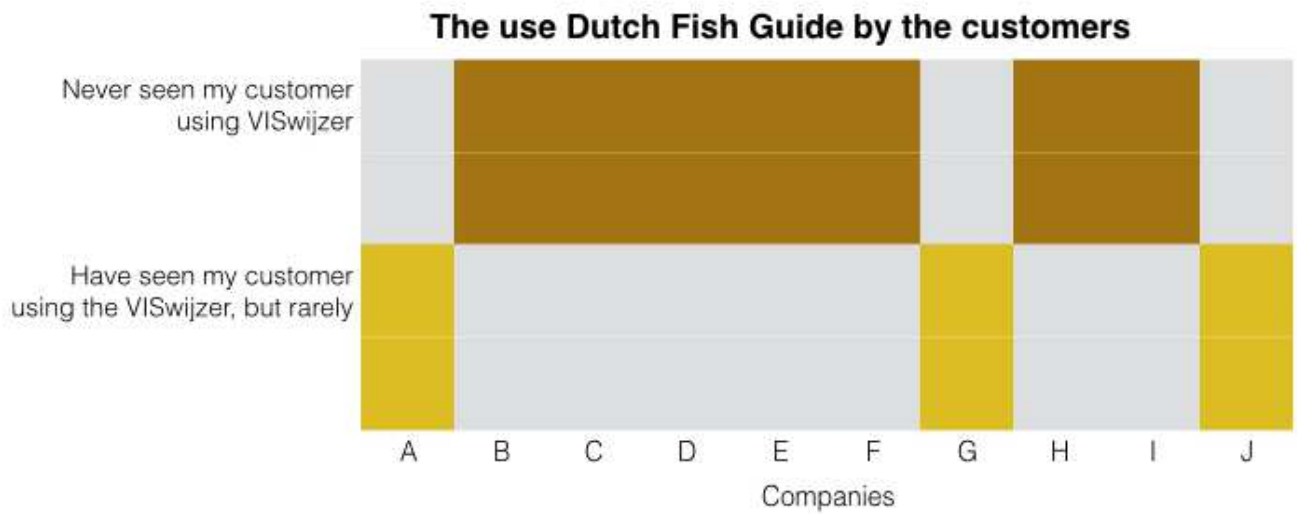


Figure 23, Fishmonger's view on sustainability

