Deliverable Report

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Objective: The objective of this deliverable is to identify and map the main trends that are relevant for the European seafood market in general, and also more specifically for markets in the selected countries within DIVERSIFY.

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Table of Contents

1 INTRODUCTION 4
1.1 OBJECTIVE OF THIS DELIVERABLE 4
1.2 METHODOLOGY 4
1.3 SET UP OF THE DELIVERABLE 4
2 TRENDS IN THE EUROPEAN ANIMAL PROTEIN MARKET 5
2.1 LONG TERM TRENDS 5
2.1.1 Increasing demand for animal proteins 5
2.1.2 Increasing production cost 5
2.1.3 Substitution between fish and meat 5
2.1.4 Growing importance of sustainability certification 6
2.1.5 Growing interest in information about origin and production of animal protein (traceability) 6
2.1.6 Increasing attention for animal welfare 6
2.1.7 Growing interest in local and regional products 7
2.1.8 EU ambition to become more self-sufficient for seafood 7
2.2 SHORT TERM TRENDS 7
2.2.1 Other protein sources will increase in market share 7
2.2.2 Increasing demand for convenience products 7
2.2.3 Dominance of retailers can lead to conversion of consumption patterns 7
2.2.4 Growing market share in private labels of retailers 7
2.2.5 Flexitarism increases in western countries 8
2.3 OVERALL PERSPECTIVE 8
3 TRENDS AND DEVELOPMENTS PER COUNTRY 9
3.1 INTRODUCTION 9
3.2 UNITED KINGDOM 9
3.2.1 Purchases of fish products have been declining since 2006, however future growth is expected 9
3.2.2 The ‘big five’ dominate the market, but there are opportunities for diversification 9
3.2.3 Personal well-being (health) is the primary driver for increasing fish consumption 9
3.2.4 Sustainability issues can influence consumption trends 10
3.2.5 UK consumers are more freshness, price and taste oriented than average EU consumers 10
3.2.6 UK consumers eat meat relatively less often compared to the EU average 10
3.3 SPAIN 10
3.3.1 Sustainability is gaining importance, but is halted due to economic crisis 10
3.3.2 Spanish consumers are increasingly health conscious 10
3.3.3 Shorter supply chains in foodservice sector 10
3.3.4 Immigration stimulates growing diversity in foodservice sector 11
3.3.5 Freshness, hygienic display, taste and local produce are main priorities in buying meat 11
3.4 GERMANY 11
3.4.1 German fish consumption has grown, but is declining recently 11
3.4.2 German consumers require knowledge on the origin (traceability) and sustainability of food . 11
3.4.3 Taste, no Genetically Modified (GM) feed, freshness and traceability are the most important consumer priorities in buying meat 11
3.4.4 Country of origin is relatively important in Germany 12
3.4.5 Increasing sales via the internet 12

3.5 ITALY 12
3.5.1 Sales of fish products are consolidating *12*
3.5.2 Decreasing self-sufficiency in fish products *12*
3.5.3 Retail buying is concentrated, but consumer formulas in the Italian retail sector remain fragmented *12*
3.5.4 Only 20% of the Italians thinks about decreasing meat consumption *12*
3.5.5 Italians prefer locally produced products, no GM feed, traceability and hygienic display for meat 12
3.6 FRANCE 13
3.6.1 Preference for fresh (chilled) fish products for consumption at home *13*
3.6.2 Independent restaurant outlets are most popular for consumption out of home *13*
3.6.3 Overall fish consumption increases, but dependency on imports grows *13*
3.6.4 Consumer preferences differ by age *13*
3.6.5 Increasing importance of ethnic food *13*
3.6.6 Freshness, acceptable and affordable pricing, traceability and taste are the most important buying motives *13*
3.6.7 Country of origin is very important in France *14*
4 CONCLUSION AND DISCUSSION 15
4.1 CONCLUSION AND IMPLICATIONS 15
4.2 DISCUSSION 15
5 REFERENCES 16
6 ANNEX 1: EU PROTEIN INTAKE 17

1 Introduction

1.1 Objective of this deliverable

The objective of this deliverable was to identify and map the main trends that are relevant for the European seafood market in general, and also more specifically for markets in the selected countries within DIVERSIFY. Besides the seafood market, relevant trends for meat products were also identified in this deliverable. Trends in these other markets are used for comparison and for cross-sector analysis. The general and specific trends in the DIVERSIFY project can support aquaculture producers in understanding the global and European context of the market for animal proteins, and the implications of the trends for their business activities. With these insights, aquaculture producers can seek for market opportunities to improve their business. The results of this deliverable could be used for the development of business models for the small and medium enterprises participating in DIVERSIFY, but also for other enterprises in the EU. The following five countries have been selected because of the potential selling volume: United Kingdom, France, Germany, Spain, and Italy. DIVERSIFY aims to enhance the European aquaculture production by removing production bottlenecks of emerging species, producing new products and accessing new markets. DIVERSIFY focuses on meagre (*Argyrosomus regius*) and greater amberjack (*Seriola dumerili*) for warm-water marine cage culture, wreckfish (*Polyprion americanus*) for warm- and cool-water marine cage culture, Atlantic halibut (*Hippoglossus hippoglossus*) for marine cold-water culture, grey mullet (*Mugil cephalus*) a euryhaline herbivore for pond/extensive culture, and pikeperch (*Sander lucioperca*) for freshwater intensive culture using RAS.

1.2 Methodology

The identification of relevant trends was conducted by literature research and consultation of position papers and news articles. Point of departure was the identification of a number of general European trends that are relevant for the market for seafood, but when relevant, also for meat products and meat substitutes. Relevant trends can be on the macro, meso and micro level. Trends on macro level already have been described in D27.1 Report on external environmental factors that affect or will affect the production chains of meagre, greater amberjack, pikeperch, Atlantic halibut, wreckfish and grey mullet. Therefore, this deliverable has focused on trends on meso (sector) and micro (household) level. Also within the trendmapping, a distinction between long-term trends (more than five years) and short-term trends (less than five years) has been made. First, relevant trends for animal proteins at EU level have been identified. For each trend a description has been given, including how this trend can affect the market for animal proteins in the EU. Then, for each of the five countries some more detailed trends are described.

1.3 Set up of the deliverable

In Chapter 2, general trends at EU level that are relevant for the market for animal proteins are identified. Chapter 3 discusses some more detailed trends at country level (United Kingdom, France, Germany, Spain, and Italy) and their implications were incorporated. Chapter 4 provides a cross sector analysis, and draws the main conclusions and implications for the selected species in the DIVERSIFY project.

2 Trends in the European animal protein market

2.1 Long term trends

2.1.1 Increasing demand for animal proteins

In the coming decennia the global demand for proteins will increase due to a growing world population. According to OECD-FAO predictions there will be more than 7.5 billion people in 2021, and even 9 billion people in 2050 (OECD-FAO, 2012). In order to meet this growing demand, the global supply of proteins also has to increase. Countries such as China, India and Brazil have faced a period of economic growth, which resulted in an increase in the disposable income. This economic growth is expected to continue in the short term future. Together with the growing world population, the demand for proteins is expected to grow, also because of an increase in the average consumption of proteins. The OECD forecasts show that in the EU the per capita consumption of seafood will increase from 20.8 kg per capita in 2013 to 22.6 kg per capita in 2023. For meat products the per capita consumption in the same period will grow from 64.6 to 66 kg per capita (OECD-FAO, 2014). These data also reveal an average meat consumption in the EU nearly three times as high as the consumption of fish products. Information about the division of protein intake in the EU can be found in Annex 1.

2.1.2 Increasing production cost

With the growing demand for protein but the limited availability of inputs for production (*e.g.*, feed and energy), the cost for producing protein will increase. Also the availability of production area is expected to become a restriction for further production increase. For captured seafood in 2020 an increase of 23% of the current average price is expected. For cultured seafood a price increase of even 50% is expected (OECD-FAO, 2012). For producers of animal protein this trend implies that efficient production will be essential to remain competitive. Besides the production process, efficiency is also important in other aspects of the supply chain (*e.g.*, logistics).

2.1.3 Substitution between fish and meat

Based on the global price index for different food categories from the FAO (Fig. 1), the price of meat has faced a stronger increase than the price of fish products (FAO, 2012). The price of meat and fish products however changes per region or country. In some parts of the world, meat is much more expensive than fish per kg (e.g. Russia), while in others fish is more expensive than meat per kg (western Europe). According to EUMOFA (2014) in the period 2005-2012 the price increase of fish products was stronger than the price increase for meat products in the EU. Depending on the further price development of meat and fish products, substitution between both can occur in consumer markets. This development also implies that for a new fish product one has to understand the market for fish and meat products, and to investigate what products are potential competitors.

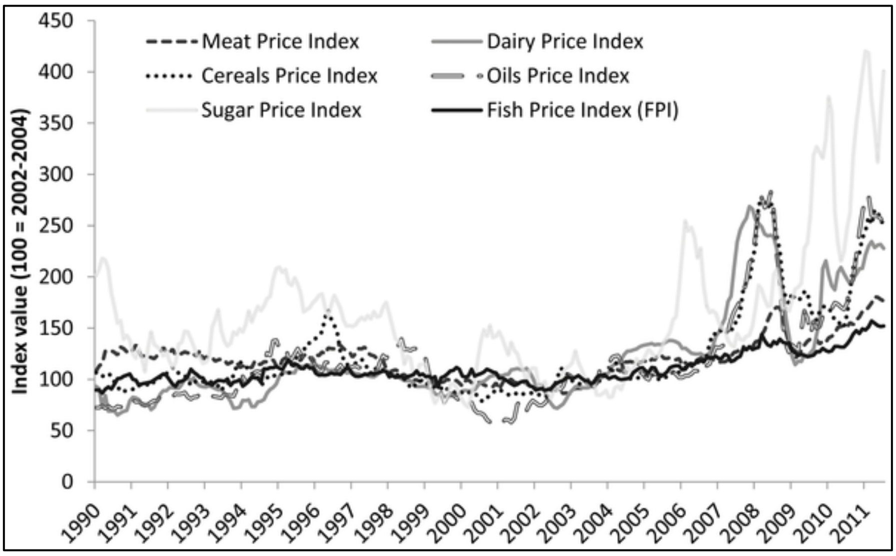


Figure 1. Global price index for different food categories (FAO, 2012).

2.1.4 Growing importance of sustainability certification

A general trend is the increasing importance of sustainability certification in Europe. Especially in the North and West of Europe, sustainability certification has become a market access requirement for large retail organisations. For seafood the most important certification initiatives are the Marine Stewardship Council (MSC) for captured seafood and the Aquaculture Stewardship Council (ASC) for cultured seafood. Also, certification initiatives such as Naturland and Bioland that focus on organic production are gaining market share. This trend implies that producers of seafood that do not achieve sustainability certification face the risk of losing access to important market segments. Besides the sustainability aspect, large EU buyers see certification also as an opportunity to minimize risks and to reduce the chance of being criticized by NGO's.

2.1.5 Growing interest in information about origin and production of animal protein (traceability)

Besides the growing importance of sustainability certification, retailers, NGO's and consumers have a growing interest in information about the origin of the animal proteins and the production process. This allows retailers and consumers to trace their products from a food safety perspective and guarantees quality. The information can also be used for marketing purposes. In Europe there are several systems that address the traceability of food products. For supermarkets, the British Retail Consortium (BRC) and International Featured Standards (IFS) are systems that include traceability and food safety in their code of conduct. Also the EU legislation is focusing increasingly on traceability issues. In December 2014 new legislation about food information to consumers will be implemented (EU regulation 1169/2011). This legislation has new detailed requirements for the labelling of food products with nutritional information (EC, 2014). Food producers that want to trade their products have to take into account this new legislation in the labelling of their products.

2.1.6 Increasing attention for animal welfare

Animal welfare is another trend that becomes increasingly important. The European Commission has developed a strategy for animal welfare in the production of animal protein (EC, 2012). Main elements of this strategy are to inform consumers about production methods of animal protein, and to improve the skills of producers that deal with fish, livestock and poultry. Although it is not a market access requirement, producers of animal protein need to take animal welfare seriously into account. As with sustainability certification, animal welfare is gaining importance. The current interest in animal welfare differs among the EU member states. In Germany and the UK the attention for animal welfare regarding meat products is above average EU-level. For Spain and Italy animal welfare with respect to meat products is less important (GFK EU3C, 2012).

2.1.7 Growing interest in local and regional products

Although international trade in fish and meat products has prospered in the previous decades, there is a growing demand for products that are produced locally or regionally. This trend is linked to the trend on traceability, and allows retailers to have more control over the shorter supply chains over which they have more control. This trend is especially relevant for SMEs that do not to supply large retailers but sell their products to wholesalers, restaurants or small shops. These suppliers are in a better position to promote their products as local and regional. The French Label Rouge is a good example of local and regional branding.

2.1.8 EU ambition to become more self-sufficient for seafood

The European Commission aims to increase EU aquaculture production in order to become less dependent on imports from outside the EU. This policy will have impact on the short run and on the long run on production and consumption of fish in the EU. The EU self-sufficiency for seafood (*i.e.*, the extent to which the EU market for fish products is supplied by catches and production within the EU) was stable at around 45% between 2008 and 2011. This however implies that 55% of available fish and fish products in the EU is imported. While the EU fully covers its needs for flatfish and small pelagics and even produces surpluses, it has a high and increasing dependency on external sourcing for groundfish, salmonids and tuna (EUMOFA, 2014).

2.2 Short term trends

2.2.1 Other protein sources will increase in market share

The ecological footprint of animal based proteins, such as meat and fish, are relatively high in relation to insect proteins and vegetable-based protein products. In most countries of the EU insect proteins and vegetable-based protein products are in development (LEI Wageningen UR, 2010). Consumers are not used to this type of protein products in their menu, but the expectancy is that developments in these fields of research will increase now food security is getting more important. In the Netherlands, recently insect-based products for consumption have been introduced in one of the major supermarket chains.

2.2.2 Increasing demand for convenience products

In European retail there is a growing demand for products that are healthy and easy to prepare. Examples of convenience products are meals that are ready-to-eat by individuals or multiple persons. This trend has to do with the fact that consumers often have less time to prepare meals, and also that at least for fish products consumers do not have the knowledge how to prepare a fish. This occurs mostly in the North and West of Europe; in the South of Europe consumers in general have more skills to prepare fish. Any SME that wants to benefit from this trend should focus on the production of fish products that can be easily prepared or portioned, and for instance have few bones.

2.2.3 Dominance of retailers can lead to conversion of consumption patterns

In most of the EU countries, retailers have an increasing share in the purchases of food products for consumption at home. It is expected that consumption patterns throughout, to a certain extent will converge in the upcoming years, due to the dominance of retailers and the internationalisation of retail formulas over Europe. Due to these developments the assortments of stores will converge.

2.2.4 Growing market share in private labels of retailers

In Europe large retailers are increasingly dominating the sales of food products. In some European countries up to 80% of the sales of food is in the hands of large retailers. Within their diverse supply of food products, retailers increasingly start selling private label products in all price categories (from budget to superior). These private label products often go at the cost of the market share of name brands. Name brands are used by retailers to attract consumers, but are positioned at a slightly higher price than their own private label products. This makes private label products financially more attractive for consumers.

2.2.5 Flexitarism increases in western countries

In northern Europe it was normal for centuries to eat 3 times a day meat. In southern European countries this is less usual. Nowadays in northern European countries an increasing number of people are becoming flexitarian and prefer a meat-free day in the week (De Bakker en Dagevos, 2010). This is stimulated by cooks and retailers by providing tasteful alternatives for a meat dish, like pure vegetable meals or meals with alternative protein sources (GFK EU3C, 2012). Vegetarism and veganism has stabilised in the last couple of years.

2.3 Overall perspective

The trends and developments that are discussed in the previous paragraphs show that macro-economic developments (population growth, emerging markets such as China and India) create an increase in the demand for animal proteins (and also other proteins). As it seems that this increase in demand cannot be met by the growth in the supply of animal proteins, scarcity and increased competition for proteins will occur. Also production cost will increase due to the growth of the cost of input supplies (feed) for aquaculture and fuel for fisheries. At the same time, however, the EU market is demanding more stringent market requirements with regard to product quality, sustainability, traceability and animal welfare. As the EU is still depending on imports from third countries outside the EU for fish products, in the long run it is not unlikely that emerging markets that currently export to the EU will switch and supply local or regional markets where there are fewer requirements, and prices sometimes are similar. Self-sufficiency in terms of animal proteins will therefore become an important long-term challenge for the EU.

3 Trends and developments per country

3.1 Introduction

Besides trends and development at EU level, also some more specific trends for the five countries were identified. Most of the trends refer to fish consumption specifically, but when relevant also trends for meat are taken into account.

3.2 United Kingdom

3.2.1 Purchases of fish products have been declining since 2006, however future growth is expected

Trend data from the National Food Survey (NFS) from DEFRA show that from 1974 to 2006 purchases of fish products by UK consumers have increased from less than 125 g to about 170 g per person per week. From 2006 to 2011, however, fish purchases have declined and are now at less than 150 g. A possible reason for the lower purchases of fish products is the economic downturn in the UK. Although fish purchases declined, the sales of fish products by retailers in the period 2006 to 2012 increased from £2,5 billion to £3 billion. This indicates a general increase in the price of fish products. This general price increase could have made fish products less competitive compared to meat products or meat substitutes, therewith contributing to the lower purchase of fish products (Seafish, 2014).

Despite the declining fish purchases in previous years a growth in fish consumption is expected. According to AAFC (2012) the main consumer groups that will elevate fish consumption are young, middle-class families and people aged 55 and over. Also Sainsbury's (2012) expects a growing consumption of fish in the UK towards 2030 based on several developments such as lower fish prices due to improved fishing technologies, more efficient aquaculture production, an aging population that consumes more fish, increasing spending power of households, an increased health awareness and more interest for new food and fish products (Sainsbury's, 2012). Developments that can have a potentially negative effect on fish consumption such as climate change and increasing fuel prices however have not been taken into account.

3.2.2 The 'big five' dominate the market, but there are opportunities for diversification

The fish market in the UK is dominated by five main species: salmon, tuna, cod, haddock and shrimp. According to Sainsbury's report there are however opportunities for other species to access the UK market and increase their market share. Examples mentioned by Sainsbury are pollock, saithe, sea bass, tilapia and hake amongst others (Sainsbury's, 2012). In the period 1993-2012 fresh (chilled) fish products faced a considerable growth compared to the sales of frozen and ambient fish products. In 2012 55-60% of the purchases in retail were chilled fish products, while frozen and other fish products (e.g. canned seafood products) accounted for respectively 25% and 15-20% (Seafish, 2014).

3.2.3 Personal well-being (health) is the primary driver for increasing fish consumption

According to the NFS, 51% of the respondents said that health concerns had encouraged them to eat more fish this year than last, while only 1% said that health concerns encouraged them to eat less. Based on these results fish products benefit from being positioned as a healthy product. There were also several reasons mentioned to not consume fish products. Price is mentioned most often, with 33% of the UK adults saying that the increasing price of fish products prevented them from eating more fish, while for 46% cost is a barrier for fish consumption in general. Other important barriers to eat fish are the lack of recipe knowledge (34%), the lack of availability of fresh fish in local shops (28%), lack of time to prepare from scratch (28%), the smell of fish products (24%) and difficulties planning ahead for meals (17%) (Sainsbury's, 2012). The reasons why UK consumers do or do not consume fish products are important to take into account when one wants to access the market with a new fish product.

3.2.4 Sustainability issues can influence consumption trends

The study commissioned by Sainsbury's (2012) also revealed that some 18% of fish-eating adults said they were eating less fish because of sustainability issues. Of this group of people, 40% explained that it was because of confusion about which fish are sustainable, while 37% mentioned the variability in the meaning of sustainability between supermarket retailers. The third most common reason (35%) was the high cost of sustainable fish (Sainsbury's, 2012). These findings reveal that if in the near future new species will be introduced in the UK retail market, sustainability issues need to be taken into account.

3.2.5 UK consumers are more freshness, price and taste oriented than average EU consumers

When consumers in the UK buy meat products, freshness is characterized as the most important priority. Price related issues are second, while taste is third on the list. All aspects previously mentioned are relatively more important for UK consumers than for average EU consumers (GFK EU3C, 2012).

3.2.6 UK consumers eat meat relatively less often compared to the EU average

About 32% of UK consumers eat meat at least 4 times per week, which is below the EU27 average of 43%. A third of the UK consumers indicate that they would like to buy meat less often than they do now. This confirms that flexitarism is a development that meets response in the UK, and that can develop further in the near future (GFK EU3C, 2012).

3.3 Spain

3.3.1 Sustainability is gaining importance, but is halted due to economic crisis

Sustainability is still treated as a marginal issue in Spain. Although the Spanish organic farming industry is the largest in the EU, it is export-oriented and organic foods are far from becoming a mainstream issue among Spanish consumers. Public awareness of sustainable fishing, however, has increased in Spain, as evidenced by the opening of a Marine Stewardship Council (MSC) office in Madrid. Also, several retailers started initiatives with respect to seafood sustainability.The Basque Country mass retailer Eroski has a partnership with WWF to improve the sustainability of the fishery products it sells. El Corte Inglés supermarkets have worked together with the MSC to raise consumer awareness. Auchan Group's Spanish subsidiary Alcampo has developed a line of seafood and aquaculture products, which bear the green 'Friend of the Sea' label (VASEP, 2014). The economic crisis in Spain, however, has had a strong impact on the purchasing power of consumers with retailers adapting to this with low-price marketing strategies. The economic crisis also has slowed down the progress towards sustainability. For the long term, the Spanish government is recognizing increasingly the importance of sustainable fishing practices and taking action to encourage more environmentally sound fishing practices (New Zealand Enterprise, 2014).

3.3.2 Spanish consumers are increasingly health conscious

Spain has a large aging population with a rising life expectancy. Over seven million people in Spain (around 18% of all population) are over the age of 65. As a result, in the future, Spain will have one of the oldest populations in the world, which will boost the demand for healthy products (AAFC, 2011). According to Fernandez (2014) concerned consumers might be willing to pay for safety assurances and expected health benefits. They might derive utility from information relative to nutrient composition, preservatives, additives and harvest procedures and methods.

3.3.3 Shorter supply chains in foodservice sector

The traditional Spanish foodservice distribution system operates on an importer and wholesaler model. The wholesale markets Mercamadrid, Mercabarna (Barcelona) and Mercavalencia make up 60% of all fish traded in wholesale fish markets in Spain. Wholesalers import the fish products and sell them to regional distributors or directly to foodservice and grocer retailers on the domestic market. In order to reduce cost, large operators such as supermarket chains have been trying to establish their own import channels and import directly (AAFC, 2011).

3.3.4 Immigration stimulates growing diversity in foodservice sector

The growing immigration in Spain has diversified the cultural and socioeconomic profile of Spain. This development has resulted in new innovations in the consumer foodservice market, in order to meet the demand of the diverse food preferences. Besides the established fast-food companies, recent trends show an increasing number of fast food outlets serving Asian and Middle Eastern food, which aim to satisfy an increasing demand for foreign foods. As a result, the number of exotic food chains, such as Cantina Mariachi (Mexican food), WOK (Asian food) and Middle Eastern outlets, will grow in order to satisfy the preferences of the rising immigrant population (AAFC, 2011).

3.3.5 Freshness, hygienic display, taste and local produce are main priorities in buying meat

Freshness is the most important buying motive for Spanish consumers with respect to meat. It is relatively more important in Spain than in the rest of the EU. Hygienic display is also relatively very important in Spain. The expected taste and local production are also important, but on a distance to the other two buying motives. The country of origin is information that 76% of the consumers in Spain notice on a product. And origin certification is also noticed by 2/3 of the Spanish consumers (GFK EU3C, 2012).

3.4 Germany

3.4.1 German fish consumption has grown, but is declining recently

In the 1890s, German per capita fish consumption was about 11 kg, and has increased to over 15 kg in 2008. In the period 2008-2013, however, per capita consumption has been declining from 15.5 kg to 13.7 kg. In 2013 the five most important species for the German market were Alaska pollock, pollock, herring, tuna and trout. Almost two thirds of the fish consumed were captured fish, while shellfish and aquaculture fish accounted for the remaining 33%. Contrary to the UK, Germans eat mostly frozen fish products (30%). Other important preparations are canned fish products (27%), shellfish (14%) and smoked fish products (12%). Fresh (chilled) fish products accounted for only 8%. Fish consumption differs between the North and South of Germany. It is the highest in the North, with Hamburg as the region with the highest fish consumption, while regions in the South like Bayern are below the German average in 2013 (FIZ, 2014).

3.4.2 German consumers require knowledge on the origin (traceability) and sustainability of food

German consumers are interested increasingly in and are conscious about sustainable produced food. Organic food production has an increasing share in Germany, and with respect to fish products, the MSC label in previous years has become an important label for sustainable fisheries (Umwelt Bundesamt, 2014). In 2012, MSC-labelled products accounted for 52% of all wild-caught fish sold in Germany (MSC, 2013). While Germany is behind some other western European countries in terms of fish consumption, fish and seafood is becoming more popular with Germans, thanks in part to the increasing focus on health issues (AAFC, 2010). New products entering the EU market are focused on having no additives and preservatives, enhancing the image of natural fish and seafood products free from monosodium glutamate (MSG) and polyphosphates, characteristics that appeal to Germans. Fish products with low fat and sugar contents, limited additives and, ideally, 100% organic ingredients, have shown recent growth. Fish and seafood suppliers are providing increasingly chilled, processed foods fortified with omega 3 and vitamins.

3.4.3 Taste, no Genetically Modified (GM) feed, freshness and traceability are the most important consumer priorities in buying meat

Germany is a market where freshness with respect to meat is very important, but even more important is taste and absence of residues in fresh products. Food scandals have high and long impact in Germany, which explains that traceability is above average in importance compared to the rest of the EU (GFK EU3C, 2012).

3.4.4 Country of origin is relatively important in Germany

Origin certification is also relatively important in Germany. About 78% of German consumers notice what is the country of origin of the meat they buy. It is the most noticed information on a packaging of the product. (GFK EU3C, 2012).

3.4.5 Increasing sales via the internet

The largest distributors in the German retail market are discount stores with 50% market share. The top three retailers (Aldi, Lidl and Penny) have a strong position in the sales of fish products. Large retailers are attempting to target more consumers by also offering internet purchasing (AAFC, 2010).

3.5 Italy

3.5.1 Sales of fish products are consolidating

Fish consumption has reached 21 kg per capita, while meat consumption has been declining. Due to immigration, the Italian population has grown, but the number of native Italian consumers has declined. As immigrants follow their own traditional eating habits, in the overall population there is a shift away from the fish-heavy Mediterranean diet. Also, while older Italian consumers demand specific fish and seafood products that fall within traditional Mediterranean cuisine, younger generations are more open to new products and different cooking styles (AAFC, 2013).

3.5.2 Decreasing self-sufficiency in fish products

Despite recent improvements in the aquaculture sector, domestic fish production continues to decline. Therefore, Italy relies heavily on imports to bridge the gap between steady consumer demand and reduced national catches. Fast-growing products include yellowfin tuna, processed swordfish, fresh salmon and prepared molluscs (AAFC, 2013).

3.5.3 Retail buying is concentrated, but consumer formulas in the Italian retail sector remain fragmented

An interesting characteristic of the Italian retail sector is the large number of buyer groups, which emerged from the mid-1990s onwards with the aim of sourcing products more cheaply through greater purchasing power. In Italy, all large retailers are members of a buying group, with the most important ones being Intermedia (whose members include Rinascente, Gruppo Pam, and Conad), Mecades (Interdis, Sisa, and SPAR), Coop Italia (Coop and Sigma), Esd Italia (Esselunga, Selex, and Agorà), and Carrefour Italia (with Carrefour, Finiper and Il Gigante). Contrary to other countries, there is no consolidation in the Italian retail sector. The majority of Italians still live in small cities and towns. Local communities are often strongly opposed to the development of large stores such as hypermarkets, and the system requires permission from local and regional authorities, making it difficult to establish larger stores (USDA GAIN, 2012).

3.5.4 Only 20% of the Italians thinks about decreasing meat consumption

In Italy flexitarism is only a minor trend; neither does meat consumption increase. Only 7% of the Italians would like to eat more meat. In general one can say that the Italians choose what they prefer and pay an acceptable price (GFK EU3C, 2012).

3.5.5 Italians prefer locally produced products, no GM feed, traceability and hygienic display for meat

In Italy, locally produced meat is the most preferred buying motive. For Italian consumers, meat produced with GM feed is not acceptable, and non-GM produced meat therefore has a strong preference. Price is relatively unimportant in Italy. Good traceability and good hygiene is also important. Eighty four percent of the Italians check the country of origin on the label for meat purchases. Moreover, they prefer products that are origin-certified. Animal welfare and organic production are relatively less important; only 50% and 40% of the Italian consumers check on animal welfare and organic production respectively (GFK EU3C, 2012).

3.6 France

3.6.1 Preference for fresh (chilled) fish products for consumption at home

According to Agrimer, in 2011 almost 65% of the French consumption of fish products consisted of fresh fish or fresh fish products (delicacies). Frozen products accounted for about 20%, while canned products had a share of 15%. Although fresh products have the highest market share, they are purchased at least once a year by 78% of the French households. Chilled delicacies and canned fish products are most popular and are bought at least once a year by 96% and 95%, respectively, of the French households. Frozen products are purchased by 89% (Agrimer, 2012). A possible explanation is that fresh products are more expensive compared to canned and frozen products and therefore bought less often. As in other countries French consumers buy most of their fish in supermarkets, while fishmongers have a small market share. For fresh products and fish delicacies fishmongers have a share of respectively 11% and 4%. In terms of volume, mussels are the most popular species for households with sales of almost 41,000 tonnes in 2011. Other popular species are salmon, oysters, cod and scallops. In terms of value, salmon was most preferred and accounted for €346 million (Agrimer, 2012).

3.6.2 Independent restaurant outlets are most popular for consumption out of home

Independent restaurants are the most popular by French consumers when they eat fish out-of-home. The sales of fish products by restaurants in 2011 was €540 million, compared to restaurant chains and groups that sold fish products worth almost €200 million. Institutional catering accounted for €442 million ,(Agrimer, 2012). Although there are no comparable data it seems that French consumers prefer to go to an independent restaurant rather than to a restaurant group, when they consume fish out of home.

3.6.3 Overall fish consumption increases, but dependency on imports grows

According to EUMOFA (2014), the French consumption of fish was about 3.3 kg per capita in 2009. After Portugal, Lithuania, Spain and Finland, France has the highest per capita fish consumption in the EU. However, the country is increasingly dependent on imports. Domestic production accounts for only 38% of total supply on the French market. In the 1990s, domestic production provided 68% of the domestic supply.

3.6.4 Consumer preferences differ by age

Food consumption in France differs according to age, while in the past social class was more determinant. The generation between the ages of 20 and 35, appreciates trying new and innovative products. This generation devotes less time and money to food and seems more interested in convenience and lifestyle than in health. Food producers have managed to adapt to this by offering an increasingly wide range of ready-to-eat products. The notion of identity, and lifestyle increasingly determines eating habits (profession, travel, etc.). This “leisure-cooking’ is evident through the growing number of cooking clubs and the success of cookbooks. Senior people, in turn, retain their eating habits and have the most balanced and varied model. They spend more on food on average, and the aged over-50s spend 25% more than others. They consider that food helps them stay healthy. The meals are often formal, varied and eaten at home. Little room is left to the discovery of new products and the foods are chosen for their freshness (GAIN, 2012; Rungis, 2014).

3.6.5 Increasing importance of ethnic food

As in most of the other countries, ethnic food is becoming increasingly popular. All major supermarket chains sell ethnic food products under their private labels. The trends favor Thai, Japanese, northern and southern African, Indian cuisine, but also Middle Eastern fast food specialties (kebabs). Kosher and halal foods are also increasing in popularity (GAIN, 2012).

3.6.6 Freshness, acceptable and affordable pricing, traceability and taste are the most important buying motives

French consumers are not satisfied about the pricing of meat. In relation to the rest of the EU French meat prices are 1/3 higher, so this attitude towards meat is explainable. Apart from the price, freshness, origin and taste are important for French consumers (GFK EU3C, 2012).

3.6.7 Country of origin is very important in France

About 88% of the French consumers check the country of origin for meat. This is by far the most important information read on meat packaging. Nearly 2/3 checks whether the meat is origin-certified. The welfare and organic background of meat is checked by 45% and 47%, respectively, of the consumers. Since organic has hardly any market share in France, the check whether it is organic is probably more a check on price (GFK EU3C, 2012).

4 Conclusion and discussion

4.1 Conclusion and implications

The objective of this deliverable has been to identify and map the main trends that are relevant for the European seafood market in general, and also more specifically for aquaculture markets in the selected countries within DIVERSIFY. The identified trends and developments in Chapter 2 reveal an increasing competition for animal proteins on the long term, which will increase fish prices, and the prices of other proteins. Prices of protein sources will also increase, because of growing production cost. For captured fish, fuel prices are an important cost driver while for aquaculture and other proteins feed prices will have an important effect. At the same time the EU market for animal proteins is facing increasingly higher requirements with respect to quality, traceability, sustainability and animal welfare. Although some of these developments show some differences per country, the main trends are comparable.

The implications of the main trends for the DIVERSIFY project is that SME's could take these trends into account in developing their marketing strategy. In some of the countries included in this study a large share of the consumers have the intention to decrease their meat consumption. This holds opportunities for fish products. Also fish products benefit from being marketed as healthy products, especially compared with meat products. Demographic developments such as the ageing population in the EU will make health issues much more important. In the marketing of the six species of DIVERSIFY, the health aspects should therefore be taken into account. Although aspects such as sustainability, traceability and animal welfare can be seen as requirements that one must meet, they can also be interpreted as an opportunity to give the species within DIVERSIFY an identity. This identity can be used in the positioning the fish products in the market. In some countries, groups of consumers prefer to eat fish that was produced in their own country or region, rather than being imported. This holds both for native consumers and for immigrants. This preference can also contribute to the identity of the fish species.

Overall, key aspects that should be taken into account when marketing the species considered in DIVERSIFY are healthiness, an alternative for meat products, sustainable and local or regional. These characteristics make the species suitable for being marketed as a fresh product for fishmongers and local restaurants. For SMEs it is difficult to sell to large retailers with strict requirements and who demand stable quantities of fish. Fishmongers and restaurants are more interested in fresh fish products that are marketed as local or regional. Selling to fishmongers and restaurants, however, requires short supply chains in order to maintain the quality.

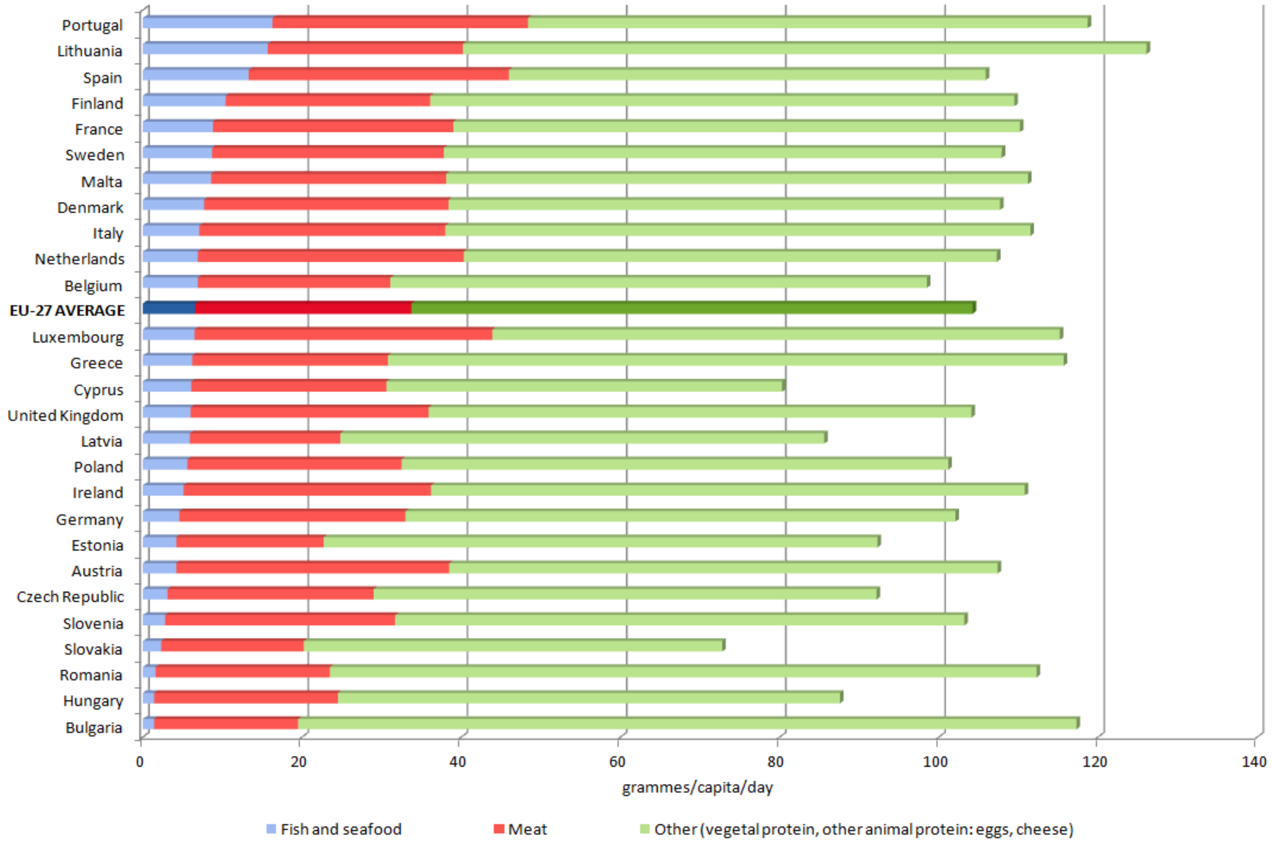
4.2 Discussion

When describing market developments, many trends can be considered as relevant. The trends described in this deliverable take into account at least the short and long term developments that will influence the market for proteins in the EU. As the findings are based on literature research, some specific trends in this study could have been overlooked. Furthermore, data come from different sources of information with their own methodologies for calculating fish consumption that applied, resulting in different perspectives and trends. Moreover, especially for data sources about per capita consumption of fish products and developments in consumption, data are not always widely available or updated.

5 References

AAFC, 2010. Consumer Trends: Seafood in Germany", Market Analysis Report, Agriculture and Agrifood Canada No. 10538E.
AAFC, 2011. Foodservice Profile: Spain, Market Analysis Report, Agriculture and Agrifood Canada (AAFC) No. 11461E.
AAFC, 2012. Inside the United Kingdom Seafood Trade, Agriculture and Agrifood Canada (AAFC) No. 11782E.
AAFC, 2013. Inside Italy: The Fish and Seafood Trade", Agriculture and Agrifood Canada No. 12032E.
Agrimer, 2012. The Fisheries and Aquaculture Sector in France, France Agrimer.
Bakker, E. de, en Dagevos, H., 2010. Vleesminnaars, vleesminderaars en vleesmijders. LEI Wageningen UR. Available at http://edepot.wur.nl/141595
European Commission, 2012. On the European Union strategy for the protection and welfare of animals, European Communicaton, Brussels.
European Commission, 2014. Food labelling – EU rules 2014. Available on http://ec.europa.eu/food/food/labellingnutrition/foodlabelling/proposed_legislation_en.htm
European Market Observatory for Fisheries and Aquaculture Products (EUMOFA), 2014. 2014 Edition The EU fish market. Available on http://ec.europa.eu/fisheries/market-observatory/
FAO, 2014. The State of World Fisheries and Aquaculture 2014. Available on http://www.fao.org/3/a-i3720e.pdf
Fernández Polanco, Prof. José,2013. New trends in seafood consumption and marketing, Department of Business, University of Cantabria, Spain, presentation at the FAO/FAME/UIMP Santander Seminar "Advanced Lessons in Fisheries and Aquaculture Economics, 2013".
FIZ, 2014. Fisch-Informationszentrum, Versorgung and Verbrauch. Available at http://www.fischinfo.de/index.php/markt/92-datenfakten/4770-versorgung-und-verbrauch-2
GFK EU3C, 2012. Consumer Market Study on the Functioning of the meat market for consumers in the European Union SANCO/2009/B1/010. GFK, LEI Wageningen UR and Cap Gemini Consultancy
Marine Stewardship Council (2013): "Leading seafood companies partnering with the MSC". Brochure April 2013.
New Zealand Enterprise, 2014. Available at https://www.nzte.govt.nz/en/export/market-research/food-and-beverage/sustainability-trends-for-food-and-beverage-in-spain-march-2014/
OECD-FAO, 2012. Agricultural Outlook 2012-2021. OECD Publishing and FAO.
OECD-FAO, 2014. Agricultural Outlook 2012-2021. OECD Publishing and FAO. Available on http://stats.oecd.org
Rungis, 2014. French eating habits, new attitudes. Rungis, Marché International. Available at http://www.rungismarket.com/en/bleu/enquetesrungisactu/ModesAlimentaires634.asp
Sainsbury's, 2012. Our future with fish. Investigating customer attitudes, behaviours and motivations, Sainsbury's Live well for less; Future Foundation.
Seafish, 2014. Seafood Industry Factsheet, Seafish, February 2014.
VASEP, 2014. SUPA Report Chapter VII. Available at http://www.seafood.vasep.com.vn/Daily-News/378_8905/SUPA-Report-Chapter-VII-Market-analysis-of-trends-and-key-stakeholder-sourcing-policies-in-Spain.htm
Umwelt Bundesamt (2014): "Green Products in Germany 2014. Status qua and trends". Federal Environment Agency UBA. www.uba.de/publikationen/green-products-in-germany-2014
USDA Foreign Agricultural Service, 2012. France Exporter Guide Annual, Global Agricultural Information Network (GAIN), report number FR9085, 3/5/2012.
USDA Foreign Agricultural Service, 2012. Italian Food Retail and Distribution Sector Report, Global Agricultural Information Network (GAIN), report number IT1246, 12/28/2012.

6 Annex 1: EU protein intake



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