CBI
Ministry of Foreign Affairs of the Netherlands

# Pangasius in the EU market

## Prospects for the position of (ASC-certified) pangasius in the EU retail and food service sector

the sustainable trade initiative

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## Prospects for the position of (ASC-certified) pangasius in the EU retail and food service sector

This report has been compiled for CBI and IDH by LEI Wageningen UR

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# 1 Introduction

## 1.1 Rationale/background

The Aquaculture Stewardship Council (ASC) has the ambition to become the leading certification programme in global aquaculture production. To further develop the production of and demand for ASC pangasius, insights into the development of the general market position of pangasius and the perception of pangasius with a trademark based on ASC certification is a prerequisite. The Centre for the Promotion of Imports from developing countries (CBI) and The Sustainable Trade Initiative (IDH) have conducted a market study to explore the market potential of ASC pangasius in the EU market.

## 1.2 Objective

The objective of this market study is to investigate the potential short- and long-term benefits for investors to invest in the production of pangasius with a trademark based on ASC certification, for the retail and food service market segments in the EU market.

## 1.3 Specific questions

The following specific questions are dealt with to achieve the objective:

- How do leading retailers and food service companies position pangasius?
- What are the short- (< 3 years) and long-term (3-5 years) purchase manager outlooks for whitefish in the retail and food service market segments with a focus on pangasius, with and without a trademark based on certification?
- How does an increased cost price for certified pangasius impact upon demand in the retail and food service market segments?
- Are short- (< 3 years) and long-term (3-5 years) price premiums to be expected for certified pangasius products?

## 1.4 Approach

To explore the market potential of ASC pangasius, this market study was carried out in six different EU member states that were selected in consultation with CBI and IDH: the Netherlands, the United Kingdom, Germany, Italy, Spain and Poland. Together these six countries imported 71% of the total EU pangasius imports in 2011. This market study was based on in-depth interviews with purchase managers of leading importers, retailers and food service companies and a review of available literature.

## 1.5 Structure

This report consists of four chapters. Chapter two presents an overview of the EU whitefish market and the pangasius market. Chapter three presents the key findings for the retail and food service in each of the six countries. Due to lack of information the key findings for the retail and food service in Poland have been combined. In Chapter four the main country results are compared and discussed. Appendix 1 presents an example of the supply chain for pangasius in Spain with the corresponding gross margins. Appendix 2 provides information about the development of import prices of frozen whitefish fillets, while appendix 3 presents import volumes of frozen whitefish fillets in 2011 and the first half of 2012.

# 2 The EU whitefish market

## 2.1 Setting the scene

Fish consumption in the EU continues to increase and remains at levels beyond what EU waters are able to produce. According to the EU Fish Processors and Traders Association (AIPCE-CEP), the size of the EU seafood market (i.e. EU production and imports of whitefish, salmon, tuna, pelagic species, surimi, shrimp and cephalopods) amounted to about 14.7 million tonnes of seafood (live weight) in 2011. The overall dependency on imports was about 65%. The supply of captured whitefish in the EU was 2.9 million tonnes, representing a share of about 20% of the EU seafood market. For captured whitefish the dependency was significantly higher and was around 90%.[1]

In 2012 about 504 million people inhabited the EU. EUROSTAT projections estimate this number to increase to approximately 508 million people in 2015 (4.6 million increase). On average, each European citizen is estimated to consume about 22.1 kg of seafood products per year (as of 2007)[2]; this represents a total growth in demand of about 100,000 tonnes in the next three years. It is assumed that about 20% of this increase, or about 20,000 tonnes, will be additional demand for whitefish. As a result whitefish demand is expected to grow approximately by <1% over the next three years. This expectation does not take into account the potential effects of changes in consumer's purchasing power that might result from an economic crisis.

During the past 20 years global whitefish production from freshwater aquaculture grew rapidly compared with production from capture fisheries. However, calculations for 2008-2013 predict a higher annual growth rate for the global whitefish production from capture fisheries (4.6%) than from freshwater aquaculture (1.3%). This is a major trend break.[3]

## 2.2 The EU whitefish market

Tilapia and pangasius are the most important cultured whitefish species for the EU market for frozen fillets. Other important species are captured species such as Pacific and Atlantic cod, haddock, Alaska pollock, saithe (coalfish) and hake. Figure 1 shows the development of the market size of the EU whitefish market in 2005-2011 for captured whitefish, pangasius and other cultured whitefish species based on AIPCE-CEP data.[4][5] The increased import of pangasius was the main contributor to the expansion of the EU whitefish market from 2005 to 2008. The supply of captured whitefish decreased in this period. After a drop in 2009, the supply of captured whitefish started to improve while pangasius imports slowed down, resulting in an overall growth of the EU supply of whitefish.

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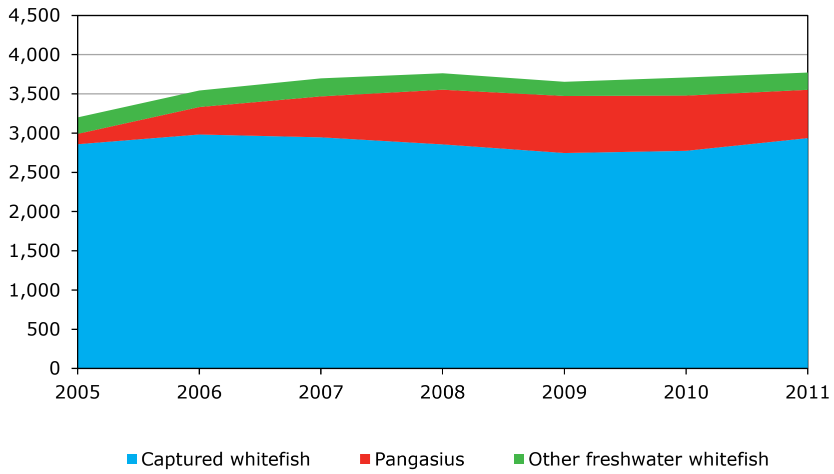
[1] AIPCE-CEP (2012): Finfish study 2012
[2] OCEAN2012 (2012): Fish dependence-2012 Update
[3] Rabobank International (2012): The outlook for groundfish: positive or very positive? Presentation August 15th 2012, available through: http://www.slideshare.net/NSEC/norfishing2012jeroen-leffelaar#btnNext
[4] AIPCE-CEP (2012): Finfish study 2012
[5] AIPCE-CEP (2009): Finfish study 2009

Figure 1: Development of the EU whitefish market in 2005-2011 (tonnes of live weight)




Source: AICPE, 2009 and 2012

Import prices of frozen whitefish fillets vary significantly depending on the particular species (Table 1). In 2011, frozen fillets of cod (Atlantic and Pacific) and haddock accounted for the highest import prices, while Northern hake, Alaska pollock and pangasius were the lowest value frozen whitefish fillets. Data about the development of import prices of frozen whitefish fillets in 2007-2011 can be found in appendix 2. Since the EU whitefish market is highly dependent on whitefish from outside the EU, the euro/dollar exchange rate has a significant impact on price fluctuations in the whitefish market.

Table 1: EU import volumes and prices of frozen fillets of different whitefish species in 2011

| Species | Volume (tonnes) | Price (euro/kg) | Species | Volume (tonnes) | Price (euro/kg) |
|---|---|---|---|---|---|
| Atlantic cod | 178,000 | 4.45 | Argentinian hake | 47,000 | 3.00 |
| Haddock | 45,000 | 3.94 | Tilapia | 21,000 | 2.95 |
| Pacific cod | 28,000 | 3.80 | Northern hake | 27,000 | 2.38 |
| Saithe | 63,000 | 3.71 | Alaska pollock | 324,000 | 2.30 |
| Cape hake | 61,000 | 3.56 | Pangasius | 205,000 | 1.99 |

Source: Eurostat, 2012

In 2011, other product types such as frozen fish meat generally had lower average import prices. For instance, for Alaska pollock 1.52 euro/kg and for Atlantic cod 2.53 euro/kg. Market prices for species such as Atlantic and Pacific cod, Alaska pollock and Saithe fluctuate throughout the year as a result of seasonality, with the main fishing season in the first months of the year. Appendix 3 presents additional data on import volumes of pangasius and other frozen whitefish fillets in 2011 and changes in imports between the first half of 2012 and the first half of 2011 on EU level and for the six countries included in this study.

For the whitefish species mentioned in Table 1, the overall developments in the import volume of frozen fillets in 2007-2011 are presented in Table 2 (tilapia has been excluded because no data was available for 2007-2009). In 2011, Germany was the largest importer, accounting for 25% of the import volume, followed by the United Kingdom (15%) and Spain (13%). Compared with 2007, only the Netherlands and Poland showed a decline in import volume of frozen whitefish fillets. For Poland this decline is mainly related to the lower imports of pangasius. Italian imports of frozen whitefish fillets grew by a remarkable 42%, which was caused by higher imports of different species of hake. Increased imports of pangasius and to a lesser extent Atlantic cod resulted in an overall import growth of 16%. Germany and the United Kingdom showed increases in imports of less than 5%.

Table 2: Import volumes and share of key whitefish species in 2007 and 2011 (frozen fillets)

| | Import volume 2011 (tonnes) | Share (%) | Change 2007-2011 (%) |
|---|---|---|---|
| Netherlands | 84,000 | 9 | -4 |
| Germany | 247,000 | 25 | 2 |
| Italy | 54,000 | 6 | 42 |
| United Kingdom | 143,000 | 15 | 5 |
| Spain | 125,000 | 13 | 16 |
| Poland | 70,000 | 7 | -16 |
| Other countries | 256,000 | 26 | 23 |
| Total | 979,000 | 100 | 8 |

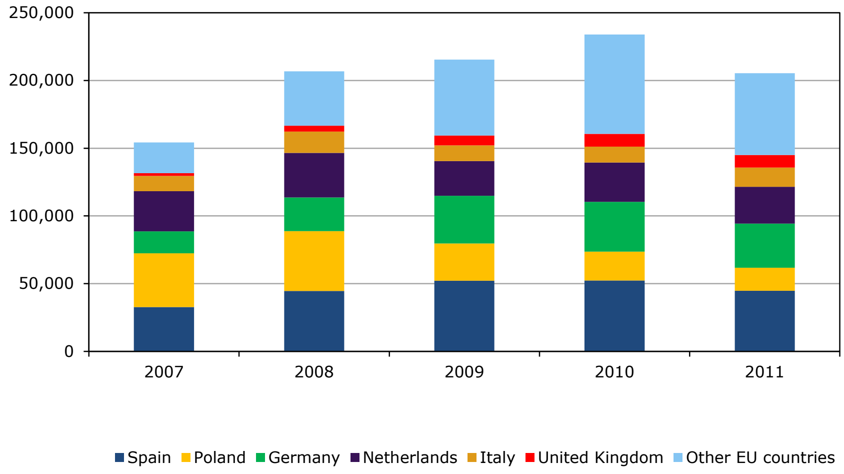
Source: Eurostat, 2012

## 2.3 The EU market for pangasius

*Main developments in EU market 2005-2011*

In 2007-2010, overall EU imports of pangasius have grown by 52% (Figure 2). Large importers such as Spain, Germany and the United Kingdom experience a growth in imports, while in the Netherlands and Italy imports fluctuated. Only Poland experienced a significant decline in pangasius imports from 2008 onwards. In 2011, EU imports declined after several years of increase. EU imports in 2011 were comparable to the import level of 2008. Compared with 2010, imports have declined by 12% in terms of volume and 2% in terms of value; average import prices increased from 1.79 to 1.99 euro/kg. All but one country included in this study experienced declining imports. Only Italian imports increased by 21%. Compared with 2009, the increase in the EU imports of pangasius in 2010 is not reflected in the development of the EU whitefish market in Figure 1. This can be explained by the fact that the EU imports also include intra EU trade of pangasius (e.g. pangasius imported by Italy from the Netherlands). Direct EU imports of pangasius from Vietnam were lower in 2010 (208,000 tonnes) compared to 2009 (216,000).

Figure 2: EU imports of pangasius in 2007-2011 (tonnes)




Source: Eurostat, 2012

In 2011 the average EU import price of pangasius was €1.99/kg. Pangasius import prices vary significantly by country (Table 3). The variation in price level gives an indication of the different product requirements of each country. In general, the United Kingdom and the Netherlands have higher requirements with respect to e.g. product quality and sustainability and therefore pay high import prices. In Spain and Poland requirements are lower, which is reflected by significantly lower import prices.

Table 3: Average import prices of pangasius in 2011 (euro/kg)

| EU average | Netherlands | United Kingdom | Germany | Italy | Spain | Poland |
|---|---|---|---|---|---|---|
| 1.99 | 2.13 | 2.48 | 2.08 | 2.03 | 1.90 | 1.64 |

Source: Eurostat, 2012

In 2011, pangasius was also re-exported by some EU countries, such as:

- The Netherlands with 10,700 tonnes, the largest volumes went to neighbouring countries;
- Germany with 8,200 tonnes, mainly to Central and Eastern European countries;
- Poland with 1,600 tonnes, mainly to other Eastern European countries.

*Market situation 2012*

In the first six months of 2012 pangasius imports declined significantly to 79,000 tonnes from 107,000 tonnes in 2011; a decline of 26%. Average EU import prices in the first half of 2012 increased to €2.18/kg. However, Globefish reported a significant decrease in Spanish import prices of pangasius during June-October 2012.[6] Table 4 shows that the pangasius import volumes of the six key markets strongly decreased.

Table 4: Changes in import volume of pangasius in January-June 2012 compared with 2011 (%)

| EU average | Netherlands | United Kingdom | Germany | Italy | Spain | Poland |
|---|---|---|---|---|---|---|
| -26 | -25 | -15 | -40 | -7 | -21 | -46 |

Source: Eurostat, 2012

[6] Globefish (2013): Globefish highlights, Issue 4/2012

While the EU market is slowing down, pangasius is becoming more popular in other markets. US imports from Vietnam increased by 36% from 35,000 in 2011 to 47,000 tonnes during the period from January-June 2012. In 2011, pangasius ranked 6th among the most popular seafood products with a per capita consumption of 0.6 lbs (approximately 0.27 kg). The Vietnam Association of Seafood Exporters and Producers (VASEP) reported a 19.4% decrease in the value of pangasius exports to the EU during the period from January-November 2012 compared with the same period in 2011. During the same period pangasius exports to the US increased by 14.1%. Other important export markets for pangasius are Mexico and Brazil. During the period from January-November 2012 exports to Mexico were stable compared to the same period in 2011, while exports to Brazil experienced a decrease of 8.2%. Furthermore exports to China and Hong Kong grew by a remarkable 33.9%.[7]

## 2.4 ASC versus MSC

Marine Stewardship Council (MSC) certification is the most important sustainability certification programme for captured seafood. In the south of Europe Friends of the Sea (FOS) is also applied as a seafood certification programme. Several important capture fisheries of whitefish species such as Alaska pollock, cod, haddock, hake, hoki and saithe have obtained an MSC certificate or are undergoing an assessment for MSC certification. Jointly all MSC certified fisheries represent close to 8% of annual capture fisheries production.[8] Sustainability certification for aquaculture is a more recent development. Before the introduction of Aquaculture Stewardship Council (ASC) certification programme GlobalGAP, which is a business-to-business (B2B) scheme, was the main certification programme in the EU. In the US also the Aquaculture Certification Council (ACC) is an important certification programme. In northwest Europe several retail chains have the ambition to only sell certified products in the near future (preferably products which are either MSC or ASC certified). In 2012 around 60,000 tonnes of ASC certified fish products were brought to the market.[9]

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[7] VASEP (2013): Vietnam pangasius export, Jan-Nov 2012, last updated on 10 January 10 2013, available through: http://www.pangasius-vietnam.com/Daily-News/58_4044/Vietnam-pangasius-export-Jan-Nov-2012.htm

[8] MSC (2013): MSC in numbers, last updated at November 8th 2012, available through: http://www.msc.org/business-support/key-facts-about-msc

[9] Personal communication ASC

# 3 Country findings

## 3.1 The Netherlands

### Facts and figures

In the Netherlands 93% of the sales of pangasius is sold in the retail segment. The remainder is sold through the food service segment (7%). Table 5 presents retail prices for pangasius and other whitefish species. In the frozen segment pangasius and Alaska pollock are the lowest value species. The price of ASC pangasius is about 25% higher compared with the uncertified product. Other important whitefish species in Dutch retail are saithe, tilapia and cod.

Table 5: Retail prices for pangasius and other whitefish species (December 2012)

| Product | Fresh segment (plain fillets, euro/kg) | Frozen segment (plain fillets, euro/kg) |
|---|---|---|
| Pangasius | 12.48 -16.90 | 4.65 - 4.79<br>5.82 (ASC) |
| Alaska pollock | - | 3.98 – 6.83 |
| Saithe | - | 4.98 – 5.75 |
| Tilapia | 14.90 (ASC) | 7.61 – 8.32 |
| Cod | 21.98 – 22.39 | 8.82 – 9.08 |

### Retail segment

*Current market position of pangasius)*

- In 2011 pangasius was the species with the highest turnover in terms of volume in Dutch retail. Pangasius accounted for more than 20% of the turnover in the frozen seafood segment and 18% in the fresh fish segment.
- Pangasius is marketed as a low-value bulk product. In the frozen segment its most important competitors are Alaska pollock and Saithe. Blocks of Alaska pollock and Saithe are sometimes sold at a lower price. In the fresh segment its main competitors are tilapia and cod. These are mostly positioned at a higher price level.
- Sustainability certification is highly recognised and ASC is set to become the main standard for pangasius. Large retailers have good knowledge of ASC and already sell or plan to sell ASC pangasius frozen fillets in the near future.

*Future outlook market position for pangasius*

- General seafood trends within the retail market are the increasing demand for traceability and convenience products.
- It is expected that in the short term pangasius will maintain its position as a low-value whitefish species. ASC certification will be important to improve its image and to maintain the market position of the product.
- In the long term it is expected that pangasius prices will slightly increase as a result of higher production costs, and that competition from captured whitefish species will increase.

*Forecasted impact of increased cost price for certified pangasius upon demand*

- By the end of 2013 but ultimately by the end of 2014 the Dutch retail will only sell ASC pangasius. ASC will replace GlobalGap as the dominant aquaculture certification programme. Although some suppliers already introduced ASC pangasius in 2012, other suppliers indicate that the moment of introduction depends on product availability and expiration of existing contracts.

- Most pangasius consumers are price-oriented. Therefore a significant higher sales price is expected to negatively affect the demand for pangasius. If pangasius prices remain stable or increase slightly, pangasius sales are expected to not change substantially.

*Expected price premiums for certified pangasius*

- The first Vietnamese suppliers of ASC pangasius quote prices that are 10-20% above normal. Some importers indicated to expect a premium from their retail customers. However, the premium they expect to receive is lower than the premium they pay to Vietnamese exporters. Other importers do not yet know if their retail customers are willing to pay a premium price. In the short term importers expect to pay their suppliers a premium of less than 10% while in the long term only a marginal premium of 1-2% for ASC pangasius will remain.
- A Dutch retailer who sells ASC pangasius frozen fillets, positioned the product at a 10-25% higher price compared with supermarkets that sell the same product without the trademark.

### Food service segment

*Current market position of pangasius*

- Compared with retail, sales of pangasius are significantly lower in food service. Smaller food service companies often have more price sensitive customers with less strict sustainability requirements. Therefore these smaller companies prefer to buy cheaper frozen fillets with additives (e.g. water, phosphates or proteins), while retail and large food service companies prefer the more expensive products with without additives.
- Within the frozen fillets segment Alaska pollock is the most important competitor of pangasius. Other competing products are hoki and hake.
- Large companies in food service have a sustainability focus and intend to (or already) sell ASC pangasius before the end of 2012. For small food service companies the situation is less clear. Some small companies do not even source GlobalGAP certified pangasius.

*Future outlook market position for pangasius*

- Like for retail the market position of pangasius in food service is expected to remain stable in the short term, while in the long term increasing competition with other whitefish products and higher production costs can pose a threat to its market position.
- The market share of certified products at large food service companies that have strict requirements regarding sustainability certification will increase. Smaller food service companies have requirements that are less strict. Demand for ASC pangasius from these small companies will depend on the growth of ASC pangasius production. If availability increases these companies are expected to switch to ASC pangasius in the long term.

*Forecasted impact of increased cost price for certified pangasius upon demand*

- Large food service companies are interested to sell ASC pangasius. A small increase in the cost price therefore is not expected to have a negative impact on demand for ASC pangasius. For small food service companies an increased cost price for ASC pangasius will have a negative impact on demand. For these companies ASC does not add value.
- A major player in commercial food service already sells ASC pangasius, but will also continue to offer non-ASC pangasius as not all customers (such as Chinese restaurants) see ASC certification as an added value.

*Expected price premiums for certified pangasius*

- Companies in food service that buy directly from suppliers in Vietnam quote prices for ASC pangasius that are up to 20% higher. Current premiums are less than 10%. It is expected that once ASC becomes a licence to operate premiums will be less than 5%.

## 3.2 United Kingdom

### Facts and figures

In the United Kingdom it is estimated that 80-85% of the sales of pangasius is sold in the food service segment. The remainder is sold through the retail segment (15-20%). In the fresh segment pangasius is the lowest value species, while in the frozen segment Alaska pollock is sold at a considerably lower price. Other key whitefish species in British retail are haddock, cod and tilapia.

Table 5: Retail prices for pangasius and other whitefish species (February 2013, €1 = £0.85)

| Product | Fresh segment (plain fillets, euro/kg) | Frozen segment (plain fillets, euro/kg) |
|---|---|---|
| Pangasius | 9.78 | 7.65 |
| Alaska pollock | - | 4.53 |
| Haddock | 10.59 | 8.51 |
| Cod | 12.94 | 8.51 |
| Tilapia | 21.40 | 8.82 |

### Retail segment

*Current market position of pangasius in retail*

- Pangasius is very much an inexpensive whitefish protein. In the UK pangasius is offered as frozen and refreshed in various product types such as plain, smoked, breaded or battered, and value added meals. Of the total pangasius retail sales, refreshed sales represented around 37%, with frozen sales around 63% in the 12 months up to September 2012.
- Promotion focuses on pangasius as an inexpensive refreshed or frozen whitefish fillet. It competes with Alaska pollock, cod and haddock, and with salmon.
- Most consumers have a low product awareness of pangasius; many consumers who are aware of the production pangasius have a negative perception as a result of negative media reports dating back to 2004-2007.
- Retailers are mainly concerned with brand integrity and due diligence and therefor try to ensure responsible sourcing practices. Retailers use certification as due diligence to ensure responsible sourcing and certification is in many cases a market access requirement. In general responsible sourcing is not specifically demanded by consumers as they trust retailers to take care of this.
- Retail is critical about ASC development as stakeholder inclusiveness drives complexity and, in turn, cost.

*Future outlook market position for pangasius*

- In the short term, the UK whitefish market is expected to continue to expand as catches of traditionally important species like cod and haddock are increasing, and prices of whitefish in the short term will be declining. The extent to which pangasius can secure a significant market share of this predicted growth will depend on production costs remaining low. Market share can only be maintained if the product quality is ensured and the costs do not increase.
- In the long term a predicted rise in pangasius production costs may see its market share decline against other whitefish like cod. On the other hand there is a substantial market for farmed salmon in the UK. If the perception of consumers towards pangasius as a responsibly sourced aquaculture product improves it could become a low-value alternative to more expensive farmed salmon and may secure a share of the salmon trade.

*Forecasted impact of increased cost price for certified pangasius upon demand*

- Certification will not drive the market share for pangasius in UK retail. For some front-running retail outlets, ASC has the potential to become a market access requirement. ASC will not be applied to position pangasius as a premium product.
- Multiple retailers refuse to pay for accreditation costs. The supply chain will carry that cost and pangasius loses its competitiveness. As a result of the market situation and competition from other whitefish species, retailers will not increase the price of pangasius.
- It is not expected that retailers favour ASC above GlobalGAP or BAP certification because it is for them only a way to guarantee due diligence and they do not believe that ASC adds value above the other certification initiatives.

*Expected price premiums for certified pangasius*

- Certification is used effectively as a 'licence to operate' instead of a tool to drive premiumisation. There are insufficient differences between the different certification programmes to merit paying a premium for ASC pangasius in either the short or long term, even if the cost price increases.

### Food service segment

*Current market position of pangasius in food service*

- Pangasius is a cost-effective whitefish substitute for cod, haddock, Alaska pollock and hoki. It has had particular success in pub chains, full service restaurants and quick service outlets as the fish component for sit-down meals marketed as 'fish and chips' rather than 'cod & chips'. Though an increase in the use of pangasius was observed from 2008 until 2011, in 2012 its market share has seen a decline, coupled with resurgence in the share of cod in food service.
- Like in retail, certification in food service is important to ensure responsibility and counter negative impacts from production practices.

*Future outlook market position for pangasius*

- The UK food service market is currently constrained given recessionary conditions and is not expected to change in the next three years.
- In the short term, it is questionable whether pangasius can increase its share in UK food service; keeping pace with the market seems more likely. With cod quotas rising sharply, food service outlets may find it tempting to switch back to for example MSC certified cod.
- Long-term developments regarding the market position of pangasius are difficult to predict.

*Forecasted impact of increased cost price for certified pangasius upon demand*

- With the prospect of ASC certification, producers will demand a higher price to cover the increased costs. A price increase can quickly reach the price level of competitor products such as cod and haddock which are preferred over pangasius once prices converge. The impact of an increased cost price therefor will have a negative impact on demand.

*Expected price premiums for certified pangasius*

- Price premiums in the current poor economic climate are very difficult to achieve. There is no reasonable basis to speculate on long-term expectations.

## 3.3 Germany

### Facts and figures

In Germany it is estimated that 70-75% of the sales of pangasius is sold in the retail segment. 25-30% is sold through the food service segment. Table 7 presents retail prices of pangasius and other whitefish species. Pangasius is the lowest value species in the fresh and frozen segment. Frozen pangasius fillets with the ASC trademark are sold at a significantly higher price. Saithe and cod are other key whitefish species in German retail.

Table 7: Retail prices for pangasius and other whitefish species (January 2013)

| Product | Fresh segment (plain fillets, euro/kg) | Frozen segment (plain fillets, euro/kg) |
|---|---|---|
| Pangasius | 11.59 | 4.38<br>12.00 (ASC) |
| Alaska pollock | - | 5.49 – 7.13 |
| Saithe | 11.69 | 17.96 |
| Cod | 22.28 | 17.96 – 21.94 |

## Retail segment

*Current market position of pangasius in retail*

- Consumers have a preference for frozen and breaded pangasius fillets with a white or light pink colour. Germany has a long tradition with Alaska pollock and its competitive position is improving as catches have become more stable while pangasius is becoming more expensive.
- The image of pangasius is negative and no pangasius promotion is undertaken. To improve its image generic marketing efforts must be undertaken to strengthen the ASC trademark, and to bring attention to the positive developments in primary production.
- Sustainability certification in retail is increasingly relevant, especially for pangasius. German retail expresses the need for less, but more transparent certification programmes. Some desire the merging of GlobalGAP and ASC.

*Future outlook market position for pangasius*

- Following reduced imports in 2011 and the first half of 2012, the German market for pangasius is expected to remain stable. All retail interviewed have the ambition to only sell ASC certified pangasius, as soon as sufficient quantities are available. In the short term the growth potential of ASC pangasius depends on the availability of significant volumes, generic marketing and (positive) consumer recognition of the ASC trademark. Finally, general economic developments have an effect on the growth potential.
- Because of increased catches the volume of the whitefish market is expected to grow in the long term. A possible threat to this growth is the high price of whitefish compared with other protein sources like poultry. Recovery of the image of pangasius will be important to regain its market position.

*Forecasted impact of increased cost price for certified pangasius upon demand*

- In Germany, Alaska pollock is cheaper than pangasius and has a better image. Therefore it is an important alterative for pangasius. If the price of pangasius increases further, the impact on demand will be negative.

*Expected price premiums for certified pangasius*

- As long as demand for ASC pangasius outstrips supply a premium can be paid. This will only happen if the cost can be passed on to consumers. Currently Vietnamese producers get paid a 10-15% premium. When sufficient volumes of ASC pangasius are on the market, premiums will decrease and disappear.
- In the long term there may not be a market for uncertified pangasius in German retail. Retailers interviewed do not believe in segmentation of the pangasius market: low-value uncertified product – high-value ASC certified. This indicates the ASC trademark is not expected to reach the same level of strength and consumer recognition as MSC.

### Food service segment

*Current market position of pangasius in food service*

- Pangasius is perceived as a low-value easy-to-use product that does not taste like fish. This makes it attractive in food service for lower segment restaurants and hospital catering.
- Like in retail, the image of pangasius is negative in food service. Generic promotion for pangasius would be welcome although promotion in food service is less focused on single products but more on the general image of the company.
- Similar to retail, sustainability is important in food service, where some of the large companies already have certified up to 80% of their seafood products. Dominant certification programmes are MSC and GlobalGAP. All interviewed companies show interest in ASC pangasius and want to source this product when it becomes available.

*Future outlook market position for pangasius*

- Short- and long-term expectations for pangasius are comparable with the retail segment. No specific consequences were identified for the food service segment.

*Forecasted impact of increased cost price for certified pangasius upon demand*

- The expected impact upon demand is difficult to predict. In food service, as opposed to retail, price increases cannot be easily passed on because of the set price on meals. To deal with price increases, food service can adjust the portions of fish within meals. As such this implies a lower demand.

*Expected price premiums for certified pangasius*

- General short- and long-term expectations regarding price premiums in food service are similar to retail.

## 3.4 Italy

### Facts and figures

In Italy it is estimated that 60% of the sales of pangasius is sold in the food service segment. 40% is sold through the retail segment. Table 8 presents retail prices of pangasius and other whitefish species. Pangasius is the lowest value species in both the fresh and frozen segment. While in the Netherlands and Germany Alaska pollock and saithe are the main competing species in retail, in Italy Nile perch, hake and plaice compete with pangasius.

Table 8: Retail prices for pangasius and other whitefish species (January 2013)

| Product | Fresh segment (plain fillets, euro/kg) | Frozen segment (plain fillets, euro/kg) |
|---|---|---|
| Pangasius | 7.90 | 4.20 – 5.00 |
| Nile perch | 10.90 | |
| Hake | 10.96 | |
| Cod | 11.90 | 9.48 – 11.48 |
| Plaice | 9.98 – 12.90 | 18.40 – 22.25 |

### Retail segment

*Current market position of pangasius in retail*

- There is no specific marketing strategy for pangasius. The product is considered not to have enough market appeal, because of a negative perception due to media campaigns and the low profitability of the product.

- Instead of pangasius, the most competitive products are fillets of species like cod, plaice, hake and Nile perch. These are preferred because of better quality and food safety guarantees, but also because they are part of the traditional eating habits of Italian consumers.
- Sustainability certificates applied in Italian retail are MSC and FOS. Purchase managers have limited knowledge about ASC. Italian consumers rely on the reliability and credibility of retail.

*Future outlook market position for pangasius*

- A significant increase in the market share of pangasius in Italian retail is not expected in the short and long term, because of its negative perception. Sales are expected to remain low but constant. A sales increase depends on either strong price increases of competing whitefish species or a reduction of purchasing power of Italian consumers.
- An increased market share for ASC pangasius will depend on the communication of ASC and the consumers' willingness to pay a higher price.

*Forecasted impact of increased cost price for certified pangasius upon demand*

- Currently Italian retailers do not invest in sustainability certification of pangasius because of low sales volumes, low profitability and the assumption that consumers are unwilling to pay a higher price.
- A price increase for pangasius cannot be justified as consumers take sustainable production for granted and therefore do not perceive an added value. The impact of an increased cost price will be negative as consumers are expected to switch to cheaper alternatives.

*Expected price premiums for certified pangasius*

- In the short term price premiums are not expected. In the long term sustainability could become an issue if pangasius certification becomes mandatory. Currently, there are no clear expectations regarding price premiums for certified pangasius in the long term.

### Food service segment

*Current market position of pangasius in food service*

- In food service pangasius is offered almost exclusively in commercial catering. Some large catering chains do not offer pangasius until the quality of the product can be guaranteed. In the institutional food service sales of pangasius have strongly decreased, due to negative media campaigns.
- Pangasius is not considered to be an interesting product within the seafood assortment of large food service companies.
- Compared with commercial catering, sustainability certification is more important in institutional catering. Certification programmes such as MSC and FOS are applied, and some food service suppliers of pangasius are GlobalGAP certified.

*Future outlook market position for pangasius*

- In the short term an increased demand in commercial catering can occur because of its competitive low price. However, for an increased demand in institutional food service, complete and correct communication and information are a prerequisite. This is also the case if the product is marketed as sustainable.
- The sensitivity of the Italian market to environmental issues is expected to increase in the long term. This poses opportunities for sustainability certification, also as a means to guarantee the food safety of seafood products. This also holds for pangasius, but only on the condition that the negative product perception changes.

*Forecasted impact of increased cost price for certified pangasius upon demand*

- An increased cost price is expected to have a negative effect on the demand for pangasius in Italian food service in general, mainly due to financial considerations. For institutional food service however a price increase of <10% without having significant negative effects on the demand for certified pangasius was indicated. A higher price increase would prevent a higher demand because of the limited financial means of local administrations, which run school and hospital canteens.

*Expected price premiums for certified pangasius products*

- The institutional food service indicates that there is a willingness to pay for certified pangasius, if the price difference is <10% compared with uncertified pangasius. Apart from this indication, no expectations for price premiums in the short and long term were provided.

## 3.5 Spain

### Facts and figures

In Spain about two thirds of the sales of pangasius is sold in the retail segment. One third is sold through the food service segment. Table 9 presents retail prices of pangasius and other whitefish species. Pangasius is the lowest value species in the fresh segment, while in the frozen segment Alaska pollock is sold at lower prices than pangasius. Besides hake and cod, a variety of domestically caught and imported whitefish and other species sold in Spanish retail.

Table 9: Retail prices for pangasius and other whitefish species (November 2012)

| Product | Fresh segment (plain fillets, euro/kg) | Frozen segment (plain fillets, euro/kg) |
|---|---|---|
| Pangasius | 5.75 – 5.99 | 4.10 – 6.56 |
| Alaska pollock | - | 3.81 – 7.75 |
| Hake | 5.89 – 14.25 | 5.91 – 6.00 |
| Cod | 8.99 | 8.74 – 10.40 |

### Retail segment

*Current market position of pangasius in retail*

- In the retail market pangasius is positioned in the lowest segment, often used for promotional offers. The product has a low profitability and requires large volumes to make it profitable.
- As Spain has a long fish-eating tradition and a consumer preference favouring captured seafood, many purchase managers prefer captured products. Therefore, the options to reposition pangasius as a higher value product are limited.
- In the frozen segment the main competitor is Alaska pollock which is sometimes positioned lower than pangasius (3.81 euro/kg for frozen Alaska pollock fillets compared with 4.10 euro/kg for frozen pangasius fillets).

*Future outlook market position for pangasius*

- In the short term pangasius will maintain its position in the retail market. As a result of the present economic downturn demand for pangasius (and other cheap whitefish like Alaska pollock, hake and blue whiting) is expected to increase. However, at the same time the competitiveness of seafood suffers from high prices compared with other protein sources like poultry.
- In Spain it is too early for sustainability certification. In the short term sustainability certification will be limited to some high value seafood products. Purchase managers have

limited knowledge of certification programmes like GlobalGAP, MSC and FOS and of them are unfamiliar with the ASC trademark.
- Long-term forecasts depend on the economic development of Spain. Importers will not prevent the entrance of certified products in the Spanish retail market. However, at the same time they will also not actively attempt to source certified pangasius.

*Forecasted impact of increased cost price for certified pangasius upon demand*
- Spanish retail only accepts certified pangasius at a price level equal to pangasius. A price increase due to certification will negatively affect pangasius sales.

*Expected price premiums for certified pangasius products*
- Given the current economic situation Spanish importers and distributors will not pay a price premium. This is unlike to change in the long term.

### Food service segment

*Current market position of pangasius in food service*
- About 70% of the pangasius sales in food service are realised in commercial food service and 30% in institutional catering. The largest restaurant chains do not use pangasius. The purchase of pangasius fillets in institutional catering is concentrated with large contract caterers.
- In recent years there have been several negative campaigns that have harmed the image of pangasius in food service. As a response some food service companies have stopped serving pangasius.
- Competitive species are frozen Alaska pollock fillets, a product widely used in institutional food service and also within quick service restaurants. Price differences between Alaska Pollock and pangasius are minimal.
- Sustainability is not a requirement for contract caterers, or for their consumers. The same holds for the commercial food service. The use of MSC certified Alaska pollock fillets by McDonald's is one of the few exceptions.

*Future outlook market position for pangasius*
- As the prospects for a speedy economic recovery do not look promising in the short term, food service will focus on cost reduction. This benefits low-value whitefish species such as pangasius.
- Commercial food service will continue to source pangasius fillets. However, there have been cases of mislabelling where pangasius is intentionally sold as cod or sole, because of the bad consumer image of pangasius and the higher market value of these species.
- In institutional food service, especially in more sensitive segments such as schools, the outlook for pangasius is less promising as the product continues to suffer from negative campaigns. It will be difficult to restore the image.

*Forecasted impact of increased cost price for certified pangasius upon demand*
- The expected impact of an increased cost price upon the demand is negative as cost reduction is a main focus area. As a slight price increase affects production costs and profitability, sustainability certification is not perceived as an added value.

*Expected price premiums for certified pangasius products*
- In the short as well as the long term a price premium for certified pangasius is not expected. Consumers are unwilling to pay more for a meal, and when confronted with a higher price may even reduce their consumption levels within the institutional food service.

## 3.6 Poland

### Facts and figures

In Poland it is estimated that 50-70% of the sales of pangasius is sold in the retail segment. 30-50% is sold through the food service segment. Table 10 presents retail prices of pangasius and other whitefish species. In Poland prices of whitefish fillets are considerably lower than in the other countries included in this study. Pangasius and Alaska pollock are the lowest value species in the frozen segment, with prices of less than €2.50/kg for Alaska pollock. Other whitefish species sold in retail are tilapia, cod and saithe.

Table 10: Retail prices for pangasius and other whitefish species (January 2013)

| Product | Fresh segment (plain fillets, euro/kg) | Frozen segment (plain fillets, euro/kg) |
|---|---|---|
| Pangasius | - | 2.88 |
| Alaska pollock | - | 2.40 – 2.88 |
| Tilapia | - | 3.59 – 4.31 |
| Cod | - | 4.31 |
| Saithe | - | 4.07 – 6.23 |

### Retail and food service segment

*Current market position of pangasius*

- The Polish seafood market is characterised as extremely price sensitive. Although this might benefit pangasius, Polish importers indicate that the image of pangasius in Poland is negative.
- (Light) pink coloured fillets are preferred. This is mainly because of the lower prices compared with white fillets. Alaska pollock is the main competing product.
- At present no promotion strategies are undertaken. Importers would like to show the positive changes in the pangasius sector. Individually they are unable to cover the cost of such a campaign.
- When the image of the product deteriorated some supermarkets demanded only 8% glazing (instead of 20%), but eventually they were unwilling to pay the higher price.
- Sustainability is not an issue on the Polish market. Retail has not developed a concept for sustainability. GlobalGAP and ASC certification are not on the agenda for pangasius.

*Future outlook market position for pangasius*

- In both the short and the long term the market position of pangasius will mainly depend on price development. Furthermore, to increase sales image improvement is also a necessity.

*Forecasted impact of increased cost price for certified pangasius upon demand*

- For a product with a negative image in a price sensitive market, a price increase will have a negative effect on demand. Whether the product is certified or not will not affect this in any way.

*Expected price premiums for certified pangasius products*

- No estimates for price premiums were provided. However, based on the current market position of pangasius price premiums in the short as well as the long term are not expected.

# 4 Conclusions

***How leading retailers and food service companies position pangasius***

Pangasius is the lowest value white fish species in the retail and food service. Nevertheless, Alaska pollock is sometimes offered at a similar or slightly lower price. In the retail pangasius is mainly sold as frozen and refreshed fillets and often used for special offers and promotions. In the fresh segment, refreshed pangasius competes with a variety of local and imported species, while in the frozen segment Alaska pollock is the main competing species. In the food service pangasius fillets are used as low cost meal ingredients and mainly compete with Alaska pollock.

As opposed to captured fish products, there are currently few cultured fish products with business-to-consumer (B2C) certification. The extent to which pangasius is currently sold with B2C certification is limited to small volumes of ASC pangasius in the Netherlands and Germany, and small volumes of FOS pangasius in Italy.

***The short - (< 3 years) and long-term (3-5 years) purchase manager outlooks for whitefish in the retail and food service market segments with a focus on pangasius, with and without a trademark based on certification***

The outlook for the market position of pangasius is determined by a number of key developments. These are the increasing supply of competing whitefish species; the euro/dollar exchange rate; the production costs of pangasius; the state of the EU economy; and the consumer perception of pangasius.

Purchase managers argue that in the short term the market position of pangasius is likely to either remain stable or to slightly improve. This is caused by the current economic downturn that is expected to shift demand to lower value whitefish. Whether this is effectuated depends on the ability of pangasius producers to keep production costs under control. If production costs increase, the competitive position of pangasius compared with captured whitefish species will deteriorate.

Current trade figures only partly support the above mentioned expectations. Despite the predicted stable or improving market position, EU import volumes of frozen pangasius fillets in the first half of 2012 experienced a significant drop (-26%) compared with the same period in 2011. High production costs, credit problems and the continuing negative image of pangasius in the EU have contributed to the declining EU imports. Most other whitefish species also showed a decrease in EU imports during the first half of 2012. However, this decrease was less substantial. Alaska pollock and Northern hake, the imported whitefish species that together with pangasius have the lowest price level (see Chapter 2, Table 1), showed declines in EU import volume with respectively 4% and 10%. The comparatively rapid decline of pangasius indicates that Alaska pollock, pangasius' main competitor, is gaining market share at the expense of pangasius. This is at least the case in countries with a traditional preference for Alaska pollock like Germany and Poland.

In the short term sustainability certification may become crucial for the sales of pangasius in order to create a level playing field with captured whitefish species that already have been certified. This is especially the case in the Netherlands, Germany and Scandinavia and potentially also in the UK. Sustainability certification may be a means to secure market share for pangasius as Alaska pollock is already available with the MSC trademark.

Purchase managers find it difficult to make long-term predictions. However, within the next five years it is unlikely that the conditions in the whitefish market will change dramatically. Competition is expected to remain strong within the low value segment of the whitefish market. At the same time purchase managers expect that pangasius needs to continue to compete on price as it will proof to be unfeasible to re-position pangasius as a higher value product. A positive note is that like in the Netherlands, some purchase managers in countries where sustainability is currently less important (e.g. Italy and Spain), suggest that in the long term sustainability certification may contribute to an improved consumer perception of pangasius. This may help pangasius to regain market share in countries where the species has suffered from negative media campaigns. Rather than a means to position pangasius as a higher value product it is therefore likely that sustainability certification will eventually become a licence to operate. Active campaigns will be required to actually influence consumer perception, especially in countries that have a strong preference for captured fish species like the UK, Italy and Spain.

***The impact of an increased cost price for certified pangasius upon demand in the retail and food service market segments***

Pangasius consumers are more price-oriented than brand oriented. In the Netherlands and Germany there is a demand for ASC pangasius. However, the actual demand comes from retailers rather than from consumers. A similar development can be witnessed in the UK, where ASC has the potential to become a market access requirement. As a consequence of the lagging consumer demand and the current market situation, a significant increase in the price of pangasius is expected to have a negative impact on its competitive position and demand in all countries. When pangasius prices increase, consumers are expected to shift to competing whitefish species or alternative sources of protein. However, it is likely that without certification an increase in cost price has an even stronger negative impact on demand. In this manner sustainability certification may become crucial for pangasius to create a level playing field with competing whitefish species, as most of these species are already MSC certified.

***Short- (< 3 years) and long-term (3-5 years) price premiums for certified pangasius products***

A premium can be expected as long as demand for ASC pangasius outstrips supply. This is particularly the case in the Netherlands where large retail companies have jointly committed themselves to provide sustainably sourced products to their customers. To a lesser extent this is also the case for Germany. Since in the UK there is only an individual commitment of certain retail and food service companies, it will be more difficult to obtain a premium for certified pangasius. The height of the premium depends on the degree to which the costs can be passed on to consumers. When sufficient volumes of ASC pangasius are on the market and ASC certification becomes a market access requirement for Dutch and German retail and large food service companies, it will become more difficult to realise a premium. In the long term the realisation of premiums also depends on the economic circumstances. Premiums for ASC pangasius will be limited to only a few per cent in markets where ASC pangasius becomes a licence to operate. Retail and food service companies in Southern Europe have not committed themselves to ASC certification for pangasius and therefore in general will also not be willing to pay a premium.

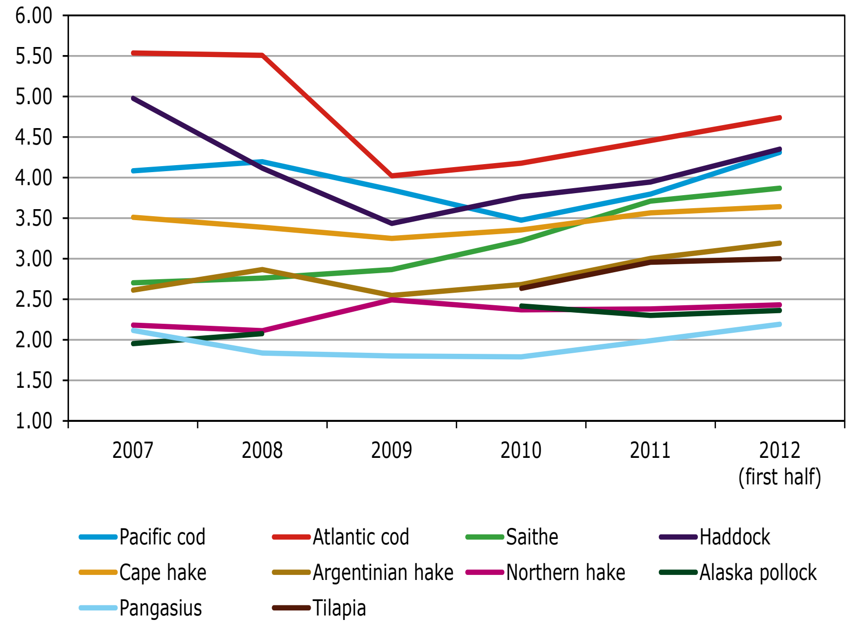
# Appendix 1 Supply chain for pangasius

To provide an indication of the supply chain for pangasius and the corresponding margins throughout the supply chain, an estimation of the price composition for a frozen pangasius fillet in Spain is presented here.

| Expenses | USD / euro per kg |
|---|---|
| **Farm gate price (Vietnam) (USD)** | **2.20** |
| Transportation cost (reefer) | 0.12 |
| Clearance cost | 0.03 |
| Custom duties (5.5%) | 0.12 |
| **Exchange rate (USD / euro)** | **1.30** |
| **Net price cleared (euro)** | **1.90** |
| Transportation to central warehouse | 0.02 |
| Storage at central warehouse | 0.02 |
| From container to pallets | 0.04 |
| Gross margin importer (5-10%) | 0.15 |
| **Sales price to distributor (delivered at central warehouse)** | **2.13** |
| Delivery shop by shop (pallets) | 0.12 |
| Financing costs: stocks, shop, commercial department, | 0.35 |
| **Net purchase price for distributor** | **2.60** |
| **Gross margin distributor (40%)** | **1.04** |
| **Retail price (VAT excluded)** | **3.64** |
| **VAT (10%)** | **0.36** |
| **Retail price (VAT included)** | **4.00** |

# Appendix 2 Development of import prices of frozen whitefish fillets

The figure below presents the import prices of frozen fillets for the key whitefish species from 2007 to 2011 and the first half of 2012. For most of the species between 2008 and 2009 a decrease in import prices can be observed. Apart from Northern hake, the price level of all key whitefish species increased between 2009 and the first half of 2012. For Alaska pollock 2009 data are not correct and therefore not included in this figure. For tilapia only trade data from 2010 onwards are available in Eurostat.




Source: Eurostat, 2012

# Appendix 3 Imports of frozen whitefish fillets

Appendix 3 provides data on the imports of frozen pangasius fillets and frozen fillets of other important whitefish species for the EU market and the six countries included in this study. For each country the import volumes in 2011 are presented, as well as their share of the total EU import volumes. The column most right shows the changes in import volume between the first half of 2012 and the half of 2011. Note that not all whitefish that is imported is consumed domestically, but in some cases is re-exported.

Total EU import volume (tonnes)

| | 2011 EU import volume | Change in 2012-2011 import volume (January-June) |
|---|---|---|
| Pangasius | 205,417 | -26% |
| Tilapia | 20,711 | -20% |
| Pacific cod | 28,414 | -7% |
| Atlantic cod | 177,791 | 1% |
| Saithe | 62,932 | -19% |
| Haddock | 45,221 | 5% |
| Cape hake | 61,460 | 13% |
| Argentinian hake | 46,886 | -21% |
| Northern hake | 27,340 | -10% |
| Alaska pollock | 323,635 | -4% |

Source: Eurostat, 2012

Import volume The Netherlands (tonnes)

| | 2011 import volume | % of EU import volume | Change in 2012-2011 import volume (January-June) |
|---|---|---|---|
| Pangasius | 27,270 | 13% | -25% |
| Tilapia | 2,275 | 11% | -27% |
| Pacific cod | 1,704 | 6% | -58% |
| Atlantic cod | 20,026 | 11% | 11% |
| Saithe | 9,363 | 15% | -16% |
| Haddock | 3,444 | 8% | 2% |
| Cape hake | 4,186 | 7% | 28% |
| Argentinian hake | 146 | 0% | -79% |
| Northern hake | 481 | 2% | 47% |
| Alaska pollock | 17,334 | 5% | 11% |

Source: Eurostat, 2012

Import volume United Kingdom (tonnes)

| | 2011 import volume | % of EU import volume | Change in 2012-2011 import volume (January-June) |
|---|---|---|---|
| Pangasius | 9,371 | 5% | -15% |
| Tilapia | 665 | 3% | -8% |
| Pacific cod | 7,222 | 25% | -3% |
| Atlantic cod | 66,416 | 37% | 7% |
| Saithe | 1,935 | 3% | -48% |
| Haddock | 31,749 | 70% | 2% |
| Cape hake | 1,322 | 2% | -11% |
| Argentinian hake | 2 | 0% | 13100% |
| Northern hake | 490 | 2% | 55% |
| Alaska pollock | 24,041 | 7% | 2% |

Source: Eurostat, 2012

Import volume Germany (tonnes)

| | 2011 import volume | % of EU import volume | Change in 2012-2011 import volume (January-June) |
|---|---|---|---|
| Pangasius | 32,584 | 16% | -40% |
| Tilapia | 3,017 | 15% | -35% |
| Pacific cod | 7,373 | 26% | -26% |
| Atlantic cod | 18,480 | 10% | -7% |
| Saithe | 15,703 | 25% | -30% |
| Haddock | 4,164 | 9% | 32% |
| Cape hake | 3,491 | 6% | 20% |
| Argentinian hake | 1,941 | 4% | 44% |
| Northern hake | 8,293 | 30% | -32% |
| Alaska pollock | 155,027 | 48% | -8% |

Source: Eurostat, 2012

Import volume Italy (tonnes)

| | 2011 import volume | % of EU import volume | Change in 2012-2011 import volume (January-June) |
|---|---|---|---|
| Pangasius | 14,125 | 7% | -7% |
| Tilapia | 1,189 | 6% | -37% |
| Pacific cod | 921 | 3% | -17% |
| Atlantic cod | 3,941 | 2% | -10% |
| Saithe | 371 | 1% | -86% |
| Haddock | 23 | 0% | -55% |
| Cape hake | 9,284 | 15% | 22% |
| Argentinian hake | 16,460 | 35% | -35% |
| Northern hake | 5,971 | 22% | -15% |
| Alaska pollock | 2,986 | 1% | 38% |

Source: Eurostat, 2012

Import volume Spain (tonnes)

| | 2011 import volume | % of EU import volume | Change in 2012-2011 import volume (January-June) |
|---|---|---|---|
| Pangasius | 44,757 | 22% | -21% |
| Tilapia | 4,602 | 22% | -18% |
| Pacific cod | 1,450 | 5% | -81% |
| Atlantic cod | 23,690 | 13% | -14% |
| Saithe | 4,625 | 7% | -22% |
| Haddock | 39 | 0% | 286% |
| Cape hake | 32,256 | 52% | 21% |
| Argentinian hake | 12,053 | 26% | -27% |
| Northern hake | 1,791 | 7% | 50% |
| Alaska pollock | 4,500 | 1% | -15% |

Source: Eurostat, 2012

Import volume Poland (tonnes)

| | 2011 import volume | % of EU import volume | Change in 2012-2011 import volume (January-June) |
|---|---|---|---|
| Pangasius | 16,951 | 8% | -46% |
| Tilapia | 4,940 | 24% | -22% |
| Pacific cod | 606 | 2% | 526% |
| Atlantic cod | 4,740 | 3% | 10% |
| Saithe | 5,064 | 8% | -14% |
| Haddock | 1,574 | 3% | -15% |
| Cape hake | 738 | 1% | -44% |
| Argentinian hake | 3,609 | 8% | -1% |
| Northern hake | 2,443 | 9% | -26% |
| Alaska pollock | 34,055 | 11% | 0% |

Source: Eurostat, 2012