

**ESTONIAN FISHERIES
STRATEGY
2007–2013**

Ministry of Agriculture of the Republic of Estonia

Table of Contents

Introduction

1. General description of the fisheries sector

1.1. Fishing

1.1.1. Fishing in the Baltic Sea

1.1.1.1. Trawl fishing in the Baltic Sea

1.1.1.2. Coastal fishing in the Baltic Sea

1.1.2. Inland fishing

1.1.3. Distant water fishing

1.1.4. Environmental impact of fishing

1.2. Ports and landing locations

1.3. Aquaculture

1.4. Processing and marketing of fish

1.5. Fisheries regions

1.6. Division of spheres of responsibility in the fisheries administration

2. SWOT analysis of the sector and the fisheries administration

2.1. Strengths of the sector and the administration

2.2. Weaknesses of the sector and the administration

2.3. Opportunities of the sector and the administration

2.4. Threats of the sector and the administration

3. Objectives and priorities

3.1. Objectives and priorities for the development of fishing and ports

3.2. Objectives and priorities for the development of aquaculture

3.3. Objectives and priorities for fish processing and marketing

3.4. Objectives and priorities for the development of fisheries regions

3.5. Objectives and priorities of the administration

3.5.1. International cooperation and control

3.5.2. Proposed actions

3.6. Compilation of the Strategy and connections with EU policies and other strategies

3.6.1. Basis for the Strategy and connections with EU policies

3.6.2. Compilation of the Strategy and connections with other strategies

4. Procedure for the elaboration, implementation and monitoring of the Strategy

5. Operational programme (financing)

Annexes

Annex 1	Baltic Sea fishing grounds
Annex 2	Fishing in the Baltic Sea 1996–2005 (tonnes)
Annex 3	Average purchase prices in 2005 (EEK thousand)
Annex 4	FIFG support as at July 2006
Annex 5	Number of Estonian fishing vessels, total power of main engines and total gross tonnage as at 19.01.06
Annex 6	Demographic situation of fisheries in 2006
Annex 7	Fishing in inland waters 1996–2005 (tonnes)
Annex 8	Distant water fishing 1996–2005 (tonnes)
Annex 9	Ports
Annex 10	Trawl and coastal fishing ports/landing locations according to quantities landed in 2004–2005
Annex 11	Coastal fishing ports according to quantities landed in 2004–2005
Annex 12	Inland ports according to quantities landed in 2004–2005
Annex 13	Fish and crayfish farms in Estonia in 2006
Annex 14	Natura 2000 network areas
Annex 15	Aquaculture production in 1996–2004 (tonnes)
Annex 16	SAPARD support
Annex 17	Production quantities
Annex 18	Percentage of export in sales (%)
Annex 19	Dynamics of fish and fishery product export and import volumes (t)
Annex 20	Number of employees in the fish processing sector
Annex 21	Map of fisheries regions
Annex 22	Location of fish industry production units by counties and the percentage of persons engaged in industries among the working age population of counties
Annex 23	Distant water fishing grounds
Annex 24	General indicators of Strategy

Introduction

Estonian geography and climate

Estonia is situated in the northwestern part of the Eastern European Lowland. The country's total area is 45,227 km² with 43,200 km² of land area. Estonia's neighbouring countries are Finland in the north, Sweden in the west, the Russian Federation in the east and Latvia in the south. The country's 3,700 km long coastline is heavily indented and the coastal waters boast with numerous islands: Estonia owns 1,521 islands with a total area of 4,130 km² (9.1% of the entire territory) in the Baltic Sea. The largest islands are Saaremaa (2,922 km²), Hiiumaa (1,023 km²) and Muhu (206 km²). The Estonian relief is generally flat, with uplands and tablelands alternating with lowlands, basins and valleys; however, the elevation does not vary much.

Inland waters cover 6.2% of Estonia's territory. These include more than 1,000 lakes. A large part of the lake area is made up of the Estonian part of Lake Peipsi. The Estonian river network is relatively dense: there are more than 7,000 watercourses with a total length of ca 31,000 km. The most water-abundant rivers are River Narva, River Emajõgi, River Pärnu and River Kasari; the longest ones are River Pärnu (144 km), River Kasari (112 km) and River Emajõgi (101 km).

The Atlantic Ocean, mainly the North Atlantic Gulf Stream, has a large influence on the climate, causing strong winds, precipitation and sharp changes in temperature in winter and autumn. The day is shortest at the winter solstice (6 hours) and longest at the summer solstice (18 hours). Estonia is situated in a humid climate zone, where the amount of precipitation exceeds evaporation. The marine and continental fronts of the temperate zone are dominant. In winter and spring, the weather may occasionally be influenced by cold and dry Arctic air masses, while in summer warm air masses may on rare occasion bring tropical air from the south. Temperatures fluctuate greatly within Estonia, with the Baltic Sea as the main cause. During wintertime, it keeps the coastal areas much warmer than the inland. The average temperature in winter is between -6 °C and -7 °C, and in the summer months between 13.8 °C and 19.6 °C. The average annual wind speed in the inland is less than 4 m/s, reaching 6 m/s on high sea coast, where gales are not uncommon either. Snow coverage is characterised by major territorial and temporal changes. On average, Estonia is covered in snow 75–135 days during winter.

Population

The population of Estonia is 1.347 million as at 01.01.2005. Population concentration is low, the average population density being 30 persons/km² (in mainland regions), while population density in rural areas is 10.4 persons/km². 69% of the population live in towns. Estonians are an ageing nation. Natural population growth is negative. The ratio of children in the population is decreasing: in 2003, 16.3% of the population were under the age of 15 and 16.0% over the age of 65.

Comparing the size of working-age population to the number of people engaged in fisheries in counties reveals that the average share of people engaged in fisheries in Estonia is 1%. The share is highest in Hiiu County – 12.3% and relatively high in Saare County (5.1%) and also in Lääne County and Pärnu County (2.4% each). In Rapla, Valga and Järva counties, which are poor in lakes, the share of the fisheries sector is less than 0.08%. Despite the proximity of large water bodies, only 1.4% of the working-age population in the urbanised Ida-Viru County work in the fisheries sector.

Estonia has many monofunctional rural municipalities where fisheries are a very significant field of activity. For example, in Kihnu, 12.8% of the population are engaged in fisheries, in Kõrgessaare rural municipality in Hiiu County this percentage is 11.1% and in Kohtla rural municipality in Ida-Viru County 9.9% of the population.

Economic situation

In 2005, GDP at current prices was 173.1 billion Estonian kroons and at year 2000 constant prices 142 billion Estonian kroons, which is 10.5% more than in 2004. Estonia's GDP increased considerably more rapidly than expected due to significant growth in domestic demand and exports. Increase in domestic demand was primarily fuelled by increased growth rate of private consumption expenditure and investments, while government final consumption expenditure also increased more than expected. The significantly higher than expected growth rate in exports was caused by a slightly stronger than projected rise in external demand as well as by a more long-term impact of joining the European Union than expected.

In terms of fields of activity, compared to the previous year, value added at constant prices increased in 2004 the most in financial intermediation (25.2%), hotels and restaurants (23.6%) and construction (19.8%). These frontrunners were followed by wholesale and retail business (16.0%) and the processing industry (12.6%). Value added increased in agriculture, hunting and forest management (2.4%) and in fisheries (0.5%). The main contributors to the increase in GDP were the processing industry, real estate, leasing and business, transport, storage and communication and wholesale and retail business; their share in gross value added amounted to 66%.

The Ministry of Finance expects the economy to grow 9.6% and 8.3% in real terms in 2006–2007; this should be fuelled both by increased domestic demand as well as an increase in the share of net exports. The growth is based on domestic demand and exports, although the growth rates of the two should slow down compared to 2005. Rise in domestic demand is influenced the most by private consumption, which will witness a decrease in its growth rate to 7% in 2007. The growth rate of government final consumption expenditure is also set to slow down. At the same time, investment activity will remain on a high level in the coming years and gross capital formation will increase more rapidly than the average growth of domestic demand. In the medium term, we expect the economic growth rate to slow down to 7.3% on average, which is slower than the average growth of the past five years.

Increase in domestic demand will stabilise to 6.7%, resulting in the decrease of the share of domestic demand to 97.6% of GDP by the end of the period. Export and import growth rates will slow down a little bit, but the negative balance of net exports should decrease in the course of the period.

Labour market, employment

The situation at the labour market can be estimated by the labour market pressure index. The index has decreased from 1.27 in 1989 to 0.91 in 2006 (-28.3%). The similar indicator for rural areas decreased from 1.38 to 1.05 (-23.9%). The situation has worsened particularly in towns, where the labour market pressure index has fallen to 0.84%, declining 31.7%.

Employment rate was 64% as at 2005. The average employment rate among 15–74 year-olds was 57.9% in Estonia in 2005. Unemployment rate decreased from 9.7% to 7.9% in 2005.

Active labour market policy and improved economy favour the decline of unemployment in the medium term. The average employment growth of 0.6% in the period 2005–2009 is consistent with moderate increase in wages and productivity. Positive developments in the Estonian labour market will depend in the coming years on continued flexibility, vocational education reform and increased mobility of labour. In the framework of the European Fisheries Fund, great attention is paid to diversifying economic activities in fisheries regions, where the welfare of local people depends greatly on the success and activeness of fishery undertakings.

Water resources and the condition of aquatic environment

Estonia's water resources are formed mainly on the expense of rainfall. Of the average annual sum of rainfall of 667 mm, run-off is 260 mm or 39%. Estonia has about 1,200 lakes with an area of more than 1 ha; the total area of lakes is 2,130 km². Most of the total area (91.5%) of lakes is made up of Lake Peipsi, Lake Võrtsjärv and the Narva reservoir. Most of the rivers in Estonia are short and not rich in water and consequently vulnerable to pollution; only 10 rivers are longer than 100 km. Most of Estonia's rivers and lakes are in a good or satisfactory condition. In Estonia, as in all of Europe, eutrophication in inland water bodies has decreased. As a result of decreased agricultural production, the flow of nutrients from inland water bodies into the Baltic Sea has decreased more than twice compared to the 1980s. In relatively poor condition are Lake Pihkva and Lake Lämmi and several small watercourses situated in the industrial northeastern Estonia, near Tallinn and in the Pandivere and Adavere-Põltsamaa nitrate sensitive areas. The nitrogen content of lakes used for recreational purposes has unfortunately increased somewhat. The reason for the poor condition of watercourses or parts them often lies in impoundment installations, which obstruct water renewal and fish migration routes. At times of unfavourable weather conditions, the Baltic Sea and Lake Peipsi suffer from proliferation of algae, while

the general condition of water bodies has improved. An important role in the decreased eutrophication of Lake Peipsi has been played by the completion of the new sewage treatment plant of Tartu. The concentration of nutrients (*nitrogen and phosphorus compounds*) measured in the coastal waters of Estonia is almost the same as in the Gulf of Finland and other regions of the Baltic Sea. The level has remained more or less the same over the past decade, while the impact of human activity on the coastal waters of Estonia has decreased. The favourable condition of sea water has not yet been attained everywhere, but positive changes have been observed mainly in the Gulf of Pärnu and in the Gulf of Tallinn. Consequently, it is necessary to decrease even more the amount of pollutants finding their way into the sea as a result of economic activities, as they deteriorate the ecological status of coastal waters and indeed the entire Baltic Sea. Sustainable use will secure the restoration of the favourable condition of coastal waters and natural reproduction of fishery resources and water biota.

1. General description of the fisheries sector

The fisheries sector is important in Estonia both in social and regional terms, constituting a significant source of employment and income in some parts of the country. In the years 2003 and 2004, the fisheries sector made up 0.5% of Estonia's domestic product (GDP).

Fisheries form a part of the local culture in coastal areas and on islands, which attributes a deep socio-cultural meaning to fisheries in Estonia.

The fisheries sector as a whole has been in a state of relative stagnation since 1998. Economic development has been slow and significantly poorer than in other parts of the economy. Investment level is the lowest and the sector is characterised by some of the highest depreciation costs in the total costs of businesses. The fisheries sector still relies largely on facilities and technology dating back to the Soviet era. Granted, with the accession to the European Union there has been upgrading of technology in the years 2001–2004 – primarily for better complying with EU hygiene requirements, but only a fraction of overall assets has been actually replaced. The main problem is that enterprises channelled their savings into technologies and meeting hygiene requirements over a very short period of time and now lack finances for everyday management. The prices of raw material and energy carriers have increased more than those of end products, resulting in smaller profit margins and difficulties in meeting financial obligations.

By 2007, the Estonian fisheries sector is made up of primarily micro, small and medium-sized enterprises.

The Estonian fisheries sector consists of three major fields: fishing, aquaculture and fish processing and marketing.

1.1. Fishing

Estonian fishing is principally divided into three parts according to fishing grounds: fishing in the Baltic Sea (trawl and coastal fishing), inland fishing and distant water fishing. Fishing in the Baltic Sea is in its turn divided into trawl fishing and coastal fishing.

1.1.1. Fishing in the Baltic Sea

1.1.1.1 Trawl fishing in the Baltic Sea

Fishing grounds and fishing

Regulated fish species in the Baltic Sea are Baltic herring, sprat, cod and salmon. Every year, fishing quotas for the Baltic Sea are imposed on EU Member States by

a European Commission regulation. The quotas allocated to Estonia are divided among trawling enterprises according to historical fishing rights. Within the country, 70% of the Baltic herring quota is allocated to trawl fishing and 30% to coastal fishing. Over the years, 90% of the allocated quotas have been exhausted. In this sense an exceptional year was 2005, when 31% of the Baltic herring quota was left uncaught due to ice. Baltic herring and sprat are mainly destined for human consumption and to a small extent for fishmeal.

The primary fishing gear are trawls, and to some extent cod and salmon nets; trawl fishing takes place mainly in the fishing squares presented in Annex 1.

In 2005, trawl fishing in the Baltic Sea made up 73% of the total catch quantity of Estonia (see Annex 2). Based on the prices at first sale for three primary species (Baltic herring, sprat and cod), the proceeds on the quantities caught amounted to EEK 129 million (EUR 8.2 million) in 2005 (see Annex 3).

Employment and socio-economic situation

Trawlers employ ca 600 fishermen. The percentage of women is very small – 9%. Women mainly operate in the administration and accounting of trawling enterprises. During off-season lasting from June to mid-September, the employees are on vacation or work on repairing vessels and trawl fishing gear. According to the spokespersons of the enterprises questioned, enterprises try to retain a specialised staff by paying minimum wages even when there is a shortage of work. The income of fishermen working on trawlers has not been studied separately, but data provided by the Statistical Office show that the income of inland, coastal and trawl fishermen of the fishing sector was 40% lower compared to the average income in Estonia in 2004.

In relation to the disposal and altering the purpose of fishing vessels under measure 3.9, fishermen left unemployed were paid socio-economic benefits in the period of 2004–2006 in the framework of measure 3.12.1 “Social measures accompanying the restructuring of the fisheries sector” (see Annex 4).

Condition of the fleet

In 2005, trawl fishing in the Baltic Sea was operated by 154 trawlers of segment 4S1. The total capacity of trawlers is presented in Annex 5. The average age of vessels is 26 years.

In relation to the implementation of FIFG measure 3.9 “Adjustment of fishing capacity of the fishing fleet”, fishing capacity in segment 4S1 decreases by ca 17% of the fleet’s total capacity (GT) and ca 18% kW (see Annex 4).

Investments into the modernisation of the Baltic Sea trawl fleet have been made under FIFG measure 3.10 “Modernisation and renewal of fishing fleet” (see Annex 4).

Condition of resources as at 2006

Baltic herring stocks in the open Baltic Sea and Gulf of Finland, except the Gulf of Riga, have hit a low point, while increase in stocks has been observed in the past couple of years in the southern part of the Baltic Sea. Baltic herring stocks are in a good condition in the Gulf of Riga (within safe biological limit), where abundance has been high. The mild winters of recent years have favoured the emergence of

strong generations, while rough winters may have the opposite effect. The specific areas, salinity and the resulting changes in food base have dropped the average live weight of the Baltic herring. The long-term outlook for the Baltic herring at high seas largely depends on the condition of cod and sprat stocks, as cod is Baltic herring's natural enemy and sprat a competitor for food.

Sprat stocks are doing well, but showing a declining trend. As young, 1–2 year old sprats form a rather large part of industrial fishing, the abundance of the resulting generations may cause significant short-term fluctuations in catches. The ICES working group, however, predicts (in a 10-year perspective) that the sprat spawning stock biomass will remain within the safe biological limit.

Cod and salmon are also caught in the Baltic Sea. The eastern cod stock is in a poor condition, below the safe biological limit. This is due to a very scarce and irregular influx of salty and oxygen-rich water through the Belts in the past decades; this aspect has a strong impact on the condition of stocks. The western stock is in a satisfactory condition (ICES estimates that the stock is able to make use of its entire natural reproduction ability), but is still threatened by strong fishing pressure. As fishing is mainly based on juveniles, the rejected quantities are significant. The condition of stocks could be improved by decreasing juvenile mortality in industrial fishing. In order to protect and recover cod stocks, the European Commission is initiating a multiannual plan for cod fishing in the Baltic Sea aiming at the sustainable use of cod stocks.

The open Baltic Sea salmon stocks mainly consist of restocked fish, ca 27% of smolts are of natural origin (primarily originating from the Gulf of Bothnia). However, the state of natural stock in the Gulf of Finland (sub-division 32) is very poor, many spawning grounds have either been destroyed or access to them has been obstructed by dams. As a result, only 2% of smolts are of natural origin. Fishing is based on mainly restocked fish (90% of the catch).

1.1.1.2. Coastal fishing in the Baltic Sea

Fishing grounds and fishing

The main coastal fishing grounds are Pärnu Bay, Väinameri Sea and the Gulf of Finland (see Annex 1). Coastal fishing extends to 12 nautical miles or up to the 20-metre isobath. Coastal fishing concentrates on a number of different species; economically more important are perch, Baltic herring, smelt, pike-perch, flounder, eel, also garfish and sea trout and to a lesser extent salmon and pike (see Annex 2). Fishing gear used in coastal fishing includes traps, nets and tended lines. Catching Baltic herring with pound nets has been gaining importance in recent years. Fishing gear used in coastal fishing is depreciated and partly non-selective.

Coastal fishing, particularly on the western coast and islands, is made difficult by the large number of grey seals, who break the fishing gear of fishermen; their numbers have been on a constant rise over the past years. In Väinameri Sea, the significant increase of the natural enemy of coastal fish, the cormorant, has hindered the recovery of stocks and consequently decreased the catches of fishermen.

The quantities caught by coastal fishing make up 8% of the total catch of Estonia of 2005. The prices at first sale of species targeted by coastal fishing are presented in Annex 3.

Employment and socio-economic situation

As at May 2006, there are 2,572 coastal fishermen, including fishermen using the fishing rights of others; 1,434 of them hold fishing rights and of these, 92 fishermen hold fishing rights for the Gulf of Finland as well as inland waters. The number of fishermen using the fishing rights of others is 1,138 and 106 of them also operate in inland waters. 1.6% of coastal fishermen are women. Such a division by gender among persons employed as fishermen can be expected, as this work is physically strenuous and thus not very well suited for women. The fishermen estimate that the working season of coastal fishermen lasts up to 4 months in a year. As a result, fishing has become a secondary source of income besides other work for most of commercial coastal fishermen. Surveys have shown that fishing constitutes the main source of income for one third of coastal fishermen; others get their main income from other activities. 20% of coastal fishermen are interested in changing professions and 14% of coastal fishermen are retiring within the next 10 years. The average age of coastal fishermen is over 50 years. In 2004, a coastal fisherman's monthly income from fishing was 55% smaller than the average monthly income in Estonia; it is also smaller than the income of inland and trawl fishermen.

Condition of the fleet

Coastal fishing employs a total of 892 vessels of less than 12 m, included in segment 4S2. The total capacity of vessels is presented Annex 5. The average age of vessels is 18 years. The renewal of coastal fishing vessels and gear was supported under measure 3.10 "Modernisation and renewal of fishing fleet" in the years 2004–2006 (see Annex 4).

Condition of resources as at 2006

The condition of pike-perch, perch and vimba bream stocks in Pärnu Bay has deteriorated due to intense fishing. Strong generations are fished out in 1–2 years. The situation must be remedied by decreasing fishing mortality rate, impeding catching undersized fish and stepping up checks. The Kihnu study area has not had very strong perch generations since the year 2000 and decrease in stocks can be expected for 2006. Flounder stocks in this area have increased somewhat. It should be added that the poor condition of stocks is not directly related to environmental conditions, as the condition of the bay has improved significantly over the past decade.

The condition of resources in the Väinameri Sea is poor: perch stock has gone down, pick-perch stock has hit a low point, and the abundance of vimba bream and roach has also decreased. As the abundance of predatory fish is low, the numbers of crucian carp and goldfish as well as white bream, rudd and bleak are on the rise. The situation must be remedied by decreasing fishing mortality rate. It is also necessary to limit the numbers of cormorants, who impede the potential for stock

recovery by eating a total of some 3,300 tonnes of fish according to latest studies. Moreover, the main prey for cormorants is precisely juvenile fish. In the Gulf of Finland, the abundance of perch and European whitefish has decreased over the past five years, which might be related to increased water temperature. However, studies conducted in 2006 indicate a slightly increasing tendency in catches, and the abundance of flounder has increased.

The stocks of highly migratory species, mainly salmon and sea trout, have hit a low point in Estonia's coastal waters. One of the primary reasons for such a situation lies in barrages installed on watercourses, limiting the access of fish into suitable breeding and living areas; another reason is the destruction of spawning grounds and habitats. In order to improve the condition of stocks, the free movement of highly migratory fish in watercourses should be restored and both spawning grounds and habitats should be conserved or improved. In the longer term, the sustainable management of stocks of highly migratory fish, such as salmon, sea trout and migratory whitefish, should entail among other aspects creating a broodstock for these species in fish farms with a view to securing the preservation of biological and genetic diversity.

1.1.2. Inland fishing

Fishing grounds and fishing

Industrial fishing in the Estonian inland waters is significant in two largest lakes: Peipsi (together with lakes Lämmi and Pihkva) and Võrtsjärv (see Annex 1). Fishing in Lake Peipsi is regulated by an annual agreement with Russia and fishing availabilities are allocated among commercial fishermen on the basis of historical fishing rights by fishing gear. Fishing takes place within a block quota. Fishing is regulated on the basis of recommendations from scientists. The same principle applies to regulating fishing in other inland water bodies, and scientists' recommendations on the number of fishing gear are taken as a basis. The quantity of inland catch is quite small compared to sea catch (2% of the total catch in Estonia in 2005), but as the price of fish caught in inland waters (see Annex 3) is significantly higher than that of sea fish, inland fishing still constitutes a regionally important source of income. The main species caught are perch, pike-perch, bream, smelt, whitefish, river lamprey (from Narva River) and eel (see Annex 7). Fishing gear includes traps, nets, pond nets and demersal seines.

The fishing gear used in inland waters is depreciated and partly non-selective.

A unique activity in the eyes of the rest of Europe is wintertime fishing from under ice practised in Estonia. Wintertime fishing allows inland and coastal fishermen to prolong their 4–5-month fishing season up to a couple of months, depending on ice conditions.

Employment and socio-economic situation

As at May 2006, inland waters employ a total of 963 fishermen including fishermen using the fishing rights of others. Out of the 79 fishing in Lake Võrtsjärv, 53 hold fishing rights; out of the 530 fishing in Lake Peipsi, 96 hold fishing rights; the rest fish in other waters. The general average percentage of women among fishermen is

1.6%. Surveys have shown that fishing is the main source of income for one third of the fishermen, while the rest get their main income from other activities. Ca 30% of the fishermen are interested in changing professions and 21% are retiring. The average age of an inland fisherman is over 50 years. Monthly income from fishing resembles that of a coastal fisherman, which is lower than the average income in Estonia, and the plummeting of prices at first sale has lowered income even more since 2001, while expenditure on gear (fishing gear, fuel, boat repairs, etc.) has increased.

Condition of the fleet

Entering inland vessels into the fishing vessel register is not compulsory in Estonia, unless the vessel's owner has wished or wishes to apply in the future for assistance from the public sector. According to the fishing vessel register, there are 352 inland vessels and they are included in segment 4S4. The total capacity of registered vessels is presented in Annex 5. Investments related to the implementation of FIG measure 3.11.4 "Investment support for inland fisheries" are presented in Annex 4.

Condition of resources as at 2006

Inland fish stocks are in a good condition. Pike catches in Lake Võrtsjärv are at an all time high (ca 60 t), and pike-perch, perch and bream catches are also quite good. Eel catches, though, have suffered in recent years due to unfavourable water level fluctuations that have hindered fish migration. Migration success is severely affected by barrages installed on watercourses. According to scientists' estimates, the fish stocks of Lake Peipsi, Lämmi and Pihkva are in a relatively good condition. Perch fishing in 2006 relies on the generation of 2001. Lakes lacked strong perch generations in the years 2001–2004, but a new and very strong generation emerged in 2005; it can be fished from the end of 2007. Lake Peipsi pike stock has decreased for several years in a row, but this process is now being turned around, and a new average-strength generation emerged in 2003–2004; it can be fished from the year 2007. Bream stock has improved thanks to the strong generations of mid-1990s joined by a series of strong generations in the 2000s. The abundance of smelt is low in the lake, as pike-perch feeds on it. Stock has decreased since the year 2003, reaching the lowest level in history in 2004. Pike-perch stock is set to decrease in 2006, as the population consists of specimens from relatively weak generations. Catches rely on the generations of 2001 and 2002, but the decline in their abundance will bring the stock down in 2006–2007. Roach stock remains high in the lake, but a declining tendency can be observed. The condition of cold water fish, such as whitefish, vendace and burbot is poor and vendace fishing is prohibited. This situation may be caused to some extent by changes in spawning ground environment brought about by an increase in water temperature.

River lamprey stock is generally stable in the rivers of Estonia. As with other highly migratory species, the conservation of the river lamprey requires securing their free movement in watercourses, maintaining or improving the condition of spawning grounds and habitats, preventing pollution and changes in hydrological regime and managing stocks in a sustainable manner.

1.1.3. Fishing in distant waters

Fishing grounds and fishing

Estonian distant water fishing takes place in the Atlantic Ocean and in the Spitzbergen area (see Annex 23), mainly in the Northwest, Southwest and Northeast Atlantic. The main fisheries are for shrimp, but squid, blue whiting, redfish, hake and Greenland halibut have also been targeted (see Annex 8). In 2005, fishing in distant waters made up 17% of the total quantity caught in Estonia. Distant water fishing vessels land at the ports of Iceland, Spain and Canada. The economic sustainability of the shrimp sector has decreased because small-size shrimp has caused a drop in purchase price in recent years, while fuel prices have gone up.

Employment and socio-economic situation

The average number of persons employed in the distant water fisheries sector is between 250 and 270. The percentage of women employed in distant water fisheries is even smaller than that of Baltic Sea trawl fisheries – up to 6% of all persons employed. In this sector, women generally work as observers on vessels or in accounting and administration. As distant water fishing enterprises use rented workforce, it is not possible to establish an exact number of persons employed throughout the year.

Condition of the fleet

The sector operates with 13 trawlers belonging to segment 4S3. The total capacity of trawlers is presented in Annex 5. The average age of vessels is 26 years.

The renewal and modernisation of distant water fishing vessels and gear was supported in the years 2004–2006 under measure 3.10 “Modernisation and renewal of fishing fleet” (see Annex 4).

Condition of resources as at 2006

Fishing in distant waters is mainly concentrated on shrimp, redfish, Greenland halibut and ray. Shrimp stock in NAFO divisions 3L and 3M is generally in a good condition. However, in division 3M, small size shrimp constitutes the majority of shrimp catches of 2005; this can be explained by the weak shrimp generation of 2003 and excessive fishing pressure in recent years, but also by an increase in water temperature, which in its turn has a positive effect on the abundance of cod. Weakening of progeny has been observed as well, and this might have an impact on the catch of 2007. The condition of resources has lately deteriorated in the Spitzbergen waters and scientists are advising against increasing the catches of recent years, and this can result in the reduction of the quota. The improvement of the stock of cod, the shrimp’s primary natural enemy, is thought to be behind the deterioration of stock. The stock of Greenland halibut in NAFO division 3LMNO is at a low point. A 10-year plan for the recovery of Greenland halibut has been adopted, providing for the reduction of quotas year by year. The plan has been in action since 2004, but has yet to show signs of improvement in stock. As for

redfish, scientists have not observed signs of stock improvement in NAFO division 3M. Nevertheless, the redfish quota for 2005 was exhausted to a 100%, which has not happened in recent years and may be a sign of stock recovery. Ray stocks in NAFO division 3LNO are in a relatively good and stable condition.

1.1.4. Environmental impact of fishing

Persistently strong fishing pressure has had a negative impact on water environment as well. Depreciated, storm-ridden or illegal and unmarked fishing gear has often been left in water bodies, thus increasing the extensive damage to the entire ecosystem of the water body.

Fish stocks as a natural resource depend directly on human activities among other aspects, including on fishing capacity and quantities. In order to prevent the harmful environmental impact of fishing, several protection measures are applied: closed areas, closed seasons, establishing minimum fish sizes and catch limitations as well as various requirements and restrictions for fishing gear. In addition, technical supervision of fleet is conducted constantly. Training and dissemination of information have contributed considerably to raising environmental awareness among fishermen as well as people living near water bodies.

1.2. Ports and landing locations

First sales receipts feature 276 different ports and landing locations, practically all of which are privately owned. Ports that are being registered or have been registered are presented in Annex 9.

Primary Baltic Sea ports

When fishing in the Baltic Sea, coastal fishermen tend to use the same ports/landing locations as trawl fishing enterprises; nevertheless, coastal fishermen also use landing locations inaccessible by trawlers due to their draught. Based on the quantities landed in 2005, the most important jointly-used ports are those of Dirham, Veere and Miiduranna, with a total of more than 10,000 t of fish landed. The quantities landed in the same year at the ports of Mõntu, Roomassaare, Lehtma, Pärnu, Meeruse and Leppneeme varied between 1,000 and 10,000 t. Of the ports used exclusively by trawlers, the most important one is that of Paldiski. Of the landing locations used by coastal fisheries, the ports of Meeruse and Kõrgessaare are the principal ones (see Annexes 10 and 11).

Primary landing locations in inland waters

There are a total of 39 landing locations in inland waters; 30 of these are situated at lakes Peipsi, Lämmi and Pihkva and 9 at Lake Võrtsjärv. Based on quantities landed, the principal landing locations at lakes Peipsi, Lämmi and Pihkva are Alajõe, Räpina, Mehikoorma, Kolkja and Lohusuu and the port of Kallaste; in each of them more than 90 t of fish were landed in 2005. The main landing location at Lake Võrtsjärv is the port of Valdma (see Annex 12).

Condition of ports and impact on employment

While not providing numerous jobs, ports are of crucial importance in terms of local fishing. Of the 112 persons employed by ports, 8% are women.

As the quantities landed are relatively small and as the revenue from landing forms a small part of the port owners' income, many ports engage in additional activities, such as tourism and carriage of goods and passengers.

Due to low profitability, landing infrastructure fails to comply with contemporary requirements in many ports. They lack fish sorting facilities, cold stores, fuel devices; hoists, berths, etc. are depreciated. This imposes seasonal restrictions on fish supply and decreases fish quality and price. The situation is better in the ports where the owner is also active in fishing and processing, as this secures a more efficient management and the highest investment capacity.

Supported investments

The investments related to the implementation of FIG measure 3.11.3 "Modernisation of fishing ports" are presented in Annex 4.

1.3. Aquaculture

Aquaculture enterprises and species farmed

The main domains of aquaculture are commercial fish farming, fish farming for restocking natural waters and crayfish farming.

As at 1 January 2006, the number of aquaculture enterprises is 26 (see Annex 13). In addition to producers of commercial fish, 53 Estonian enterprises engage in fish farming as stated in the commercial register. These include owners of small ponds and fishing tourism undertakings.

The traditional species farmed in Estonia are rainbow trout and carp.

In terms of quantity, the primary species with the most potential is rainbow trout; fishing tourism is based on this species as well. The most successful novel species are eel and crayfish. Commercial farming of whitefish, pike-perch, perch and sturgeon offers a completely new outlook.

Some of aquaculture producers operating in the Natura 2000 areas must take into consideration additional requirements and a decreasing revenue base (see Annex 14).

Aquaculture production

The aquaculture sector is characterised by a dependence on imported juveniles and roe, as Estonia lacks centres for the reproduction of breeding material.

Aquaculture production has decreased from the largest quantity of 1,743 tonnes produced in 1989 to 500 tonnes produced in 2005; at the same time, the area of ponds and basins has diminished radically (see Annex 15). Production quantities have decreased mainly as a result of the land and ownership reform and low investment level in the first years after regaining independence.

The production quantities of 2005 fail to meet domestic demand, as the need for the domestic consumption and processing of salmonids currently exceeds 2,000 tonnes.

Insufficient production volumes and the absence of a producer organisation render the market price of aquaculture production unstable.

Employment and socio-economic situation

In 2003, the aquaculture sector employed 100 people, and this number has stayed more or less the same. Of all persons employed in the aquaculture sector, an average of 30% are women. According to the representatives of enterprises, the principal activities carried out in fish farms require more physical strength, and are therefore more suitable for men. Increased production is not set to have a significant impact on employment. Wage level in aquaculture was considerably inferior to the average Estonian level in 2005.

Fish diseases and control thereof

The main problem in terms of the support system for the prevention and control of fish diseases is that although Estonia has technologically well-equipped veterinary laboratories, their ability to diagnose fish diseases is limited due to a lack of specialists. In addition, Estonia lacks a quarantine facility necessary for the fish species introduced into Estonia and for combating the spread of diseases and parasites accompanying this introduction. Experiences in the diagnostics of fish diseases are insufficient due to the lack of properly-trained ichthyopathologists.

Supported investments

The investments supported under SAPARD measure 3 “Investment aid for developing and diversifying alternative economic activities in rural areas” are presented in Annex 16.

The investments supported under FIG measure 3.11.2. “Investment support for aquaculture” are presented in Annex 4.

1.4. Processing and marketing of fish

Fish processing industries and production

As at 13 September 2005, 97 production units dealing with fish processing and the production of fishery products were under the supervision of the Veterinary and Food Board (see Annex 22). The principal activities of Estonian fish processing include freezing and filleting of fish and the production of fish preserves and prepared food (see Annex 17).

The structure of cold storage plants and filleting departments is characterised by a large number of small units. The primary raw material of Estonian fish processing enterprises are local Baltic Sea fish species such as Baltic herring and sprat, and the filleting business is based on the freshwater species perch and pike-perch.

Prepared food is mainly produced from imported raw material.

Fish processing enterprises have not lately invested enough into product development. Product development is often handled by the same people who work in production on a daily basis, and enterprises generally do not keep separate count of research and development costs.

Low purchase price and quality of fish (sprat, Baltic herring) has fuelled the threat of domestic raw materials being turned into animal feedingstuffs. One of the reasons for this is that if possible, large quantities of fish are sold for a slightly lower price to Nordic countries for fishmeal, since the established producer organisations have not yet actively engaged in joint marketing and regulation of prices.

In 2004, the total value of processed production amounted to EUR 67.4 million and turnover increased 20% compared to 2003.

Marketing

In 2004, the domestic sales of fish and fishery products made up 25% of total sales and ca 75% of fish and fishery products are exported (see Annexes 18 and 19). The share of fish and fishery products in food export has decreased 19% in 2004 compared to 1996. At the same time, fish trade is one of the few sectors of the economy with a positive foreign trade balance. Fish forms the largest part of food exports. In 2004, Estonia traded in fish and fishery products with 72 different countries. Weak product and market development caused by a deficit in circulating capital has not yet managed to increase the share of fish and fishery products in food exports.

Producer organisations

To this day, fresh fish is marketed by fishermen or fishing enterprises directly to first buyers or fish processing industries, who can dictate the price of fish on the basis of supply and demand. Joint marketing has not yet been applied. The first three producer organisations were approved at the end of 2005, and of the Baltic Sea fish species quota they comprise Baltic herring (51.4%), sprat (79.6%) and cod (72.9%). The aim of establishing producer organisations is first and foremost to ensure rational fishing and to improve the conditions of sale of their members' products with measures that favour production planning and adjusting it to demand in terms of quantity and quality, improve the concentration of supply, stabilise prices and promote fishing methods that support sustainable fishing.

Employment and socio-economic situation

In 2004, fish processing enterprises employed 3,636 people, almost 70% of whom are women. Employment in this sector has changed significantly over the past 10 years (see Annex 20). The average monthly wages of EEK 5,652 (EUR 361) paid in enterprises make up 80–85% of the average wages paid in food industry and 78% of average wages in Estonia. The sector is characterised by seasonal employment, high level of staff turnover, difficult working conditions coupled with low wages and ageing staff.

Fish consumption in Estonia

Estonians annually consume 16 kg of fish per person, which is almost 8 kg less than in old Member States. Increase in fish consumption is mainly restricted by the high price of fishery products and low purchasing power of the domestic market.

Investments made

Investments supported under SAPARD measure 2 “Investment support for improving the production and marketing of agricultural and fishery products” are presented in Annex 16.

Investments supported under FIG measure 3.11.1. “Investment support for processing of fishery and aquaculture products” are presented in Annex 4.

1.5. Fisheries regions

Fisheries regions in Estonia can be divided into two: regions situated by the sea and regions situated by inland waters.

Fisheries regions situated by the sea can be divided into three: the Väinameri Sea region (including the western part of Saaremaa and Hiiumaa), the Gulf of Riga region and the Gulf of Finland region. Fisheries regions situated by inland waters are the lake Peipsi, Lämmi and Pihkva region and the Lake Võrtsjärv region.

In these regions, the share of people engaged in the fisheries sector among the population of rural municipalities is the highest and the number of fishermen in these regions is around 500, except the Lake Võrtsjärv region, where the number of fishermen is ca 60. All these regions are characterised by low population density and decreasing fishing trend. That said, fisheries activities and fishery resources vary by region, thus allowing for local fisheries action groups to elaborate strategies taking into account the specific characteristics of their respective areas.

In view of the above-mentioned observation, we expect these regions to develop up to 8 fisheries action groups (see Annex 21).

Insufficient experiences in the implementation of LEADER make it difficult to rely on these experiences. Neither are there any other existing solid structures upon which to base fisheries action groups. We therefore assume that most of fisheries action groups will be established in regions as a new structure.

In some fisheries regions, the created fisheries action groups may happen to be territorially situated in the same areas as the newly-established LEADER action groups.

Separation from LEADER and regional development actions (e.g. diversification, restoration of villages, training or nature tourism) is secured by local action plans and development strategies submitted to the Ministry of Agriculture for assessment and approval.

1.6. Division of spheres of responsibility in the fisheries administration

In Estonia, the administration of the fisheries domain is divided between the Ministry of Agriculture and the Ministry of Environment.

The Ministry of Agriculture’s responsibilities are the following:

- economic development of the fisheries sector, comprising the implementation of the market regulation system, support and state aid

- organising commercial fishing and keeping records of commercial fishing, including managing the national fishing vessel register and collecting data on commercial fishing (from 1 April 2006)

The government agency Agricultural Registers and Information Board (ARIB), operating under the Ministry of Agriculture's area of government, is in charge of managing the provision of state aid and agriculture and rural development support of the European Union, keeping national agricultural registers and other databases prescribed by law, processing and analysing this data.

The Ministry of Environment's responsibilities are the following:

- assessment of the condition of fishery resources, organising related scientific research
- laying down the technical measures for the protection of fishery resources and determining catch quotas and fishing effort restrictions
- organising the reproduction of fishery resources by breeding and the restoration of fish spawning grounds and habitats
- organising recreational fishing
- managing supervision over the use of fishery resources and natural environment, including natural water bodies

Fisheries are managed in the Ministry of Environment by the Fishery Resources Department and fisheries specialists of county environmental authorities. Supervision is managed by the Environmental Inspectorate.

The Environmental Inspectorate is a state agency operating under the Ministry of Environment's area of government. It coordinates and carries out supervision of the use of natural environment and natural resources in all fields of environmental protection, applying enforcement powers of the state on the bases and to the extent prescribed by law. In the case of environmental offences, the Environmental Inspectorate conducts extra-judicial proceedings and carries out urgent investigative actions in criminal cases. The primary legislation regulating environmental supervision is the Environment Supervision Act.

Pursuant to the Fisheries Market Organisation Act, the Fisheries Council has been set up. The task of the Council is to advise the Minister of Agriculture on fisheries-related matters. The Council is made up of representatives from the Ministry of Agriculture, Ministry of Finance, Ministry of Environment, Agricultural Registers and Information Board, Environmental Inspectorate, Estonian Fishermen's Association, Estonian Association of Fishery, Estonian Fish Farmers Association, Peipsi Sub-basin Fishermen's Association and Estonian Association of Distant-Water Fishing.

The Fisheries Council has been equipped with an expert working group, including, in addition to representatives of the above-mentioned organisations, representatives of the Estonian Green Movement, recreational fishing organisations and the Veterinary and Food Board. The working group discusses important fisheries-related documents (including regulations, strategies, operational programmes, etc.) before submitting them to the Fisheries Council.

Supervision of compliance with marketing standards and requirements to inform customers is carried out by:

- 1) Veterinary and Food Board
- 2) Consumer Protection Board on the basis of the powers conferred on it under the Food Act
- 3) Environmental Inspectorate on the basis of the powers conferred on it under the Fishing Act

In 2005, the Environmental Inspectorate, Veterinary and Food Board and Tax and Customs Board launched an intense cooperation concerning the fish caught, registered and introduced into industry. The purpose of these controls is to secure exact registration of quantities on first sales receipts or delivery declarations, to guarantee the identification of the origin of fish at their arrival in industries and to check compliance with hygiene requirements when transporting and processing fish.

In order to ensure better supervision and to collect and analyse data, a database incorporating the national fishing vessel register and its data and data on commercial fishing rights and catches has been created. The database is intended, with varying rights of use, for the Ministry of Agriculture, Veterinary and Food Board, Ministry of Environment, Environmental Inspectorate and other institutions.

2. SWOT analysis of the sector and the fisheries administration

2.1. Strengths of the sector and the administration

- Existence of natural resources, water and fishery resources
- Clean and versatile nature, interesting historical and cultural heritage
- Long-standing traditions in fishing and fish processing and experienced sector employees
- Existence of means of production (fishing vessels, production lines, etc.)
- Versatility/unity of the sector (existence of coastal, trawl and distant water fisheries, aquaculture and fish processing sectors)
- Stable macroeconomic environment (trade relations with foreign countries)
- Market demand and export potential for fish
- Diverse socio-economic make-up of local communities, which would allow for the creation of added value, diversification of activities and preservation of natural heritage

- High percentage of workforce with higher education in the administration and great valorisation of education by the society, functioning as prerequisites for the learning ability of workforce
- Long-standing experiences in fisheries administration, including experiences in the management of support
- Consistent scientific research for stock assessment
- Availability of a technical basis for supervision (Veterinary and Food Board, Environmental Inspectorate)

2.2. Weaknesses of the sector and the administration

- Unpopularity of the sector due to low income
- Fishing capacities exceed fishing availabilities
- Depreciation of means of production and processing, high energy consumption (vessels, fishing gear, production and processing equipment, etc.)
- Insufficient joint activity and lack of experiences in various types (producer organisations, regional action groups, networks) of joint activities
- Divide between the skills of the workforce and the demands of the labour market, significant shortcomings in the vocational training of workforce and an incomplete system of retraining
- Problems with accessing capital for small businesses and consequently low investment level
- Insufficient long-term competitiveness of enterprises: low added value of production, insufficient usage of quality standards for fresh fish, low expenditure on innovation, weak marketing
- Weak socio-economic development of rural areas and great inequality between the capital and other regions of the country

- Underdeveloped infrastructure, inadequate technical level of transportation networks (ports, roads)
- Dependence of fish farms on imported juveniles and roe due to the absence of centres for breeding
- Insufficient product and market development
- Advanced age of sector staff

- Insufficient development of information systems (compatibility of databases, cross-checking)
- Workforce shortage and employee turnover due to low income in the administration

2.3. Opportunities of the sector and the administration

- Availability of fishery resources with positive potential (in good condition) (Baltic herring, sprat)
- Higher market price for inland water fish
- High level of domestic demand for fishery and aquaculture products exceeding current production, thus allowing for increasing consumption
- Diversification of aquaculture species and favourable natural conditions for aquaculture
- Increase in attributing added value to fishery products
- Increased demand for economic activities based on natural environment and cultural heritage (nature and culture tourism) contributing to the stabilisation of workforce in fisheries regions
- Developing joint activities through operating producer organisations, fisheries action groups and various networks
- Achieving a balance between production and processing capacity and availability (fishing capacity versus fishing availability, production capacity versus production availability, including raw materials and market)
- Ensuring sustainability in all subsectors (investments made in 2007–2013 allow enterprises to operate without investment support starting from the year 2014)
- Maintaining and improving environmental conditions by favouring environmental investment
- Diversifying fisheries by introducing modern technologies, developing new products, finding new markets and growing novel species
- Developing infrastructure (landing locations of fish, ports) and decreasing production and processing energy consumption (vessel engines, processing enterprises, etc.)
- Great potential for local development and diversification on the basis of natural heritage and local traditions
- Additional opportunities for developing human capital (EU educational cooperation, virtual learning of international scope, in-service training and retraining)

- Increasing administrative capacity by:
 - Constantly developing information systems (cross-checking of databases, reports)
 - Improving control mechanisms
 - Intensifying/enhancing cooperation among administrative agencies
 - In-service training

2.4. Threats of the sector and the administration

- Reduction of cost advantages in international competition, resulting in processing enterprises relocating to countries with more affordable production costs, such as Ukraine and Russia
- The sector's dependence on support (the sector will not be able to cope in a sustainable manner after the year 2013)
- Threat of environmental pollution in the Baltic Sea, which is an environmentally sensitive area (gas pipe, boat transport, etc.)
- Decreasing quality of water bodies may lead to further reduction of resources
- Loss of highly qualified or otherwise scarce workforce in the context of the common European labour market
- Insufficient catch quotas and decreasing fishery resources (cod, salmon, etc.)
- Increasing populations of natural enemies (seals and cormorants) harm fishery resources and fishing gear
- Persistent increase of running costs (fuel) together with decreasing market prices (fisheries for shrimp)
- Increasingly strict environmental, hygiene, safety, etc. requirements
- Deterioration of conditions in natural habitats

- Increased complexity/scope of administration schemes resulting in increased costs (in the context of a limited state budget)

3. Objectives and priorities

The general objective of the Strategy is to develop the Estonian fisheries sector as a part of the economy and to increase the competitiveness of fishery products in domestic and external markets, thereby contributing to the creation of a favourable and balanced fisheries environment in Estonia.

3.1 Objectives and priorities for the development of fishing and ports

The objective of the Fisheries Strategy is to restructure the fishing sector in order to ensure the increase in income of people engaged in fishing to the Estonian average level by the following priorities:

As fishing capacity still exceeds fishing availability in Estonia, it is of primary importance to ensure coordination between fishing capacity and fishery resources, i.e. to achieve the optimum size of the fishing fleet. This provides fishermen with stable work and income, while decreasing the pressure to fish illegally. In order to adjust fishing capacity, disposal of vessels should be joined by the various opportunities for altering the purpose of vessels, which would also contribute to making use of the fishermen's seafaring ability and diversifying their employment. These priorities are planned to be financed under EFF priority axis 1.

In many fisheries regions, the number of fishermen dependant on fishing is not in concordance with fishery resources; this concerns particularly coastal and inland waters. It is therefore necessary to pay attention to in-service training and retraining of fishermen with a view to adding efficiency and variety to their occupation or to locating alternative sources of income. EFF priority axis 4 provides good opportunities for attaining these goals.

Estonian fish fauna is continually damaged by the deteriorated quality of habitats, particularly spawning grounds and the diminished size thereof. Fish habitats are affected by factors resulting directly from human activity alongside natural factors. The most common factors of this type are damming of watercourses, altering riverbeds (straightening, dredging), altering the shore area and water meadows, relocation of sediments and amelioration in catchment areas. It is therefore necessary to restore fish spawning grounds in various regions, which in its turn will create the necessary conditions for increasing fishery resources. We will contribute to solving these problems by employing the opportunities and resources of EFF priority axis 3.

Taking into consideration the condition of fishery resources and the potential developments in the Baltic Sea, Estonian inland waters and distant water fishing regions, it is essential to modernise the fishing fleet, primarily in view of increasing selective fishing gear and savings on fuel as well as stepping up environmental and vessel safety requirements and improving occupational safety conditions.

Switching over to more selective fishing gear will secure the fishermen a more stable and higher income through sustainable management of fishery resources. In doing so, it is necessary to take into account the specific characteristics of the caught fish species and water bodies, as well as the traditions of fisheries regions.

In order to increase the competitiveness of the fisheries sector, the Estonian fishing fleet must be modernised as the fleet is mainly made up of vessels from the Soviet era built in the 1970–1980s, characterised by extremely low-quality steel and unreliable engines. In order to decrease expenditure on environmental pressures and fishing and to increase the quality of fishing, the Estonian fishing fleet must be modernised and renewed, accompanied by introducing newer vessels and more modern and selective fishing gear (including seal-proof fishing gear) and allowing for the replacement of main engines with more economical devices.

It is also important to meet the ever-increasing environmental, vessel safety and occupational safety requirements in order to ensure high-level working conditions for fishermen.

The objectives introduced in this section will be attained with the help of opportunities and resources provided under EFF priority axis 1.

Improving the quality of caught fish and increasing the added value attributed to fish by fishermen constitutes one of the main factors in increasing the income of fishermen. This can be done by supporting the development of fishing ports, which should be fitted with modern ice, landing and fish sorting equipment as well as cold stores, and, where possible, by adding the highest possible value to fish.

It is also important to encourage fishermen to get organised and undertake joint activities in the framework of producer organisations, which must result in the increased economic influence of fishermen in the fisheries sector.

The objectives specified in this section will be attained by making use of the opportunities and resources provided under EFF priority axis 3.

On the national level, the following actions are planned for the fishing sector:

- Arrangements will be made for transferring from division based on fishing gear to division based on tonnes in inland and coastal fisheries.
- As studies have shown that for a large part of commercial fishermen, income from fishing does not play a significant role in their overall income, the options for adjusting the scope of the notion of a commercial fisherman must be addressed.
- The numbers of cormorants will be restricted on the basis of a corresponding protection and management plan for cormorants, while taking into account the restrictions specified in the EU Habitats and Birds directives.
- It will be established that a commercial fisherman should hold a professional licence. The requirement will take effect under the Fishing Act on 1 January 2008. The requirement will be established to ensure better compliance with

maritime safety requirements and hygiene rules, in particular regarding young fishermen. This would in its turn improve fishermen's professional skills.

- Strategic guidelines for recreational fishing will be elaborated.
- Fish is farmed for their repopulation and in accordance with the programme “Conservation of fish species in need of national protection and threatened fish species and the reproduction of fishery resources (2002–2010)”. As regards the reproduction of fishery resources in Estonia, the improvement of the status of natural populations of threatened fish species and fish species requiring protection, in particular salmon and sea trout, and creating live gene pools for these species will be the priority in the nearest future.
- To attain and maintain a good status of water bodies, the Ministry of Environment will prepare, together with local governments and their associations, national and regional water management plans, subsequently followed by the systematic implementation thereof.
- To avoid eutrophication of internal water bodies, measures to restrict pollution from agricultural sources will be perfected.

National priorities will be tackled without EFF opportunities and resources.

3.2 Objectives and priorities for the development of aquaculture

Estonian natural conditions enable to increase the volumes of fish farms many times over and aquaculture is without a doubt the field capable of the most extensive development.

The objective of the Fisheries Strategy is to increase production volumes through efficient fish farming enterprises, eventually meeting at least 90% of the current domestic market demand and increasing the share of aquaculture production in total fishery production to at least 3%.

In the context of the long-term development of the fisheries sector, the role of fish farming as one of its industries will gain increasing importance. The development of the Estonian fish farming sector is based on favourable natural conditions, both in terms of abundant water resources and available land. In the context of developments in world and European fish and raw material market, the sector's development potential will be determined by competitiveness. This primarily entails the ability to produce fish in the quantities required by the processor/consumer, while maintaining suitable prices and quality.

A more rapid growth in the sector has been obstructed by a shortage of specialists and qualified workforce, which in its turn affects the wide availability of know-how concerning the usage of equipment and technical solutions.

The development of the fish farming sector must be based on market demand. Consequently, the sector must concentrate primarily on supporting investments

related to the expansion of production, paying special attention to environmental investments. In order to increase competitiveness, it is also necessary to promote the application of new technologies and gathering related know-how, which would increase production efficiency, while minimising environmental risks. It is also necessary to support the farming of novel species and species in high demand in the market.

In order to improve the marketing capacity of enterprises, attention should also be paid to adding increased value to fish in fish farming enterprises, including expanding them with a view to erecting processing facilities. Forming producer organisations among fish farmers should also be supported in order to ensure stable fish quantities for marketing with a view to satisfying the demand of primarily domestic industries and consumers.

In order to decrease the risk of the spread of diseases and dependence on juvenile fish and roe, investments should be supported for growing and keeping broodstocks (breeder fish) in fish farms and for producing eggs and juvenile fish. With a view to managing risks and securing compliance with potential new requirements, a need may arise to support the establishment of a quarantine centre in order to prevent the damages possibly resulting from introducing new aquaculture species.

In 2008, the new legislation necessary for the implementation of the new Council Directive 2006/88/EC on aquaculture animals and products thereof will enter into force. This legislation regulates the organisation of trade, imports and transit of aquaculture animals and minimum prevention and control measures. The objectives specified in the section are planned to be achieved by making use of the opportunities and resources of EFF priority axis 2. Actions regarding fishing tourism are covered by the Rural Development Plan.

3.3. Objectives and priorities for fish processing and marketing

The main aim here is to strengthen the competitiveness of fish processing enterprises, through both expanding the geographical export range and bringing domestic consumption up to the average EU level by using as much local raw material as possible.

Considering the scarcity of raw material, concentration on the production of products of the largest possible (optimum) added value is necessary, thereby increasing the share of fishery products in food production.

Pursuant to the needs of consumers, it is necessary to concentrate on active product development, which would enable to offer a product range as diverse as possible in order to keep up with rapid changes in consumer habits. This entails the elaboration of new products and the introduction of innovative technologies and species that

have not yet been used or have been used to a small extent. As raw material is limited, adding a higher value to fishery products and the production of niche products should be promoted more. Also, we should not forget the need to invest into technologies and equipment necessary for meeting the increasingly strict requirements for fish processing, mainly in terms of regulating the level of toxic substances (including benzopyrene, dioxin levels, etc.).

The promotion of activities related to exploring new markets should continue as well; this should be done primarily by supporting market research and participating in various fairs. It is also important to promote the consumption of fishery products in order to increase domestic consumption by focusing mainly on raising the awareness of the consumer in terms of the health advantages and quality of products.

In order to increase fish consumption and boost the trust of consumers, continuous emphasis should be put at developing the quality and quality control systems of fishery products. This primarily entails improving quality control systems and ensuring the traceability of the origin of raw material.

When developing fish processing, more attention should be paid to environmental risk management. Investments have been insufficient in the area of environmental protection, mainly concerning waste management, and particularly the kind of waste that is prohibited to be buried and that is disposed of in animal waste rendering plants, which lack the specific equipment for disposing of fish waste. Consequently, a supplementary system for managing fish processing waste should be elaborated.

The objectives specified in this section are planned to be achieved by making use of the opportunities and resources of EFF priority axis 2. Market development and promotion of consumption along with potential pilot projects will be supported under priority axis 3.

3.4. Objectives and priorities for the development of fisheries regions

The objective of the Fisheries Strategy is to guarantee the preservation of a diverse socio-economic structure and increase in the quality of life in fisheries regions.

Fisheries have been a significant field of activity in coastal areas, inland waters and in their respective areas of service. The profitability of the fisheries sector has changed over the past 10 years due to changes in fish prices and fishing costs. In the field of fisheries, socio-economic well-being depends directly on fishery resources, and the situation today is such that the existing resources are not enough to guarantee sufficient earnings for all persons operating in coastal fisheries.

Today, fishing is the main source of income only for one third of fishermen, while for the rest it constitutes additional income besides their main earnings from pensions, field, forestry or construction work. The principal place of work is often situated outside the home rural municipality or Estonia because fisheries regions

offer few alternative job opportunities besides fisheries. It is therefore important to contribute during the coming programming period to the creation of jobs outside the fisheries sector. In terms of increasing employment, an important opportunity lies in adding value to fish locally. Primary processing, drying, salting or/and smoking of fish would all enable to increase the employment and income of fishermen. This type of restructuring of economic activities promotes adding value to fishery products and strengthening the sector's competitiveness, while not increasing fishing effort.

Studies have found that in several counties the main potential for keeping up coastal fisheries in the future lies in the development of fishing tourism. This would entail supporting the infrastructure and services related to small-scale fishing and tourism (including ecotourism), which would be targeted especially at small fishing communities.

Study results revealed on several occasions that coastal fisheries could continue to exist if this tradition were to be held in high esteem and if active support was offered to young fishermen.

It is important to ensure the protection of the living environment of fisheries regions by restoring and conserving the natural and architectural heritage of coastal villages.

People engaged in the fisheries sector are still not active enough in getting organised for the procurement of inputs, fish marketing (primary processing), cooperation in regional development and increasing the quality of life.

In order to achieve the above-mentioned goals, it is necessary to promote local joint activities (fisheries action groups), the implementation of development strategies, increased involvement of women in the development of local life and international cooperation among fisheries regions. Additional encouragement should be given to forming networks of women engaged in fishing and other parts of the sector and international cooperation between networks.

The objectives specified in this section are planned to be achieved by making use of the opportunities and resources of EFF priority axis 4.

3.5. Administration, objectives and priorities

3.5.1. International cooperation and control

Fishing capacities and the technical measures for the protection of fishery resources in the Baltic Sea and the waters regulated by the Northwest Atlantic Fisheries Organisation (NAFO) and the North-East Atlantic Fisheries Commission (NEAFC), where vessels flying the flag of Estonia fish, are laid down in directly applicable EU regulations of the European Union. The same applies for other internationally regulated fish species.

Representatives of the Ministry of Environment participate in negotiations in European Union institutions concerning fishing capacities and restrictions on

fishing effort of internationally regulated fish species and concerning the technical measures for the conservation of fishery resources. In accordance with the Accession Treaty with the European Union, Estonia has withdrawn from the International Baltic Sea Fishery Commission (IBSFC), NAFO and NEAFC, the member of which Estonia used to be. IBSFC has finished its work and the management of the sustainable use of Baltic Sea fishery resources must continue in the framework of a fisheries agreement concluded between the European Community and Russia, which was approved on 12 July 2006. Now, the representatives of Estonia participate in NAFO and NEAFC cooperation as members of the European Union's joint delegation, and negotiations in the common interests of the European Union are held with these organisations by the European Commission.

Restrictions on the fishing effort of internationally regulated fish species in the Baltic Sea and waters regulated by NEAFC are determined by the International Council for the Exploration of the Sea (ICES); the scientists of the Estonian Marine Institute at the University of Tartu also participate in the work of ICES. The NAFO Scientific Council provides recommendations for managing fishery resources in NAFO-regulated waters.

Representatives of the Ministry of Environment participate in the work of the Baltic Marine Environment Protection Commission (HELCOM), which is the governing body of the "Convention on the Protection of the Marine Environment of the Baltic Sea Area". Recommendations of the Baltic Marine Environment Protection Commission are usually of advisory nature and their aim is to contribute to and secure the attainment of the objectives presented in the Convention. Recommendations for the implementation of the Convention are adopted at annual meetings of the Commission. Generally, the Baltic Sea countries ensure the implementation of the recommendations through national legislation by bringing it into accordance with the proposals included in the recommendations.

The Baltic Sea Action Plan is currently being prepared, with approval by HELCOM due at the end of 2007.

Estonia conducts international cooperation with Russia in managing fishery resources in lakes Peipsi, Lämmi and Pihkva. The Intergovernmental Commission on Fisheries in the Peipsi, Lämmi and Pihkva Lakes formed on the basis of the Agreement between the Government of the Republic of Estonia and the Government of the Russian Federation on cooperation in the conservation and management of fish stocks in Peipsi, Lämmi and Pihkva Lake area meets twice a year and fishing activity in these lakes is agreed upon for periods of six months. From the Estonian side, fishery resource studies are conducted by the scientists of the Estonian Marine Institute at the University of Tartu, who provide in cooperation with Russian scientists recommendations on managing fishery resources in the Peipsi, Lämmi and Pihkva Lake area to the Intergovernmental Commission of Fisheries.

The Environmental Inspectorate conducts supervision in all inland water bodies, in the Baltic Sea, in waters regulated by the Northwest Atlantic Fisheries Organisation (NAFO) and the North-East Atlantic Fisheries Commission (NEAFC) and if

necessary, in other foreign waters where vessels flying the flag of Estonia fish. In addition to water bodies, the Environmental Inspectorate also supervises all operations related to fish handling, such as purchase-sale, transportation and processing of fish. In addition to direct supervision, the Environmental Inspectorate also observes fishing vessels with a satellite monitoring system, which provides a real-time overview of fishing vessel positions and movements. Inspectors of the Environmental Inspectorate participate together with EU inspectors in fish conservation missions in the NAFO area, thus fulfilling the obligation assumed by Estonia pursuant to Council Regulation No 2847/93 (establishing a control system applicable to the common fisheries policy) to conduct direct supervision in waters where fishing vessels flying the flag of Estonia fish. In addition to this, inspectors of the Environmental Inspectorate have participated along with inspectors from other countries (Finland, Sweden, Latvia, Lithuania, Denmark and Canada) in joint fishing supervision operations in the Baltic Sea and the Atlantic Ocean. Besides direct supervision, an important role is also occupied by assessing the effect of legal provisions and the constant adjustment of the judicial area in accordance with the problems that have emerged. In addition to helping develop national legislation, the representatives of the Environmental Inspectorate also participate in the work of working groups on fishery resource conservation and control at European Union institutions.

The Environmental Inspectorate has placed strong emphasis on cooperation with various inspection bodies: a cooperation agreement on stepping up controls on fishing and fish handling was concluded with the Veterinary and Food Board in 2005 and cooperation with the Tax and Customs Board has grown particularly intense.

The Environmental Investment Centre finances the elaboration of a satellite monitoring system for fishing vessels and the inspection of fishing vessels fishing in the NAFO area, as well as enhancing cooperation with neighbouring countries in controlling fishing in the Baltic Sea.

Estonia also values cooperation with EUROFISH. On 14 November 2006, the EUROFISH agreement was ratified and Estonia can now become the member of this international organisation for the development of fisheries in Eastern and Central Europe. The EUROFISH organisation is an independent international organisation established in 2002. The EUROFISH organisation is authorised to assist the development of fisheries in Eastern and Central European countries, with an emphasis on commerce, marketing, processing and aquaculture.

After joining the EUROFISH organisation, Estonia will intensify cooperation with Eastern and Central European countries in the development of fisheries. Estonia stands to gain from the exchange of international market information and the introduction of advisory services.

3.5.2. Proposed actions

- Increasing administrative capacity (opportunities and resources of EFF priority axis 5)

- Incorporating fisheries-related databases into an integrated system in order to ensure better reporting and cross-checking
- Managing the elaboration and implementation of strategic guidelines for recreational fisheries (on the basis of national opportunities and resources)
- Expanding opportunities for monitoring fishing vessels (with financing from the Environmental Investment Centre) in order to allow each county department of the Environmental Inspectorate to observe the movements of fishing vessels via the fishing vessel monitoring system
- Increasing the controlling frequency of trawl fishing at sea by acquiring a patrol vessel for carrying out inspections in the open part of the Baltic Sea (CFP resources)
- Strengthening the fisheries supervision administration at the headquarters of the Environmental Inspectorate by hiring supplementary staff for supporting inspections (in the form of conducting various analyses of fisheries-related data and elaborating inspection models) (on the basis of national opportunities and resources)
- Enhancing control of fishing and first sales in cooperation with the Veterinary and Food Board, Environmental Inspectorate, Tax and Customs Board and Ministry of Environment (on the basis of national opportunities and resources)

3.6. Compilation of the Strategy and connections with EU policies and other strategies

3.6.1. Basis for the Strategy and connections with EU policies

The Strategy is modelled on Council Regulation (EC) No 1198/2006 on the European Fisheries Fund on fisheries assistance and on Council Regulation (EC) No 2371/2002 on the conservation and sustainable exploitation of fishery resources under the common fisheries policy.

The Strategy takes into account the Lisbon Strategy, along with the Estonian Action Plan for Growth and Jobs (the Lisbon Strategy) for 2005–2007, supporting in 2007–2013 investments that guarantee the following: sustainability and growth in the fisheries production and processing sector; maintaining the employment level, including providing better income for coastal and inland water fishermen through diversifying activities in fisheries regions; improving the quality of jobs and innovation as well as compliance with market requirements.

The Strategy is in accordance with the rest of Community policies and operations, particularly in fields such as employment and equality between men and women. The Strategy takes into account the Treaty of Amsterdam, promoting the reinforcement of equality in the fisheries employment and mainstreaming of gender equality in the context of regional development, which affects the situation of

women in the fisheries sector, mainly in terms of the sustainable development of fisheries regions.

Great attention is paid to improving the qualification of workers by increasing know-how and training opportunities in accordance with the conceptual basis for the Memorandum of Lifelong Learning.

In accordance with the conclusions of the European Council of Gothenburg, the Strategy takes into account the aim to harmonise the capacity of the fisheries sector with the sustainable use of natural resources, thereby preserving biological diversity. As a result, in addition to various national actions, the measures of the European Fisheries Fund are employed in such a way as to decrease the environmental impact of commercial fishing and to increase emphasis on attaining sustainable development by supporting the use of environmentally friendly production and processing methods and technologies.

3.6.2. Compilation of the Strategy and connections with other strategies

The Fisheries Strategy was composed and coordinated under the leadership of the Ministry of Agriculture. To this end, an expert working group (see Chapter 1.6. for members of the working group) was formed within the Fisheries Council in 2005. The working group meets once a month on average so that representatives of social partners invited to the working group can discuss draft documents with members of their respective associations and submit proposals. The draft Strategy has been submitted to the Fisheries Council on numerous occasions for informative purposes and for granting its approval (see Chapter 1.6. for Fisheries Council members). All working group and Fisheries Council meetings have been documented in written form and both oral and written supplementary notes have been recorded. In addition, the draft Strategy has been introduced at internal meetings of professional associations and overviews of the progress of Strategy compilation have been presented in the Riigikogu Rural Affairs Committee and at fisheries conferences. The Strategy was submitted for harmonisation to other ministries and for approval to the Government of the Republic. Thereafter the Strategy will be submitted to the European Commission for information. The Operational Programme compiled on the basis of the Strategy will be submitted to the European Commission for approval.

On the national level, the Fisheries Strategy takes into account the National Strategic Reference Network 2007–2013. There are connections with Network priorities “An educated and active nation”, “Improving the efficiency of research and development and increasing innovation and productivity of undertakings”, “Improved communications”, “Sustainable environmental use” and “Unified and balanced regional development”. The Fisheries Strategy supports the implementation of the priorities of the Strategic Reference Network, complementing and supporting the established goals.

Various instruments and operational programmes will be coordinated primarily by joining together the various national processes concerning planning and budgeting: when making budgetary decisions, all funds (including various types of EU support) are examined as a whole and if needed, the use of these funds is harmonised. An important coordinating role is assumed by secretary generals of ministries, as they discuss regularly issues concerning the use of state budget funds, including external funds. Regular overviews of the use of all European Union support are submitted to the Government of the Republic. This guarantees that a unified discussion on the problems and choices occurring in using support for fisheries, rural affairs and domains of structural instruments as well as other EU support programmes will also be guaranteed on the level of the Government of the Republic. This mechanism makes it possible to coordinate the processing of proposed amendments to operational programmes and formulating corresponding decisions.

In order to coordinate and guide the use of various financial resources, monitoring committees of operational programmes are employed, incorporating all ministries concerned and all socio-economic partners. Ministries involved in the application of structural instruments, including the Ministry of Finance, are also members of the Monitoring Committee for the “Operational programme of the European Fisheries Fund 2007–2013”. The task of the Monitoring Committee is to observe and guide the implementation of the corresponding Operational Programme, initiating, if necessary, amendments in actions and funding plans.

On a national level, the Fisheries Strategy takes into account the Estonian Rural Development Strategy 2007–2013. The main link is with the LEADER axis, with an objective to improve quality of life in rural areas and diversify rural economy.

As a rule, the main demarcation principle is that of not supporting diversification from agriculture to fisheries and vice versa, particularly in terms of product groups lacking normal market outlets or having limited resources (catch and production quotas). On an administrative level, double funding of projects is out of the question. One of the aims of the common fisheries policy is encouraging sustainable development and improving the quality of life in fisheries regions. Fisheries and rural life form a part of the integrated approach towards local development in such regions. The core of this approach are strategies based on local development elaborated and implemented by local action groups. If local action groups and coastal action groups overlap, the requirement is to prepare different strategies for managing EFF and EAFRD resources.

In addition to the above-mentioned, the Fisheries Strategy takes into account the Estonian Environmental Strategy, the programme “Conservation of fish species in need of national protection and threatened fish species and the reproduction of fishery resources (2002–2010)” and several conducted studies, including: “The impact of investment on the Estonian fisheries sector”, “Environmental impact of fisheries and possibilities for decreasing unfavourable environmental impacts”, “The role of coastal fishing in fishing effort”, “The state of distant water fisheries and the need for investment”, “The state of inland fisheries and the need for investment”, “The measures of the Financial Instrument for Fisheries Guidance: impact and necessity in the Lake Peipsi region fisheries sector”, “Economic and social situation in fisheries-related coastal regions”, “Investment needs in

fisheries”, “Employment in the fisheries sector” and “The state of fisheries-related ports and the need for investment”. In addition, the Strategy makes use of data provided by the Statistical Office and the Fisheries Information System.

The Estonian Fisheries Strategy together with other development plans of this domain forms a basis for the State Budget Strategy 2007–2010, work schedule of the Government of the Republic and the development plan relating to the area of government of the Ministry of Agriculture.

4. Procedure for the elaboration, implementation and monitoring of the Strategy

Implementation of the European Fisheries Fund during the programming period 2007–2013 will be the responsibility of the Ministry of Agriculture. The Ministry of Agriculture will act as a management authority, attestation body and audit body all rolled into one by dividing the corresponding responsibilities among competent departments. The departments will work independently of one another. The Fishery Economics Department, which will be in charge of management tasks, is subordinate to the Deputy Secretary General of Rural Development and Fisheries Policy. The Financial Department, which will be in charge of attestation tasks, is directly subordinate to the Secretary General. The Internal Audit Department, which will be in charge of auditing, is directly subordinate to the Minister and exercises supervision over the rest of the Ministry’s departments as an independent department. The tasks of the implementing body will be performed by the Agricultural Registers and Information Board (ARIB). The implementing body will perform the tasks related to the implementation of the European Fisheries Fund measures.

The Minister of Agriculture will establish the distribution of functions and the process of cooperation among the above-mentioned agencies.

For the purposes of monitoring the implementation of the Operational Programme, the Monitoring Committee will be set up. The Monitoring Committee will be formed and lead by the Minister of Agriculture. The Monitoring Committee will include representatives of the Ministry of Agriculture, Ministry of Environment, Ministry of Finance, fisheries sector, European Commission and representatives of the implementing body as well as environmental organisations. The Minister of Agriculture will lay down the rules of procedure of the Monitoring Committee.

The legal framework of the European Fisheries Fund in the Estonian legislation will be incorporated into the Fisheries Market Organisation Act, which lays down the bases for processing applications for support from the European Fisheries Fund, the rights and obligations of subjects related to granting and using support, the bases for supervision and the procedure for challenge proceedings. In addition, the Minister of Agriculture will issue acts regulating the conditions and procedure for granting and using support from the European Fisheries Fund and the division of funds among measures. In addition, pursuant to Article 63 of Council Regulation

(EC) No 1198/2006 the Monitoring Committee will be set up and its rules of procedure will be established, along with the procedure for referring to objects that have been granted support.

5. Operational programme (financing)

The main source for funding the objectives of the Strategy lies in the opportunities of the European Fisheries Fund. In addition to the Fund, the resources of the Environmental Investment Centre will be used for funding the reproduction of fishery resources by fish farming and restocking water bodies with fish. The Environmental Investment Centre resources have also been used for funding the work of state observers on distant water fishing vessels, but this system is planned to be changed so that enterprises engaged in distant water fisheries themselves facilitate the work of approved observers on their vessels. CFP resources will be used for funding various projects related to supervisory actions.

The European Commission has allocated EUR 84,568,039 (EEK 1,323,202,279) to Estonia from the European Fisheries Fund.

When drafting the state budget, it must be kept in mind that actions funded by the European Fisheries Fund require a 25% co-financing.

The estimated division of EFF priority axes is the following:

Priority axis 1 – 18%

Priority axis 2 – 29%

Priority axis 3 – 25%

Priority axis 4 – 23%

Priority axis 5 – 5%

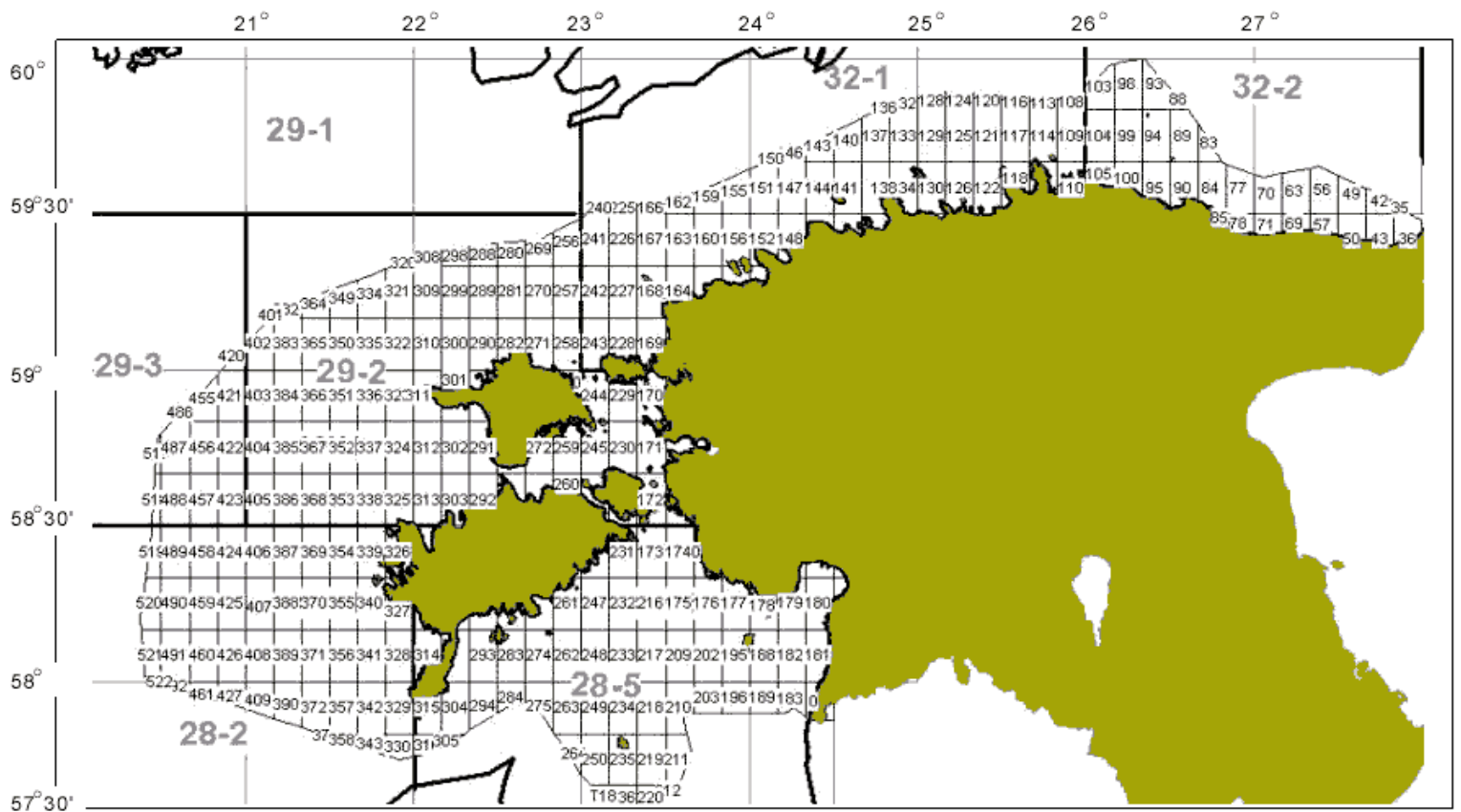
A more detailed financing plan by priority and year forms a part of the Operational Programme.

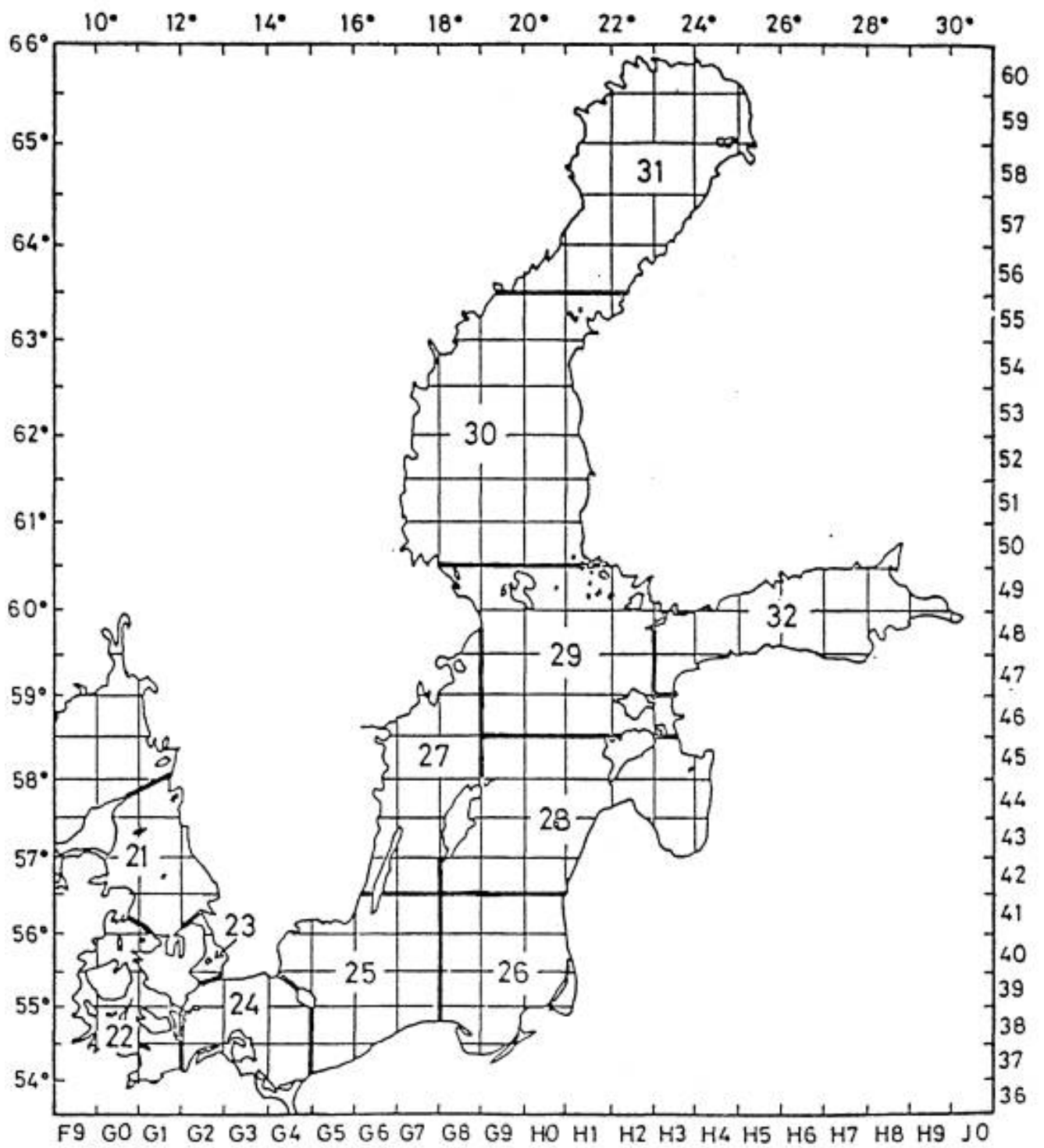
Annexes

“ESTONIAN FISHERIES STRATEGY 2007–2013”

ANNEX 1

Baltic Sea fishing grounds





**“ESTONIAN FISHERIES STRATEGY
2007–2013”**

ANNEX 2

Fishing in the Baltic Sea 1996–2005 (tonnes)

Fishing ground	Fish species	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Fishing in the Baltic Sea	Total fish	71370.30	95287.50	77643.70	82998.30	85176.00	84959.30	79034.80	59377.80	64902.30	79760.60
	Perch	396.40	315.10	236.80	296.40	279.80	386.00	577.90	823.80	665.70	688.88
	Eel	19.70	18.30	22.20	28.30	26.70	27.10	27.30	18.80	15.60	8.94
	Eelpout	2.00	7.60	9.20	1.60	1.40	1.30	0.80	0.10	0.20	0.17
	Trout	15.60	10.60	8.10	9.80	13.30	12.70	16.00	9.00	10.20	11.34
	Pike	42.20	23.40	17.20	19.00	21.30	18.60	18.60	30.70	48.90	23.17
	Sprat	22493.00	39692.60	32165.00	36406.50	41393.80	40777.00	40717.10	29366.20	34113.40	55285.17
	Pike-perch	332.80	180.40	140.60	115.80	25.10	33.30	38.50	95.80	206.20	68.47
	Bream	8.30	8.10	6.80	13.30	10.50	9.80	16.00	15.10	11.80	7.41
	Flounder	296.80	333.10	354.60	415.90	419.50	482.20	514.70	442.30	383.80	402.96
	Burbot	2.90	3.60	3.20	1.30	2.20	0.50	0.50	0.60	0.50	0.78
	Salmon	9.50	10.20	7.50	13.50	21.10	14.10	15.70	10.10	7.10	7.68
	White bream/roach	292.70	342.40	321.10	156.60	243.60	272.30	302.80	159.90	187.10	85.24
	Baltic herring	45296.00	52435.30	42720.60	44038.40	41735.00	41737.80	36250.30	27359.10	27380.00	22098.27
	Whitefish	20.80	19.70	20.10	27.90	32.80	32.90	47.00	30.40	27.60	19.18
	Lamprey	18.60	2.50	4.50	6.60	8.20	3.00	2.40	4.40	3.50	0.75
	Ide	130.70	88.40	68.70	49.90	60.50	35.80	26.40	24.50	16.40	7.32
	Smelt	5.70	14.40	10.50	60.80	90.10	127.50	104.20	200.00	231.90	202.91
	Cod	1392.00	1173.60	1166.70	1060.10	514.20	754.90	37.20	559.60	1278.70	588.62
	Garfish	404.70	400.20	167.00	122.40	135.10	111.10	148.30	95.70	168.40	155.69
Vimba bream	163.80	185.20	165.30	122.70	101.10	82.50	114.70	72.50	59.50	40.43	
Other fish	26.10	23.00	28.10	31.50	40.60	38.80	58.40	59.20	85.80	57.22	

Coastal fishing	Total fish	14165.60	13244.50	11107.70	9924.50	10219.80	13782.60	10954.60	14871.00	10476.70	7857.56
	Perch	396.40	315.10	236.80	296.40	279.80	386.00	577.90	823.80	665.70	688.88
	Eel	19.70	18.30	22.20	28.30	26.70	27.10	27.30	18.80	15.60	8.94
	Eelpout	2.00	7.60	9.20	1.60	1.40	1.30	0.80	0.10	0.20	0.17
	Trout	15.60	10.60	8.10	9.80	13.30	12.70	16.00	9.00	10.20	11.34
	Pike	42.20	23.40	17.20	19.00	21.30	18.60	18.60	30.70	48.90	23.17
	Sprat	0.00	0.00	0.00	2.50	1.40	5.50	0.10	28.60	24.10	67.71
	Pike-perch	332.80	180.40	140.60	115.80	25.10	33.30	38.50	95.80	206.20	68.47
	Bream	8.30	8.10	6.80	13.30	10.50	9.80	16.00	15.10	11.80	7.41
	Flounder	276.80	284.10	252.40	395.90	357.40	449.10	469.60	405.80	383.80	402.96
	Burbot	2.90	3.60	3.20	1.30	2.20	0.50	0.50	0.60	0.50	0.78
	Salmon	7.80	9.40	7.40	13.40	20.90	13.90	15.70	10.10	7.10	7.68
	White bream/roach	292.70	342.40	321.10	156.60	243.60	272.30	302.80	159.90	187.10	85.24
	Baltic herring	12000.00	11310.70	9618.60	8448.40	8746.80	12118.20	8982.70	12784.90	8320.30	5999.77
	Whitefish	20.80	19.70	20.10	27.90	32.80	32.90	47.00	30.40	27.60	19.18
	Lamprey	18.60	2.50	4.50	6.60	8.20	3.00	2.40	4.40	3.50	0.75
	Ide	130.70	88.40	68.70	49.90	60.50	35.80	26.40	24.50	16.40	7.32
	Smelt	3.70	11.30	10.50	60.80	90.10	127.50	90.40	200.00	231.90	202.91
	Cod	0.00	0.60	0.00	0.50	1.00	2.50	0.60	1.10	2.10	1.54
	Garfish	404.70	400.20	167.00	122.40	135.10	111.10	148.30	95.70	168.40	155.69
Vimba bream	163.80	185.20	165.30	122.70	101.10	82.50	114.70	72.50	59.50	40.43	
Other fish	26.10	23.00	28.10	31.50	40.60	38.80	58.30	59.20	85.80	57.22	
Deep-sea fishing	Fish total	57204.70	82043.00	66536.00	73073.80	74956.20	71176.80	68080.20	44506.80	54425.60	71903.04
	Sprat	22493.00	39692.60	32165.00	36404.00	41392.50	40771.50	40717.00	29337.60	34089.30	55217.46
	Flounder	20.00	49.00	102.20	20.00	62.10	33.10	45.10	36.50	0.00	0.00
	Salmon	1.70	0.80	0.10	0.20	0.20	0.20	0.00	0.00	0.00	0.00
	Baltic herring	33296.00	41124.60	33102.00	35590.00	32988.30	29619.60	27267.60	14574.20	19059.60	16098.50
	Smelt	2.00	3.10	0.00	0.00	0.00	0.00	13.80	0.00	0.00	0.00
	Cod	1392.00	1173.00	1166.70	1059.60	513.20	752.30	36.60	558.50	1276.60	587.08
	Other fish	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00

**“ESTONIAN FISHERIES STRATEGY
2007–2013”**

ANNEX 3

Average purchase prices in 2005 (EEK thousand)

Fish species	Price						
	EEK/kg	Coastal waters	Deep-sea fishing	Total	Lakes Peipsi and Lämmi	Total inland waters	Total
Baltic herring	1.796	10775.6	28912.9	39688.5			39688.5
sprat	1.572	106.4	86801.8	86908.3			86908.3
cod	21.891	33.6	12851.8	12885.4			12885.4
flounder	4.654	1875.4		1875.4			1875.4
salmon	29.209	224.4		224.4		0.2	224.6
sea trout	31.801	360.7		360.7			360.7
eel	102.801	919.4		919.4	12.8	1975.4	2894.7
whitefish	17.297/7.068	331.7		331.7	10.3	11.1	342.7
vimba bream	3.301	133.5		133.5			133.5
bream	5.896	43.7		43.7	1934.8	2472.4	2516.1
pike-perch	31.569	2161.4		2161.4	21244.9	22473.7	24635.1
pike	13.784	319.3		319.3	885.1	1738.9	2058.2
perch	26.005	17914.3		17914.3	9734.6	10370.7	28285.0
smelt	2.573	522.1		522.1			522.1
Peipsi smelt	2.787				471.2	471.2	471.2
roach/white bream	3.365	286.8		286.8	778.2	909.7	1196.5
eelpout	1.000	0.2		0.2		0.0	0.2
ide	4.702	34.4		34.4	2.5	6.5	40.9
garfish	3.350	521.6		521.6			521.6
burbot	6.308	4.9		4.9	105.2	124.5	129.4
lamprey	24.423	18.4		18.4		1513.8	1532.2
other	1.299	74.3		74.3	3.9	260.8	335.1
Total		36662.1	128566.5	165228.6	35183.4	42328.8	207557.4

Note: average purchase prices are used

**“ESTONIAN FISHERIES STRATEGY
2007–2013”**

ANNEX 4

FIFG support as at July 2006

	Amount	Investment total	Support total	EC funding	National funding
Measure 3.9					
Scrapping of fishing vessel	8	10 245 850	10 245 850	5 430 301	4 815 550
Educational purpose	7	47 208 802	47 208 802	25 020 665	22 188 137
Supervisory purpose	1	1 867 890	1 867 890	989 982	877 908
Total	16	59 322 542	59 322 542	31 440 947	27 881 595
Measure 3.10					
Purchase of vessel	6	16 834 786	6 733 914	5 881 675	852 239
Design work	4	122 000	48 800	36 680	12 120
Preparing of application and business plan	20	154 500	61 800	51 065	10 735
Hull work	41	18 463 550	7 385 421	6 420 033	965 389
Reconstruction of vessel's non-work compartments (crew compartments, etc.)	8	2 119 500	847 800	741 825	105 975
Reconstruction of fish handling spaces	6	1 855 880	742 352	649 558	92 794
Purchase and installation of fish handling and preservation equipment	8	4 368 712	1 747 484	1 529 049	218 435
Purchase and installation of equipment for the main deck (winches, hoists, anchor gear, etc.)	26	16 750 719	6 700 287	5 862 752	837 535
Reconstruction of superstructures located on the main deck	13	2 854 200	1 141 680	998 970	142 710
Purchase and installation of life saving equipment (life boats, life vests, signal rockets, etc.)	4	284 956	113 982	99 497	14 485

Purchase and installation of fire water supply and emergency and survival equipment (fire pumps, hoses, alarm systems, etc.)	8	488 100	195 240	163 555	31 685
Purchase and installation of means of communication	10	1 117 726	447 080	391 204	55 876
Purchase and installation of navigation equipment, along with related software (positioning equipment, etc.)	35	5 273 382	2 109 316	1 825 287	284 029
Reconstruction of engine rooms and the purchase and installation of related equipment	16	4 731 544	1 892 618	1 614 628	277 990
Reconstruction of power, ballast and sanitary systems	25	5 025 300	2 010 118	1 757 889	252 229
Purchase and installation of environment protection equipment (wastewater containers, etc.)	6	209 400	83 760	73 290	10 470
Reconstruction or major repairs of the main engines, provided that the total power of fishing vessel does not increase and that the repairs are conducted on the basis of a project	2	2 547 040	1 018 816	891 464	127 352
Purchase of selective fishing gear	21	11 272 639	4 509 056	3 945 424	563 632
Total	259	94 473 934	37 789 524	32 933 844	4 855 680
Measure 3.11.1					
Construction of building or facilities for handling fishery or aquaculture products	3	15 007 907	7 377 362	5 164 153	2 213 209
Reconstruction of building or facilities for handling fishery or aquaculture products	2	14 883 019	7 441 510	5 209 057	2 232 453
Purchase and installation of fishery and aquaculture product handling equipment, including treatment facilities, cold generating equipment, water supply systems, energy systems or packing lines	5 041	59 863 949	29 311 971	20 518 380	8 793 591
Purchase and installation of stationary heating installations	1	496 360	248 180	173 726	74 454
Design work	1	50 000	25 000	17 500	7 500

Preparing of application and business plan	6	116 000	58 000	40 600	17 400
Purchase of refrigerator trucks	10	14 615 020	7 243 892	5 070 724	2 173 168
Purchase of storage hoists	8	1 408 875	704 437	493 106	211 331
Total	5 072	106 441 130	52 410 352	36 687 246	15 723 106
Measure 3.11.2					
Construction of aquaculture building or facility	33	45 534 582	23 618 448	15 919 401	7 699 047
Reconstruction of aquaculture building or facility	9	23 462 652	12 069 832	8 192 678	3 877 155
Purchase and installation of equipment for aquaculture building or facility	27	6 468 203	3 312 821	2 263 871	1 048 950
Purchase and installation of control systems (oxygen measuring systems, PH meters, integrated information technology, etc.) for aquaculture building or facility	4	785 056	426 228	274 770	151 458
Design work	18	555 993	298 925	194 598	104 327
Geotechnical and geodetic research	3	44 356	22 814	15 525	7 289
Preparing of application and business plan	14	148 000	76 920	51 800	25 120
Environmental impact assessment	2	14 200	7 520	4 970	2 550
Purchase and installation of cages for fish farming	264	1 302 150	651 075	455 753	195 323
Purchase of maintenance equipment for cages (mobile platforms, hoists, fish pumps, etc.)	1	586 000	293 000	205 100	87 900
Purchase of service crafts for cages (with a cost of up to EEK 400,000)	2	186 407	93 203	65 242	27 961
Purchase and installation of shipping casks (with the necessary equipment)	1	44 000	22 000	15 400	6 600
Construction of water purification structures	4	844 261	506 557	295 491	211 066
Purchase and installation of equipment for water purification structures	4	498 300	298 980	174 405	124 575

Purchase and installation of security systems for aquaculture structures	5	743 614	375 797	260 265	115 532
Total	391	81 217 774	42 074 120	28 389 267	13 684 853
Measure 3.11.3					
Reconstruction of the berth used for landing fish	7	68 373 701	33 803 000	21 295 890	12 507 110
Construction and reconstruction of electricity and water supply unit	5	1 873 650	856 059	539 317	316 742
Construction and reconstruction of fuel unit	1	2 507 430	1 253 715	789 840	463 875
Construction and reconstruction of facility for maintenance and repairs of fishing vessel	1	2 020 898	1 010 449	636 583	373 866
Construction and reconstruction of accommodation areas for fishermen	1	171 710	85 855	54 089	31 766
Purchase and installation of equipment for servicing fishing vessel (power supply, water supply, refuelling, vessel maintenance and repair equipment)	1	596 641	298 320	187 942	110 378
Construction, reconstruction or pavement improvement of fishing port road	5	7 014 267	3 291 474	2 073 629	1 217 845
Purchase and installation of equipment for landing and storage, including crate washing line	2	5 325 477	2 662 738	1 677 525	985 213
Purchase and installation of ice machine	3	1 481 344	740 672	466 623	274 049
Design work	2	139 200	69 600	43 848	25 752
Preparing of application and business plan	3	39 000	19 500	12 285	7 215
Total	31	89 543 318	44 091 382	27 777 571	16 313 811
Measure 3.11.4					
Purchase of vessel	30	12 643 561	6 006 878	4 204 815	1 802 063
Preparing of application and business plan	7	30 000	15 000	10 500	4 500
Purchase and installation of engine	5	338 767	169 382	118 567	50 815
Total	42	13 012 328	6 191 260	4 333 882	1 857 378

Measure 3.12.1					
Individual and single support for fishermen who are losing or have lost their jobs due to reduced fishing capacity of fishing fleet	37	5 789 242	5 789 242	3 763 007	2 026 235
Total	37	5 789 242	5 789 242	3 763 007	2 026 235
Measure 3.12.2					
Complex publicity campaign promoting the consumption of fishery and aquaculture products	2	7 000 000	7 000 000	4 550 000	2 450 000
Market research for mapping the market position of various fishery products in terms of popularity and consumption	5	870 252	869 892	565 430	304 462
Market study on farmed crayfish	1	193 520	193 520	125 788	67 732
Moscow fair "Prodexpo - 2006"	42	600 000	600 000	390 000	210 000
Bremen fair "10th Fish International"	89	550 000	550 000	357 500	192 500
Boston fair "The International Boston Seafood Show 2006"	47	500 000	500 000	325 000	175 000
Brussels fair "European Seafood Exposition 2006"	261	1 100 000	1 100 000	715 000	385 000
Paris fair "SIAL 2006"	1	650 000	650 000	422 500	227 500
Total	448	11 463 772	11 463 412	7 451 218	4 012 194
TOTAL	6 296	461 264 040	259 131 834	172 776 983	86 354 851

**“ESTONIAN FISHERIES STRATEGY
2007–2013”**

ANNEX 5

Number of Estonian fishing vessels, total power of main engines and total gross tonnage as at 19.01.06

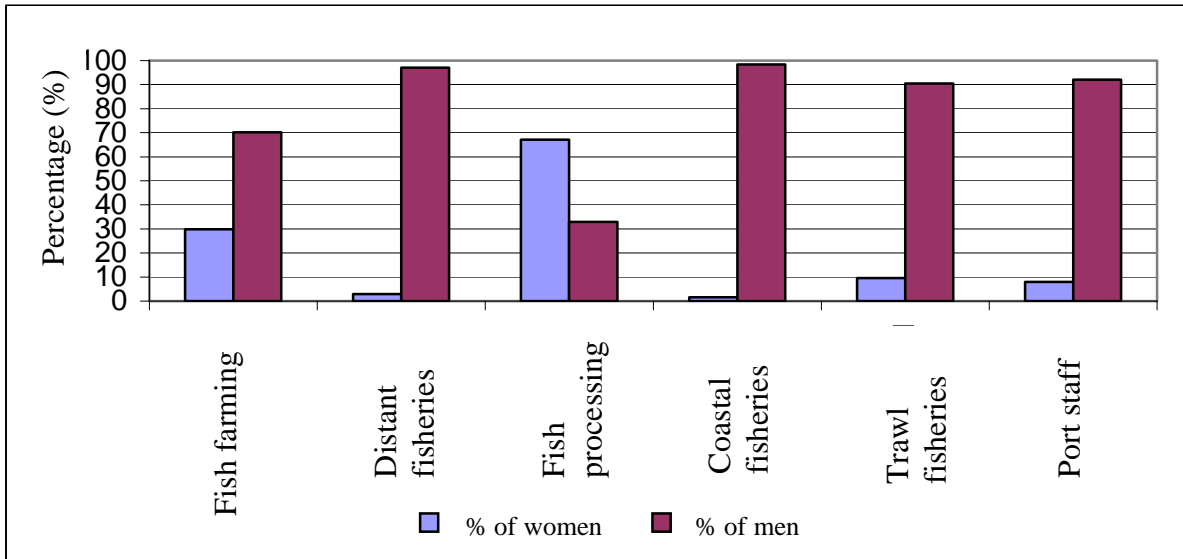
Segment/indicator	4S1	4S2	4S3	TOTAL 4S1+4S2+4S3	4S4
Fishing ground	Baltic Sea	Baltic Sea	Sea, except Baltic Sea		Inland water bodies
Fishing gear	Trawls, gillnets	Unidentified	Trawls		Unidentified
Caught species	Pelagic and benthic species	Pelagic and benthic species	Pelagic and benthic species		Unidentified
Overall length	12 metres and above	Below 12 metres	24 metres and above		Unidentified
Possibility of adding to the segment	no	no	no		yes
Number of vessels (registered)	154	892	13	1059	352
Active	148	886	11	1045	350
Not active	6	6	2	14	2
Power (kW)	26 723	15251	25 738	67 712	10316
Number of vessels without engines	0	106	0	106	87
Tonnage (GT) London	10188	1823	15611	27 622	806
Data not available	0	0	0	0	69
Average year of construction	1980	1989	1980	1983	1990

“ESTONIAN FISHERIES STRATEGY 2007–2013”

ANNEX 6

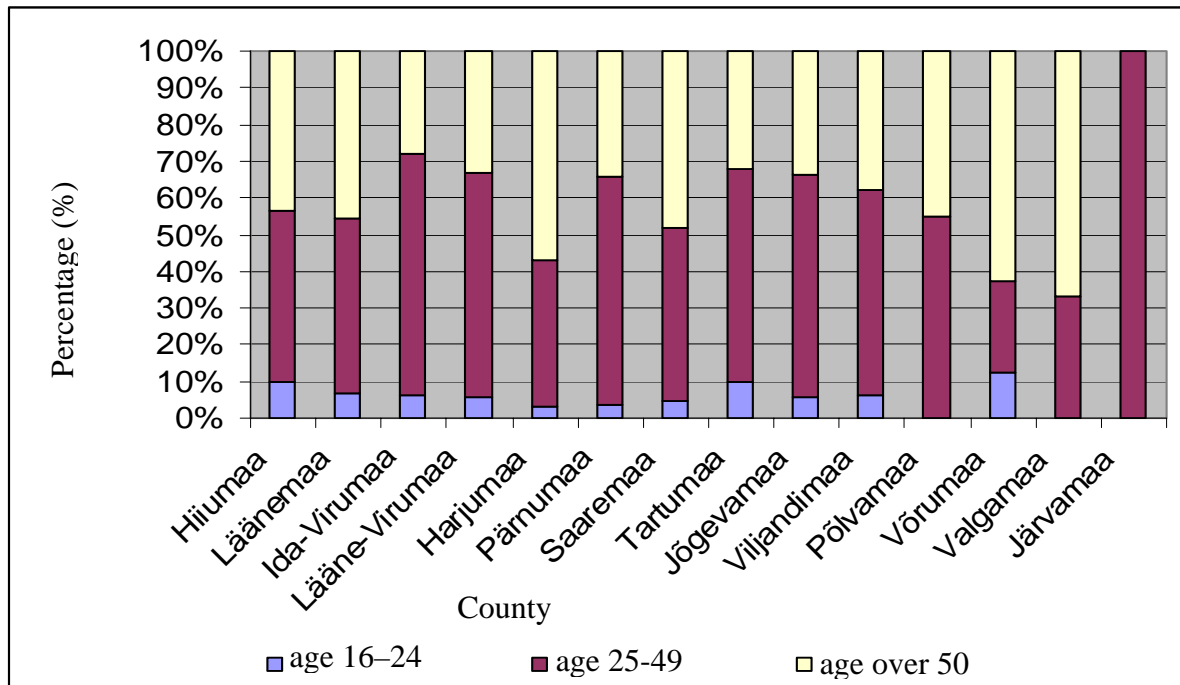
Demographic situation of fisheries in 2006

1. Division by gender by fisheries domains (%)



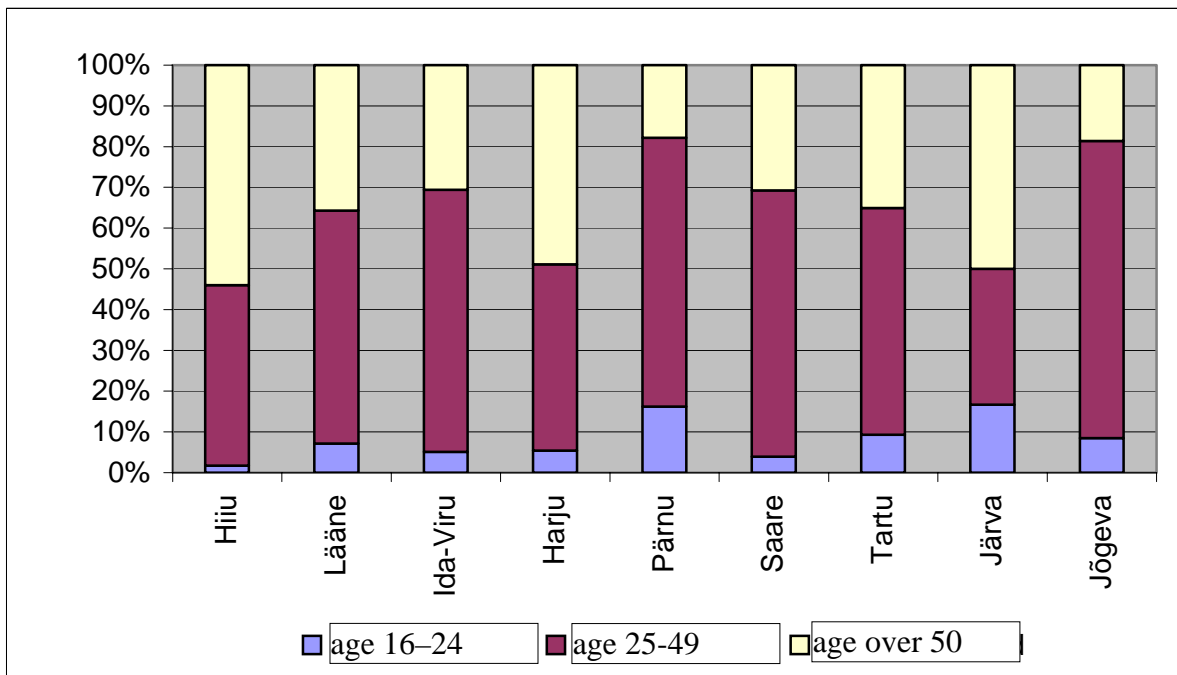
Source: Estonian University of Life Sciences, Institute of Agricultural and Environmental Sciences – study “Employment in the Estonian fisheries sector”

2. Division of fishermen by age in counties (%)



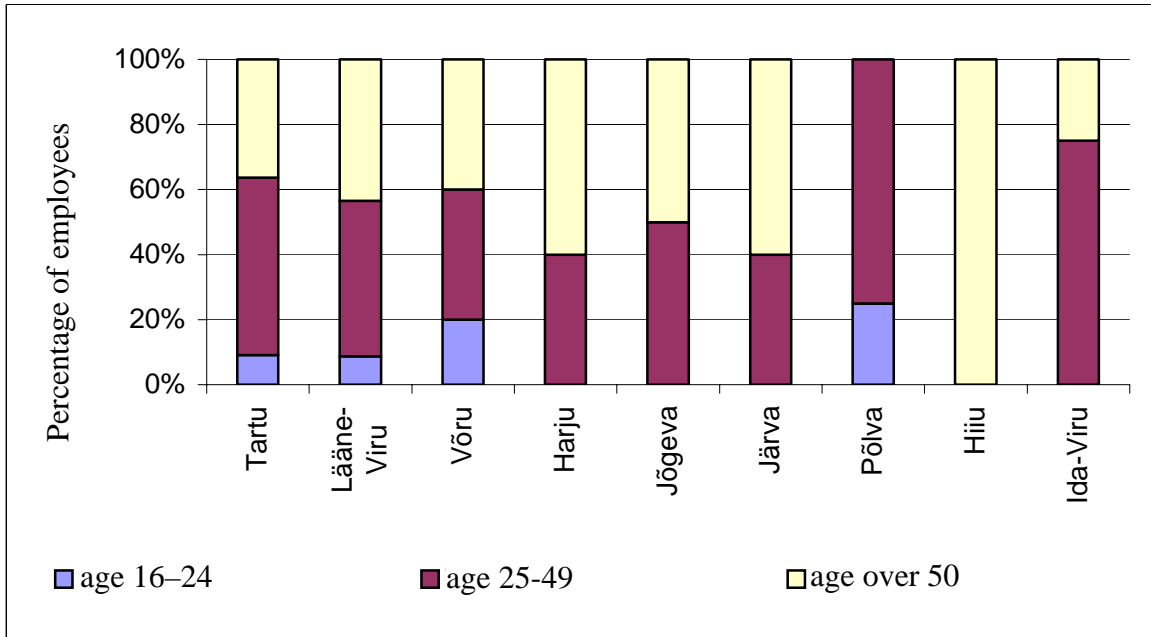
Source: Estonian University of Life Sciences, Institute of Agricultural and Environmental Sciences – study “Employment in the Estonian fisheries sector”

3. Division of persons engaged in fish processing by age (%)



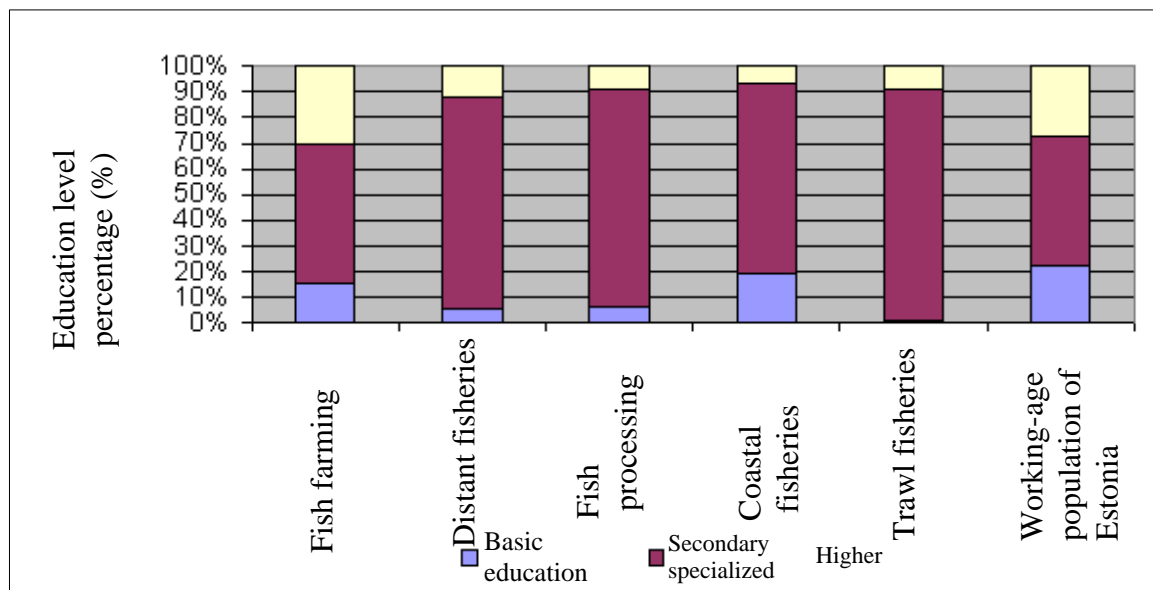
Source: Estonian University of Life Sciences, Institute of Agricultural and Environmental Sciences – study “Employment in the Estonian fisheries sector”

4. Division of persons working in fish farms by age (%)



Source: Estonian University of Life Sciences, Institute of Agricultural and Environmental Sciences – study “Employment in the Estonian fisheries sector”

5. Level of education of persons engaged in the fisheries sector (%)



Source: Estonian University of Life Sciences, Institute of Agricultural and Environmental Sciences – study “Employment in the Estonian fisheries sector”

6. Intensity of working-time in fisheries domains

Domain	J a n u a r y	F e b r u a r y	M a r c h	A p r i l	M a y	J u n e	J u l y	A u g u s t	S e p t e m b e r	O c t o b e r	N o v e m b e r	D e c e m b e r
Coastal fishing												
Trawl fishing												
Distant water fishing												
Fish processing												
Fish farming												
Fish tourism												

Source: Estonian University of Life Sciences, Institute of Agricultural and Environmental Sciences – study “Employment in the Estonian fisheries sector”

**“ESTONIAN FISHERIES STRATEGY
2007–2013”**

ANNEX 7

Fishing in inland waters 1996–2005 (tonnes)

Fishing ground	Fish species	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Fishing in inland waters	Total fish	2361.3	2438.9	3878	3041.4	3189.2	2461	4579.9	3592.4	2367.7	2400.2
	Perch	634.5	887.5	814.7	663.7	561.3	300.2	246	620.9	404.6	398.8
	Eel	35.4	37.8	22	31.8	40.2	39.8	22.3	29.8	23.6	19.2
	Pike	96.8	82.2	114.4	128.4	156.4	180.4	200.2	169.3	138	126.2
	Pike-perch	392.8	279.7	750.4	622.2	652.1	483.9	937.7	1786.5	923.6	711.9
	Bream	167.4	221.8	239.7	177	193.9	317.5	385.9	328.6	335	419.3
	Burbot	33.2	26.8	17.8	51.0	37.9	37.4	40.7	37.5	49.5	19.7
	Salmon	0	0	0	0	0	0	0.1	0	0	0
	White bream/roach	208.8	150.0	128.4	158.0	234.3	230.9	469.4	210.6	219.7	270.3
	Peipsi whitefish	62.8	30.1	59.7	35.1	8.7	9.1	11.2	6.3	2.1	1.6
	Vendace	126.7	152.8	159.4	47.5	1.1	0	0	0	0	0
	Lamprey	0	7.2	15.8	9.3	25.9	25.3	22.4	29.9	48.0	62.0
	Ide	1.5	1.6	1.2	2.1	3.7	3.8	1	2.7	1.7	1.4
	Smelt	477.7	401.1	1420.5	946.9	1104.2	623.4	2214.1	186.8	30.7	169.1
	Vimba bream	0.7	0.5	0.2	0.2	0	0.1	0	0	0	0
	Other fish	123	159.8	134.1	168.3	169.6	209.3	28.9	183.6	191.2	200.7
Fishing at Lake Peipsi	Total fish	2105.8	2160.8	3610.9	2778.9	2787.3	1974.6	4149.5	3156.1	1880.5	1861.8
	Perch	631.5	883.4	808.8	652.2	537.5	281.2	229.6	600.0	387.8	374.3
	Eel	0.1	0.5	0.2	0.2	0.2	0.3	0	0.2	0.2	0.1
	Pike	67.6	65.1	97.5	106.6	111.2	122.6	144.9	110.8	72.5	64.2
	Pike-perch	370.1	261.3	706.7	590.6	621.7	449.9	910.8	1764.7	894.7	673.0
	Bream	96.4	132.2	167.7	132.9	134.8	231.2	323.8	250.9	241.9	328.1
	Burbot	30.2	24.8	14.8	49.6	33.9	32.3	37.1	31.4	45.2	16.7

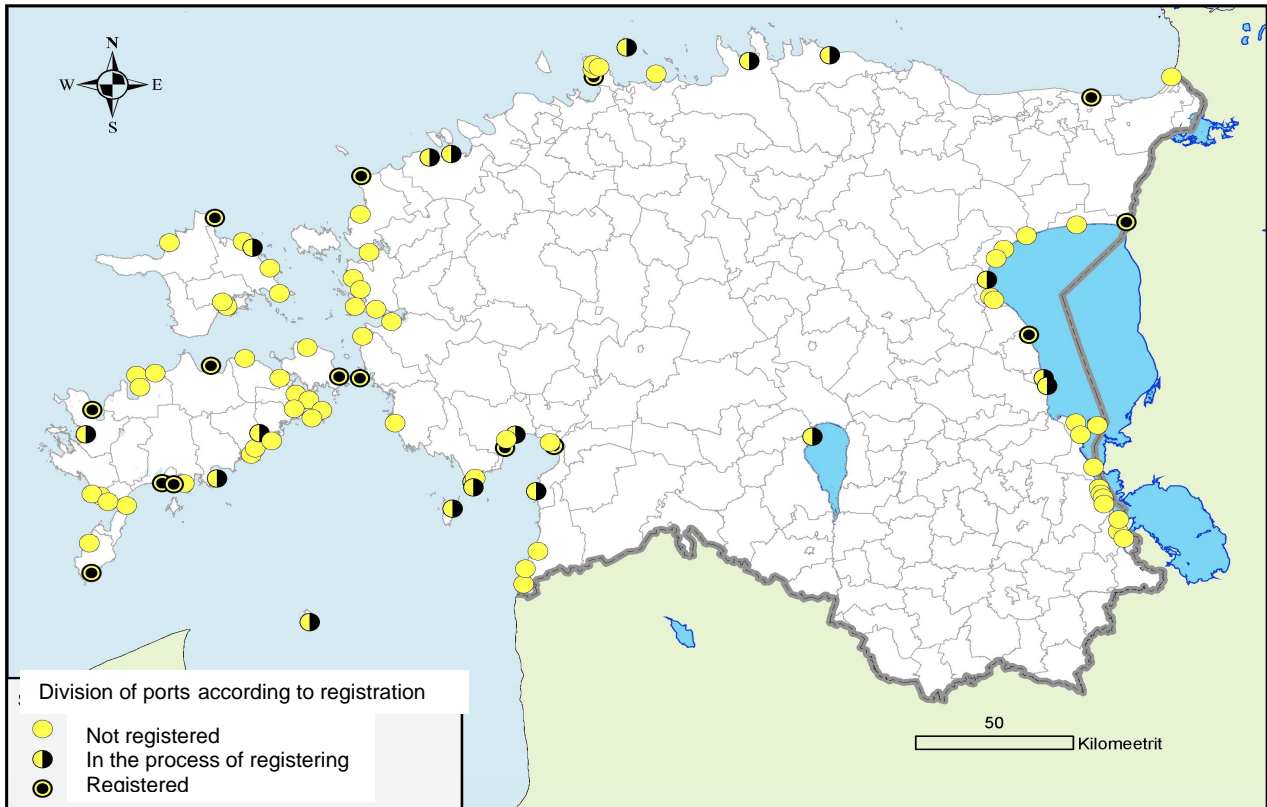
	White bream/roach	206.6	146.5	123.8	152	220.4	209.7	260.7	187.5	198.6	231.3
	Peipsi whitefish	62.8	30.1	59.7	35.1	8.5	8.9	10.9	6.2	1.8	1.5
	Vendace	126.7	152.8	159.4	47.5	0.9	0	0	0	0	0
	Ide	1.5	1.6	1.2	2	3	3.1	0	1.4	0.7	0.5
	Smelt	477.7	401.1	1420.5	946.9	1104.2	623.3	2214.1	186.8	30.7	169.1
	Vimba bream	0.7	0.5	0.2	0.2	0	0	0	0	0	0
	Other fish	33.8	60.9	50.6	63.3	11.0	12.2	17.6	16.2	6.6	3.0
Fishing at Lake Vörtsjärv	Total fish	246.8	259.7	241	241.8	337	375.8	318.7	316	353.2	374.5
	Perch	2.1	3.3	3.9	9.8	17.5	12.5	10.0	14.2	10.1	16.8
	Eel	34.1	37.3	21.8	31.6	38.9	37.6	20.4	26.4	20.1	16.8
	Pike	28.1	16.5	16.1	20.7	40.6	50.6	44.9	49.8	55.5	54.6
	Pike-perch	22.3	18.4	43.7	31.5	29.9	32.6	25.2	19.2	27.3	35.0
	Bream	69.1	86.2	70.6	42.8	53.4	45.7	30.5	42.3	59.1	57.1
	Burbot	3.0	2.0	2.9	1.4	3.9	5.0	3.5	6.0	4.2	3.0
	White bream/roach	0	0	0	0	0	0.4	184.2	0.4	0.1	0.2
	Ide	0	0	0	0	0.1	0	0.1	0.1	0	0
	Smelt	0	0	0	0	0	0.1	0	0	0	0
	Other fish	88.1	96	81.9	103.9	152.7	191.2	0	157.6	176.8	191.0
Fishing at other waters	Total fish	8.7	18.4	26.1	20.7	64.9	110.6	111.7	120.3	134.0	163.9
	Perch	0.9	0.8	2.0	1.7	6.2	6.5	6.4	6.6	6.7	7.7
	Eel	1.2	0	0	0	1.2	2.0	1.9	3.2	3.3	2.3
	Pike	1.0	0.6	0.7	1.1	4.6	7.2	10.4	8.6	10.0	7.4
	Pike-perch	0.3	0	0	0.1	0.4	1.4	1.6	2.6	1.6	3.9
	Bream	1.9	3.4	1.3	1.3	5.7	40.5	31.6	35.4	34	34.1
	Burbot	0	0	0	0	0	0.1	0.1	0.1	0.1	0
	Salmon	0	0	0	0	0	0	0.1	0	0	0
	White bream/roach	2.2	3.5	4.6	6	13.9	20.8	24.5	22.7	21.0	38.8
	Peipsi whitefish	0	0	0	0	0.2	0.2	0.3	0.1	0.3	0.1
	Vendace	0	0	0	0	0.2	0	0	0	0	
	Lamprey	0	7.2	15.8	9.3	25.9	25.3	22.4	29.9	48.0	62.0
	Ide	0	0	0	0	0.6	0.7	1	1.2	1	0.9
	Vimba	0	0	0	0	0	0.1	0	0	0	0
	Other fish	1.1	2.9	1.6	1.1	5.9	5.9	11.3	9.8	7.8	6.7

Sardine	274	480	0	0	0	0	0	0	0	0
Sardinella	252	415	3,169	2,474	0	0	0	0	0	0
Blue ling	0	0	0	0	0	85	22	5	0	5
Horse mackerel	1,983	2,283	1,583	1,621	0	0	0	0	0	0
Black scabbardfish	0	0	0	0	0	0	0	7	0	11
Greenland halibut	0	0	0	0	177	912	1,125	1,673	791	534
Black drum	0	0	0	0	0	154	259	0	0	0
White hake	0	0	0	0	0	2	6	8	102	1
Other fish	148	0	469	23	0	0	66	0	255	148
Total fish	34,715	25,887	37,436	25,686	24,695	15,548	17,056	16,008	16,820	16,539

“ESTONIAN FISHERIES STRATEGY 2007–2013”

ANNEX 9

Ports



Source: Estonian University of Life Sciences, Institute of Agricultural and Environmental Sciences – study “Employment in the Estonian fisheries sector”, 2006

**“ESTONIAN FISHERIES STRATEGY
2007–2013”**

ANNEX 10

**Trawl and coastal fishing ports/landing locations according to quantities
landed in 2004–2005**

No	Name		2004 T	2004 R
1	Veere	R/T	11 182 590.00	11 830.00
2	Roomassaare	R/T	7 424 560.00	1 300.00
3	Miiduranna	R/T	5 889 030.00	269.00
4	Mõntu	R/T	5 636 720.00	957.00
5	Dirhami	R/T	5 144 957.00	4 039.00
6	Lehtma	R/T	3 426 705.00	2 595.00
7	Pärnu	R/T	1 573 210.00	412 342.00
8	Meeruse	R/T	1 018 670.00	0.00
9	Bekkeri	T	698 640.00	0.00
10	Paldiski	T	650 890.00	0.00
11	Sõru	T	644 600.00	0.00
12	Kihnu	R/T	416 150.00	50 440.00
13	Leppneeme	R/T	314 393.00	1 555.00
14	Haapsalu	R/T	282 730.00	11 056.00
15	Toila	R/T	249 930.00	78 179.00
16	Vergi	R/T	229 925.00	0.00
17	Tapurla	R/T	228 335.00	71.00
18	Nasva	R/T	219 150.00	33 785.00
19	Kõrgessaare	R/T	170 690.00	15 703.00
20	Prangli	T	144 820.00	0.00
21	Turbuneeme	T	64 519.00	0.00
22	Purtse	R/T	47 170.00	5 824.00
23	Triigi	T	19 980.00	0.00
24	Nõva	R/T	15 785.00	5 725.00
25	Mahu	T	13 770.00	0.00
26	Ristna	T	3 245.00	0.00
27	Narva-Jõesuu	R/T	1 592.00	75 631.00
28	Aabla	T	0.00	0.00
29	Eismaa	T	0.00	0.00
31	Kakumäe	R/T	0.00	2 489.00
32	Kaunispea	R/T	0.00	8 092.00
33	Kärša	R/T	0.00	0.00
34	Laevaremonditehase kai	T	0.00	0.00
35	Lennusadam	T	0.00	0.00
36	Lohusalu	R/T	0.00	0.00
37	Paldiski Lõunasadam	T	0.00	0.00
38	Paldiski Põhjasadam	T	0.00	0.00
39	Paljassaare	T	0.00	0.00
40	Patareisadam	T	0.00	0.00

41	Peetri	T	0.00	0.00
42	Rohuküla	T	0.00	0.00
43	Rohuneeme	T	0.00	0.00
44	Varese	R/T	0.00	0.00
45	Vene-Balti	T	0.00	0.00
46	Virtsu praamisadam	T	0.00	0.00
47	Virtsu Vanasadam	T	0.00	0.00
48	V-Kalamaja	T	0.00	0.00
49			45 712 756.00	721 882.00

50

51	2004 R	Name	Name	2005 R
52	412 342.00	Pärnu	Meeruse	247 239.00
53	78 179.00	Toila	Kõrgessaare	169 485.00
54	75 631.00	Narva-Jõesuu	Nasva	81 354.00
55	50 440.00	Kihnu	Mahu	57 934.00
56	33 785.00	Nasva	Kakumäe	29 207.00
57	15 703.00	Kõrgessaare	Kihnu	12 833.00
58	11 830.00	Veere	Vergi	9 814.00
59	11 056.00	Haapsalu	Roomassaare	7 637.00
60	8 092.00	Kaunispea	Paldiski	2 395.00
61	5 824.00	Purtse	Tapurla	1 919.00
62	5 725.00	Nõva	Toila	1 179.00
63	4 039.00	Dirhami	Sõru	1 017.00
64	2 595.00	Lehtma	Leppneeme	823.00
65	2 489.00	Kakumäe	Rohuneeme	678.00
66	1 555.00	Leppneeme	Miiduranna	330.00
	1 300.00	Roomassaare	Pärnu	215.00
	957.00	Mõntu	Lehtma	200.00
	269.00	Miiduranna	Mõntu	6.00
	71.00	Tapurla	Aabla	0.00
	0.00	Aabla	Bekkeri	0.00
	0.00	Bekkeri	Dirhami	0.00
	0.00	Eismaa	Eismaa	0.00
	0.00	Kärssa	Haapsalu	0.00
	0.00	Laevaremonditehase kai	Kaunispea	0.00
	0.00	Lennusadam	Kärssa	0.00
	0.00	Lohusalu	Laevaremonditehase kai	0.00
	0.00	Mahu	Lennusadam	0.00
	0.00	Meeruse	Lohusalu	0.00
	0.00	Paldiski	Narva-Jõesuu	0.00
	0.00	Paldiski Lõunasadam	Nõva	0.00
	0.00	Paldiski Põhjasadam	Paldiski Lõunasadam	0.00
	0.00	Paljassaare	Paldiski Põhjasadam	0.00
	0.00	Patareisadam	Paljassaare	0.00
	0.00	Peetri	Patareisadam	0.00
	0.00	Prangli	Peetri	0.00
	0.00	Ristna	Prangli	0.00
	0.00	Rohuküla	Purtse	0.00
	0.00	Rohuneeme	Ristna	0.00
	0.00	Sõru	Rohuküla	0.00
	0.00	Triigi	Triigi	0.00

0.00	Turbuneeme	Turbuneeme	0.00
0.00	Varese	Varese	0.00
0.00	Vene-Balti	Veere	0.00
0.00	Vergi	Vene-Balti	0.00
0.00	Virtsu praamisadam	Virtsu praamisadam	0.00
0.00	Virtsu Vanasadam	Virtsu Vanasadam	0.00
0.00	V-Kalamaja	V-Kalamaja	0.00
721 882.00			624 265.00

Name	2005 R	2005 T	
Dirhami	0.00	16 345 460.00	R/T
Veere	7 637.00	15 813 370.00	R/T
Miiduranna	330.00	13 164 800.00	R/T
Mõntu	6.00	3 521 510.00	R/T
Paldiski	0.00	2 730 355.00	T
Roomassaare	200.00	2 533 770.00	R/T
Lehtma	215.00	2 239 060.00	R/T
Pärnu	247 239.00	1 800 950.00	R/T
Meeruse	0.00	1 241 016.00	R/T
Leppneeme	2 395.00	1 104 665.00	R/T
Vergi	1 017.00	876 195.00	R/T
Haapsalu	12 833.00	721 050.00	R/T
Toila	823.00	419 477.00	R/T
Paljassaare	0.00	280 900.00	R/T
Tapurla	1 179.00	209 145.00	R/T
Kõrgessaare	9 814.00	138 200.00	R/T
Purtse	1 919.00	130 350.00	R/T
Nasva	81 354.00	115 050.00	R/T
Kihnu	169 485.00	105 740.00	T
Sõru	0.00	33 400.00	T
Rohuküla	0.00	30 400.00	T
Triigi	0.00	26 640.00	T
Lennusadam	0.00	13 600.00	T
Mahu	0.00	8 640.00	T
Narva-Jõesuu	57 934.00	630.00	R/T
Eismaa	0.00	319.00	T
Aabla	0.00	0.00	T
Bekkeri	0.00	0.00	T
Hundipea	0.00	0.00	T
Kaunispea	29 207.00	0.00	R/T
Kärša	0.00	0.00	R/T
Laevaremonditehase kai	0.00	0.00	T
Lohusalu	0.00	0.00	R/T
Nõva	0.00	0.00	R/T
Paldiski Lõunasadam	0.00	0.00	T
Paldiski Põhjasadam	0.00	0.00	T
Patareisadam	0.00	0.00	T
Peetri	0.00	0.00	R/T
Prangli	0.00	0.00	T
Ristna	0.00	0.00	T
Rohuneeme	0.00	0.00	T

Turbuneeme	678.00	0.00	T
Varese	0.00	0.00	R/T
Vene-Balti	0.00	0.00	T
Virtsu praamisadam	0.00	0.00	T
Virtsu Vanasadam	0.00	0.00	T
V-Kalamaja	0.00	0.00	T
	624 265.00	63 604 692.00	

Trawl only

2004		2005	
Bekkeri	698 640.00	Paldiski	2 730 355.00
Paldiski	650 890.00	Kihnu	105 740.00
Sõru	644 600.00	Rohuküla	30 400.00
Prangli	144 820.00	Triigi	26 640.00
Triigi	19 980.00	Lennusadam	13 600.00
Mahu	13 770.00	Mahu	8 640.00
Ristna	3 245.00		
Total	2 175 945.00		2 915 375.00

**“ESTONIAN FISHERIES STRATEGY
2007–2013”**

ANNEX 11

Coastal fishing ports according to quantities landed in 2004–2005

2004 (kg)	Name Name	2005 (kg)
124 584.00	Vasknarva Pärnu laht	141 896.00
98 886.00	Lindi Vasknarva	126 805.00
69 909.00	Liu Lindi	85 337.00
62 420.00	Sillamäe Lao	83 484.00
61 311.00	Puulaid Liu	75 375.00
50 002.00	Virtsu Saaremaa	63 090.00
43 245.00	Võiste Võiste	50 927.00
35 320.60	Kadrina Sillamäe	48 160.00
28 870.50	Audru Tõstamaa	41 715.00
27 656.70	Japs Kadrina	38 555.00
25 581.00	Vätta Audru	33 598.00
20 087.00	Uulu Muhu	31 822.00
19 967.00	Pärnu laht Sauga	17 932.00
19 226.00	Manija Vätta	16 893.00
17 975.00	Tõstamaa Sääre	15 817.00
10 546.00	Kastna Japs	14 593.00
9 571.00	Vana-Sauga Narva	14 387.00
9 318.00	Raeküla Kabli	13 300.00
8 890.00	Seliste Soome laht	12 523.00
8 056.00	Lao Rannaküla	11 003.00
7 137.00	Rannaküla Treimani	9 231.00
5 673.00	Luidja Harjumaa	8 544.00
5 406.00	Narva Vh Manija	8 105.00
4 280.00	Narva Matsalu	7 987.00
4 174.00	Aseri Virtsu	7 335.00
3 656.00	Suursadam Jaagupi	6 548.00
3 435.00	Tallinn Tori	6 306.00
2 994.00	Vaiste Puise	6 029.00
2 741.00	Matsalu Häädemeeste	6 002.00
2 729.00	Värati Tallinn	5 545.00
2 394.00	Sääre Kuivastu	5 509.00
2 330.00	Orjaku Mäksa	5 465.00
1 562.00	Tori Hiiumaa	5 010.00
1 514.00	Muhu Narva-Kulgu	4 796.00
1 496.00	Treimani Läänemaa	4 697.00
1 302.00	Kärdla Lääne-Virumaa	4 530.00
1 143.80	Kavastu Vana-Sauga	3 880.00
1 111.00	Koguva Kallaste(Saaremaa)	3 614.00
920.00	Mäksa Kavastu	3 534.00
909.00	Kavaru Metsapöole	2 705.00
895.00	Salinõmme Papissaare	2 580.00

894.00	Loksa Luidja	2 545.00
750.00	Võrkaia Põhja rand	2 533.00
705.80	Jaagupi Salinõmme	2 430.00
628.00	Kallaste(Saaremaa) Arumetsa	2 305.00
604.00	Kabli Tsitre	1 814.00
600.00	Võidu sadam Seliste	1 712.00
580.00	Muratsi Raeküla	1 629.00
573.00	Palupõhja Uulu	1 613.00
529.00	Kudruküla Muratsi	1 569.00
424.80	Kuressaare Ikla	1 425.00
369.00	Lille Läätsa	1 350.00
329.00	Läätsa Koguva	1 316.00
309.00	Näkitiigi Kudruküla	1 300.00
250.00	Salme Virve	1 300.00
207.00	Kuivastu Muuga	1 223.00
171.00	Kaleste Võrkaia	1 097.00
156.00	Tallinna laht Võsu	1 055.00
150.00	Hirmuste Suursadam	935.00
150.00	Labuna Pihlaspea	934.00
149.00	Mudaste Labuna	900.00
112.00	Lihula Maardu	863.00
100.00	Kihelkonna Salmistu	792.00
100.00	Orissaare Lõu	768.00
83.00	Saulepa Rannametsa	756.00
78.00	Vahtrepa Pärисpea	679.00
69.00	Matsi Ihasalu	676.00
56.00	Marksa Kärđla	646.00
42.00	Riguldi Võidu sadam	595.00
41.00	Sarve Saulepa	588.00
40.00	Lõimastu Kungla	583.00
24.00	Puise Loksa	574.00
22.00	Tornimäe Kaberneeme	565.00
20.00	Vääna Reiu	565.00
10.00	Keila-Joa Hirmuste	552.00
10.00	Kiideva Kavaru	528.00
10.00	Rannametsa Nõva-Rannaküla	525.00
0.00	Abruka Palupõhja	462.00
0.00	Altja Munalau	456.00
0.00	Arumetsa Käsnu	449.00
0.00	AS Maseko Unguma	436.00
0.00	Eru Kuressaare	433.00
0.00	Haabneeme Lihula	425.00
0.00	Hara Luide	380.00
0.00	Harjumaa Kaldu	370.00
0.00	Heltermaa Lahe	355.00
0.00	Hiumaa Neeme	334.00
0.00	Hindaste Pirita	316.00
0.00	Häädemeeste Hindaste	256.00
0.00	Ihasalu Hara	242.00
0.00	Ikla Lauka	241.00
0.00	Jägala jõgi Tuksi küla	233.00
0.00	Kaavi Simisti	225.00

0.00	Kaberneeme	Kartre	210.00
0.00		Kaldu Salme	201.00
0.00	Kalevi Jahtklubi	Tahkuranna	201.00
0.00		Karala Pedassaare	198.00
0.00		Karepa Vainupea	194.00
0.00		Kartre Puulaid	190.00
0.00	Kaugotoma	Karala	185.00
0.00		Kiidema Eru	157.00
0.00		Kisula Orissaare	127.00
0.00		Kulgu Keila-Joa	124.00
0.00		Kunda Vääna	107.00
0.00		Kungla Tamme	103.00
0.00		Kuusalu Tehumardi	100.00
0.00		Kõiguste Sutlepa meri	95.00
0.00		Kõrkvere Lõmala	94.00
0.00		Kälbuse Kisula	84.00
0.00		Käsmu Jägala jõgi	83.00
0.00		Lahe Karepa	79.00
0.00		Lahtaguse Tallinna laht	73.00
0.00		Laidevahe Haabneeme	60.00
0.00	Lao kala vastuvõtupunkt	Kihelkonna	60.00
0.00		Lauka Rummu	58.00
0.00	Lobineeme	Kuusalu	51.00
0.00		Luide Tornimäe	35.00
0.00		Lõmala Pootsi	26.00
0.00		Lõu Kiidema	20.00
0.00	Läänemaa	Valgma	20.00
0.00	Lääne-Virumaa	Altja	6.00
0.00		Maardu Abruka	0.00
0.00		Manilaiu AS Maseko	0.00
0.00		Merikaru II Aseri	0.00
0.00	Merikuld I.Vana Sauga Heltermaa		0.00
0.00		Metsapoole Kaavi	0.00
0.00		Miinisadam Kaleste	0.00
0.00		Munalaiu Kalevi Jahtklubi	0.00
0.00		Muuga Kastna	0.00
0.00		Naissaare Kaugotoma	0.00
0.00	Narva Linnasadam	Kiideva	0.00
0.00		Narva-Kulgu Kulgu	0.00
0.00		Neeme Kunda	0.00
0.00	Nõva-Rannaküla	Kõiguste	0.00
0.00	OÜ Merikuld Häädemeeste	Kõrkvere	0.00
0.00		Papissaare Kälbuse	0.00
0.00		Pedassaare Lahtaguse	0.00
0.00		Peerni sadam Laidevahe	0.00
0.00		Pihlaspea Lao kala vastuvõtupunkt	0.00
0.00	Piirivalvesadam	Lille	0.00
0.00		Pirita Lobineeme	0.00
0.00		Pootsi Lõimastu	0.00
0.00	Põhja rand	Manilaiu	0.00
0.00		Pärispea Marksa	0.00
0.00		Reiu Matsi	0.00

0.00	Ringsu Merikaru II	0.00
0.00	Rummu Merikuld I.Vana Sauga	0.00
0.00	Saaremaa Miinisadam	0.00
0.00	Salmistu Mudaste	0.00
0.00	Sandla Naissaare	0.00
0.00	Sauga Narva Linnasadam	0.00
0.00	Seanina Narva Vh	0.00
0.00	Simisti Näkitiigi	0.00
0.00	Soome laht Orjaku	0.00
0.00	Sutlepa meri OÜ Merikuld Häädemeeste	0.00
0.00	Sviby Peerni sadam	0.00
0.00	Tagalaht Piirivalvesadam	0.00
0.00	Tahkuranna Riguldi	0.00
0.00	Tamme Ringsu	0.00
0.00	Tehumardi Sandla	0.00
0.00	Topu Sarve	0.00
0.00	Tsitre Seanina	0.00
0.00	Tuksi küla Sviby	0.00
0.00	Turja Tagalaht	0.00
0.00	Türju Topu	0.00
0.00	Unguma Turja	0.00
0.00	Vainupea Türju	0.00
0.00	Valgma Vahtrepa	0.00
0.00	Vanasadam Vaiste	0.00
0.00	Virtsu Maseko Vanasadam	0.00
0.00	Virve Virtsu Maseko	0.00
0.00	Võsu Värati	0.00
818 569.20		1 104 958.00