# National Strategic Plan

## For the Fisheries Sector for the Period 2007 - 2013

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1. General description of the industry

1.a) (Position of the industry in the national or regional economy, importance from the perspective of employment and relation to the sea)

The fisheries is part of the agriculture in the Czech Republic. Fishing activity is in accordance with Act No. 99/2004 Code, on fishpond farming, execution of the fishing right, fishing guard, protection of marine fisheries resources and amending certain acts (act on fisheries) divided in two activities. These are the fishpond farming (so called production fisheries) and management in fishing grounds.

The Act on Fisheries and other national legislation connected with the production of fish are fully compatible with EU regulations. At the same time, it secures the protection of sea fishing resources.

The fisheries in the Czech Republic contributes approximately CZK 1.1 milliard to the gross domestic product, which is 0.04% of the GDP.

Gross agricultural production totals 4.42% of GDP. The level of total animal product production in the Czech Republic is CZK 59.8 milliard at current prices. Fish for market comprise 1.9% of the gross animal product production, and hatching fish 0.25% (source ČSÚ; Czech Statistical Office).

In 2004, the fisheries employed 1,679 persons. The development of employment shows a slight decrease. The decrease in employment is related to the continuously high share of physical labour, the increased efficiency in human labour with the adaptation of management methods in the area of the environment protection to new legislative rules.

In the conditions of a land-locked country the fishpond farming carries out functions significant to the society as a whole, such as water management, landscape planning, as well as cultural and protective. Fishpond farming is a specific form of aquaculture. It is traditional farming of water reservoirs. In the cultural landscape the system of farming in man-made water reservoirs (fishponds) substituted formerly agriculturally unutilized locations. The territory of the Czech Republic contains more than 24,000 fishponds and bodies of water used in aquaculture, whose total area equals 51,800 ha, with a retention ability of more than 420 million m$^3$ of water. Its irreplaceable retention function, for instance, during the flooding in 2002 enabled the retention of 150 million m$^3$ of water above the normal level in South Bohemia alone.

Farming in fishing grounds consists of the farming of river systems and maintaining fish communities in water, where recreational fishing is carried out primarily by angling. More than 2,000 fishing grounds are located in the Czech Republic, with an area of approximately 42,000 ha. In recreational fishing engage 350,000 registered members of all fishing unions.

The research and education are integrated part of all industry. Technical schools have many years of internationally recognized tradition.

1. b) (Regions or territories, for which the fisheries is significant in the local economy)

The Czech Republic is among the smallest of the member states in terms of area, and therefore the fisheries was not administratively divided into smaller units.

A higher concentration of fishpond area used for aquaculture is located primarily in the South Bohemia region.
1. c) (Condition of the fishing fleet)

This is not relevant to the Czech Republic.

1. d) (Situation in aquaculture)

Fishpond farming of the Czech Republic produces just under 20,000 tonnes of fish for market annually. Fishpond farming was, and still is, built on artificially created bodies of water, which are situated primarily in rural areas. Fish breeders and processors create working places in areas where is otherwise a lack of employment opportunities.

The commercial fisheries sector belongs among the stable fields, both with respect to production and from the perspective of market mechanism functioning. The almost thousand-year history of aquaculture breeding of carp, carp family species and predatory fish species in natural conditions has potential usefulness for the future.

Carp production achieves 87% of the total quantity of fish for market.

Fishpond farming shows a characteristic balance of production, ecological and water management bonds. Fishponds fulfil irreplaceable secondary functions in the landscape, such as water retention, flood protection, biological water purification in fishponds, artificially created space for nesting birds and the protection of animal territories, leisure use, environment stabilisation function, biological diversity conservation, and others.

In the Czech Republic, fish farms breeding salmon fish (rainbow trout and American grayling) exist alongside fishpond farms. For their more significant development, however, they lack, in particular, appropriate water sources and initial operating capital.

The breeding of other fish in closed systems is used only to a limited extent. It serves primarily to breed certain development schools of fish or water animals and also for the purpose of their reintroduction into river systems.

The demand for ornamental fish species in the last few decades has enabled some of our producers to expand their production capacity in this direction as well; this applies to koi carp, goldfish and golden orfe.

1. e) (The situation in processing and introducing on the market)

The carp tradition traditionally has a dominant position on the domestic market. The market with live fish is connected with the Christmas and Easter holidays. Its production reaches 17,000 tonnes of fish for market annually and it is evenly divided between domestic and foreign market.

From the perspective of consumption, trout is the most significant product. The domestic production of trout on the market is in a situation of strong competitive pressure caused by the import of these fish, primarily from other EU member states, where appropriate production capacity was already created in previous program periods.

The market supply of other fish species is limited since they are economically demanding and bring a limited profit, and thus the volume of their production is statistically insignificant.
A disadvantage for introducing fish on the market is the consumer price, and the high degree of laboriousness in kitchen preparation which dissuades some target customers. The distrust of our customers for processed freshwater fish survives up to the present.

The Czech Republic has adequate production capacity. For the most part, producers process small volumes. The technical level of processing units is fully adequate for EU requirements and is fully comparable to developed foreign operations.

The selection of semi-finished fish products with a higher added value is a good with prospects for the future. The price of this good, together with the conservative approach of customers, preferring live fish, is a barrier to its broader assertion on the market.

Abroad, primarily live carp intended for immediate consumption or for stocking into fishing grounds are in demand. Target areas for export are mainly Germany, Slovakia and Austria. The demand for processed fish products does not have a permanent character; this is primarily carp fish fillets delivered to these countries.

Hatching fish are a special segment on the market. These are determined for the production of fish for market in fishpond farming, as well as for stocking into fishing grounds. Fish associations and smaller fish breeding farms also aim at the production of protected or threatened fish species. From the perspective of the environment, this production is necessary into the future for the maintenance of the fish community spectrum of species.

A wholly specialized market is the one with ornamental freshwater fish. In this sphere, primarily small farmers are active. Commercial fish industry subjects are involved in this activity only to a limited degree. Sale is primarily aimed at foreign markets. Czech exports are currently aimed at Germany, the Netherlands and Belgium.

1. f) (Marketing and sale chains)

Imported saltwater fish dominate the Czech fish market. Of the total annual consumption of 5 kg of fish meat per inhabitant, saltwater species comprise more than 4 kg, while 1 kg is made up of meat from freshwater domestic fish.

Of processed fish, the largest share on the market is held by frozen fish products, which derives from their character enabling problem-free inclusion into a wide spectrum of frozen foods in supermarkets.

Among the selection of freshwater fish, carp with a size of 2 to 3 kg is the most important fish. Despite the almost year-round existing selection, the sale of fish is concentrated primarily at the end of the year, when the market absorbs 60% of the domestic consumption for the whole year. Customers prefer a purchase of live carp. Processed freshwater fish totals only 10 to 15% of the overall domestic fish market.

No special sales network aimed exclusively at fish exists in the Czech Republic, but a whole variety of fish and fishery products is offered to consumers in the scope of the already existing sales network.

A stand traditional sales network oriented for sale of live carp is yearly created at temporary basis in the connection with Christmas customs and traditions before Christmas.
2. SWOT analysis of the industry and its development

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Opportunities

- greater publicity of aquaculture products,
- increasing agrotourism services,
- increasing production of other fish species,
- increasing the assortment of products from processed fish,
- modernization of technical equipment of processing facilities,
- revitalization and modernisations of fish lakes and other aquaculture units,
- making river systems passable for migrating species,
- measures to prevent illness;
- utilisation of technology minimising adverse environmental impacts.

Threats

- limitations of economic activity in fishponds by increasing of production methods intensity due to the implementation of new legal standards in the area of environment,
- import of less expensive fish and products,
- for fish and water organisms, a non-passable river system, interrupted migration routes,
- environmental burden in sediment formation,
- spread of dangerous fish illnesses
- influences of climatic phenomena
- increase in number of fish-eating predators

Strengths

- **Czech fishpond farming know-how**

Czech fishpond farming possesses a collection of knowledge related to the breeding of fish. This includes the actual techniques of breeding fish, knowledge of etology and their application in farming in harmony with requirements of the quality of the environment. In addition to carp, other fish species are raised in fishponds. This contributes not only to the better economic use of fish farming by bringing other fish species to the market (particularly grass carp, silver carp, bighead carp, common tench, predator fish), but it also has an equilibrium effect on the entire fish population. The approaches of polycultural farming are currently biologically and technologically balanced and historically tested.

- **High quality of breeding material**

For many years Czech, fishpond farming has been selectively breeding decisive fish species – common carp, rainbow trout and common tench. Fish farmers also work with lines that are less susceptible to illness and are at the same time highly productive from the perspective of production qualities.

- **Extra-production functions of fishponds**

In addition to the breeding of fish, the majority of fishponds also serve for water management purposes, such as retention reservoirs, including the ability to catch extreme floodwater currents. From the perspective of landscape protection, the fishpond systems enable the maintenance of the variety of fauna and flora. Fishponds further positively influence the level of surface waters, fulfil a purification function of surface waters and not least have landscape planning, recreational historical and aesthetic importance. An increase in public demand for extra-production functions of fishpond areas is possible to anticipate in future.
• **Quality care of fishing grounds**

Management of fishing grounds comprises a system of measures, which have the goal of maintaining a stable condition of fish species corresponding to natural conditions.

• **Maintenance of stock of fish communities in fishing grounds**

In addition to the management and enrichment of fish communities, the increase of fish communities by protected and threatened autochthonous species in harmony with requirements for the protection of the environment is also taken care of.

• **The use of fishing grounds and fishpond systems by the greater public for recreational activities**

There is a strong interest in recreational fishing and care of fishing grounds in the Czech Republic. Fisheries societies have 350,000 registered interested anglers. Fishing grounds and fishpond areas also serve for other recreational activities such as water sports and ecological education and they have a positive impact on mental and physical relaxation.

• **Competitiveness of fisheries enterprises**

Before the accession to the EU, the existence of a market economy enabled the creation of stable competitive enterprises, whose products have established them not only on the domestic market, but also on foreign markets.

• **The existence of organizations coordinating the interests of fisheries**

In 1991 the Rybářské sdružení ČR (Fisheries Association of the Czech Republic) was formed in accordance with Council Regulation No. 104/2000/EU on a similar service base as producers organizations have been created. The members of the professional union of individuals and businesses created a mutually supported organisation which is not financed from public sources. The Fisheries Association of the Czech Republic coordinates interests of producers and informs a public about its activity and activities of its members.

• **Sufficient processing capacity**

The fish processing facilities, which supply the domestic market in the Czech Republic, are currently in very good condition. The capacity of processing facilities is 4,500 tonnes/year of final products, although they are currently running only at 36% of capacity. Most processing facilities were already rebuilt and modernized within the SAPARD Programme in the pre-accession period or on the basis of measures within the Operational Programme of rural development and Multipurpose agriculture in the period 2004 to 2006 (FIFG).

• **Science and school education systems**

The education system aimed at the fisheries has a long-standing tradition. In the Czech Republic, there exist two secondary level educational establishments, one secondary level technical school, one technical college and two universities. Part of the University of South Bohemian is a Research Institute of Fish Culture and Hydrobiology in Vodňany, which has a high professional level, and carries out not only basic but also applied research with the goal of directly using the knowledge gained in practice.
• **Trademarks and quality seal**

The trademarks Bohemian Carp (Český kapr) and Třeboň Carp (Třeboňský kapr) are registered in the Czech Republic and are based on genetic origin identification and the originality of the goods. The national quality seal “KLASA” was introduced by the Ministry of Agriculture and denotes certain domestic food products of a tested high quality. The national quality seal “KLASA” was given to some products from carp as well to the Třeboň carp.

• **Fisheries legislation**

Act No. 99/2004 Code, on fishpond farming, execution of the fishing right, fishing guard, protection of marine fisheries resources and amending certain acts (act on fisheries) in the wording of the pursuant regulations and Decree No. 197/2004 Code, on the execution of Act No. 99/2004 Code, on fisheries, in the wording of the pursuant regulations regulating activities of fishpond farmers, users of fishing grounds and recreational anglers.

• **Stabilized market**

The domestic market for freshwater fish is supplied directly by domestic products, which is favourable for the national economy. In 2004 8,200 tonnes, i.e. 42%, of live fish were delivered on the domestic market; 9,500 tonnes, i.e. 49%, of live fish were exported and 1,700 tonnes, i.e. 9%, of fish were designated for processing. Long-term sales of freshwater fish are secured. Less than 1,000 tonnes of freshwater fish and products made therefrom are imported to the Czech Republic. Total fish imports (almost exclusively saltwater) and other water animals equal 45,000 tonnes annually. The consumption of fish and fishery products has been maintained for a long time at a level of 5 kg per inhabitant per year, of this 1 kg is freshwater fish, of which 0.8 kg equals carp.

**Weaknesses**

• **Silting (sediment in fishponds)**

Intensive agricultural production has caused, and is causing, excessive water and wind erosion and subsequently leading to the accumulation of sediments in fishponds. In the Czech Republic, a third of fishponds (approximately 200 million metres square) indicate excessive sediment burden. Sediments are transported in large volumes to fishponds depending on the character and condition of river networks and farming activity in the river basin. They quickly clog up sections with less surface water flow. In fishponds, sediments have an equally negative impact on water quality. For the fisheries itself, they are very unfavourable, lower the landscape retention of water and as an end result gradually decrease as well the overall water area of the fishponds.

• **Scattered fishponds**

Scattered fishponds in the landscape causes increased expenses for transportation of hatching fish and fish ready for market. It also affects transfer of fish for fish farming, as well as all other farming activities necessary for fishpond operation. Due to the large volumes of fish transported, it is necessary to pay attention to the demands for the use of special methods of transportation and equipment specially determined for the transport of live fish in such a way that the requirements for fish “welfare” are respected.
• **Insufficient appropriate sources for breeding salmon fish**

This concerns an objective cause, which results from the configuration of the cultivating landscape, its retention ability and the method of water resource management.

• **Low economic return**

The total volume of freshwater fish production does not create sufficient financial resources and reserves, which could be used for larger investments without public financial sources. The reconstruction of fishpond systems without external input is not possible at current price relations and with respect to the total gross production of fish.

• **Length of breeding period of carp**

The period of carp breeding to get fish for market (2.5 to 3 kg) preferred by our consumers is three to four years. In comparison with the production of carp in other countries this is an economic handicap.

• **High degree of physical labour**

In the fish industry a significant share of hard physical labour remains, which cannot thus far be avoided. Demanding natural conditions and the method of farming often do not allow for mechanisation.

• **Age and wear of technical equipment**

A condition of successful fishpond farming is the smooth functioning of all operational, service objects and facilities, especially in the framework of the fishponds. This includes parts of the fishponds such as the corpus of dikes, gullets, safety overflows, fishing grounds, fortified fishing ground centres, canal network, discharge facilities and its areas impacted by falling water etc., or of technical equipment, such as feed storage, aerators etc.

• **Insufficient advertising of fish products**

The conservative approach of customers to aquaculture products has not yet been changed in a fundamental way. Publicity has not enough focused on the quality of fish meat and its health benefits. Targeted advertising campaigns for promotion of fish and fishing products are not used in sufficient measure.

• **Seasonal nature of the market and limited consumer interest in fish and fishery products**

The habits of consumers in the consumption of freshwater fish in the Czech Republic are traditionally oriented to the Christmas and Easter holidays. During the calendar year most of the population does not show an interest in freshwater fish. A disadvantage is the consumer price of fish, comparable with the price of poultry. Poultry is easier to prepare in kitchen.

• **influences of fish-eating predators**

The fishpond farming and management in fishing grounds is strongly influenced by fish-eating predators.

Crucial are damages caused by the river otter (*Lutra lutra*), the grey cormorant (*Phalacrocorax carbo*) and the grey heron (*Ardea cinerea*).
The Czech Republic compensates damages caused by specially protected animals only partially. Breeders are forced to cover production losses from their own resources.

The fishpond area, the scattered distribution of fishponds over the territory and other circumstances prevent from any efficient protection of fish communities against damages caused by these predators. Fishpond farmers cannot in many cases effectively protect their property. The balanced fish communities, especially in small watercourses (in trout areas) are as well damaged; quite a number of fish species at past common, including protected species gradually disappear.

- *inappropriate management in river basins above fishponds causing excessive erosion*

The silting of fishponds is important negative factor caused by a number of different influences, for example agricultural operation, industry, transportation and density of population.

- *reduction of economic activities in fishponds by decreasing of production methods intensity for reasons of adopted legal standards in the field of environment*

Fish producers must fill strict national rules and measures ensuring water purity. Fish breeding in fishponds is also outside of protected natural areas and national parks limited by a number of environmental and water management measures. The national legislation regulates these requirements by acts No. 114/1992 Code, on nature and landscape protection, in the wording of pursuant regulations and act No. 254/2001 Code, on waters and the amendment to certain acts, in wording of the following regulations which regulate and limit the management on fishponds and bring a large file of measures and prohibitions. Fish farmers have to ask for common management for a number of exceptions and permits.

- *decrease in biological diversity and ecological stability of fishpond ecosystems caused by high measure of agricultural operation intensification in second half of last century*

In second half of last century the accent has been put mainly on economic result and therefore the species composition and ecological stability of the environment was not sufficiently taken into account.

**Opportunities**

- **Increased publicity of aquaculture products (existing OP)**

The aim of publicity will be to catch the fancy of customers with a targeted advertising campaign and to achieve an increase in the sale of quality products and to familiarize customers with the whole assortment, from freshwater fish to saltwater fish. It is necessary to open this area top a systematic influence on the public in order to achieve continuous usage of fish resources.

- **Expansion of the production from other fish species**

Fisheries in the Czech Republic, which are narrow oriented on carp breeding, should expand their breeds for other fish species that find good use on the market.
• **Expansion of assortment of processed fish products**

It is an objective of our policy to provide for continuous interest of consumers focused also on convenient foods with high quality of processing, nutritional value and fully complying with the requirements of healthy diet.

• **Modernization and reconstruction of processing facility technical equipment**

In the new budget period the reconstruction or enlargement of existing processing facilities, so that they fully cover the changing demand of customers for the selection of fish products, can be expected. It is necessary to maintain the high standard of food safety, public health requirements for processing quality as well as requirements for social equipment of the processing facilities. The operating units shall gradually use more environmentally friendly technology procedures, including progressive methods of operating waste disposal.

• **Renewal and modernisation of fishponds and other aquaculture units (existing OP)**

For the maintenance of constant close to nature farming of existing water bodies, it is necessary to support through investment the construction or modernisation of technical equipment. Over the course of time, existing facilities are becoming outdated and getting worn out, and this can lead to their failure. Most of these investments are time-intensive and very expensive. Their financing from current operating funds, including reserves, cannot be counted on.

• **Making river systems passable for migrating species**

A large part of the river courses is not passable from the perspective of fish migration, which limits the natural movement of fish to the locations where they multiply (e.g. Atlantic salmon, river eel). The construction of fish passages is one of the conditions enabling and supporting not only natural reproduction, but also the actual occurrence of fish populations. The goal is to enable problem-free fish migration not only within fishing grounds, but also in the scope of the whole migratory route, primarily of long-distance migrating species for the entire length of the watercourse.

• **Increasing agri-tourism services**

An increasing of agri-tourism services represents a possibility for satisfaction of the demand for new services, especially in the field of sport fishing. The sector will be popularised by the provision of new services and creating of new employments will be its result.

• **Increasing production and selection with other species**

The Czech Republic fisheries are closely focused on carp farming, it should enlarge breeding with other species with good use on the market.

• **Revitalization of fishpond systems**

The revitalization of fishpond systems should bring about the stabilization of bank and littoral zones, and the preservation and renewal of sustainable biodiversity of flora and fauna in given locations. Implementing measures aimed at limiting negative influences on fishponds,
for example, limiting the results of releasing waste waters, limiting erosion in the river basing, limiting eutrophysation of water etc.

• **Measures to prevent illness**

Preventive measures are aimed at the support of breeding research projects aimed at the acquisition of fish species, which will be less susceptible to illnesses such as *koi herpesvirus*. To ensure education of the public it is necessary to carry out periodical training of professional and amateur fishermen, with the goal of securing the transfer of information on the possibility of the prevention of the spread of other types of illness, which infect not only carp-type fish, but also other ornamental fish as well.

• **Utilisation of technologies reducing adverse environmental impacts.**

It is necessary, in accord with the requirements for maintaining environmental quality in the culture landscape, to use at higher extent such methods of management – aquaculture, which shall provide for not merely vitality of fisheries enterprises yet also, at the same time, shall have positive environmental effects.

**Threats**

• **Limitations of economic activity at fishpond areas by decreasing of production methods intensity due to the implementation of new legal standards in the area of environment**

Fish producers must adhere to strict national rules and measures for clean water issuing from the framework directive 2000/60/EC. National legislation more strictly amend these requirement for quality of the environment, these requirements regulate and limit the management at fishponds and bring a large range of measures and prohibitions. For regular farming, it is necessary to request a whole range of exceptions and permits on the part of fishpond farmers. More and more fishponds are gradually becoming part of the protected regions (such as NATURA 2000 territory), due to which the possibility of their utilization for farming is limited. Fishpond owners in this way incur economic losses, not of their own fault, and they are only very insufficiently compensated by the state.

• **Import of less expensive fish and fishery products**

For a long time the sale price of freshwater fish has been higher than the cost of saltwater products. With the use of lower investment expenses, saltwater fishing enables to delivery products to the market cheaply. Aquaculture is completely dependent on human activities. From the creation and maintenance of special facilities to the constant care of fish breeding, to fishing, to introduction on the market. Other unfavourable conditions are the long-term process of the actual production, seasonable production and the import of freshwater fish species from areas with more favourable climates.

• **Impassibility of river systems, disrupted migration routes**
During the last century the construction of a large number of dams were constructed, which either entirely or partially prevented the migration of saltwater species such as river eels, Atlantic salmon, sea trout, great sturgeon, flounder and river lamprey. Making passable these barriers will favourably influence the breeding of exclusively freshwater species as well, such as common trout, common pikeperch, aspius aspius, common roach, common barbell, river vimba and chondrostoma nasus, for whom thus far the barriers have prevented migration to the places where they natural breed and find food. Closing part of the population in the scope of the river system may cause degeneration with subsequent disappearance of specific species in given regions.

- **Ecological burden in sediment formation**

  Excessive silting of fishponds with the soil, silting of fishpond including the contamination occur due to intensive agricultural operation with inappropriate agricultural practices. The composition and contamination of sediments in fishponds depends on the structure of agriculture and industrial production in the river basin. In the event of dredging contaminated sediments, it is necessary to count on significantly higher expenses for their ecologically safe removal. All the same, it is not possible to leave sediments in fishponds. Due to excessive high layers of mud sediments, the water quality will be degraded and fish populations will die off.

- **Spread of dangerous fish illnesses**

  Inspections of animal-fish health are aimed at salmon species (in harmony with EU regulations). The state veterinary administration carries out obligatory examinations, and includes all existing farms to prevent the development and spread of illness. On the territory of the Czech Republic no incidences of illness, which fall under the notification duty according to the EU list or even under Czech legislation, have been thus far announced.

  - **Influences of climatic phenomena**

    Sufficient quality water is a necessary prerequisite for a functioning aquaculture. Long-term lack of water in the vegetation period can have a significant negative influence on the productive results of farming and contribute to the worsening health condition of fish in fishponds. As well the excess water, especially if it is not flood condition, has negative influence on farming and may occur eventually the destruction of all water work.
3. Goals and Priorities of the Fisheries in the Czech Republic

Priorities follow from the documents of the Common Fisheries Policy of the Communities, from the Lisbon and Göteborg Strategies. Objectives and priorities of fisheries in the Czech Republic follow the global objectives of the National Strategic Reference Framework for the period 2007 – 2013, in which the transformation of the social and economic environment in the Czech Republic in accordance with sustainable development principles is draw the way that the Czech Republic will be an attractive location for investments, working and living of the inhabitants. In fisheries the Czech Republic will strive for the maintaining, or potentially growth of employment and for balanced and harmonic development in regions, which shall lead to increase quality of living of the inhabitants.

The Czech Republic competitiveness in the field of fisheries and the capability to attain sustainable growth can be achieved in a combination of the internal and external factors, however, first of all, by the support to the fisheries structure based on the historically traditional systems while utilising the most up-to-date technologies and effective use of opportunities following from the Czech Republic accession to the European Union and its merging with the globalised economy.

The main goals of the fisheries in the Czech Republic are the preservation of the current level of employment in the industry and maintenance of fish production in fish-breeding facilities and in fishing grounds in compliance with sustainable development rules, and environmental, economic and social points of views are required to be taken into account.

Further goals are especially: enlargement of possibilities for fish farming in freshwater aquaculture; implementation of aquaculture methods which decrease adverse influence or increase positive impacts at the environment; preservation of traditional aquaculture and following activities which are important for maintenance and development of economic and social structure and the environment; improvement of working conditions in the fisheries sector; equal rights for men and women; improvement of fish farms against wild predators; increasing of fish products quality; better propagation of fish and products originated from fish production in the Czech Republic.

Priorities of the Czech Republic fisheries are following:

- The modernisation of existing operations, including the area of fish processing, the market for fish and fishery products primarily of domestic origin.

- Sustainable landscape management – must provide not solely for vitality of fisheries enterprises, yet also for the increased intensity of usage of such management methods, which will have positive environmental effects.

- Protection and development of aquatic animals and plants – they are fixed at the renovation of inland water bodies including places for friction and making of migration routes passable for migratory fish species. There are connected construction, modernisation and enlargement of hatcheries which enable appropriate restocking of watercourses.

- Preserving a high professional level of workers in the fish industry which is an integral part of the quality approach to ensuring of the sustainable management on fishponds in harmony with requirements on the environmental protection. The attempt is to achieve a balanced relationship among the fish production, social and cultural needs of inhabitants and the environment.

- Promotion of fish and aquaculture products – it is desired to increase the general awareness on fish meat quality, its positive effects on human organism. Finally the
successful promotion should bring an increased consumption of fish and fish products per capita.

- **Dredging of fishponds** – the aim is the elimination of undesirable sediments from fishponds.

The aforementioned priorities are of long-term character. They will remain topical for the whole programming period and be followed in further programming periods.

In order to achieve the priorities the Czech Republic will use the assistance of subsidies provided within the operation Programme Fisheries 2007 - 2013. The subsidies shall be paid for the whole programming period 2007 - 2013. It is assumed that till 2013 the following objectives are to be achieved: maintaining of the annual production of freshwater fish at the level of 20 thousand tonnes per year; building and modernising of processing capacities; improved quality of aquatic environment on the area of 5,000 hectares, at least; creating of reproduction places and making parts of the original migratory routes for the migratory species passable, construction and modernising of fish breeding facilities; better information dissemination among end consumers on high quality products of fisheries and thus subsequently the increase in fish products consumption; improved technology in aquaculture when applying new scientific findings in practise; fishpond dredging; higher education of 20 % fisheries personnel as minimum.

The fulfilment of priorities shall be evaluated on the basis of indicators, such as fish production in tonnes per year; quantity of fresh, refrigerated, frozen or otherwise processed products in tonnes per year; number and hectare area of fishponds, which are managed in accordance with the obligation regarding to the fulfilment of requirements for improvement of the aquatic environment which fall outside the scope of the use of common good practise in the aquaculture branch at least five years; number of migration barriers and friction places made passable; number of realised educational courses/ number of participants; number of tested new technologies.

Main areas of interest of the Common Fisheries Policy in the Czech Republic

I. Sustainable utilization of fish resources

The Czech Republic is bound to the common rules valid for the placing fishing and aquaculture products on the Communities market. The Czech Republic is concerned by the potential substitution of exhausted sea resources by aquaculture products. Investments into aquaculture are one of the tools, which help indirectly to establish the sustainable use of fish resources.

II. Product Supply and Market Equilibrium

1. Supply of the processing industry

The Czech Republic strategy leads towards increased quality in the product range of foods offered from existing facilities. This includes primarily increased selection of products, which is aimed at the preparation of freshwater fish from our own production. The construction of new fish processing facilities is not a priority of the Czech Republic. In the future, it is necessary to count with the reconstruction and modernization of existing facilities the way comply with current public health requirements and requirements for food safety.
2. Supply of products for human consumption

Here it is necessary to positively orient the current consumer approach, to change its habits and use fish products with a high added value during the course of the whole year. The goal of our policy is to ensure the continuous interest of consumers oriented to semi-finished foods with a high quality of processing, and a nutritional value fully corresponding to the requirements for a healthy diet. It is necessary to open this space for the systematic appeal to the public to achieve a permanent utilization of fish resources.

3. Supply of fishmeal and fish oils.

The supply of fishmeal and fish oils is not a priority for the Czech Republic.

4. Balancing supply and demand

The Czech Republic stimulates an increase in supply and supports the year-round demand on the side of customers, primarily using advertising campaigns.

5. The approach to fish resources and waters of Non-members of the Community (Agreements on fishing and regional fishing organizations)

The Czech Republic does not place any requirements on the approach to fish resources in the world’s seas and to fishing rights in Community waters or other waters.

6. Market transparency and free movement of products

On the territory of the Czech Republic, EU rules with respect to the free trade and movement of goods are complied with. The market is completely open. The Czech state does not own fishing or processing enterprises, which are completely in private ownership. The market is not regulated by the state in any way and is completely transparent.

III. Sustainable Aquaculture Development

1. Medium-term development of saltwater and freshwater aquacultures

Saltwater aquaculture is not relevant to the Czech Republic.

The state’s goal is to secure conditions in such a way that the fishponds (freshwater aquaculture) meet all the functions in the landscape for which they were built and which they already secured in the past. At the same time it is highly desirable that species life biodiversity is preserved in the future both in fishponds and around them. The long-term goal consists of the systematic support of multi-purpose fishpond use. This includes the support of activities to achieve the quality of waters released from fishpond systems corresponding to the requirements set in the Framework Directive for surface waters. It will be further attempted to maintain and improve landscape retention abilities, ensure landscape creation and other functions having a significant impact on maintaining the use potential of the landscape and the environment. It is necessary to aim support at maintaining the diversity water communities founded on the basis of partially natural diet.

Production in closed systems (tank aquaculture) is not used very often under our conditions. If the impact of new legislation leads to a significant limitation of fishpond production, it is possible to presume a gradual replacement of decreased production by other forms of aquaculture.
2. Development of the industry of organic aquaculture in the meaning of organic farming

The production of fish in compliance with the provisions of Council Decree No. 2092/2000/EC has not been made use of in the Czech Republic to a significant extent so far. The Czech Republic prepares in the form of pilot projects, a support to higher use of organic aquaculture.

3. Measures to improve the quality of water used in breeding fish

The collection of measures is divided according to their application.

Fisheries are bound to comply with legal requirements (Framework Directive EC/60/2000). Requirements on keeping required quality of environmental status of surface waters are necessary to be addressed in relation to all related factors in fishponds and in the fishpond feeding area. In accordance with the aforementioned it is the objective of the Czech Republic to mitigate impacts of intensive management in fishponds.

4. Diversification of breeding and the introduction of new species

The diversification of breeding and the introduction of new species must be carried out in compliance not only with the interests of fishermen, but also in compliance with environmental requirements, related to the introduction of new species. It is necessary to direct the increase by other species, including non-original ones, into special closed systems to prevent a release of farmed organisms into wild nature. It is necessary to support the introduction of fish species, which demonstrate a low susceptibility to various types of illness.

5. Measures to prevent illness

The inspection of the health of animals in the Czech Republic (in accordance with EC regulations) is aimed primarily at the breeding of fish susceptible to dangerous types of infections (directive). The State Veterinary Administration records all existing holdings within the system of mandatory examinations in order to prevent outbreak and spreading of infections. Following to the valid legal regulations on animal health contributions from the EFF will be able to be drawn for expenditures in veterinary field.

IV. Development and Competitiveness of the Industry

1. The medium-term development of saltwater fishing, including the competitiveness of Community fleets and especially small coastal fishing

Not relevant for the Czech Republic.

2. The use of all catches, modernization of equipment on-board, and storage conditions

Not relevant for the Czech Republic.

3. The improvement of equipment and conditions of discharge, packaging and storage on land

The conditions of landlocked country enable to build only packaging and storage capacities, which are used for the distribution of freshwater as well as sea products. The freshwater
aquaculture has been using for the distribution of marketed living products traditional forms of storing these products, namely in submerged cages, for a long time. The support to the storage facilities construction will enable a continuous supply of fish and fish products to further processing as well as to the consumer.

4. Fishing in inland waters

Measures, which artificially supplement the fish species, which cannot multiply, are implemented systematically and in a long-time frame. Among the reasons which prevent to natural fish reproduction it is possible to state repair of riverbeds, the construction of perpendicular barriers, and the impassibility of watercourses for migrating fish species.

The goal is primarily the stabilization of the populations of common trout and European grayling in areas where there exist objective conditions for their occurrence. Another priority is measures for the renewal of the eel population, which consists mainly in the support of the purchase and import of the glass eel and its subsequent stocking in fishing grounds. The reasons of artificial stocking are in the weakened migration of eels in general and of barriers which do not allow migration in river systems. To the eel problem is connected the return migration of this species to the sea and the current state of its protection. Without international cooperation on all sides and valid legal regulation in all state waters by which the eel migrates during its life, its population increase cannot be expected.

In fishing grounds should be preserved the necessary quantity of water required for the undisturbed development of fish. For high quality fish communities it is required to preserve, and possibly renew the natural or close to natural condition of riverbeds of watercourses, and make passable river networks for salmon, eel, sea trout and other migrating fish species.

5. Long-term development of the processing industry

The modernization of existing facilities has included among the Czech Republic goals. The future processing of aquaculture products from fishpond fishing is primarily oriented to products with a high utility value. Processed fish is most prevalent on the market in the form of frozen products. The attempt is to get the attention of consumers for fresh (chilled) processed fish, which are of extraordinary quality; however, a barrier is the fact that only the seasonal sale of fish is concerned.

The goal of the development of the processing industry is to achieve the gradual increase in the share of processed fish of the total domestic market by means of nation-wide targeted advertising campaigns.

Processing facilities must meet the requirements set in valid EC regulations and related national legislation aimed at production, veterinary, hygienic and sanitary conditions.

6. Medium-term development of the placing on the market

Alive carp unequivocally dominates the highly traditional domestic market. An increase in demand for carp family species fish is not expected in the new programming period. It is necessary to catch and develop the customer attraction in fish products and to increase demand for processed freshwater fish products in the course of the whole calendar year.

7. Policy of innovation, research, quality labelling and development of new products or products with a high added value

The historical development of traditional farming in a inland aquaculture gradually created a demanding, but useful structure. The system of cyclical emptying and filling of fishponds, their stocking with hatched fish in two to three year periods cannot easily be innovated in a basic direction.
The goal of research is the introduction of new technologies into actual production on fishpond systems, the use of progressive technologies with the recycling of water supply, genetic breeding with the fixation of high use values of bred lines, and the increase in the number of farmed fish species.

Carp originating from the entire Czech Republic has earned the label “Bohemian Carp”.

8. Analysis of the economic situation of enterprises in the industry

In the Czech Republic, just as in other EU countries, nowadays in first place there are the management of marketing issues and also circumstances arising from the environmental, water management, and landscape-forming functions of fishponds.

The goal is to achieve a balanced condition between the economic stability of enterprises while respecting requirements for a quality environment.

9. Protecting and informing consumers

The protection of consumers is taken care of by the Czech Agriculture and Food Inspection Authority, Czech Trade Inspection and the State Veterinary Administration of the Czech Republic. Within the country, besides these monitoring organizations, the label “Klasa” has been introduced, which positively motivates consumers to the purchase of Czech premium food products. Part of the fulfillment of valid EU directives and national legislation presented in particular by the Act on Foodstuffs No. 110/1997 Code, as subsequently amended, is also packaging labelling indicating product origin. The aim is to ensure that end consumers have precise information about the origin and quality of foods at their disposal.

V. Human Capital and the Territorial Dimension of Common Fisheries Policy

1. Medium-term policy and quality of employment in the branch (contribution to Lisbon goals)

The national priority is to maintain the current level of employment in professional fishing, that is, at the level of approximately 1,600 to 1,800 workers. This number has been falling over the years, but the level is constantly augmented by young graduates of all school types. The Czech Republic should support new professionals who will apply economically and environmentally sustainable economic approach. Further emphasis should be placed on alternative and the use of aquaculture management of as an auxiliary source for limited farming. If further significant decrease in fishpond production would occur, the Czech Republic could register a significant loss in employment in the sector.

2. Safety and improving living and working conditions

Fishpond farming is connected with work in the field, and from this it follows that the area of improving working conditions will be targeted towards decreasing physical demands, improving hygienic conditions, using quality personal protective aids, at using progressive environmentally friendly technologies, at using modern techniques and improving the social background.

Industries in the fisheries are rare, and occur more often due to negligence.

3. Development of professional education, policy of access to the industry and support of young persons starting out

The Czech Republic is aware of the common need for the constant spread of basic education. Professional education is closely tied to this, and all levels of fisheries education are evaluated positively. The direct relationship in between the school educational system, research, and pisciculture is a guarantee that the newest findings will be applied right in the operation.
4. Position and role of women in the industry

Women have secured equal rights and access to employment opportunities in the fisheries, but the role of women is directed to less physically demanding professions. These are primarily processing facilities of fish products and supporting fisheries sector services, such as work in building networks and other aids, where women are employed. Further they work in managerial functions, in education and in research.

5. Social dialogue

The social dialog is maintained in constructive and manner and stable over long-term. If a significant limitation in fish farming occurs, it is very likely that it could cause a certain amount of social upheaval.

6. Strategy of permanently sustainable fisheries development

Increasing the area and primarily concentration of fish-breeding facilities primarily in selected areas provides a strong impetus to the maintenance of the permanent development of the fisheries. Fisheries are bound not only to the production capacity of fish product processing facilities, but also to manufacturers of special equipment, netmakers, builders of fishing boats, related metal working industry, and others. The goal of fishing policy is also to maintain regional employment and thereby social stability.

VI. Protection of the Aquatic Environment

For sustainable development of fishpond farming and the maintenance of fish communities in river systems, it is necessary that water quality corresponds to the requirements for sustainable development of water ecosystems (see Directive of the European Parliament and the Council No. 2000/60/EC of 23 October 2000 establishing a framework for Community action in the field of water policy) and health of fish.

1. Prevention and monitoring of pollution from sources outside the branch

Bodies of water, which can be used for aquaculture, must be judged from the perspective of the quality of the aquatic environment, consistency of flow, content of pollutants, or other factors having an impact on the content of damaging material. The existence of sources of pollution in river basins can become a threat for fishpond farmers. Therefore, source water must be monitored constantly. The Czech Environmental Inspectorate was created for supervision over the adherence to legal standards in the field of environment.

2. Care of aquatic environment conditions and scientific monitoring

Each producer shall carry out inspection of the quality of the aquatic environment in which bred fish live. Therefore, each producer observes qualitative indicators during the year and considering weather developments, so that if needed it will be possible to implement immediate measures to preserve fish stocks. The long-term monitoring of the surface water quality is a concern of the Czech Republic because of the commitments following from the requirements of the Water Framework Directive.
Waste produced by the industry must be divided into two basic categories.

A) Waste, which arises as a direct result of actual production. Such waste from intensive aquaculture, or from processing facilities, is removed in compliance with the requirements of appropriate state administrations. In the new programming period supports are planned for the utilisation of environmentally friendly technologies and for waste water treatment in accordance with the most up-to-date technology knowledge in this field.

B) Suspended sediments and silt from the surrounding environment, deposited in fishpond systems, negatively influencing the actual fishing production. A slowing down in the current fishponds is leading to the deposit of drifting particles. The quantity and composition of such substances is decided by the character of the landscape in the river basin, which fills the fishpond.

4. Protection of the aquatic environment and areas, in which monitored aquatic species breed

National legislation in the connection with EU legislation sufficiently takes into account the protection of water environment.

Places appropriate for the natural breeding of certain fish species are steadily disappearing. To maintain existing fish communities in river systems it is necessary to implement, now and in the future, measures to contribute to their stabilisation. In the rivers of the Czech Republic fish communities are primarily stocked and augmented in such a way that a balanced structure is allocated.

The re-introduction of Atlantic salmon into the Czech Republic has been carried out coordinated in conjunction with Germany and Sweden. To renew the salmon population, its artificial breeding is not sufficient, but the rivers to their spawning grounds must be made passable. Modifications and monitoring of spawning places is one of other conditions of the successful salmon reproduction in wilderness.

The river eel migrates downstream for breeding and the protection system must be coordinated internationally for its successful return to reproduction. Financial support to its restocking in freely flowing waters and making the rivers passable for them is a necessary condition for its preservation.

VII. SRP Management

1. Inspection and management

Inspection and management activity is provided by Act No. 99/2004 Code, on fishpond farming, execution of the fishing right, fishing guard, protection of marine fisheries resources and amending certain acts (act on fisheries). This act defines the bodies performing the state administration of the fisheries from the lowest elements of the state administration, that is, from town municipal offices to county offices up to the ministry. Similarly, customs offices are set forth here as well. The obligations for the State Veterinary Administration and the Czech Environmental Inspectorate, the Czech Agriculture and Food Inspection Authority etc. derive from other acts related to the fisheries. The Czech Fisheries Association takes a coordinating and advising function for fishing subjects, which creates a positive pressure on objective conditions in fish production. Fisheries unions are part of the Fisheries Association
and primarily organize recreational fishing. They have their own facilities, which primarily produce hatching fish for maintaining the existing fish stock of fishing grounds.

2. Quality data and information collection

The obligation to maintain farming records is provided by the Act on Fisheries. In S. 3, the obligation to fishpond farmers is set forth, and in S. 11 is the obligation to maintain farming records in fishing grounds and to deliver them for inspection to the respective fishing authority. Competent fisheries body can during inspection action use information provided by the Czech Republic Fisheries Union.

3. Producer organizations

Producer organizations in the fisheries in the Czech Republic, as defined in Council Directive No. 104/2000/EC, have not been recognized due to lack of interest. Organizations of a similar type, however, do exist, such as Fishmarket, which trades for other producers as well.

4. Regional Advisory Committees and inter-branch partnerships

Due to the administrative direction of priorities and goals, two regional working groups have been created in the Czech Republic. They were created, first of all, with the goal of preparing NSP and OP for the next program period. Their common attempt was to set strategy, goals, directions and specific measures to secure in the future the on-going functioning sector of the fisheries. These groups are composed of professionals from commercial enterprises, of workers from research and education, representatives of recreational anglers and the state fishing administration. Together with all the other elements of the state administration a rational evaluation of administration directing individual proposed support into discussed and problematic areas of the fishing sector in individual regions should take place, in such a way that the goals are in harmony with the EU Common fisheries policy.
4. Resources to be mobilised

Prognosis of total expected financial resources for the period 2007 – 2013 for the EFF (€)

<table>
<thead>
<tr>
<th>Area politics</th>
<th>Prognosis of total expected financial resources (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public in total (EFF + CR)</td>
</tr>
<tr>
<td>In total all areas of Common Fisheries Policy</td>
<td>36,142,234</td>
</tr>
</tbody>
</table>


5. Creation, implementation and monitoring of NSP

The preparatory work for the National Strategic Plan was initiated during June 2005. It continually was established on the continuous cooperation with professional fishermen and representatives of interest groups managing fishing grounds, which were topically informed on the negotiations on the proposal of the “European Fisheries Fund” directive.

Common ministry and inter-ministry working meetings also took place with the participation of all affected fields within the Ministry of Agriculture, representatives of the Ministry of Finance, the Ministry of Foreign Affairs and the Ministry of the Environment of the Czech Republic.

To ensure an active approach of fishermen in the preparation of the NSP and the OP during the course of 2005 four informal discussions and meetings with producers and representatives of interest groups took place. Subsequently the Ministry of Agriculture of the Czech Republic created two working groups, whose interests covered the whole territory of the Czech Republic. The composition of working groups was conceived in such a way that it included representatives involved in professional fishing from actual commercial enterprises, further to processing and sales companies, to interest groups managing fishing groups, to school manufacturing enterprises, secondary schools and universities and the hydrobiological and fishing research institute.

All members were actively engaged in work on the preparation of material for the creation of the NSP and Operational Program. The Czech Fisheries Association was the coordinating centre for both working groups. Based on several rounds of meetings the Fishing Association summarized all material of the sides of requirements, from individual working group members.

Preparations for processing an Analysis of the current condition and prognosis for the development of the fisheries in the Czech Republic for the period of 2007 – 2013 was carried out at in a parallel fashion, with respect to the Common Fisheries Policy of the European Community with an outlook to 2015, which was prepared in the framework of technical assistance of FIFG, finished and presented to the Ministry of Agriculture of the Czech Republic on 12.12.2005. In the NSP all principal and relevant conclusions, taking into account the National Development Plan of the Czech Republic and the National Strategic Reference Framework of the Communities support, were taken into account and used.

The text of the NSP is a consensual document of the state administration, in the fisheries sector and environment and subjects engaged in fisheries; describing SRP goals and strategies in the framework of inland fish farming.

On the basis of the Czech Republic Government Resolution No. 603/2006 of 24 May 2006 on financial flow of the Common Agricultural Policy and Common Fisheries Policy in the Czech Republic for 2007 – 2013 and their institutional securing, the system of financial flow for the EFF is set uniformly with financial flow from the Structural and Cohesion Funds.

- Managing Authority for the European Fisheries Fund (MA) – MoA CR (Ministry of Agriculture of the Czech Republic), main function is managing of the Operational Programme
- Payment and Certification Authority for the European Fisheries Fund – MF CR (Ministry of Finance of the Czech Republic), responsible for all financial management of means provided for the Czech Republic from the EU budget.

Auditing Authority for the European Fisheries Fund – MF CR is functionally independent on managing and certification authority. It is responsible for verification of efficient operation of the management and control system and carrying out of activities in accordance with article No. 61 of the EFF.

- Mediating subject for the European Fisheries Fund – SAIF, which carries out the administration connected with application acceptance including project inspections, and at the same time is the manager of the state budget chapter which executes payments of aids for beneficiary (financial department) and the separation of these two functions will be secured.

Monitoring, i.e. inspection of meeting the NSP goals, will be carried out depending on the actions of the OP monitoring board, which has the ability to make material modifications to individual submeasures. These modifications must be in harmony with the NSP.
6. Annexes

Annex I

Abbreviations used

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquaculture</td>
<td>Cultivation or breeding of aquatic organisms using procedures dedicated to the increased production of these organisms exceeding the natural environment capacity; for the time of cultivation or breeding the organisms shall remain in the property of a natural or legal entity till the time of their picking and collection.</td>
</tr>
<tr>
<td>EFF</td>
<td>European Fisheries Fund</td>
</tr>
<tr>
<td>EC</td>
<td>European Community</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>evaluation</td>
<td>evaluation</td>
</tr>
<tr>
<td>evaluation ex ante</td>
<td>Evaluation of effectiveness, or usefulness, respectively of the resources, which are to be spent.</td>
</tr>
<tr>
<td>NSP Fisheries</td>
<td>National Strategic Plan for Fisheries</td>
</tr>
<tr>
<td>fisheries branch</td>
<td>Economic branch, including all activities of producing, processing, and placing of the fisheries and aquaculture products on the market.</td>
</tr>
<tr>
<td>OP Fisheries</td>
<td>Operating Programme Fisheries for the period 2007 - 2013</td>
</tr>
<tr>
<td>acceptable expenditures</td>
<td>Expenditures, which subsidy can be provided for; they are defined in respective measures or submeasures.</td>
</tr>
<tr>
<td>MA</td>
<td>Managing Authority of the OP Fisheries (a Department of the MA CR)</td>
</tr>
<tr>
<td>SEA</td>
<td>Strategic Environmental Assessment</td>
</tr>
<tr>
<td>CFP</td>
<td>Common Fisheries Policy</td>
</tr>
<tr>
<td>SWOT</td>
<td>Strengths, Weaknesses, Opportunities and Threats – Analysis</td>
</tr>
<tr>
<td>SAIF</td>
<td>State Agriculture Intervention Fund</td>
</tr>
</tbody>
</table>
## Annex II

### Utilization of freshwater fish produced by breeding for market (thousands tonne of live weight)

<table>
<thead>
<tr>
<th>Year</th>
<th>Production of fish for market*</th>
<th>Utilization</th>
<th>Fish</th>
<th>Export of live fish designated for live processing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Domestic sale of live fish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>20,1</td>
<td>9,2</td>
<td>1,6</td>
<td>9,3</td>
</tr>
<tr>
<td>1994</td>
<td>18,7</td>
<td>9,4</td>
<td>1,6</td>
<td>8,4</td>
</tr>
<tr>
<td>1995</td>
<td>18,7</td>
<td>9,7</td>
<td>1,7</td>
<td>7,8</td>
</tr>
<tr>
<td>1996</td>
<td>18,2</td>
<td>8,5</td>
<td>1,9</td>
<td>8,2</td>
</tr>
<tr>
<td>1997</td>
<td>17,6</td>
<td>7,6</td>
<td>1,4</td>
<td>7</td>
</tr>
<tr>
<td>1998</td>
<td>17,2</td>
<td>7,5</td>
<td>1,6</td>
<td>8,8</td>
</tr>
<tr>
<td>1999</td>
<td>18,8</td>
<td>8,5</td>
<td>1,8</td>
<td>8</td>
</tr>
<tr>
<td>2000</td>
<td>19,5</td>
<td>8,5</td>
<td>2,1</td>
<td>9,2</td>
</tr>
<tr>
<td>2001</td>
<td>20,1</td>
<td>7,8</td>
<td>2,1</td>
<td>10</td>
</tr>
<tr>
<td>2002</td>
<td>19,2</td>
<td>7,6</td>
<td>1,6</td>
<td>9,7</td>
</tr>
<tr>
<td>2003</td>
<td>19,7</td>
<td>7,8</td>
<td>1,8</td>
<td>9,4</td>
</tr>
<tr>
<td>2004</td>
<td>19,4</td>
<td>8,2</td>
<td>1,7</td>
<td>9,5</td>
</tr>
</tbody>
</table>

*Source: Fisheries Association of the Czech Republic*

Note: *Besides the whole-year production of fish for market the initial state (stock from the previous year), volume of imported fish for market, and losses are also taken into account, and thus this represent the total balance (including final stock of live fish).*
Utilization of Freshwater Fish Produced by Breeding for Market

Production of Fish for Market

Source: Fisheries Association of the Czech Republic
### Annex IV

**Fish Species Structure of Market Fish Production 1995 - 2004**

<table>
<thead>
<tr>
<th>Fish Species</th>
<th>1995</th>
<th>1998</th>
<th>2001</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carp</td>
<td>16.4</td>
<td>15.1</td>
<td>17.4</td>
<td>17</td>
</tr>
<tr>
<td>Salmonids *)</td>
<td>0.7</td>
<td>0.6</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Herbivorous fish</td>
<td>0.7</td>
<td>0.5</td>
<td>1.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Tench, whitefish</td>
<td>0.4</td>
<td>0.4</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Carnivorous fish</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Other</td>
<td>0.3</td>
<td>0.4</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18.7</strong></td>
<td><strong>17.2</strong></td>
<td><strong>20.1</strong></td>
<td><strong>19.4</strong></td>
</tr>
</tbody>
</table>

*) trout, char
**) grass carp, bighead carp
***) pike, pike-perch, Wels catfish, European eel, European perch

Source: Fisheries Association of the Czech Republic

### Species Breakdown of the Fish Production for Market 1995 - 2004

![Bar chart showing fish production by species from 1995 to 2004](chart.png)

Source: Fisheries Association of the Czech Republic
### Employment in the Fisheries Sector in the Czech Republic

#### Overview of employment in the fisheries sector 2000 – 2004

<table>
<thead>
<tr>
<th>Employees</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>1455</td>
<td>1393</td>
<td>1395</td>
<td>1460</td>
<td>1387</td>
</tr>
<tr>
<td>Females</td>
<td>337</td>
<td>318</td>
<td>311</td>
<td>307</td>
<td>292</td>
</tr>
<tr>
<td>Total</td>
<td>1792</td>
<td>1711</td>
<td>1706</td>
<td>1767</td>
<td>1679</td>
</tr>
</tbody>
</table>

Note: This table includes the numbers of full-time employees in fisheries industry only.

Source: Fisheries Association of the Czech Republic
Catch in Fishing Grounds in the Czech Republic from 1990 to 2004

<table>
<thead>
<tr>
<th>Year</th>
<th>Thousands of kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>2979</td>
</tr>
<tr>
<td>1991</td>
<td>3038</td>
</tr>
<tr>
<td>1992</td>
<td>3333</td>
</tr>
<tr>
<td>1993</td>
<td>3699</td>
</tr>
<tr>
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<td>3900</td>
</tr>
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<td>1995</td>
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</tr>
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<td>1996</td>
<td>3349</td>
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<td>1997</td>
<td>3563</td>
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<td>4190</td>
</tr>
<tr>
<td>1999</td>
<td>4651</td>
</tr>
<tr>
<td>2000</td>
<td>4645</td>
</tr>
<tr>
<td>2001</td>
<td>4513</td>
</tr>
<tr>
<td>2002</td>
<td>5127</td>
</tr>
<tr>
<td>2003</td>
<td>4525</td>
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</tbody>
</table>
Annex VII

Selected legal regulations and documents

**EC legislation:**


Council Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy


**CR legislation:**

Act No. 99/2004 Coll. on fishpond farming, execution of the fishing right, fishing guard, protection of marine fisheries resources and amending certain acts (act on fisheries), in wording of the following regulations.

Decree No. 197/2004 Coll. on the execution of Act No. 99/2004 Coll. on fisheries, in wording of the following regulations.

Act No. 114/1992 Coll. on nature and landscape protection, in wording of the following regulations.

Act No. 254/2001 Coll. on waters and amending certain acts, in wording of the following regulations.
Annex VIII

Czech republic (river system, river basins, reservoirs and ponds)