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THE FISH SECTOR IN CROATIA

FLANDERS INVESTMENT & TRADE MARKET SURVEY

The fish sector in Croatia

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1. INTRODUCTION

This paper aims to give an overview of the fish sector in Croatia.

The study starts with some general figures about Croatia and its economy. After that we look more specifically into the fish sector. First, there is a general overview of the fish sector in Croatia that includes aquaculture, which will help you to get a better understanding of the market.

The following chapter deals with consumption of fish in Croatia, followed by the SWOT analysis of the fisheries in Croatia.

The next chapter describes the overall market organization of fisheries products. The final chapter deals with legal regulations concerning fishery, where inspection, surveillance and control is explained, as well as the bluefin tuna fishery, the EU system for fishery controls and general import rules for fishery products.

2. GENERAL OVERVIEW OF CROATIA

With an area of 56 594 km², the Republic of Croatia is a Central European and Mediterranean country, culturally and historically linked to Central and Eastern Europe, with a good geo-strategic position. It borders with Slovenia, Hungary, Serbia, Montenegro and Bosnia-Herzegovina. Moreover, Croatia has a marine border with Italy.

The capital city is Zagreb, which is also a political, administrative and economic centre, a university centre and a city of culture and arts.

During the 20th century, Croatia was part of Yugoslavia, ruled under the socialist system, i.e. having state-owned companies. Croatia became an independent state in 1991 when a democratic, multi-party political system was adopted and political/economic reforms were implemented.

In 2011 the estimated population was 4,284,889 million inhabitants with an average density of 75.8 inhabitants per km².

Croatia became a member of the European Union on the 1st of July 2013.

2.1 General figures

Area	56,594 km²
Population Nationality	4,284,889 million inhabitants Croatian
Capital	Zagreb
Population in Zagreb	779 000 inhabitants
Language	Croatian
Currency	Croatian Kuna (HRK)
Government	Parliamentary Democracy
President	Kolinda Grabar-Kitarović was elected for a five-year term in February 2015
Prime Minister Minister of Agriculture	Andrej Plenkovic (October 2016-present) Tomislav Tolusic (October 2016-present)

2.2 Economy

Economic Index	Croatia
Population	4,284,889 (2011 est.)
Human Development Index (IDH)	0,818 (2014)
GDP growth rate in 2016	+2.7 (real, Q1 2016)
GDP per capita (nominal, 2014) GDP per capita (PPP, 2015)	$13,493 $21,169
GDP (Composition by sector) - Agriculture - Industry - Services	 4,5% 26,6% 68,9%
Inflation Rate	-0,8% (September 2015)
Average Monthly Salary (gross) Average Monthly Salary (NET)	7,735 HRK/$ 1190 (February 2016) 5,652 HRK/$ 870 (February 2016)
Unemployment Rate	15,9% (April 2016)
Exports	$14.04 billion (2014 est.)
Imports	$22.90 billion (2014 est.)
Global Competitiveness Index	4.13
Main Commercial Partners	Italy Bosnia and Herzegovina Germany Slovenia Serbia
Currency	Kuna (HRK)
Average Exchange Rate/Euro Average Exchange Rate/Dollar	7,50 HRK 6,7 HRK

Table 1: Economic Indicators of Croatia

The economy of Croatia is a service-based economy with the tertiary sector accounting for 70% of total gross domestic product (GDP). After the collapse of socialism, Croatia went through a transition process to a market-based economy in the 1990s, but its economy suffered badly during the Croatian War of Independence. After the war the economy began to improve, before the financial crisis of 2007–08 the Croatian economy grew at 4-5% annually, incomes doubled, and economic and social opportunities dramatically improved.

Croatia joined the World Trade Organization in 2000, NATO in 2009 and became a member of the European Union on 1 July 2013. The Croatian economy was badly affected by the financial crisis which, together with the slow progress of economic reforms, resulted in six years of recession and a cumulative decline in GDP of 12,5%. Croatia formally emerged from the recession with 3 continuous quarters of GDP growth in Q4 2014 (0,3%), Q1 2015 (0,5%) and Q2 2015 (1,2%). Predictions are that real GDP growth will gradually rise to 2.1% in 2016.

The industrial sector, with exports of over € 1 billion annually, is dominated by shipbuilding which accounts for over 10% of exported goods. Food processing and the chemical industry also account for significant portions of industrial output and exports. The industrial sector represents 27% of Croatia's total economic output while agriculture represents 6%. The industrial sector is responsible for 25% of Croatia's GDP, with agriculture, forestry and fishing accounting for the remaining 5% of Croatian GDP.

Tourism is traditionally a notable source of income, particularly during the summer months, but also more recently during the winter months as well, due to an increase in popularity of snow sports such as skiing. With over 14 million tourists annually, tourism generates revenue in excess of € 8 billion..

Economic growth has been hurt by the global financial crisis. Immediately after the crisis it seemed that Croatia did not suffer serious consequences like some other countries. However, in 2009, the crisis gained momentum and the decline in GDP growth, at a slower pace, continued during 2010. In 2011 the GDP stagnated as the growth rate was zero. Since the global crisis hit the country, the unemployment rate has been steadily increasing, resulting in the loss of more than 100,000 jobs. While unemployment was 9.6% in late 2007, in January 2014 it peaked at 22.4%. In 2010 the Gini coefficient was 0,32. In September 2012, Fitch ratings agency unexpectedly improved Croatia's economic outlook from negative to stable, reaffirming Croatia's current BBB rating. The slow pace of privatization of state-owned businesses and an overreliance on tourism have also been a drag on the economy.

Croatia joined the European Union on 1 July 2013 as the 28th member state. The Croatian economy is heavily interdependent on other principal economies of Europe, and any negative trends in these larger EU economies also have a negative impact on Croatia. Italy, Germany and Slovenia are Croatia's most important trade partners. In spite of the rather slow post-recession recovery, in terms of income per capita it is still ahead of some European Union member states such as Bulgaria and Romania. In terms of average monthly wage, Croatia is ahead of 9 EU members (Czech Republic, Estonia, Slovakia, Latvia, Poland, Hungary, Lithuania, Romania and Bulgaria).

The average unemployment rate in 2014 was 17.3% and Croatia has the third highest unemployment rate in the European Union, after Greece (26.5%), and Spain (24.%). Of particular concern is the heavily backlogged judiciary system, combined with an inefficient public administration, especially regarding the issues of land ownership and corruption in the public sector. Unemployment is regionally uneven: it is very high in eastern and southern parts of the country, nearing 20% in some areas, while relatively low in the north-west and in larger cities, where it is between 3 and 7%. In 2015 external debt rose by 2.7 billion euros since the end of 2014 and is now around € 49.3 billion.

Industrial production in Croatia increased by 4.9 percent in April of 2016 compared to the same month in the previous year. Industrial production in Croatia averaged 1.13 percent from 1999 until 2016, reaching an all-time high of 11.4% in March of 2007 and a record low of -12.4% in June of 2009. Industrial production in Croatia is reported by the Croatian Bureau of Statistics.

Trade plays a major role in Croatian economic output. Croatia's currency is the Kuna, which was implemented in 1994 and has remained stable since.

3. GENERAL SITUATION OF THE FISH SECTOR

With a sea surface of 31,067 km², over 1,246 islands and a coastline of 1800 km, Croatia has a long tradition in fisheries which provide a source of income throughout the year for the coastal and island communities. In addition to being a source of supply for healthy food, fisheries are particularly important for adding value to the coastal tourism.

Fishing represents a rather small share of GDP, but plays an important role in the socio-economic situation of a large number of people. Despite the low value fishery provides employment on the islands and the continent, especially in rural areas. In some regions, fisheries and particularly fish farming are closely linked to the development of rural tourism, since it is a source of high-protein food, which is an important element in the human diet.

Commercial fishing is represented primarily by small-scale coastal fisheries: more than 80% of the fleet comprises vessels less than 12 m in length. However, the largest percentage of the catches (89%) is made by purse-seines, which represent ca. 5% of total fishing vessels. Croatia has (in 2014) fishing fleet of 7300 vessels while bottom trawlers account for some 14% of the fleet.

Fishing takes place mostly in the Adriatic Sea, and it is characterised by multispecies fisheries. More than 45% of Croatia's fishing vessels are registered as multipurpose vessels that use different gears during the course of the year. The catches are primarily small pelagic species, sardine, and anchovy, which make up ca. 90% of the catches. The remaining catch is split between other fish (6%), bivalves and shellfish (2%) and crustaceans (2%).

Catches have increased from about 44,000 tonnes in 2005 to almost 79,000 tonnes in 2014.

Catches by fishing area *Tonnes of live weight*

GEO / TIME	2010	2011	2012	2013	2014
European Union (28 countries)	481,490	474,830 (p)	423,655	424,993	:
Bulgaria	9,681	8,956	8,153	9,535	8,565
Greece	68,818	61,758 (p)	60,610	62,733	:
Spain	100,288	103,505	78,985	82,999	78,467
France	17,779	15,028	11,611	16,050	15,067
Croatia	52,397	70,534	63,599	75,267	78,928

Source: Eurostat

3.1 Fish production[1]

Source: Food and Agriculture organisation of the UN

Global Croatian Production				
Years	2011	2012	2013	2014
Quantity in tonnes	84 306	74 830	87 850	92 502
Croatian Capture Production				
Years	2011	2012	2013	2014
Quantity in tonnes	71 460	64 389	75 831	79 353
Croatian Aquaculture Production				
Years	2011	2012	2013	2014
Quantity in tonnes	12 846	10 440	12 019	13 149
Value in USD (thousands)	70 421	65 631	72 123	92 524
Croatia Fishery Commodity Trade and Production				
Years	2010	2011	2012	2013
Quantity in tonnes	96 593	97 914	87 547	83 825
Value in USD (thousands)	243 290	305 945	277 948	267 923

[1] http://www.fao.org/fishery/facp/HRV/en

4. AQUACULTURE

The aquaculture industry covers both marine and freshwater species.

Finfish farming involves a closed farming cycle, where the first phases take place in a hatchery, and then in the floating cages at sea. The farming activities are wide-spread in all Croatian coastal counties, but predominantly in Zadar County.

The most important marine species produced are seabass (*Dicentrarchus labrax*) and seabream (*Sparus aurata*), representing ca. 66% of the mariculture production volume (2013). The cultivation of these two species has increased rapidly from a mere 2,500 tonnes in 2001 to 5,200 tonnes in 2010, though it fell back to around 4,500 tonnes in 2012. The second largest marine species cultivated is the Atlantic bluefin tuna (*Thunnus thynnus*) which represents on average ca. 25% of the volume of marine aquaculture production. Farming is based on catching small wild tuna (8–10 kg) which are then grown to market size of 30 kg and larger for sale to the Japanese market. Croatia also farms shellfish, mainly mussels (*Mytilus galloprovincialis*) and oysters (*Ostrea edulis*), using longlines to cultivate these species in specially designated areas, such as the west coast of Istria and the Novigrad Sea.

The freshwater farming segment in Croatia produces primarily common carp (*Cyprinus carpio*), and rainbow trout (*Oncorhynchus mykiss*), which represent over 50% and ca. 30%, respectively, of the total fresh water aquaculture volume production (9,960 tonnes in 2014)[2]. Small volumes of silver carp, bighead carp, catfish, tench, pike and zander are also farmed.

[2] Source: Croatian Bureau of Statistics

Total production of fish, crustaceans, molluscs and other organisms / Tonnes live weight

Source: Eurostat

geo \ time	2008	2009	2010	2011	2012	2013	2014
EU (28 countries)	1,271,671	1,318,087	:^{c}	:^{c}	:^{cep}	:	:
EU (27 countries)	:	:	:	:	:	:	:
Euro area (18 countries)	:	:	:	:	:	:	:
Euro area (17 countries)	:	:	:	:	:	:	:
Belgium	126	576^{e}	:^{c}	:^{ce}	:^{c}	:^{c}	214^{e}
Bulgaria	7,251	7,912	7,920	7,091	6,940	6,292	6,883
Czech Republic	20,395	20,071	20,420	21,010	20,763^{e}	19,360	20,163
Denmark	37,216	34,131	32,330	:^{c}	33,588	31,790	33,624
Germany	43,977	39,957	40,694	:^{c}	:^{c}	:^{c}	26,222.6
Estonia	475	654	573	419.73^{b}	:^{c}	:^{c}	864.93
Ireland	44,871	47,212	46,188	43,921	34,229	32,664.1	29,327^{e}
Greece	114,888	121,971	120,982	111,218	108,852^{p}	:^{c}	104,451.7
Spain	252,238	268,457	253,784	274,223	266,593	226,221	284,976.51
France	238,249	236,439	203,017	193,672	205,106^{e}	200,330^{e}	:
Croatia	16,387	16,329	15,686	17,189	13,921	13,720	13,767.8

5. FISH CONSUMPTION

Per capita consumption of fish and seafood in Croatia is estimated at 8 kg. Total consumption of fish and fish products per capita is significantly lower than in other Mediterranean countries. Consumers prefer captured fish, fresh, whole, and domestically produced. A small percentage of processed fish is consumed, usually as canned products. Fish is consumed mostly at home, traditionally once a week (on Friday) and during some holidays. The consumption of fish is higher in coastal areas than inland. Most fish is sold at traditional fish markets where the availability and freshness of fish products is considered very good.

Only 3% of Croatia's population eat fish every day, with the average person spending just 840 kuna (110 euros) a year on fish.

In Croatia the most popular fish eaten are the cheaper varieties such as sardines and anchovies, followed by hake, mackerel and bonito. Croatia export a big part of its quality fresh fish from the

Adriatic such as scampi and red mullet overseas, whilst restaurants along the coast often will serve farmed fish or cheaper imported varieties.[3]

6. SWOT ANALYSIS[4]

SWOT analysis of the commercial marine fisheries sector

Strengths	Weaknesses
• Great biodiversity of commercially important species (multispecies fishery) and of fisheries techniques (multigear fishery) • Existence of resources monitoring system (scientific monitoring and capture fisheries related data gathering system) • Information system in fisheries and fleet monitoring established and operational • Existing fisheries cooperatives as a good platform for POs • Tradition in fisheries and linkage with other sectors (e.g. tourism, ship building, etc.) • Favourable environmental conditions, quality of sea and diversity of marine habitats which all affect quality of fishery products	• Total fishing capacity in GSA 17 (exercised by all participants) exceeding the available resources in demersal fishing due to negative impact of the exploitation of resources in the spawning and nursery areas for some commercially important species • Absence of a common management plan for Adriatic, particularly, the GSA 17 (eg. Jabuka pit joint management plan) • Level of exploitation of small pelagic resources is on the limit of sustainability and fishing mortality should be controlled in order to ensure the long term sustainability Low level of profitability due to unfavourable composition of catches in purse seine fisheries leads to increase of fishing pressure • Aged and insufficiently equipped fleet, particularly in terms of safety on board, working conditions, hygiene, product quality and energy efficiency • Limited fishing infrastructure and inadequate port facilities and insufficient national funds for its restructuring
Opportunities	**Threats**
• Adjustment of fishing capacity with available resources using EFF funds • Developing marketing, both in Croatia and outside • Utilisation of EU funds for development of infrastructure (in fishing ports and landing sites) • Development of activities through POs, fisheries local action groups, and networks • Further strengthening of cooperation within the sector (enabling cooperatives to provide consistent technical and administrative support to their members in terms of facilitating participation in implementation of CFP and related structural policy)	• Decrease of fish resources in the Adriatic Sea (Croatian catches from trawling fishery represent only 14% of the total catches in GSA 17) • Competition from other activities and use of the coastal zone (nautical tourism, sports and small ports) • Increase of running cost (fuel in particular) in combination with low first sale price of fishery products • Competition of other countries' fishing fleet

[3] http://www.croatiaweek.com/croats-eating-less-fish/

[4] NATIONAL STRATEGIC PLAN FOR DEVELOPMENT OF FISHERIES, Republic of Croatia

SWOT analysis of the commercial freshwater fisheries sector

Strength	Weaknesses
• Tradition of commercial fishing • Available freshwater resources for commercial fishing • Habitat diversity • Existence of domestic market • New trends in sports fishing, and sustainable approach	• Limited knowledge on the capacity of the environment and the assessment of stocks • Lack of modern management measures in freshwater fisheries
Opportunities	**Threats**
• Contribution to the rural way of life • Development of fishing, especially in terms of enriching tourism and gastronomy • Rural development and rural tourism • Traditional, ecological, cultural and ethnological character	• Conflict of interest between commercial and sports fishing • Conflict between the environmental protection, water management and fishery • Using of allochthonous species for ranching and translocation of species from one river system to the other

7. MARKET ORGANIZATION

The market organization of fisheries products in Republic of Croatia is based on cooperatives, buy-off stations and registered first buyers. The first sales in accordance with the Marine Fisheries Act may only be done to the registered first buyers. Captured fisheries products may be placed on the market for the first time in accordance with the regulation governing marketing standards (presentation, preservation, freshness and size).

Market chains and the organization of the market itself differ between demersal and pelagic species. A large percentage of high-quality demersal fish (bottom trawl fishery, beach seine fishery etc.) is exported after the first sale, while small pelagic species form the backbone of processing industry, salting and marinating industry as well as fish feed for tuna farms.

The Croatian fish & seafood market organization - by sales channel - consists of 4 main channels: retailers, HRI (hotels, restaurants and institutions), wholesalers and the traditional fish market.

Restaurant features when it comes to ordering fish & seafood products are:

1) The fall in the amount of fish & seafood ordered mainly for the following reasons: the recession, fewer people go to restaurants (especially fish restaurants)
2) "Aversion" towards farmed fish
3) Billing – problems like non-compliance with terms of payment, companies or businesses closing down, the inability of insurance claims
4) Buying at net price
5) Buying a fish in the "black market" - pushing manufacturers in the grey zone
6) Shipping 24/7, unplanned

8. LEGAL REGULATIONS

The legal framework governing fisheries in the Republic of Croatia includes 3 laws – Marine Fisheries Act (OG 56/10, 127/10, 55/11), Freshwater Fisheries Act (OG 106/01, 7/03, 174/04, 10/05 i 49/05-consolidated text) and Act on Structural Support and Market Organization in Fisheries (OG 153/09, 127/10).

On the basis of these three Acts, a wide range of regulations has been adopted, which further regulates specific issues.

In the sector of marine fisheries, the most important implementing regulations are governing technical measures, measures directed towards protection of resources through minimum catch and landing sizes as well as designation of specially protected areas or fisheries protected areas, determination of technical characteristics of fishing gears, manner of keeping and submission of fisheries-related data and manner of issuance of fishing licenses.

Specific ordinances govern sport and recreational fisheries at sea, as well as subsistence and small coastal fisheries. Another important segment relates to marine aquaculture, where ordinances determine the way farming licenses are issued as well as other detailed rules governing marine aquaculture activities.

In the sector of freshwater fisheries, the ordinances govern commercial fisheries (catch quotas, manner of issuance of licenses, fishing areas), sport and recreational fisheries (fishing rights and management of resources within the management areas awarded to right holders) and freshwater farming activities.

Structural support and market organization ordinances govern issues related to all aspects and segments of fisheries production and sector organization. They regulate associations in fisheries (cooperatives and producer organizations), issues of marketing standards of fisheries products at first sales, the manner of financing and implementation of structural policy measures.

In addition to the legal framework under the direct responsibility of the Ministry of Agriculture, Fisheries and Rural Development (MAFRD), the sector is also governed by a wide range of legal instruments from other areas of state administration, primarily regulations from the area of food safety, environmental protection and construction, nature protection and maritime affairs.

Source: http://www.mps.hr/ribarstvo/default.aspx?id=43

1.1 Inspection, surveillance and control[5]

Inspection, surveillance and control of the fisheries sector in the Republic of Croatia is undertaken by several different services. The most important one is the Fisheries Inspection of the MAFRD, which is the only strictly dedicated service for inspection, surveillance and control in fisheries. However, given the length of the coast and the multitude of different types of activities in the field of fisheries, other state administration bodies are authorized to perform these tasks as well.

[5] http://www.mps.hr/ribarstvo/default.aspx?id=48

These include the Port Authority inspectors of the ministry in charge of safety at sea and the authorized persons of the Maritime Police of the Ministry of Internal Affairs. Furthermore, inspection in fisheries may be performed by authorized personnel of the Coast Guard of the Republic of Croatia, as well as the State Inspectorate (in the area of trade and markets of fisheries products).

All these state administration bodies cooperate through the Governmental Cooperation for surveillance and control at sea, as well as through other available instruments (ordinances on cooperation, memorandums of understanding, strategic documents, action plans etc.).

Inspection and control in the European Union is an important element in the enforcement and implementation of the common fisheries policy. Therefore, high importance is placed on the human and technical capacities of all institutions involved.

1.2 The Bluefin tuna fishery (ICCAT)[6]

The Bluefin tuna fishery is regulated by the International Commission for the Conservation of Atlantic Tunas (ICCAT) to which the EU is a contracting party. Important control measures have been adopted to standardize the control of live fish at the point of caging into farms and to establish a protocol to release fish in excess, internationally as well as in in EU waters. The 2015 Bluefin tuna season for large vessels, purse seiners, has run from 26 May to 24 June. Those vessels, which catch the fish alive for farming purposes, share 61% of the total EU quota. The traps fishery (20% of the EU quota) and the line vessel fishery started earlier this year.

8 EU member states are involved in the Bluefin Tuna fishery (Cyprus, France, Greece, Croatia, Italy, Malta, Portugal and Spain).

Continuous cross-checking is undertaken by the European Commission to ensure that measures are fully respected by all Member States involved, concerning the fishing seasons, the quotas and the new control measures. The Commission also deploys its own inspectors and carries out spot checks at critical moments and in particular at the time of caging into the farms.

Based on the benchmarks set up in the Specific Control and Inspection Programme (SCIP) adopted in 2014, a Joint Deployment Plan (JDP) for the control of the Bluefin tuna fishery for 2015 has been adopted by the European Fisheries Control Agency (EFCA). As in previous years, the plan brings together the European Commission, Member States and the EFCA, and draws on the resources of the eight EU Member States involved in the fishery.

[6] http://europa.eu/rapid/press-release_MEMO-15-5033_fr.htm

Key data

Total Allowable Catch (TAC) (for all ICCAT members): 15.821 tonnes. **EU 2015 quota:** 9,372.92 tonnes. **EU total fleet**: around 910 vessels and 12 traps. **Member states actively involved in the fishery**: Cyprus, France, Greece, Croatia, Italy, Malta, Portugal, Spain. **Fishing period for the purse seiners**: 26.05.2015-24.06.2015. **Main actors in the control**: EC, EFCA, Member states. **Member States Control means**: around 30 fishery patrol vessels and 11 aircrafts. **EU control means**: Control missions: 200 days of fishery patrol vessel activity, 70 days of land inspections, and 100 hours of air surveillance.

1.3 The EU system for fisheries controls[7]

To ensure that the rules of the Common Fisheries Policy are followed in practice, the policy also includes a control system with the necessary tools to enforce them.

To enforce common fisheries policy rules, there is a control system, designed to:

- ensure that only the allowed quantities of fish are caught
- collect the necessary data for managing fishing opportunities
- clarify the roles of EU countries and the Commission
- ensure the rules are applied to all fishers in the same way, with harmonised sanctions across the EU
- ensure that fisheries products can be traced back and checked throughout the supply chain, from net to plate.

2. GENERAL IMPORT RULES FOR FISHERY PRODUCTS

Common marketing standards lay down uniform characteristics for fishery products sold in the EU, whatever their origin. They are applied in accordance with conservation measures and help to ensure a transparent internal market that supplies high-quality products.

European Commission developed an online tool called EUMOFA to enhance market intelligence and to contribute to transparency and efficiency of the market for fishery and aquaculture

[7] http://ec.europa.eu/fisheries/cfp/control/index_en.htm

products. Producers, processors, importers, retailers, consumers, market analysts and policy makers may all find useful information in the observatory.

EUMOFA enables direct monitoring of the volume, value and price of fishery and aquaculture products, from the first sale to retail stage, including imports and exports. Data are collected from EU countries, Norway, Iceland and from EU institutions and updated every day.[8]

The European Commission's Directorate General for Health and Consumers (SANCO) is responsible for food safety in the European Union. Their import rules for fishery products and shellfish (bivalve molluscs) seek to guarantee that all imports fulfil the same high standards as products from the EU Member States - with respect to hygiene and consumer safety and, if relevant, also to the animal health status.

[8] http://ec.europa.eu/fisheries/cfp/market/market_observatory/index_en.htm