

DIRECTORATE-GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT STRUCTURAL AND COHESION POLICIES



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INLAND FISHERIES AND THE COMMON FISHERIES POLICY

NOTE





DIRECTORATE GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES

FISHERIES

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NOTE

This document was requested by the European Parliament's Committee on Fisheries.

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DIRECTORATE GENERAL FOR INTERNAL POLICIES POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES

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Abstract

Commercial inland fisheries are small-scale, labour intensive, traditional fisheries mostly using passive gear. They produce high value products of local importance. Inland fisheries will not be heavily influenced by the reform of the Common Fisheries Policy as they are mainly managed nationally. Diadromous species may benefit from the reforms as long as they are properly implemented. The new European Maritime and Fisheries Fund has greater potential to provide increased support to inland fisheries through the strengthening of community-led local development.

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LIST OF ABBREVIATIONS

CFP Common Fisheries Policy
CMO Common market organisation
CSF Common Strategic Framework
EFF European Fisheries Fund
EMFF European Maritime and Fisheries Fund
FAO Food and Agriculture Organisation of the United Nations
FLAG Fisheries Local Action Group
GDP Gross Domestic Product
ICES International Council for the Exploration of the Sea
MSY Maximum Sustainable Yield
TAC Total allowable catch

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EXECUTIVE SUMMARY

Background

This briefing focuses on commercial inland fishing in the European Union. It excludes recreational and subsistence fishing and aquaculture activities. Inland fisheries are located on large natural lakes or reservoirs, lagoons or coastal lakes, estuaries or rivers. They target freshwater fish species, which spend their entire life cycle in fresh water, and diadromous species, which are migratory, spending part of their life cycle in sea water and part in freshwater. The majority of European freshwater fish species belong to the order Cypriniforms, such as carps, chubs, dace and loaches, or to Salmoniforms such as salmon, trout, grayling, and whitefish. Diadromous species are among the most valuable species targeted by commercial inland fisheries. They are targeted in coastal areas, estuaries and the downstream, tidal parts of rivers, and constitute the main species exploited in these areas. Exploited species include salmon, eel, trout, shads, lampreys, mullets and sturgeons. Information on EU inland fisheries is scarce, with information not routinely collected at the EU level. Furthermore, data collection by Member States on inland fishing is highly variable, and not necessarily comparable.

Aim

This briefing presents an overview of the commercial inland fishing sector, including the species targeted, distribution of the sector across the EU, catches, employment in the sector, fishing methods, the markets for inland fish products, and professional organisation within the sector. It places a particular focus on diadromous species and eel especially. This briefing also examines the expected impact of the reform of the Common Fisheries Policy (CFP) on inland fisheries, by providing a comparison between the provisions for inland fishing under the 2002 CFP and European Fisheries Fund (EFF), and the recently reformed CFP and the proposed European Maritime and Fisheries Fund (EMFF) still under negotiation at the time of writing.

Key findings

Overview of the sector

Commercial inland fisheries exist in 22 of the 28 EU Member States, but only in 19 Member States are these fisheries significant. They target a wide range of both freshwater and diadromous fish species. Fisheries for European glass (young) eels specifically are concentrated along the Atlantic coasts of Portugal, Spain, France and the Bristol Channel in the UK. Elsewhere eel fisheries are maintained by restocking rivers, often supplemented by imports from France, Spain and Portugal.

Inland fisheries are mostly exploited using passive gear, often using traditional fishing methods that have been practised for decades and sometimes centuries. There are between 14,000 and 15,000 fishing boats operating in the EU commercial inland fisheries (approximately 14 per cent of the total EU fishing fleet), and an estimated 1000 fishermen fishing without boats, fishing either from shore or by ice-fishing in the winter months. Most of these boats are less than 8m in length with small outboard motors.

The most recent estimate of total annual catch for the commercial inland sector is a 2007-2008 average, estimated at 35,000 tonnes (equal to **1 per cent** of the total production of all EU fishery products in 2008). Of the Member States, **Finland has the highest catches** (4498 tonnes) followed by **Romania** (4284 tonnes) and Italy (3915 tonnes). In terms of

catch value, the total EU catch is valued at **100-110 million EUR** (2007-2008). This equates to 1-2 per cent of the value of EU landings in 2008 (6878 million EUR) (Eurostat, 2011). Together, five Member States (**Germany, the Netherlands, France, Finland and Italy**) make up half the total value of landings.

There were an estimated 17,100 commercial inland fishermen operating within the EU in 2008-2009, many of whom worked **part time**, due to the seasonality of the profession. In general, estuarine and riverine fisheries manage to sustain a higher number of fishermen due to the high value of the diadromous species harvested in these environments. Fisheries located in natural lakes and reservoirs account for over half of the overall catch of inland fish in the EU in terms of volume, but they only involve 28 per cent of the fishermen. The total number of inland commercial fishermen in 2008-2009 is approximately equivalent to 13 per cent of the number of people employed in the marine fisheries sector in Europe.

Most of the volume of freshwater fish is supplied to regional or national markets, through local dealers and wholesalers, or **direct private sales**. The exceptions to this are in Estonia, where major quantities of pike-perch are sold to processors and exported to markets in the EU, US and Canada. Historically glass eel has also typically been exported to other EU Member States and internationally, however a trade has been limited since 2009 after eel was listed on CITES Appendix II.

A disproportionate number of people are employed by the sector compared to its productivity, primarily due to its labour-intensive traditional methods. Most freshwater fish exploited by inland fisheries are caught to supply local traditional demand or niche markets. Inland fisheries often possess a unique cultural value, given that techniques and gear are often very traditional, the fish species exploited are frequently traditional local delicacies, and the knowledge of the fishery, its methods and the exploited aquatic environment, is often handed down through generations and is of great cultural and heritage value.

It appears that inland commercial fisheries suffer from a lack of institutional representation. Only Finland and France have national professional associations uniquely for inland commercial fishers. In other countries commercial inland fishermen are represented in organisations which include both professional and recreational inland fishers, or in organisations which represent both marine and inland professionals. Some argue that insufficient coordination amongst fishermen and the lack of resources do not allow fishermen to put collective integrated strategies in place, either for fisheries management or marketing.

Inland fisheries and the Common Fisheries Policy

Inland fisheries are on the whole managed by national legislation. The CFP does not have competence over inland fisheries, although ambiguously it does apply to diadromous species during the marine part of their lifecycles, and it does provide support for commercial inland fisheries under the financial instruments (previously the EFF and soon the EMFF). This distinction is unclear and has led to varying approaches to diadromous species management across Europe, with most not managed at EU level with two notable exceptions: Baltic salmon and European eel. European eel is subject to a management plan which requires Member States to identify eel river basins and reduce anthropogenic mortalities to increase the probability of escapement to sea. In 2011 a multiannual management plan was proposed by the Commission for Baltic Sea salmon, covering both seas and rivers and aiming to restore stocks to sustainable levels.

As inland fisheries are not generally regulated through the CFP, the reform of the basic regulation does not exert a particularly strong influence over their management, success and survival. The exceptions to this however are the diadromous fish species for which the CFP does play a role, i.e. the European eel and the Baltic salmon. Among other things, the reformed CFP aims to bring populations of harvested species above levels which can produce the maximum sustainable yield and reinforces the drive towards long-term management requiring that multiannual plans be adopted as a priority. The impact of these reforms on eel and salmon depends on implementation, but unfortunately the track record for implementation in these areas has been poor. The CFP also introduces an obligation to land all catches. In conjunction with sustainable rates of exploitation, this could help to improve the state of the Baltic salmon stocks.

The Commission's proposed reforms to the financial instrument in relation to inland fisheries are not very significant: the proposed article designed to support inland fisheries (Article 42) is quite similar to the equivalent article in the EFF. The main differences are that the proposed EMFF introduces support for on board energy efficiency audits and schemes, and, more significantly, it removes support for the temporary cessation of inland fishing activities. However, the strengthening of community-led local development in the proposed EMFF has the potential to make a significant positive impact on local communities practising commercial inland fishing. The Commission proposed more support be provided for the development of local strategies, networking and community activities. It also sought to introduce the opportunity for 'multi-funding', so that Fisheries Local Action Groups can access funding from the different Common Strategic Framework funds. Arguably it is the community-led local development pillar of the EMFF that has the greatest potential to support the commercial inland fishing sector.

1. INTRODUCTION

KEY FINDINGS

The focus of this briefing is commercial inland fishing in the European Union (to the exclusion of recreational fishing and aquaculture).

It presents an overview of the sector, including species targeted, distribution across the EU, catches, employment in the sector, fishing methods, the markets for inland fish products, and professional organisation within the sector.

It examines the expected impact of the reform of the Common Fisheries Policy and European Maritime and Fisheries Fund on the inland fisheries sector.

This briefing focuses on commercial inland fishing in the European Union. The aim is to provide an overview of inland fisheries, including the Member States involved, the species targeted and the fishing methods used. An overview of the fisheries will be presented, including catches, the economic situation facing inland commercial fishermen and the socioeconomic importance of the sector, plus the levels of employment it generates. This briefing also examines the expected impact of the reform of the Common Fisheries Policy (CFP) on inland fisheries, by providing a comparison between the provisions for inland fishing under the 2002 CFP and European Fisheries Fund (EFF), and the recently reformed CFP and the proposed European Maritime and Fisheries Fund (EMFF) still under negotiation at the time of writing.

Information on EU inland fisheries is scarce, with data not routinely collected at the EU level. Furthermore, data collection by Member States on inland fishing is highly variable, and not necessarily comparable. The primary source therefore for this briefing is a European Commission funded report, executed by Ernst and Young and published prior to the reform in December 2011. Despite being published a couple of years ago this is the most recent and relevant source, providing a pan-European overview of inland fisheries based on detailed surveys, interviews, etc. Another key source used is a 2010 report produced by the European Inland Fisheries Advisory Commission (EIFAC), which provides valuable country profiles on commercial inland fisheries in EIFAC member countries.

Before proceeding it is important to make some distinctions concerning the scope of this briefing. Firstly, it is to focus on commercial fishing, to the exclusion of recreational and subsistence fishing. In most Member States this distinction is based on the granting of a license. Sometimes this is associated with the registration of a boat, sometimes with the obligation to join a professional fisherman's organisation (in France and Romania for example), and sometimes based on the time invested, gears used, species targeted, or other economic indicators (such as minimum annual income for example). Secondly, this briefing refers to the extraction or capture of wild stocks of aquatic species, as opposed to the rearing of fish species (i.e. aquaculture activities). This distinction is generally clearcut except for some very extensive forms of freshwater aquaculture in central and Eastern Europe where ponds are restocked and harvested periodically. Lastly, the scope is limited to **inland waters**. The rationale behind Member States' delineation of inland waters varies, based on geographical or regulatory distinctions. For example, some countries include estuaries and lagoons as inland waters (e.g. Italy, Spain, Greece and Portugal) while others consider these to be within the maritime sphere. Although there do not appear to be any issues with respect to targeting of policies as a result of these inconsistencies, they are important to bear in mind when comparing and aggregating data on inland fisheries across Member States.

2. OVERVIEW OF COMMERCIAL INLAND FISHERIES

KEY FINDINGS

Commercial inland fisheries exist in 22 of the 28 EU Member States, but only in 19 Member States are these fisheries significant. They target a wide range of both freshwater and diadromous fish species.

There were an estimated 17,100 commercial inland fishermen operating within the EU in 2008-2009, many of whom were part time.

Passive gear, such as traps, pots, fyke nets, lines, trammels, gill nets and other passive nets are the most widely used gears throughout the EU. There are between 14,000 and 15,000 fishing boats operating in the EU commercial inland fisheries, and an estimated 1000 fishermen fishing without boats, fishing either from shore or by ice-fishing in the winter months.

The most recent estimate of total annual catch is a 2007-2008 average, estimated at 35,000 tonnes, and valued at €100-110 million.

Inland commercial fisheries suffer from a lack of institutional representation. Generally they sell their catch to wholesalers, which means that ultimately they appear to be in a position where prices are volatile and driven by the number or behaviour of local buyers.

2.1. Inland ecosystems and targeted fish species

Inland fisheries are located on large natural lakes or reservoirs, lagoons or coastal lakes, estuaries or rivers. They target **freshwater fish species**, which spend their entire life cycle in fresh water, and **diadromous species**, which are migratory, spending part of their life cycle in sea water and part in freshwater. Diadromous species can be further separated into anadromous and catadromous species: anadromous fish live at sea as adults but migrate into fresh waters to breed, and typically live there as juveniles. Catadromous fishes are the opposite: adults live in freshwater but migrate back to the ocean to breed.

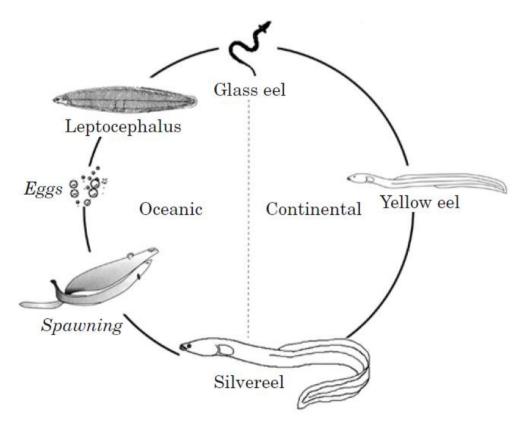
Diadromous species are among the most valuable species targeted by commercial inland fisheries. They are targeted in coastal areas, estuaries and the downstream, tidal parts of rivers, and constitute the main species exploited in these areas. Diadromous species exploited in the EU include:

- Salmonidae: Atlantic salmon (Salmo salar) and Sea trout (Salmo trutta).
- Clupeoidae: including the Allis shad (*Alosa alosa*), Twaite shad (*Alosa fallax*), Pontic shad (*Alosa pontica*) and other species of shads (*Alosa spp.*).
- Petromyzonidae: including sea lamprey (*Petromyzon marinus*) and river lamprey (*Lampetra fluviatilis*).
- Anguillidae: including the European eel (Anguilla anguilla) (See Figure 1).
- Acipenseridae: which includes different species of sturgeons, European sturgeon (*Acipenser sturio*) and Beluga sturgeon (*Huso huso*).
- Mugillidae: with various species of mullets (*Mugil spp.*) including Red mullet (*Mullus barbatus*).

The **European eel** is atypical among aquatic species as its life cycle is unusually complex (see Figure 1). They are believed to spawn in the Sargasso Sea, and the newly hatched leptocephalus larvae drift with the Gulf Stream and North Atlantic Drift to European and North African coasts (OSPAR, 2010; Knights, 2011). As they cross the continental shelf they metamorphose into transparent 'glass eels' and migrate coast-wards. Glass eels can settle in estuaries or coastal waters, or migrate further upstream in late spring-summer, before they become yellow eels. This life stage can last between 2 and 25 years (depending on latitude, ecosystem characteristics and density dependent processes) before maturation and metamorphosis to the silver eel stage (OSPAR, 2010; Knights, 2011). Silver eels then migrate to the Sargasso Sea to spawn and die after spawning. Although they spawn only once in their lifetime, they are highly fecund, with each female estimated to produce over a million eggs (Knights, 2011). This compensates for the extremely high mortality (over 99.8 per cent) during the trans-Atlantic migration (Knights, 2011).

Commercial inland fishermen also exploit a wide range of **freshwater species**. The majority of European freshwater fish species belong to the order **Cypriniforms**, such as carps, chubs, dace and loaches, or to **Salmoniforms** such as salmon, trout, grayling, and whitefish. In Northern and sub-Alpine lake fisheries the main target species are whitefishes (*Coregonus spp.*), trouts (*Salmo spp.*) and chars (*Salvelinus spp.*), perch (*Perca fluviatilis*), pike-perch (*Sander lucioperca*) and pike (*Esox lucius*). In other natural lakes and in rivers (in their main course) the fish populations are dominated by Roach (*Rutilis rutilus*), Carps (*Cyprinus carpio*), Tench (*Tinca tinca*) and Crucian carp (*Carassius spp.*). Although less abundant than the aforementioned Cyprinidae, predator fishes such as perch, pike-perch, pike, and Wels catfish (*Silurus glanis*) are often more valuable and are also actively pursued.

Figure 1. Life cycle of the European eel. The names of the major life stages are indicated.



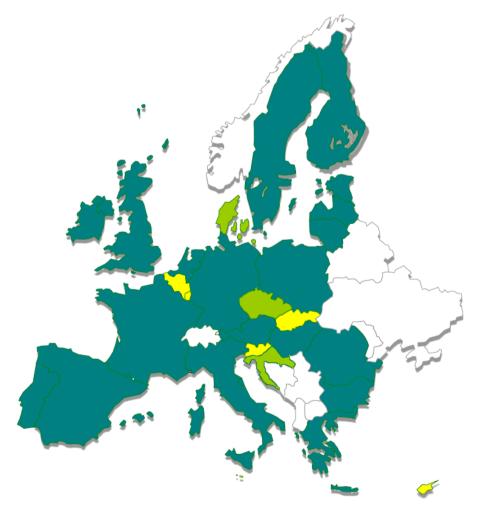
Source: Dekker, 2000

2.2. Distribution of commercial inland fisheries

Commercial inland fisheries exist in 22 of the 28 EU Member States (see Map 1). Belgium, Cyprus, Luxembourg, Malta, Slovakia and Slovenia have no commercial fishing operations, with inland aquatic resources exploited by recreational fishers or aquaculture. In Denmark, the Czech Republic and Croatia, the commercial fisheries are extremely small, occupying only 19, 4 and 30 fishermen respectively (Treer 2009, in Mitchell et al, 2010; Ernst and Young, 2011). In the remaining 19 Member States commercial inland fisheries are considered significant (with at least 100 fishermen occupied) (Ernst and Young, 2011). Fisheries for European glass eels specifically are concentrated along the Atlantic coasts of Portugal, Spain, France and the Bristol Channel in the UK (Ringuet et al, 2002). Elsewhere eel fisheries are maintained by restocking rivers, often supplemented by imports from France, Spain and Portugal (Ringuet et al, 2002). Glass eel fisheries take place in estuaries and at the mouths of rivers and dams where fishermen exploit the higher concentrations of eels.

Map 1: Commercial inland fisheries within the EU





Source: Adapted from Ernst and Young, 2011. Data for Croatia was obtained from Mitchell et al, 2010.

2.3. Fishing methods and gears

There are between 14,000 and 15,000 fishing boats operating in the EU commercial inland fisheries, an estimate based partly on expert opinion as not all Member States require such boats to be registered (Ernst and Young, 2011). Most of these boats are less than 8m in length with 30 hp outboard motors. Passive gear, such as traps, pots, fyke nets, lines, trammels, gill nets and other passive nets are most widely used throughout the EU. These are traditional fishing methods that have been practised for decades and sometimes centuries, mostly in waters where active gear is difficult or impossible, or where it is prohibited under inland fishing regulations. In these cases boats are often used to ferry gear and fish to and from fishing grounds, rather than to actively fish. Wooden rowboats are still used in some areas, sometimes because of traditional fishing methods, such as in the UK and Ireland, and sometimes due to economic constraints (in Romania and Bulgaria). Active gears are used on larger bodies of water, such as large lakes and estuaries, where fish are more widely distributed. Such fisheries include the Lake Peipsi fishery in Estonia, which targets pike-perch and vendace with seine nets; the Lough Neagh fishery in Northern Ireland, which uses surrounding nets to target yellow (adult) eels; the fisheries for char and lake trout in the French sub-Alpine lakes; and Finnish lake fisheries which use trawls and seines to target vendace, perch and other freshwater fishes. Inland fishing boats are similar to the small-scale fishing vessels operating in the marine and coastal environment, though the latter generally have higher engine power to cope with the more difficult maritime conditions. With 14, 000 boats the inland fishing fleet represents 14 per cent of the total EU fishing fleet¹.

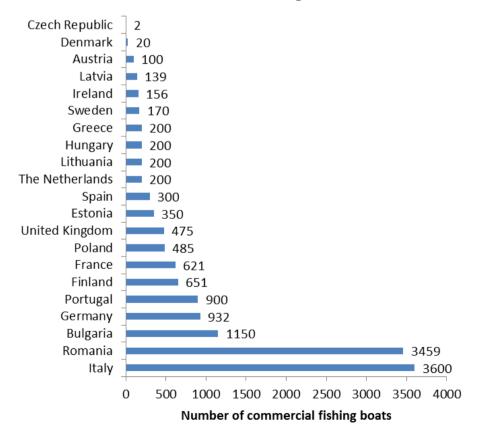


Figure 2. Number of inland commercial fishing boats

Source: Ernst and Young, 2011

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¹ In 2008 the EU sea fishing fleet consisted of 86,587 vessels (Eurostat, 2011).

In addition to the (approximate) 14,000 fishermen fishing with boats, there are an estimated 1000 fishermen fishing without boats, either from shore or by ice-fishing in winter months. Fishing from shore includes intertidal harvesting of molluscs and crustaceans by foot; fishing from weirs with fixed traps, boxes and nets; or fishing from shore or from pontoons, mainly to catch migratory fish like salmon and eel at specific passes. Winter ice-fishing is practised in Finland, Sweden and Estonia in the winter months when the usual fishing grounds are frozen over, by the same commercial fishermen which exploit the lakes during the rest of the year. Snowmobiles and 4x4's are generally used to access the fishing grounds, and gears can be passive, with lines or nets, or active using surrounding nets trawled under the ice with motorised winches.

2.4. Catches

Catch statistics for inland commercial fisheries are not monitored in every Member State. Eurostat compiles data on catches of inland species, but this is not segregated by commercial, recreational or subsistence fishing. Furthermore, under reporting is rife meaning that the data that is available is likely to be unreliable. The most recent estimate of total annual catch is a 2007-2008 average, estimated at **35,000 tonnes**, on the basis of national statistics and expert judgements (Ernst and Young, 2011). To put this in context, it equates to only **1 per cent** of the total production of all EU fishery products in 2008². Clearly the contribution of inland fisheries to overall EU fish production is negligible. Nevertheless the contribution to national catches is significant in a small minority of Member States. In Romania for example freshwater fish constitute 89 per cent of catches, and in Bulgaria, 13 per cent (this is in addition to the three landlocked countries where the all fish production consists of inland catches) (Ernst and Young, 2011). In terms of absolute catches, Finland has the highest catches (4498 tonnes) which are dominated by vendace and perch. Romania comes second with 4284 tonnes, with approximately half this catch comprising of Crucian carp (see Figure 3). Catches are also high in Italy (and these figures have not been inflated through the inclusion of catches from salt water lagoons).

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² Total catches in 2008 were 5,175,441 tonnes (Eurostat, 2011).

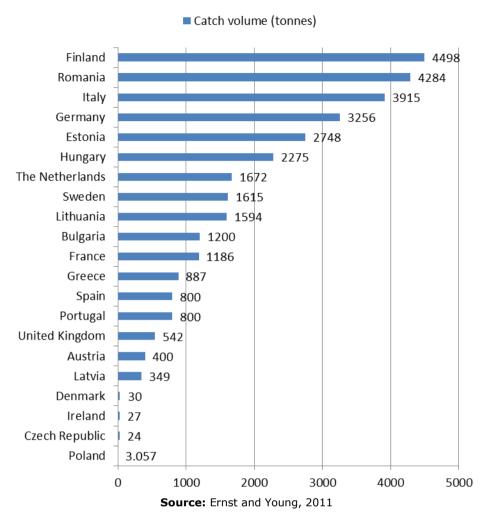


Figure 3. Volume of catches of inland fish by Member State

In terms of catch value, the total EU catch is valued at **100-110 million EUR** (at first sale) (2007-2008) (Ernst and Young, 2011). Again this is only a rough estimate, as few Member States monitor catch value and it therefore had to be deduced from catch volumes and average prices. To put this into context, it equates to 1-2 per cent of the value of EU landings in 2008 (6,878 million EUR) (Eurostat, 2011). Together, five Member States (**Germany, the Netherlands, France, Finland and Italy) make up half the total value** (Figure 4). Overall there is a difference between the older Member States in West Europe, where volumes are relatively low but prices are high (where fishers are targeting the most lucrative species), and the newer Member States where less valuable fish (Cyprinids) are targeted and harvested in greater volumes, in order to supply the domestic market.

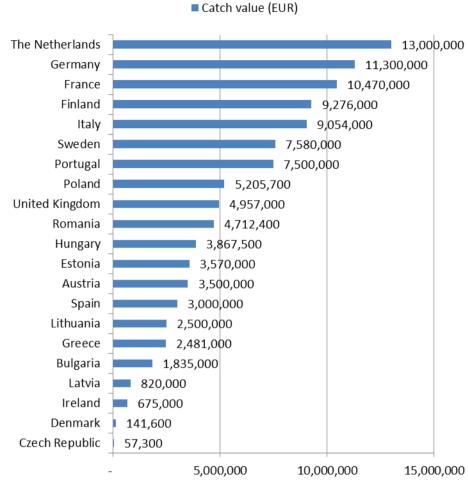


Figure 4. Value of catches of inland fish by Member State

Source: Ernst and Young, 2011

The total EU catch of inland fish species is distributed as follows: eels account for 6 per cent, other diadromous species for 5 per cent, Cyprinids – 62 per cent, predator fishes – 17 per cent, and Salmonids and Coregonids – 10 per cent. This distribution varies significantly across Member States, as alluded to in the catch value statistics (Figure 5).

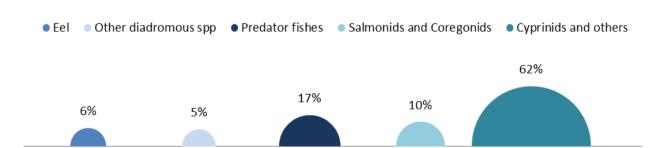


Figure 5. Catch distribution by group of fish species (total: 35,159 tonnes)

Source: Adapted from Ernst and Young, 2011

2.5. Employment

There is no routine EU level reporting on employment in inland fisheries, and Member State **reporting is inconsistent**, making it difficult to aggregate at EU level. For example, most Member States estimate the number of fishermen based on the number of licences issued. But in other Member States licences are issued either per fishermen, or for particular gears which can potentially be used by multiple fishermen (e.g. Ireland and the UK), and in other Member States licences are issued to operators employing several fishermen, such as the cooperative systems in the Czech Republic, Estonia, Hungary, Latvia and Poland, or in Finland and the Netherlands where medium-sized companies exist. The most recently compiled data on employment in commercial inland fisheries is Ernst and Young (2011). Despite the inconsistencies, the study compiled the data supplementing it with estimates from national experts to improve its accuracy. Mitchell et al (2010) also reviews employment for most EU Member States, however the data is frequently older than that compiled by Ernst and Young (2011), and there has been no attempt to make the data comparable or improve its accuracy.

In 2008-2009 there were an estimated **17,100 commercial inland fishermen** operating within the EU (see Table 1) (Ernst and Young, 2011). The number of full time fishermen is difficult to assess, and, again, due to inconsistent and incomplete or unreliable monitoring the estimates are rough. However it is clear that a significant number of the inland fishing workforce is **part time**. This is primarily a result of the seasonality of the profession, with fisheries typically closing in spawning seasons, and many target species being migratory and therefore only exploitable at certain periods of the year. There are also indications that in some Member States (Germany, Portugal, Spain, and the UK), license prices are relatively low and do not come with any minimum fishing time obligation, which has encouraged recreational anglers and other non-professional fishermen to obtain professional licenses.

Table 1 Employment in commercial inland fisheries

MEMBER STATE	TOTAL	FULL TIME	PART TIME	OCCASIONAL (1)	FULL TIME EQUIVALENT
Austria	100	20	80		
Bulgaria (5)	1500	630	870		717
Czech Republic	4		4		
Denmark (5)	19	10	9		
Estonia	963				
Finland	945	313	338	294	478
France (5)	431	242	189		306
Germany (5)	932	437	495		
Greece (2)	400	50	350		200
Hungary	304	204	100		
Ireland	624		624		60
Italy (3)	3600				
Latvia	231	40	191		
Lithuania	300				
Poland (5)	755	475	280		
Portugal (4)(5)	940	188	564	188	
Romania	2677	2422	242	13	2545
Spain	500				
Sweden	193				
The Netherlands	400				
United Kingdom	1276	20	1256		298
Total	17094	5051	5592	495	

⁽¹⁾ Only some hours/year and sometimes no fishing.

Source: Ernst and Young, 2011.

Despite leading in terms of the number of fishermen, the figure for Italy should be taken with a pinch of salt, as the majority of the 3600 fishermen reported exploit stocks in coastal saltwater lagoons, which would not be considered 'inland' in other countries. Romania and Bulgaria do however have relatively large commercial sectors, owing to the traditional domestic consumption of freshwater fish. When looking at the UK it is important to be aware that almost all of the fishermen operate on a part time basis. If these figures are taken at face value then the total number of inland commercial fishermen in 2008-2009 is approximately equivalent to 10 per cent of the total number of EU fishermen in 2009³. However this is an EU average and in some countries the contribution of the inland sector is much more important. Austria, Hungary and the Czech Republic clearly only have inland fishermen, and in Romania and Finland they account for 90 and 60 per cent of fishermen

⁽²⁾ Greek lagoons are not taken into account as they are not considered as fishery areas (extensive aquaculture).

⁽³⁾ The number of fishermen in Italy includes 2600 operating in coastal inland lagoons (brackish) and generally having other activities (shellfish rearing, sea fishing...).

⁽⁴⁾ Rio Minho fishery is not taken into account because it is mainly under maritime jurisdiction.

⁽⁵⁾ Brackish lagoons are under maritime jurisdiction in BG, DE, DK, FR, PL, PT.

According to Member States Data Collection Framework data submissions, the total number of fishers employed in the EU sea fishing fleet (excluding Greece) in 2009 was 134,700 (STECF and JRC, 2011).

respectively (Ernst and Young, 2011). Additionally, in Bulgaria, Germany, Estonia, Poland, and the Netherlands inland fishermen make up more than 20 per cent of catching sector employment.

2.6. Markets and trade

Most of the volume of freshwater fish is supplied to regional or national markets. In most Member States inland fishermen sell their fish to **local dealers and wholesalers**. However the mechanism by which this is done can vary significantly: in the Netherlands this is done via **auction**, whereas in Romania fishermen are legally obliged to sell their fish at authorised trading points where often only one dealer is present (Delaney et al., 2010; Ernst and Young, 2011). In some Member States **cooperatives** are involved in the marketing, such as the Lough Neagh Fishermen's Co-operative Society in Northern Ireland, and cooperatives in Italy and Hungary. Generally, the importance of wholesalers and dealers means that ultimately inland fishermen appear to be in a position where prices are volatile and often driven by the number of behaviour of local buyers (Ernst and Young, 2011).

Direct private sales are the next most important marketing channel for a lot of Member States. For example, in Portugal, 45 per cent of the catch is marketed to wholesalers and dealers (comprising eel, glass eel and lampreys), while other species are sold **directly to private consumers** (25 per cent) or hotels/restaurants (20 per cent) (Ernst and Young, 2011). The inland fish markets operate differently in Austria and Germany, where dealers and wholesalers market a much smaller percentage, and direct sales to private consumers dominate (occupying 60 and 45 per cent of the market respectively) (Ernst and Young, 2011). Hotels, restaurants and catering outlets are also very important in Austria and Germany. The situation is also exceptional in Estonia, where **processors** play a fundamental role, filleting and exporting major quantities of pike-perch from lakes Peipsi, Lammi and Võrtsjärv to markets in the EU, US and Canada. This is one of the few instances where inland catches are exported. Sales to processors are also significant in Lithuania, Latvia and Poland, as there is a tradition of freshwater fish processing in the Baltic States (Ernst and Young, 2011).

Trade in glass eel is also exceptional, with exports going to other EU countries and to international markets (China, Russia). The market for glass eel has changed significantly over the past two decades. Scarcity (due to the steady decline in landings - see Figure 7) combined with strong demand in Asia for glass eels to supply aquaculture, resulted in price rises (up from €5 per kg in the 1960s to around €500 per kg in 2012) (ICES, 2012). In the face of this steep price rise the traditional Spanish market (for consumption) declined (see Figure 6), as well as the European market for aquaculture and restocking, whereas the Asian market for glass eel continued to grow until 2008-2009. Then the Asian demand for European glass-eel dropped, probably due to oversaturation, with Chinese eel farms struggling to sell their farmed eel to the traditional Japanese market. However, due to the decline in numbers eel was listed on CITES Appendix II. This listing came into force on 13 March 2009 and required all exports to be accompanied by an export permit, which can only be issued after scientists in the exporting countries have confirmed that levels of trade are not be detrimental to the survival of the species and that the European eel is maintained, throughout its range, at a population level consistent with its role in the ecosystem.

The total export of glass eel for 2011-2012 was 24 tonnes for France, 3.7 tonnes for the UK, 2.2 tonnes in Spain and 0.9 tonnes for Portugal (ICES, 2012). France clearly dominates the export market, with exports going to the Netherlands (6 tonnes), Germany (4.9)

tonnes), Spain (5.0 tonnes) and the UK (2 tonnes), and lesser quantities going to other EU Member States (ICES, 2012). The Netherlands, Germany and Denmark also import significant amounts from the UK.

A comparison of landings data and exports statistics shows that a significant amount of eels are unaccounted for. In France these 'lost' eels totalled 7.2 tonnes, in the UK 0.6 tonnes, and Spain 8.5 tonnes (EIFAAC and ICES, 2012). This may be due to a combination of post-fishing mortality, underreporting of exports, or illegal activity. The former is less of a problem in the UK where traditional handnets are used, compared with France and Spain where glass eel are fished actively using trawls and post-catch mortality is higher (ICES, 2012).

The EU Eel Management Plan required the countries which catch glass eel to reserve 35 per cent of their catch for restocking within the EU, rising to 60 per cent in 2013. Analysis of catch and trade statistics (ICES, 2012) observed that only 12-16 per cent of glass eels caught were identified for restocking (as opposed to aquaculture or other unknown destinations), although this figure may be higher as those destined to aquaculture may go to restocking after being reared for a period.

Spain (consumption)

Europe (farming and restocking)

Asia (farming)

100

100

Asia (farming)

Figure 6. Market for glass eel

Source: Ernst and Young, 2011 (data unofficial, obtained from EU glass eel dealer).

2.7. Socio-economic importance

The relationship between catches and employment differs across Europe depending on the type of fishery. Fisheries located in natural lakes and reservoirs account for over half of the overall catch of inland fish in the EU in terms of volume, but they only involve 28 per cent of the fishermen. Estuaries and rivers occupy a similar percentage of fishermen (33 per cent) but they only contribute to 17 per cent of the catch by volume. These estuarine and riverine fisheries manage to sustain a higher number of fishermen due to the high value of the diadromous species harvested in these environments. The fisheries located on the

upstream course of rivers occupy a greater share than the downstream/ estuarine fisheries, both in terms of catch volumes (24 per cent) and in fishermen (37 per cent). Lastly the coastal lagoon fisheries of the EU involve 2 per cent of inland commercial fishermen, and 6 per cent of catch volume. These brackish lakes include the Curonian Bay in Lithuania and Kaliningrad, and the Dutch coastal lagoon complex of Ijsselmeer, as the marine species caught in Italian coastal lagoons are recorded along with sea fishing and are therefore not included in this estimate.

60% 53% 50% 37% 40% 33% 28% **%** 30% 24% Fishermen (%) 17% 20% ■ Catches (%) 10% 6% 2% 0% Large natural Estuaries and Lakes and Coastal lagoons lakes and downstream upstream rivers reservoirs rivers Type of fishery

Figure 7. Number of fishermen and catch (volume) of the different EU fisheries

Source: adapted from Ernst and Young, 2011.

Overall the commercial inland sector accounts for around 1 per cent of total EU fish production, approximately 1-2 per cent of the value of EU landings, and it employs 10 per cent of the EU fisheries workforce. Although the employment statistics for inland commercial fisheries are unreliable, with many working part-time, it is clear that a disproportionate number of people are employed by the sector compared to its productivity, primarily due to its labour-intensive traditional methods. In addition it is important to recognise that commercial inland fisheries play a unique role that can get overlooked when focusing on productivity. Most freshwater fish exploited by inland fisheries are caught to supply local traditional demand or niche markets, unlike the mass production of the aquaculture or marine catching sector - this distinction makes figures on the proportion of market supply by volume somewhat misleading. Inland fisheries often possess a unique cultural value, given that techniques and gear are often very traditional, the fish species exploited are frequently local and traditional delicacies, and the knowledge of the fishery, its methods and the exploited aquatic environment, is often handed down through generations and of great cultural and heritage value. Given their knowledge of and proximity to the environments in which they operate professional inland fishermen are also in the position to play an important role in environmental monitoring and management. Indeed, in some Member States this is already the case and fishermen participate in such stewardship activities as fish stock monitoring, removal of invasive and undesirable species, and restocking of eel and other species.

It is helpful to compare the socio-economic importance of commercial inland fisheries with another sector relying on freshwater fish resources: recreational fishing. Unfortunately there is no EU-wide socio-economic assessment of inland recreational fisheries, although several Member States have produced socio-economic studies. These indicate that angling has a higher economic value than commercial fisheries, and that recreational fishermen significantly outnumber professional fishermen (Carleton, 2003; European Anglers Association, no date). For example, in Ireland that total direct expenditure on recreational angling is estimated to be in the order of 555 million EUR, of which 121 million EUR is spent by out-of-state anglers (Tourism Development International, 2013)⁴. When indirect impacts are factored in then the overall economic impact is estimated to be approximately 750 million EUR (Tourism Development International, 2013). Furthermore, they estimate that recreational angling can support 10,000 jobs (Tourism Development International, 2013). Studies of this kind suggest that the value of recreational fishing to the economy is much greater than commercial fisheries. However, these studies typically estimate the expenditure on recreational fisheries by anglers, which is not strictly comparable with the economic value of commercial fisheries which is estimated by calculating the value of catches.

2.8. Professional organisation

Inland commercial fisheries suffer from a lack of institutional representation. Only Finland and France have national professional associations uniquely for inland commercial fishers. In France, 11 commercial fishermen's associations, approved by the Ministry of Ecology and Sustainable Development, are brought together under the umbrella of the National Committee for Inland Commercial Fishers (Comité National de la Pêche Professionnelle en Eau Douce). Indeed, fishermen are legally required to belong to one of these associations. In other countries commercial inland fishermen are represented in organisations which include both professional and recreational inland fishers, or in organisations which represent both marine and inland professionals (Ernst and Young, 2011). In Sweden for example the Swedish Fishermen's Federation has a freshwater fish committee, and the Swedish Lake Fishermen's Federation represents both professional and recreational fishermen. The tendency across Europe is for local associations to exist where the density of commercial fishermen is sufficient to merit them, i.e. around lakes, lagoons and estuaries (e.g. the Lough Neagh Fishermen Cooperative Society in Northern Ireland, or the Lake Peipsi Fishermen's Association in Estonia). In some Member States there are no commercial inland fisheries associations to be identified at all (e.g Bulgaria, Hungary), and in the Member States where they do exist, generally they lack human and financial resources (Ernst and Young, 2011).

According to Ernst and Young (2011) in mixed associations (combining recreational and commercial or inland and marine fishers) professional inland fishermen constitute a minority and they therefore risk being overlooked. They argue that insufficient coordination amongst fishermen and the lack of resources do not allow fishermen to put collective integrated strategies in place, either for fisheries management or marketing (Ernst and Young, 2011).

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⁴ This study includes marine angling and is not restricted to inland fishing and diadromous species.

3. INLAND FISHERIES AND THE CFP

KEY FINDINGS

Inland fisheries are on the whole managed by national legislation. However the CFP does apply to diadromous species during the marine part of their lifecycles, and it does provide support for commercial inland fisheries under the financial instruments (previously the EFF and soon the EMFF).

As inland fisheries are not generally regulated through the CFP, the reform of the basic regulation does not exert a particularly strong influence over their management, success and survival. The exceptions to this however are the diadromous fish species for which the CFP does play a role, i.e. the European eel and the Baltic salmon.

Among other things, the reformed CFP aims to bring populations of harvested species above levels which can produce the maximum sustainable yield and reinforces the drive towards long-term management requiring that multiannual plans be adopted as a priority. The impact of these reforms on eel and salmon depends on implementation, but unfortunately the track record for implementation in these areas has been poor.

The new CFP also introduces an obligation to land all catches. In conjunction with sustainable rates of exploitation, this could help to improve the state of the Baltic sea salmon stocks.

The reforms to the financial instrument in relation to inland fisheries are not particularly significant: the proposed article designed to support inland fisheries (Article 42) is not very different to the equivalent article in the EFF. However, the strengthening of community-led local development in the proposed EMFF has the potential to make a significant positive impact on local communities practising commercial inland fishing.

3.1. Policy landscape

Unlike marine aquatic resources which are managed under the CFP, inland fisheries are, on the whole, managed by national legislation, or in some Member States at the regional administrative level. Germany for example has 16 different fisheries regulations for the Länder (Arlinghaus et al, 2002). In Italy and Spain, regions and provinces administer the regulation of inland fisheries, and in most Member States, regional or local administrations are involved in the operational side of implementing national regulations (such as licensing or monitoring) (Mitchell et al, 2010; Ernst and Young, 2011). Fishing management systems also tend to vary between and within Member States by water body, species, gear, etc (Mitchell et al, 2010; Ernst and Young, 2011).

In addition to national legislation, a number of EU policy instruments exert influence over the conservation of freshwater species and habitats and consequently the management of European inland fisheries. The Habitats Directive, which aims to protect natural habitats and wild species other than birds, equally applies to the EU freshwater, terrestrial and marine environments. At present there are 202 freshwater fish species listed on Annex II and IV of the Habitats Directive (92/43/EEC) (Freyhof and Brooks, 2011). The preservation of habitats of threatened species has been aided through legal protection of sites under the Natura 2000 network, and a number of conservation projects have been financed through the EU conservation programmes LIFE (Regulation (EC) No 1655/2000).

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⁵ Member States are required to designate Natura 2000 sites for the species listed in Annex II, and Annex IV species are subject to a strict protection system.

The Water Framework Directive (WFD) (2000/60/EC) is another major driver for achieving sustainable management of water resources throughout Europe, and thereby the conservation of Europe's freshwater and diadromous fishes and the fisheries that rely on them. It requires all inland and coastal waters within defined river basins to reach good ecological status by 2015. The WFD includes requirements for increased monitoring of aquatic ecology by Member States and improved protection and recovery of water bodies.

Although on the whole inland fisheries are not managed by the rules of the CFP, it does apply to anadromous and catadromous species during the marine part of their lifecycles. This distinction is unclear and has led to varying approaches to diadromous species management across Europe. For example, in the North Atlantic, sovereign states retain their role in the regulation of fisheries for salmon originating in their own rivers (NASCO, 2012). Fishing for salmon is prohibited beyond areas of fisheries jurisdiction of coastal states and in most areas beyond 12 nm (the exceptions are Greenland the Faroes where fishing is prohibited 40 nm offshore) (NASCO, 2012). By contrast, in the Baltic Sea, salmon in the marine environment is managed by the EU through total allowable catches (TACs), quotas, closed seasons, and gear restrictions, while Member States implement national measures in their rivers. In 2011 a multiannual management plan was proposed by the Commission for Baltic Sea salmon (COM(2011)470), covering both seas and rivers. The proposal argues that it is necessary to include measures for the management of salmon in rivers in order to ensure effective conservation of marine species throughout their whole migratory cycle, even though the riverine phase of its lifecycle has traditionally been outside of EU competence. The proposed management plan includes:

- Objectives and targets, such as restoration to levels that can produce maximum sustainable yield by 2015 (corresponding to a smolt production level between 60-75 per cent of the potential smolt production capacity for the different wild salmon rivers);
- A TAC based on constant fishing mortality rate of 0.1. The TAC would only cover marine fisheries but would include masters of recreational marine vessels;
- The phasing out of releasing salmon in rivers with man-made obstacles and without potential for re-establishment of self-sustaining wild salmon populations, in order to protect the genetic diversity of the wild stocks;
- Financial assistance from the EFF for direct restocking of rivers with potential for self-sustaining wild salmon populations as a conservation measure for the wild salmon stock.

The European Parliament adopted the plan, amending it to include higher reproduction targets, stricter rules for restocking rivers with farmed young salmon in order to protect genetic integrity, and broadening the scope of the plan to include recreational fishing. However, it has been caught in the institutional deadlock between the European Parliament and the Council over long term management plans.

Unlike Baltic salmon, European eel is currently subject to a management plan (Council Regulation (EC) No 1100/2007). Similarly to the proposed plan for Baltic salmon, the Eel Regulation establishes a framework for the protection and sustainable use of the stock of European eel in coastal lagoons, estuaries and rivers, as well as community waters. It requires Member States to identify eel river basins and prepare an Eel Management Plan, the objective of which is to reduce anthropogenic mortalities to increase the probability of escapement to sea. More specifically it requires Member States to take measures that allow 40 per cent of adult eels to escape from inland waters to the sea, where they spawn, and the EU countries which catch glass eel are required to reserve 35 per cent of their catch for

restocking within the EU, which increased to 60 per cent in 2013. The measures that Member States might take to achieve these aims could include structural measures to improve rivers, transportation of eels from inland waters to the sea, restocking measures, restricting recreational fishing, and of most relevance for this briefing, restricting commercial fishing activity.

A review of the implementation of the Eel Management Plan was published by the International Council for the Exploration of the Sea (ICES) in 2013. According to this review, most management actions were directed at commercial and recreational fisheries, with almost as many consisting of 'monitoring measures' (such as implementing monitoring programmes and scientific studies) (ICES, 2013a). The remaining measures related to hydropower, pumping stations, obstacles in rivers, habitat management, restocking, and predator control. Based on Member States' progress reports ICES identified that of the management actions in Member States' Eel Management Plans, 756 had been fully implemented, 259 partially implemented, and 107 were not implemented at all (ICES, 2013a). For 18 actions there was not enough information available to make an assessment (ICES, 2013a). They observed that management measures related to fisheries were most frequently fully implemented, while other management measures were often postponed or only partially implemented. Indeed, the majority of the increase in escapement of silver eel since the implementation of the plans was due to management measures addressing commercial and recreational fisheries on silver eel (ICES, 2013a).

Despite not regulating inland fisheries, except for some diadromous species described above, the CFP does provide support for commercial inland fisheries under the financial instruments (previously the EFF and soon the EMFF). Article 33 of the EFF (Council Regulation (EC) No 1198/2006) aims to provide support for commercial inland fisheries, covering such investments as:

- Investments for the construction, extension, equipment and modernisation of inland fishing facilities (in view to improve safety, working conditions, product quality, environmental impact, etc);
- The reassignment of vessels operating in inland fishing to other activities outside fishing;
- Grant support for the temporary cessation of inland fishing activities, where
 measures for the recovery of species occurring in inland waters are provided for in
 a Community legal act;

Additionally, Article 38 sets out measures intended to protect and develop aquatic flora and fauna, which includes support for the **rehabilitation of inland waters**, including spawning grounds and migration routes for migratory species, as well as the protection and enhancement of the environment in the framework of Natura 2000 areas concerning fishing activities. The latter could refer to inland waters, and includes support for **restocking** when it is foreseen as a management measure under a Community legal act (i.e. restocking of eel under the Eel Regulation). Other articles are also relevant to inland fisheries, although they do not explicitly mention inland fisheries, fish species or habitats. These include:

- Article 37, 'Collective Actions': numerous measures implemented with the active support of fishing operators themselves, including measures to create producer organisations, or promoting selective fishing methods or gears, etc;
- Article 43 'Sustainable Development of Fisheries Areas': assistance for the sustainable development and improvement of the quality of life in fisheries areas, targeting as a priority areas with low population density or fisheries in decline or small fisheries communities, and including such measures as to maintain or

- develop prosperity and jobs in these areas through diversification and adding value to fisheries products;
- Article 34 'Investments in processing and marketing': aiming to promote sustainable employment in the sector, and includes assistance for marketing products originating from local landings.

3.2. Reform of the CFP and expected impacts

In order to assess the impacts of the reform of the CFP on inland commercial fisheries it is useful to provide an overview of the main elements of the reform package of relevance to the inland fisheries sector. Because the EMFF is currently still under negotiation at the time of writing it is not possible to provide a complete analysis of the reform of the financial instrument, nevertheless an assessment has been performed using the Commission proposal for a new EMFF (COM(2011)804) as the next best thing.

The CFP basic regulation

As inland fisheries are not generally regulated through the CFP, the reform of the basic regulation (Regulation (EU) No 1380/2013) does not exert a particularly strong influence over their management, success and survival. The exceptions to this however are the diadromous fish species for which the CFP does play a role, i.e. the European eel and the Baltic salmon. A fundamental reform of the basic regulation is the objective to ensure that 'exploitation of living marine biological resources restores and maintains populations of harvested species above levels which can produce the maximum sustainable yield' (MSY). The maximum sustainable yield exploitation rate shall be achieved 'by 2015 where possible and on a progressive, incremental basis at the latest by 2020 for all stocks'. In addition, the reformed regulation reinforces the drive towards long-term management plans for stock management from the previous regulation, requiring that multiannual plans be adopted as a priority in order to restore and maintain fish stocks above levels that are capable of producing MSY. Multiannual plans may also be multispecies, in the case of mixed fisheries or where the dynamics of stocks relate to one another. Another significant reform of relevance to diadromous species is the landing obligation (Article 15). The landing obligation requires all catches of species subject to catch limits caught during fishing activities in Union waters or by Union fishing vessels outside Union waters shall be brought and retained on board the fishing vessels and recorded and landed. The introduction of this ban on discarding is phased in by species or groups of species, but for Baltic salmon it must be in place from 1 January 2015 at the latest.

The impact on diadromous species of the MSY objective and drive towards multiannual plans depends significantly on implementation. If these reforms were to be implemented fully and in a timely fashion, which would mean swift adoption of the proposed plan for Baltic Sea salmon, and the setting of exploitation rates in line with scientific advice, they could be expected to ensure the recovery of the stocks, and to sustain a commercial sector. Unfortunately the track record for implementation in these areas has been poor. The adoption of long-term management plans under the previous CFP has been very slow, delayed by inter-institutional disputes over the legal base. Given that the 2012 reform did not establish any timetable by which multiannual plans should be adopted, there is a real danger that this will continue to be a barrier to implementation. In addition, whenever possible ICES has used the objective of MSY as the basis for its scientific advice. Nevertheless the Council has frequently set TACs at levels exceeding those proposed. O'Leary et al (2011) analysed the extent and degree to which the Council of Ministers set TACs according to scientific advice for 11 species during the annual negotiations over the

period 1987 to 2011. They discovered that in 68 per cent of quota setting decisions TACs were set at levels higher than those recommended by the official scientific advice (O'Leary et al, 2011). Furthermore, the degree to which the politicians have exceeded scientific recommendations was not insignificant: on average the quotas exceeded the scientific recommendations by 33 per cent (O'Leary et al, 2011).

The Agriculture and Fisheries Council of 17 October 2013 was the first Council meeting to set fishing opportunities in the spirit of the reformed CFP, and therefore was viewed by many as providing an indication of how the policy will be implemented in the future. For the Baltic salmon stocks the TAC for the Main Basin was reduced by 2 per cent (to 106 587 salmon) and for the Gulf of Finland by 15 per cent (to 13 106 salmon) (Council of the European Union, 2013a). Although these constitute reductions, they contrast with the scientific advice that no directed fishery on wild stocks take place in the Gulf of Finland, and that the TAC for the Main Basin be set to 78 000 salmon (down 72 per cent from the previous year) (ICES, 2013b). At the time this decision was made the ministers were not under a legal obligation to set the TAC according to MSY, and clearly this will change next year. However the pressure on ministers to keep the fishery open is unlikely to change and the socio-economic arguments for maintaining higher fishing levels may be given more weight than the arguments – and legal obligation – for setting exploitation rates according to the MSY objective.

With respect to the introduction of the discard ban, the effects on diadromous species are likely to be more significant. Discarding has been a problem for Baltic salmon in all areas of the Baltic, due to seal damage to targeted salmon catches and salmon bycatch in other fisheries. In 2012 in the Gulf of Finland discards were estimated at 8 per cent and at 5 per cent in the main basin and Gulf of Bothnia (ICES, 2013b; ICES, 2013c). If implemented fully this ban could play an important role in reducing fishing mortality. However, on its own the landing obligation would be unlikely to restore Baltic salmon stocks to a sustainable trajectory, without setting fishing opportunities at sustainable levels and enforcing them properly.

The European Maritime and Fisheries Fund

The reforms to the financial instrument in relation to inland fisheries are not particularly significant. They consist of a new recital (45), explicitly in support of inland fisheries, which reads as follows: 'It is vital for the Union that a sustainable balance be achieved between fresh water resources and their exploitation; therefore having due regard to environmental impact while ensuring that these sectors retain economic viability, appropriate provisions should support inland fishing'. Arguably this deliberate mention of inland fisheries demonstrates an increased awareness of the sector.

However, the article proposed by the Commission designed to support inland fisheries (Article 42) is not very different to that in the EFF (Article 33):

- both articles provide support for investments on board vessels and equipment, in view of improving safety and working conditions, increasing product quality, and reducing the impact on the environment.
- both funds provide support for the reassignment of vessels operating in inland waters to other activities outside of fishing.
- both funds support the participation of inland fishermen in managing, restoring and monitoring Natura 2000 sites, as well as the rehabilitation of inland waters, including spawning grounds and migration routes⁶.

 $^{^{6}}$ This measure is Article 42(5) of the proposed EMFF, equivalent to Article 38(2)b of the EFF.

The main differences between the inland fishing articles in the two funds are that the proposed EMFF introduces support for on board energy efficiency audits and schemes, and, more significantly, it removes support for the temporary cessation of inland fishing activities. The support for on board energy efficiency audits and schemes is not likely to have much of an impact, given that the techniques and gears used in inland fishing are amongst the most sustainable, with low energy consumption. Temporary cessation was one of the subsidies which the Commission sought to terminate in the 2014-2020 programming period, both for inland and marine fisheries (see Article 13 of proposed EMFF, 'Ineligible operations'). However, as explained the EMFF is still under negotiation, and the European Parliament voted in plenary in favour of amendments reintroducing temporary cessation into the fund (see amendments 191 and 281 of the Cadec report (European Parliament, 2013)), and the Council agreed a general approach that reintroduces temporary cessation in certain circumstances (Article 33a of Council General Approach (Council of the European Union, 2013b)). The proposed EMFF also supports investments on existing landing sites and ports, which is more specific and restricted than the 'construction', 'extension' and 'modernisation' of inland fishing facilities funded under the EFF - support under the proposed EMFF is not supposed to cover the construction of new ports, landing sites, or auction halls (Article 41).

Potentially of more significance to the inland fisheries sector are the reforms to the local development measures. The Commission's intention was to build on the success of Axis 4 under the EFF, which produced good value for money, with small projects generating innovation and jobs at low cost. Thus for the 2014-2020 period the Commission proposed more support be provided for the development of local strategies, networking and community activities. It also sought to introduce the opportunity for 'multi-funding', so that Fisheries Local Action Groups (FLAGs) - partnerships between fisheries actors and other local private and public stakeholders - can access funding from the different Common Strategic Framework (CSF) funds. This is made possible through the application of a single methodology for community-led local development across all five CSF funds, making support from the funds consistent and coordinated. The incentives are also greater: the maximum co-financing rate has increased to 75 per cent (European Commission, 2012). The Commission also seeks to reinforce the importance of networking, encouraging Member States to set up support units for national networks of FLAGs, with the aims of disseminating information, building the capacity of local players, exchanging good practice, and supporting cooperation between FLAGs (European Commission, 2013). Experiences from similar bottom-up territorial approaches (e.g. Leader) have shown that networking and exchange of experience have contributed significantly to improving the efficiency and effectiveness of the implementation of the programme (European Commission, 2013).

This strengthening of community-led local development has the potential to make a significant positive impact on local communities practising commercial inland fishing. There are already examples of inland fishing operators setting up projects under Axis 4 of the EFF. For example, the Northernmost Lapland FLAG received support for training in fishing tourism for commercial fishermen; founding a fishermen's cooperative; training in food hygiene legislation and hazard analysis in fish processing; training commercial fishermen to build and repair big fyke nets for whitefish fishing; and finding new economic uses for roach and ide that are harvested as bycatch (FARNET, 2012). Arguably it is the community-led local development pillar of the EMFF that has the greatest potential to sustain the commercial inland fishing sector.

CONCLUSIONS

KEY FINDINGS

Commercial inland fisheries are small-scale, labour intensive, traditional fisheries which produce high value products of local importance, mostly using passive gear.

As inland fisheries are not generally regulated through the CFP, the reform of the basic regulation does not exert a particularly strong influence over their management, success and survival.

The impact on eel and salmon of the MSY objective and drive for multiannual plans depends largely on implementation, but unfortunately the track record for implementation in the area of sustainable stock management has been poor. The landing obligation could also have a significant impact in reducing fish mortality, though it is likely that without sustainable rates of exploitation, and restoration of riverine habitat, it will not lead to the recovery of the Baltic Sea stocks.

Of greater relevance to commercial inland fisheries is the financial instrument for fisheries, particularly the strengthening of community-led local development.

This briefing provided an overview of commercial inland fisheries in the EU. It describes how commercial inland fisheries are small-scale, labour intensive, traditional fisheries which produce high value products of local importance, mostly using passive gear. Despite their low productivity, they are valuable sources of employment, particularly in some Member States, and they have important heritage and cultural value.

On the whole inland fisheries are managed by national legislation, and are not regulated under the rules of the CFP. As inland fisheries are not generally regulated through the CFP, the reform of the basic regulation does not exert a particularly strong influence over their management, success and survival. The exception to this however is that the CFP does apply to diadromous species during the marine part of their lifecycles (i.e. the European eel and the Baltic salmon). The greatest threats facing such species are overexploitation and low recruitment, and therefore the greatest threats facing the fisheries for these species are low catches and closures. Among other things, the reformed CFP aims to bring populations of harvested species above levels which can produce the maximum sustainable yield and reinforces the drive towards long-term management requiring that multiannual plans be adopted as a priority. The reforms also introduce an obligation to land all catches, which is of particular relevance to Baltic Sea salmon, for which there are unnecessary mortalities due to discarding. The impact on eel and salmon of the MSY objective and drive for multiannual plans depends largely on implementation, but unfortunately the track record for implementation in the area of sustainable stock management has been poor. In light of this it should be concluded that although these reforms to the Basic Regulation have the potential to improve the state of diadromous species and the fisheries that exploit them, the political will needs to be present for these gains to materialise. The landing obligation could also have a significant impact in reducing fish mortality, though it is likely that without sustainable rates of exploitation, and restoration of riverine habitat, it will not lead to the recovery of the Baltic Sea stocks. With respect to freshwater fish species beyond the jurisdiction of the CFP, and diadromous species in the freshwater part of their life cycles, these fisheries are more likely to be sustained in the long term if the WFD and the Habitats Directive were to be fully implemented.

Of greater relevance to commercial inland fisheries is the financial instrument for fisheries. It contains measures which offer support to inland fishermen in order to reduce the impact of inland fishing on the environment, increase energy efficiency, increase the quality of fish landed, and to improve safety or working conditions. However, the article in the proposed EMFF designed to support inland fisheries currently under negotiation is very similar to the equivalent article in the EFF. Like the EFF, it provides support for investments in equipment, extension and modernisation of facilities, reassignment of vessels to other activities, and the participation of fishermen in environmental management schemes. It does propose the introduction of support for energy efficiency schemes but these are not as relevant as for the marine sector given the relatively low energy consumption of the inland fleet. This suggests that if it were down to the inland fisheries measure alone, inland fisheries would not dramatically change course under the next programming period (unless further amendments are adopted by Council and Parliament). However, another aspect of the EMFF consists of the strengthening of community-led local development. The proposal contains more support for the development of local strategies, networking and community activities. It introduces the opportunity for applying for and combining funding from multiple EU funds and it encourages Member States to create support units for national networks of FLAGs, with the aims of disseminating information, building the capacity of local players, exchanging good practice, and supporting cooperation between FLAGs. As a result, the strengthening of the local development pillar is likely to have a much more significant impact on local communities practising commercial inland fishing.

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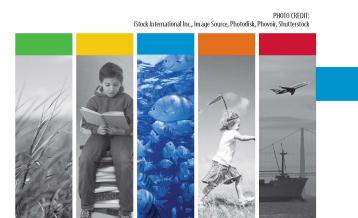
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