



The costs of IUU fishing to the EU

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Introduction

The full picture

Illegal, Unreported and Unregulated (IUU) fishing is a serious threat to the sustainability of fisheries, globally and in Europe. The continued failure of the EU's control and enforcement measures has significant consequences for fisheries' resources, the fishing industry and the communities dependent on fishing.

What is IUU fishing?

There are many forms of IUU fishing, including fishing without a licence, mis-reporting of catches, fishing in closed areas or with illegal gear, and taking undersized fish. In a number of EU fisheries, IUU fishing accounts for one-third to one-half of all catches.

What are the costs of IUU fishing?

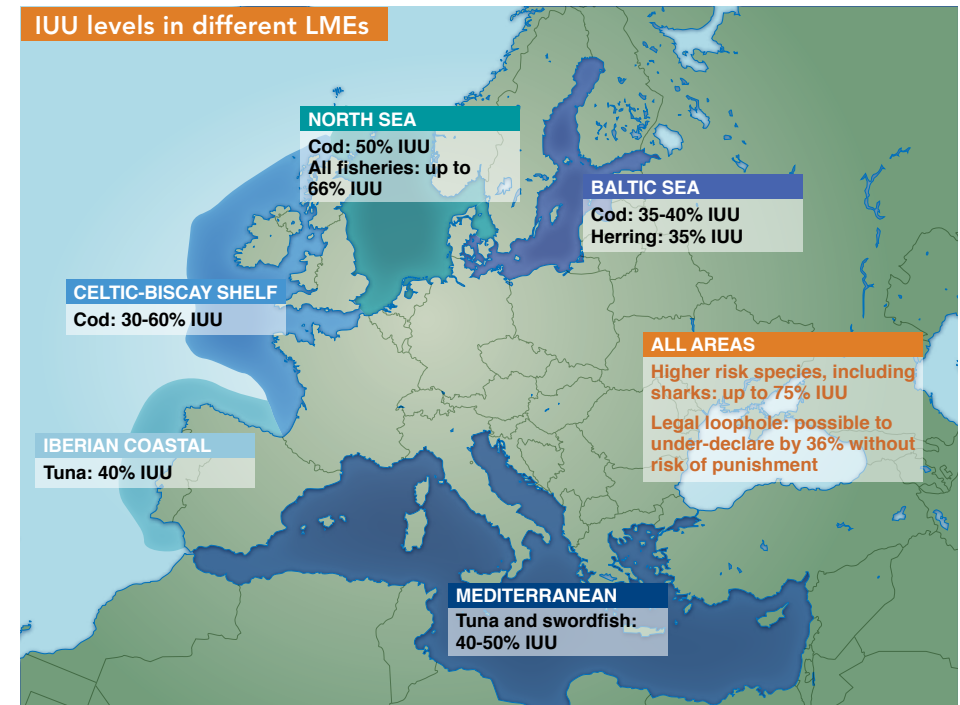
IUU fishing incurs many costs, such as depleted fish stocks; fewer jobs in fishing and processing; distorted fisheries data, leading to less effective management; likely extinction of sensitive species; and other impacts on ecosystem services, tourism and international negotiations. Some of these costs are difficult to quantify, however it is possible to use models to calculate the cost of reduced catches, job losses and depleted stocks from IUU fishing.

Overview of research

The Pew Environment Group commissioned etec – an environmental economics consultancy – to estimate the costs of IUU fishing to EU Member States; these costs were assumed to be significant but until now had not been calculated.

Modelling method

Simple surplus-production models were applied to key commercial groups representing 46 percent of fishing value in five Large Marine Ecosystems (LMEs) around Europe. Simulations were carried out under various management scenarios, with IUU fishing rates ranging from zero to 90 percent. Using best estimates of actual IUU fishing levels for different commercial groups in different areas, costs of IUU fishing were assessed by comparing the IUU fishing case with a zero-IUU scenario.



ANALYSIS

The costs of IUU fishing

Environmental, economic and social costs to EU Member States are large and represent a significant proportion of fishing value.

Summary of key costs

The cost estimates for selected fish groups across the five LMEs sum to

- over €10 billion of lost catches by 2020
- over €8 billion of lost stock value in 2020, and
- over 27,000 lost jobs in fishing and processing industries.

In comparison, the value of all EU Member State fishing in these LMEs is about €6 billion each year. Moreover, these estimates, large as they are, do not represent the full cost as the analysis only included selected costs and key stocks with clear evidence of IUU fishing. The true costs of IUU fishing are therefore likely to be substantially higher.

Environmental cost

A key environmental cost is the damage to fish stocks. For instance in the North Sea, ending IUU fishing is projected to lead to increased fish stocks in 2020 worth more than €4 billion. The full environmental costs are likely to be far greater. This is because the estimate does not include all environmental costs, for instance the risk of extinction of target or by-catch species such as sharks and rays, or impacts on ecosystem services.

Economic cost

The total loss of catches from 2008 to 2020 arising from IUU fishing is likely to be more than twice the value of current annual fishing. In fact, the effect of stock depletion is so severe that by 2020 catches using the zero-IUU fishing scenario could be many times higher than when IUU fishing continues. Again the full economic costs are much greater, as the analysis does not include other economic impacts such as distorted competition, poorer data quality for management, or the increases in numbers of jelly fish on tourism.

Social cost

Depleted fish stocks lead to reduced employment in fishing and fish processing. Fisheries-related employment in EU Member States is currently more than 220,000. This figure could be at least 27,000 higher if IUU fishing was stopped. This is an average of projections for 2008–2020; the positive impact on employment from 2020 onwards would be even greater.



Costs of IUU fishing until 2020						
Member states	Landing value modelled	Stock value in € million	Annual value of landings		Employment 2008–2020	
			In € million	%	In real terms	%
Belgium	62%	90	9	23%	174	20%
Denmark	76%	1334	117	26%	2,415	54%
Estonia	91%	177	8	10%	636	8%
Finland	91%	102	5	10%	367	8%
France	46%	1092	130	17%	2,988	16%
Germany	70%	430	38	22%	900	21%
Greece	13%	175	9	3%	403	2%
Ireland	47%	404	50	17%	1,097	17%
Italy	13%	504	26	3%	1,162	3%
Latvia	91%	189	8	10%	683	17%
Lithuania	90%	25	1	10%	88	3%
Netherlands	64%	863	85	26%	1,526	44%
Poland	91%	140	6	10%	506	8%
Portugal	46%	207	24	14%	3,238	15%
Slovenia	13%	1	0	3%	3	1%
Spain	34%	693	73	11%	6,800	12%
Sweden	81%	482	36	21%	1,119	58%
UK	60%	1,948	200	24%	3,715	32%
EU	46%	8,855	827	16%	27,818	13%

The way forward



Catch limits in line with scientific advice will increase fish stocks and reduce the costs of IUU fishing.

Fisheries management regimes and time horizons

The total cost of IUU fishing is dependent on the management strategy for a given fishery and the time horizon. A management regime that sets catch limits according to scientific advice is better equipped to react to IUU fishing activity and to counter stock depletion. As a result, the cost of IUU fishing would be more moderate. Similarly, a number of costs are amplified over time. As a result, the cost of IUU fishing from 2020 onwards would be even greater than between 2008 and 2020.

The principal finding

The principal finding from the research is that there are two possible futures for EU fishing. If IUU fishing continues fish stocks will not recover from current depleted levels but decline further. If IUU activity is stopped then sound management could lead, for most commercial species, to restored fisheries approximating maximum sustainable yield levels within a short period of time.



For further information see the full report, *Costs of Illegal, Unreported and Unregulated (IUU) Fishing in EU Fisheries*, at: www.pewenvironment.eu/resources/costs_of_IUU.pdf



POLICY Recommendations

IUU fishing creates significant environmental, economic and social costs. The Pew Environment Group calls on European institutions and Member States to face the challenge of strengthening the EU control and enforcement regime by introducing:

- Meaningful sanctions for non-compliance;
- Vessel Monitoring Systems (VMS) on all fishing vessels regardless of their length;
- Independent observers and/or cameras onboard for specific fisheries with a consistent record of infringements, such as bluefin tuna;
- Central computerised repositories for all information relating to fisheries offences and their perpetrators; and
- Suspension of Community aid to the fisheries sector, including the granting of fishing rights under Fisheries Partnership Agreements, if a Member State fails to respect its control obligations.

In addition, the existing overcapacity in the European fleet – estimated to be about 40 percent – has to be removed as it inevitably leads to unprofitable fishing operations and strong incentives to bend or break the rules.

BRIEFING



About the Pew Environment Group

THE PEW ENVIRONMENT GROUP is the conservation arm of The Pew Charitable Trusts, a non-governmental, non-profit organisation. Pew applies a rigorous, analytical approach to improving public policy, informing the public and stimulating civic life. The objective of Pew's European Marine Programme is to support the European Union in ending global overfishing and reducing the destruction of the world's oceans.

Pirate, or Illegal, Unreported and Unregulated (IUU), fishing

- contributes to the depletion of fish stocks worldwide
- jeopardises the viability of resources
- destroys marine habitats
- distorts competition for legal fishermen, and
- threatens the survival of coastal communities in developing countries.

Our work in the EU is focused on the design and promotion of sustainable marine and fisheries policies, informed and guided by the most up-to-date and accurate scientific information.

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