

Hunting and fishing fees in Estoniai

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Brief summary of the case

Fishing and hunting fees has been in place in Estonia since the 1990s and environmental fees and charges are guided by the overarching Environmental Charges Act. The fishing fees are differentiated based on the purpose of fishing: rates are separately established for commercial, recreational and special purpose fishing. While commercial rates are based on the first sale price of fish species recreational fees vary as per the period of fishing. Recreational fishers are also allowed to fish in nature protection areas nevertheless for this they need to buy special fishing cards, which are more expensive and are only available in limited numbers. Prior to 2013, hunting fees were differentiated by the main game species and the class of the quality of the hunting grounds nevertheless with the introduction of the new Hunting Act in 2013 an annual hunting fee was introduced.

The revenues collected from both fees are earmarked at the proportion of the 2009 tax-base and are transferred to the Environmental Investment Centre, which then distributes the revenues in the form of grants for specific projects. The collected funds are used for research, conservation actions targeting a wide range of species and habitats and awareness raising. In 2015, total revenues from fishing fees were EUR 1.57 million out of which 77% was earmarked for conservation purposes; while total revenues from the annual hunting fees were around EUR 130,000. While it is challenging to quantify the environmental effectiveness of the fees the earmarking system seems to provide a positive impact on biodiversity.

Transparency and the communication of how the revenues are used appear to be an important characteristic of the fees which in turn create a stable system and ensures the effective engagement of stakeholders.

1 Description of the design, scope and effectiveness of the instrument

1.1 Design of the instrument

The rules of the Estonian fishing and hunting fees are laid down in the **Estonian Environmental Charges Act** (2005), as well as in the Estonian Fishing Act (2015) and the Estonian Hunting Act (2013). The Environmental Charges Act provides the grounds for determining all environmental charges (including the hunting and fishing fees), establishes the rates of the charges, the procedures for payments and the use of the revenues obtained from the charges. In contrast, the Fishing Act and the Hunting Act establish the specific requirements of fishing and hunting in Estonia, including for instance allocation of fish resources, fishing conditions, quotas for hunting and the requirements of monitoring the stocks.

Fishing fees were introduced in Estonia in the early 1990s. According to the Environmental Charges Act (2005) the fishing charge needs to be paid for the right to fish and collect aquatic plants from the following two water bodies (paragraph 11):

- "from water bodies under the jurisdiction of the Republic of Estonia or parts of such water bodies;
- from water bodies outside of the jurisdiction of the Republic of Estonia if the fishing rights on such water bodies have been issued or guaranteed by the Republic of Estonia."

The fee is differentiated based on the purpose of fishing; rates are separately established for commercial, recreational and special purpose fishing¹. Commercial fishing fee rates are further differentiated by the trawl and passive gear fisheries by specific fish species and by fishing gear as well as the location of the fishing on the basis of the first sale prices; for instance there are different rates for Atlantic, Baltic Sea, Lake Peipus and inland water bodies (Statistics Estonia 2009a). According to the OECD Database on instruments used for environmental policy the general tax base for the fishing fee for some of the most commonly fished species is the following (not full list):

Baltic herring: EUR 3.19 per tonne;

Cod: EUR 31.95 per tonne;

• Flounder: EUR 9.58 per tonne;

• Salmon: EUR 0.31 per individual fish;

• Shrimps in the district of Spitzbergen: EUR 191.73 per day;

Sprat: EUR 3.19 per tonne;

• Unregulated species at NEAFC district: EUR 4.47 per tonne.

The commercial fishing fee rates are set by the Ministry for the Environment each year. There is a negotiating process with the commercial fishers in doing this and the fish prices on the market (i.e. first sale price) are also considered (Interview with Mr Lamp, Ministry of the Environment 2016).

Special purpose fishing rates are differentiated based on the fish species, while **recreational fishing fees are based on the fishing time period**. Recreational fishing fees are currently applied as follows: 24 h – EUR 1; 7 days – EUR 3; 6 months – EUR 13; 12 months – EUR 20 (Ministry of the Environment 2016). Fishing permits can be obtained via mobile payment, online payment or direct purchase.

In addition to the general recreational fishing permit, **fishing is allowed in nature protection areas if recreational fishers buy special fishing card**. Fishing is permitted in only specific areas and time period. These fishing cards are more expensive than the general fishing permits and varies from EUR 3-6 per day or EUR 7 per limited period (Ministry of the Environment 2016). With fishing cards fishers are also allowed to use entangling nets, long lines consisting of up to 100 hooks, hoopnets, dragnets, crayfish dip-nets and traps, and trap-nets and can fish *Salmonidge* on some rivers and fish on some water bodies within nature conservation areas.

¹ According to the Fishing Act (2015) special purpose fishing can be carried out for the following reasons: environmental research, to collect roe needed for the production of restocking material, to catch breeder fish, to collect hypophysis, to transplant fish and to avoid the death of fish or improve the ecosystem of a water body (paragraph 19).

Each year only a limited number of fishing cards are issued and only for specific fish species. For those who fish with fishing cards it is obligatory to submit catch data within a specific time period (Ministry of the Environment 2016). For instance to fish with an entangling net in the sea or Võrtsjärv region for one month EUR 13 needs to be paid. Fishing card for *Salmonidae* (salmon and sea trout) costs EUR 7 per day and EUR 14 per 3 days.

Exemptions from the fishing fee are granted in the following cases:

- No recreational fishing permit is needed for pre-school children, students under the age of 16, pensioners and people with disabilities
- No license is need for one simple hand line.
- Commercial fishing rights are free of charge if the fishing rights are not guaranteed by the Republic of Estonia.

Hunting fees were introduced in Estonia in the late 1990s and prior to a reform of the Hunting Act in 2013 it was the State's responsibility to outline hunting districts and to collect fees from hunters using the districts. Hunting fees were differentiated by the main game species and the class of the quality of the hunting grounds (Statistics Estonia 2009a). In addition, payments for game damages were also done by the State.

With the introduction of the new Hunting Act in 2013, the former "rent fee" was replaced with an annual hunting right fee which costs EUR 10 - EUR 25 (Environmental Charges Act 2015). The current fee is EUR 10 (Interview with Mr Lamp, Ministry of the Environment 2016). This hunting permit gives permission for hunters to hunt in the districts. The new act also made substantial changes on game damages as it is now the hunters' responsibility to prevent these damages and pay for them directly to the landowners.

The owners of estates which are located within a hunting district and their family members are **exempt** from the hunting fees.

1.2 Drivers and barriers of the instrument

Fishing and hunting fees are common in most EU Member States (Withana et al. 2014) and seen as a financial contribution for the use of natural resources. While assessing their effectiveness in achieving value added conservational impacts can be challenging in most cases significant barriers does not seem to be apparent making it difficult to introduce the fees.

Environmental charges have been in use in Estonia since 1991 (Statistics Estonia 2009b) and fishing and hunting fees were both introduced in the 1990s and are seen as a contribution to support sustainable natural resource use.

The main driver to introduce the new Hunting Act in 2013 was to reduce the workload of the State and to foster cooperation between the hunters and the landowners (Interview with Mr Lamp, Ministry of the Environment 2016). When the new act was introduced in 2013, hunters initially opposed the new rules on game damages and were concerned that the payment they will need to provide directly to landowners for game damages will be high. In order to mitigate this opposition, the Ministry of the Environment decided to initially keep the hunting fees

relatively low, at least for the first few years. Nevertheless, initial experience with the new rules suggest that the game damage payments are not that high and therefore hunting fees might be raised in the coming years (Interview with Mr Lamp, Ministry of the Environment 2016).

1.3 Revenue collection and use

The use of revenues collected from environmental fees and charges are guided by the Environmental Charges Act (2005) which indicates the revenues from the use of natural resources, covering the fishing and hunting fees, are "used for the restocking and protection of such resources". Paragraph 13 of the Environmental Charges Act indicates that revenues from both charges are transferred to the state budget and funds arising from fishing and hunting fees are earmarked at the proportion of 2009 year tax-base. This means that all additional funds that are collected above the 2009 tax year-base go to the general State budget and are not earmarked for conservation purposes (Interview with Mr Lamp, Ministry of the Environment 2016).

In general, a high rate – above 75% in the case of fishing fees (see below) - of the revenues are earmarked for conservation purposes. The earmarked revenues are transferred to the Environmental Investment Centre (EIC), a state agency dealing with environmental issues established in 2000, which then distributes the revenues in the form of grants. Currently the EIC's Environmental Programme covers then areas, including fisheries, water management waste management, nature conservation, forestry, environmental management, soil and marine environment (EIC 2016).

The earmarked revenues from the fishing fees are used for research (e.g. building up an inventory of fish stocks and establishing fishing quotas/possibilities for commercial fishing each year), conservation actions (e.g. river restorations) and awareness raising (e.g. summer camps for children where they taught about the importance of sustainable fishing, recreational competition, constructions to give access to waterbodies for small boats), control purposes (Interview with Mr Lamp, Ministry of the Environment 2016). Earmarked funds from the hunting fees are used for replenishing and monitoring wild game resources, training, research and hunting grounds surveying and management planning (OECD n.d.).

As in most EU Member States, the largest revenues from environmental taxes are realised from energy taxes. In 2013, revenues arising from all pollution and resource taxes only accounted for 2.8% of Estonia's GDP (Hogg et al. 2016). Overall, revenues from fishing fees are much higher than from hunting fees (see below).

Exact revenue figures for both fishing and hunting fees are available for the period between 2001 and 2007 and are presented (see in

Additional resources

Table 2 in Annex). In 2007, the total revenues from both fees only accounted for 0.4% of all revenues arising from environmental taxes in Estonia (Statistics Estonia 2009b).

Table 1 shows more recent figures of the total revenues collected for each year from fishing fees and also indicate the share of the funds which are transferred to the Environmental Investment Centre and thus fully earmarked for conservation purposes. In 2015, total revenues from fishing fees were EUR 1.57 million out of which 77% was earmarked for conservation purposes. According to Mr Lamp (2016) on average half of the total revenues came from commercial fishing and the other half from recreational fees.

Table 1: Revenues from fishing fees between 2012 and 2015 and the shares of earmarking

Year	Total revenues collected (million EUR)	Revenues transferred to the EIC (million EUR)	Share of earmarked funds
2012	1.53	1.21	79%
2013	1.57	1.20	76%
2014	1.47	1.17	79%
2015	1.57	1.22	77%

Source: Interview with Mr. Lamp, Ministry of the Environment 2016

According to Mr Lamp (2016), in recent years around 13,000 hunters were in Estonia in total which means that total revenues from the annual hunting fees (which cost EUR 10) were around EUR 130,000.

1.4 Environmental impacts and effectiveness

As indicated above, the revenues from both fishing and hunting fees are earmarked and proved to be an important financial source for research, conservation action and awareness raising supporting the achievement of conservation objectives. Nevertheless, no quantitative analysis has been made on this aspect.

In 2015, 17,571 recreational fishing cards were acquired, which is 3% more than in 2014 and 11% more than in 2013 (Ministry of the Environment 2016). 80,816 and 81,522 recreational fishing permits were bought in 2014 and 2015, respectively, which also shows a minor growing trend (Personal communication with Ministry of the Environment, 2016). While the Ministry of the Environment welcomes the growing number of recreational fishers it also emphasises the increasing pressure on fish resources as a result. It also highlights that more and more recreational fishers apply the so-called 'catch-and-release' method which in turn may have a positive impact on fish stock (Ministry of the Environment 2016).

Within the recreational fishing sector a special monitoring system exists. In order to study the migration of fish some fish are labelled with small plastic tags near their dorsal fin. While it is mandatory for recreational fishers to submit fishing information when they fish by fishing

cards they are also further incentivised to submit the information online² on species, weight, length, sex of the labelled fish alongside the time and place the fish was caught and the fishing gear used for that and for each submission they receive EUR 5.11, a gift and a letter with the data collected on the fish (Ministry of the Environment, 2016).

With regards to hunting, the Ministry of the Environment (n.d.) indicates that currently there are 324 hunting areas and over 15 thousand hunters in Estonia. In order to keep ecological balance of game populations the ministry emphasises the importance of monitoring and also mentions the role of hunting in controlling non-native species.

With the introduction of the new Hunting Law monitoring activities were changed as previously the quality of habitats was evaluated while now status of the game populations is monitored.

1.5 Other impacts

In terms of the cost-effectiveness of the fees, as payments can be made online the administrative burden is very low for the Ministry. In addition, since the system is made very user-friendly – for instance, fishers can dial a phone number to pay the fees which is then added to their phone bills – it also resulted in the decrease of illegal fishing and hunting activities (Interview with Mr. Lamp, Ministry of the Environment 2016).

As indicated above, the number of recreational fishing cards acquired has been steadily increasing in recent years and linked to this the Ministry of the Environment (2016) highlighted that the growing number of issued fishing permits and cards is a positive sign which is expected to lead to improvements in public health, alongside with greater awareness of nature protection.

2 Stakeholder engagement

Figure 1 provides an overview of the key milestones of the development of the Estonian fishing and hunting fees. While there is no regular discussion with NGOs and civil society they play an important role in supporting nature conservation objectives. They are also eligible to apply for the grunt funding of the Environmental Investment Centre and thus the revenues raised form the fishing and hunting fees can serve as an important source of funding for them (Interview with Mr. Lamp, Ministry of the Environment 2016).

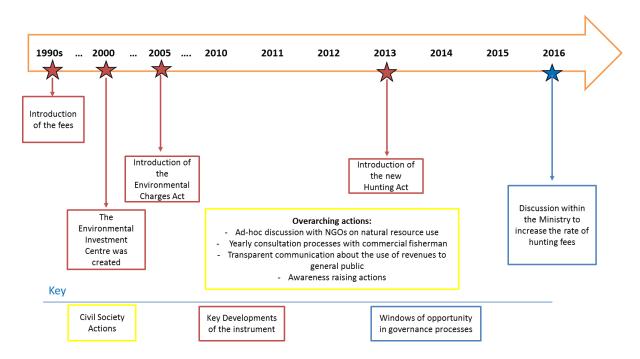
As mentioned above, commercial fisherman are also consulted each year when the new fishing rates are established. In general, both fishers and hunters seem to welcome the investments that are being made to ensure sustainable natural resource use from the revenues of the fishing and hunting fees (Interview with Mr. Lamp, Ministry of the Environment 2016). In this sense, transparency and communicating how the revenues are used is a very important aspect to which the State pays careful attention. Detailed information on the use of revenues and the conservation projects which are being funded by the environmental fees is available to the general public on the Environmental Investment Centre's website (www.kik.ee).

² They can submit information by e-mail (<u>margis@rmk.ee</u>) to the Fish Farm of Põlula or fill in the form here: www.rmk.ee/polula.

Finally, with regards to future opportunities, according to Mr Lamp (2016) there is now discussion within the ministry that the hunting fee rates could be increased in the future as the opposition of hunters' to the new game damage rules has disappeared due to the fact that game damage payments turned out to be much lower than expected. This therefore provides a window of opportunity to increase the rates and raise more revenues from the hunting fees.

Figure 1: Timeline of key developments

Timeline of Key Developments in the Estonian fishing and hunting fees



3 Windows of opportunity

Figure 2 provides a schematic overview of the key windows of opportunities with which stakeholders are influencing the policy cycle of the hunting and fishing fees in Estonia.

As earlier indicated, each year there is a consultation process with commercial fisherman when commercial fishing fees are established.

The transparent communication on how revenues are used for conservation purposes and the awareness raising campaigns that are funded by the revenues both support the effective implementation of the fees and acts as an enabling factor for the general public to understand why sustainable use of natural resources, such as biodiversity, is important. Awareness raising also supports the policy formulation process as it can create positive behavioural changes, which can impact how fees can be implemented and established.

While conservation projects are one of the main actions that are being funded by the fees the development of the inventory of game populations and fish stocks are also crucial for monitoring activities. While the inventory is mainly developed by the scientific institutes as well as the Environmental Board recreational fishers who fish by fishing card are required to submit information about their catches and thus also contribute to the monitoring activities.

Finally, when fishing rates are established each year for the commercial fishers universities provide suggestions on sustainable fishing possibilities.

Civil society engagement with the Estonian fishing and hunting

Figure 2: Key influencing opportunities for stakeholders in the policy cycle

fees Public awareness raising projects **Policy Formulation** Involvement of academic sector in **Decision** Consultation with **Evaluation** establishing fishing making commercial fisherman quotas for commercial fishing Transparency on use of revenues **Policy** Mandatory **Monitoring Implementation** requirement for Public awareness raising fishers to provide projects monitoring information

4 Insights into future potential/reform

4.1 Planned reforms and stakeholder engagement

As earlier indicated, in order to mitigate the hunter's resistance towards the new hunting rules the hunting fee was initially set relatively low. Nevertheless, the fee might be raised in the coming years as the new game damage rules, against which hunters were opposed, turned out to be much less significant than expected. There is now a window of opportunity to raise more revenues (Interview with Mr. Lamp, Ministry of the Environment 2016).

With regards to fishing fees, there is some discussion amongst recreational fishers that they would be willing to pay for short term fishing cards for fishing with nets. Currently, fishers can only buy monthly permits and they would like to have weekend permits and would be willing

to pay more than the half price of the monthly fees, which could provide more funds for conservation purposes (Interview with Mr. Lamp, Ministry of the Environment 2016).

4.2 Suggestions for future reforms – instrument design and civil society engagement

There seems to be no specific future plans for civil society engagement apart from the ongoing communication to the general public about the use of revenues. The importance of using revenues for awareness raising actions was also highlighted by Mr Lamp (2016) and is seen as a crucial element in ensuring the effectiveness of the hunting and fishing fees.

4.3 Suggestions for replicability

The setup of the earmarking system – including the high level of earmarking, the overarching Environmental Charges Act, the establishment of a specific agency to transfer the funds and the wide use of the funds for both research, conservation projects and awareness raising – seems to work very effectively in Estonia and could be replicated in other EU Member States.

References

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Additional resources

Table 2: Revenues from fishing and hunting fees between 2001 and 2007, in thousand kroons³

Year	Fishing fee (thousand kroons)	Hunting fee (thousand kroons)
2001	37 834	No data
2002	17 242	3 815
2003	25 425	4 647
2004	20 352	4 720
2005	17 622	6 503
2006	18 049	6 582
2007	17 800	6 630

Source: Statistics Estonia 2009a

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ⁱ This case study was prepared as part of the study 'Capacity building, programmatic development and communication in the field of environmental taxation and budgetary reform', carried out for DG Environment of the European Commission during 2016-2017 (European Commission Service Contract No 07.027729/2015/718767/SER/ENV.F.1) and led by the Institute for European Environmental Policy (www.ieep.eu). This manuscript was completed in December 2016.

³ Euros were introduced in Estonia in 2011. On average between 2002 and 2011 EEK 1 = EUR 0.06391 (European Central Bank: https://www.ecb.europa.eu/stats/exchange/eurofxref/html/eurofxref-graph-eek.en.html#)