THE EFFECTIVENESS OF THE EUROPEAN UNION SEAL REGIME ON THE SEAL HUNT TRADITION IN SWEDEN AND FINLAND

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ABSTRACT
This study evaluates the effectiveness of the European Union Seal Regime (EUSR) in addressing seal hunting practices in Sweden and Finland, in light of increasing concern for animal welfare and environmental sustainability. Using a descriptive qualitative approach based on literature and document analysis, the regime is assessed across three dimensions: output, outcome, and impact. EUSR has proven effective in output and outcome, establishing binding regulations and influencing member state behavior through monitoring and reporting. However, its impact, particularly in achieving socio-economic integration, remains limited. The Baltic grey seal population has increased from under 10,000 in the 1980s to around 60,000 by 2023, reflecting a significant ecological recovery. Additionally, local coastal fishers report income losses of up to 20% due to seal-related gear damage and fish stock decline. The Indigenous Sami community also faces cultural disruptions, as hunting restrictions affect traditional practices. These tensions highlight the challenge of balancing ecological goals with cultural and economic sustainability. This study recommends more inclusive, adaptive policies to ensure the EUSR promotes both environmental conservation and social justice.
Keywords: European Union Seal Regime, seal hunt, regime effectiveness, animal welfare, sustainability

ABSTRAK
Penelitian ini mengevaluasi efektivitas European Union Seal Regime (EUSR) dalam mengatasi praktik perburuan anjing laut di Swedia dan Finlandia, di tengah meningkatnya perhatian terhadap kesejahteraan hewan dan keberlanjutan lingkungan. Dengan pendekatan kualitatif deskriptif melalui studi literatur dan analisis dokumen, efektivitas rezim ini dinilai berdasarkan tiga dimensi: output, outcome, dan impact. EUSR terbukti efektif pada dimensi output dan outcome dengan membentuk regulasi yang mengikat serta memengaruhi perilaku negara anggota melalui sistem monitoring dan reporting. Namun, pada dimensi impact, khususnya dalam pencapaian integrasi sosial-ekonomi, efektivitasnya masih terbatas. Populasi grey seal di Laut Baltik meningkat dari kurang dari 10.000 ekor pada 1980-an menjadi sekitar 60.000 ekor pada 2023, hal ini menunjukkan adanya pemulihan ekologis yang signifikan. Namun, nelayan pesisir melaporkan penurunan

pendapatan hingga 20% akibat kerusakan alat tangkap dan berkurangnya stok ikan. Komunitas adat Sami juga mengalami gangguan budaya karena pembatasan perburuan menghambat praktik tradisionalnya. Ketegangan ini mencerminkan tantangan dalam menyeimbangkan tujuan ekologi dengan keberlanjutan budaya dan ekonomi. Studi ini merekomendasikan kebijakan yang lebih inklusif dan adaptif agar EUSR dapat mendorong konservasi lingkungan sekaligus keadilan sosial.
Kata Kunci: European Union Seal Regime, perburuan anjing laut, efektivitas rezim, kesejahteraan hewan, keberlanjutan

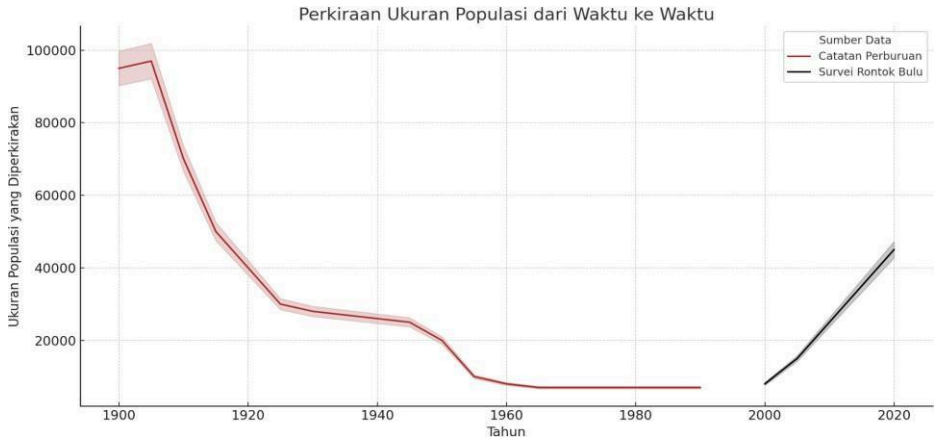
INTRODUCTION

In recent decades, animal welfare issues have become a growing global concern. One practice that has sparked widespread controversy is commercial seal hunting, which IFAW considers cruel and unethical (European Union, 2016).

Commercial seal hunting often targets seal pups, which are hunted by shooting them and leaving them injured until they slowly die. This practice has been done with little oversight, both moral and regulatory (Barry, 2005). Public awareness of animal welfare was low, and there was no legal framework to strictly limit seal hunting activities.

In the other hand, there are indigenous communities that addressed seal hunting as a form of traditional heritage, which often used as their main resource of local economy and cultural identity. The traditional practice of seal hunting has certain moral and rules that align with hunting ethics due to their respect for the animals. That said, this kind of seal hunting does not really use the brutal and cruel ways of hunting the seal.

Figure 1.
Estimated Population Size of Grey Seals in the Baltic Sea 1900-2020



Source: (a) Carroll et al (2024) from Journal of Animal Ecology accessed on the National Library of Medicine website on September 3, 2024.

However, massive seal hunting has had a noticeable impact on the population decline of this species. Based on data from Figure 1, the grey seal population in the Baltic Sea declined dramatically to less than 10,000 by 1980 (Harding et al., 2007).

This condition triggered criticism from various environmental organizations and animal rights groups. The rise of moral sanctions against commercial seal hunting, which peaked in the late 1970s and 1980s, marked a shift in public attention to the issue of animal cruelty (IFAW, 2019). With traditional practice as exception due to their respect with cultural existence and sustainability.

In response to this international pressure, the European Union began to formulate a stricter policy through Regulation (EC) No. 1007/2009, which later gave birth to the European Union Seal Regime (EUSR). This regime officially came into force on 20th August 2010 with legal provisions binding on all EU member states (European Commission, 2009). In its implementation, this regulation is set by the European Commission and its implementation is left to the competent authorities in each member state (European Commission, 2015).

Despite its binding nature, the EUSR still provides certain flexibility to member states. Member states have the right to set national rules and sanctions as long as they remain effective, proportionate and prevent violations. In addition, countries can also conduct seal hunt activities in the context of protection and sustainable management of marine resources, which of course remains closely monitored by the European Union.

Sweden and Finland are two countries that take advantage of this flexibility due to their geographical and ecological conditions, being the main habitat for grey seals in the Baltic Sea (NatureScot, 2024). It is estimated that by 2023 the seal population in this region will reach around 60,000, making it one of the largest in Europe after the waters of Great Britain and Ireland (Helcom, 2023).

In both countries, seal hunting is considered important as a form of predator control that impacts economically valuable fish stocks. Therefore, hunting activities are still permitted through strict licensing and hunting certification schemes.

These policies are integrated into each country's national laws. In Sweden, it is regulated through the Hunting Act and Hunting Ordinance 1987:259 with oversight from the Swedish Environmental Protection Agency (Naturvårdsverket, 2024). In Finland, the Finnish Nature Conservation Act is the legal basis that authorizes the national authority, the Department of Fisheries and Game under the Finnish Ministry of Agriculture and Forestry (FMAF) to regulate hunting quotas and procedures (FMAF, 2007).

Each member state is required to submit an implementation report in the Commission Report to the European Union. This report, mandated by the European Parliament and the European Council, contains surveys, questionnaires, and data from member states and recognized bodies. Two official reports have been released, in 2020 and 2023.

In Commission Report 2023, Sweden and Finland assessed that the implementation of EUSR has negatively impacted coastal fisheries due to increased gear damage, as well as the negative stigma attached to hunting practices. The indigenous Sami community also said that this regime puts pressure on the sustainability of their traditional culture that depends on seal hunting.

On the other hand, this regulation has also managed to restore the seal population to a much healthier level, as shown in Figure 1. However, the increased seal population has created new problems, such as decreased fish catches and increased conflicts with local fishermen.

Sweden and Finland then proposed a relaxation of the ban, or at least an exception for the benefit of marine resource management. This proposal is aimed at maintaining the sustainability of coastal economies, the preservation of traditional cultures, and the balance of the ecosystem. They also conduct regular population monitoring programs to adjust annual quotas so as not to endanger the seal population itself (SwAM, 2023). Data shows an upward trend in the number of hunts after 2016, which is in line with the increase in the seal population (Carroll et al., 2024).

However, according to researchers from the University of Gothenburg (2024), setting high hunting quotas could jeopardize the species in the long term (Harding, 2024). The dilemma between the demands of local communities, the need to control marine predators and the ecological risks posed by relaxing the policy creates a complex situation that calls for a re-evaluation of the effectiveness of the EUSR.

Although the policy has been successful in formally restricting the trade in seal products, seal hunting continues in Sweden and Finland due to strong geographical, historical and cultural factors. For the Sami community, for example, seal hunting is not just a tradition, but also part of the local identity and economy.

Under these conditions, this research seeks to answer how effective the implementation of the European Union Seal Regime (EUSR) is amid the ongoing practice of seal hunting in Sweden and Finland. The main focus will be on how the implementation of EUSR works in this dynamic local context.

The effectiveness evaluation is conducted through a three-dimensional approach in environmental regime effectiveness theory by Arild Underdal, namely output, outcome and impact. These three dimensions are used to assess the success of an environmental regime more holistically.

This research is expected to provide a better understanding of the impact of EUSR policies, both on animal welfare, cultural sustainability of indigenous communities, and the economy of local fishermen. In addition, academically, this study is expected to contribute to the development of International Relations, especially in the study of International Regimes and Organizations in environmental issues, as well as a relevant policy reference for decision makers at the national and regional levels.

CONCEPTUAL FRAMEWORK

International Environmental Regimes

The term "regime" refers to how international organizations (IOs) can influence outcomes in the form of changes in the behavior of actors, especially states (Barkin, 2006). A regime is defined as a set of principles, norms, rules and decision-making procedures that shape shared expectations in a particular issues area. The international environmental regime itself is a collaborative framework between countries to address global environmental issues that cannot be effectively resolved within the borders of a single country. Its efficiency is assessed inductively, i.e. the extent of differences that arise after the regime is implemented (Barkin, 2006).

In the book The Interplay of International Regimes, it is explained that international regimes influence outcomes through three main mechanisms (Stokke, 2001). First, by altering the costs and benefits of certain actions, such as the provision of incentives or the threat of sanctions. Second, by shaping perceptions of what is considered appropriate through the reinforcement of norms and values. Third, by

influencing priorities and improving actors' understanding of how to achieve certain goals. In the context of this research, the EU Seal Regime (EUSR) is positioned as an international environmental regime that influences perceptions and norms about seal hunting practices.

Effectiveness of International Environmental Regimes

The theoretical framework in this study refers to the approach of Edward L. Miles and Arild Underdal et al. in Environmental Regime Effectiveness: Confronting Theory with Evidence. The basic concept is that regime effectiveness is determined by its ability to achieve the objectives of managing global environmental issues followed by functional compliance by the related parties. Which need to act responsible with the regulatory and legal frameworks.

There are two main approaches: first, effectiveness is seen from the state's compliance with norms, rules, and mechanisms such as monitoring and reward-punishment systems (Young, 2011); second, effectiveness is measured by the extent to which the goals set are successfully achieved (Underdal, 2011).

Evaluation of effectiveness is carried out through three main dimensions, namely output, outcome and impact. Outputs reflect formal results in the form of rules, principles and policies set by the regime. Outcome refers to changes in actor behavior as a result of the application of these rules. Meanwhile, impact reflects the real impact on the physical, social and economic environment.

This approach relies on a comparison between actual conditions and scenarios without the existence of the regime, so it not only assesses the existence of rules, but also their implementation and impact (Easton, 1965).

Framework application used to analyze the effectiveness of the EUSR on seal hunting practices in Sweden and Finland, since the continuity of seal hunt practice even after the regulations has been into force and implemented. Also, both countries geographically located in Baltic Sea which one of the largest habitats of seal in entire Europe.

Output assessment includes the number of regulations set out in the EUSR and the implementation of monitoring and enforcement. Outcome is assessed by changes in the behavior of Swedish and Finnish fishermen and seal hunters after regulations are implemented, such as a decrease in illegal hunting or compliance with quotas. Meanwhile, impact is evaluated through long-term impacts on animal welfare and environmental sustainability, the cultural existence of local communities, and the economic conditions of the fisheries sector.

RESEARCH METHODS

This research uses a qualitative methodological approach to evaluate the effectiveness of the EUSR policy in mitigating seal extinction. This approach was chosen because the research aims to understand the effectiveness of the regime in depth, as well as examine various perspectives related to the seal hunt issue.

Type of Research

This research is an analytical-descriptive-research. This research aims to describe and analyze the existing situation, as well as to provide a clear picture of the effectiveness of the policy more broadly. The research will identify factors that

influence the success or failure of the policy, as well as its impact on the seal population and the communities involved in the hunt.

Data Type and Source

The data sources in this research consist of secondary data obtained from literature studies that include scientific articles, Commission Reports by the European Commission, reports by non-governmental organizations, and statistical data on seal populations. These sources will provide important information for the analysis and help in understanding the dynamics surrounding the seal hunt and the EU policy response. Data triangulation is used by reading multiple sources of data with the same phenomenon to enhances the validity and reliability of findings.

Data Collection Technique

The data collection technique used in this research is document analysis. Document analysis will be conducted on various written sources relevant to the EUSR policy, how the regulation being implemented in Finland and Sweden, data abundance of seals in Baltic Sea, and its impact on seals. The technique involves systematically breaking down and organizing all the data to discover the key themes that result the answer of this research.

Data Analysis Technique

Data analysis in this study was conducted qualitatively using a textual analysis approach. Once the data is collected, identified key themes will be analyzed through the documents resource. This process involves analyzing in writing to group information based on certain categories, such as environmental impacts, cultural aspects, and economic implications of the policy. Next, the researcher will analyze the relationship between these themes and how they influence the effectiveness of EUSR policies. The results of this analysis are expected to provide insights into the success or failure of the policy as well as recommendations for future improvements.

RESULT AND DISCUSSION

Seal Hunt Existence

Seal hunting is a practice done by fishermen, hunters, tourists, and indigenous communities (Lepola, 2018). The killing method in this practice determines the level of animal welfare, depending on the species' ability to feel pain, the duration of pain, and the intensity of suffering (Littin and Mellor, 2005). In general, the seal hunt method is divided into typical effects and worst-case scenario effects (Nunny et al., 2018). Typical effects are considered more humane because they cause instant death, while worst-case scenario effects include actions such as non-fatal shooting or drowning, which cause slow and painful deaths, and have been criticized by animal welfare activists.

The Marine Mammals Regulation sets out a moderate hunting procedure in three stages: striking the skull, checking the condition of death, and removing blood from the artery under the front flipper (MMR, 2018). However, muscle reflexes such as the swimming reflex (EFSA, 2007) are often misunderstood by the public as a sign of seals being skinned alive.

The choice of hunting method is influenced by the purpose and the practitioner. Traditional and recreational seal hunts generally pay more attention to animal welfare because they are bound by cultural values and hunting ethics.

Commercial hunting, on the other hand, tends to ignore animal welfare aspects as it pursues large yields in a limited time. Seal hunting itself is conducted for three main purposes: tradition and recreation, commercial, and predator control.

Traditional Customs and Tourism

Seal hunting has strong cultural roots in indigenous communities such as the Inuit in Canada, who view seals as living beings worthy of respect for being able to feel pain and share living space (Sarah Levy, 2020; McElroy, 2013). In Northern Europe, the Sami communities living in the region around Sweden and Finland also have similar ecological relationships, although seal hunting is not their primary practice (Oceanwide Expeditions, 2025). In Finland, the practice dates back to the stone age as part of adaptation to the harsh environment, with the use of seal blubber as traditional medicine (Onatsu, 2019; Huttunen, 2019). In coastal areas of Sweden, especially the Gulf of Bothnia, seal hunting is closely linked to fishing traditions and winter survival (Lepola, 2018). Currently, seal hunting in both countries is only allowed with official licenses from Swedish Environmental Agency (SEPA) and the Finnish Wildlife Agency, with annual quotas and specific hunting periods.

In addition to tradition, seal hunting also comes in the form of recreational and tourism. Seal tourism includes activities such as seal watching, certified seal hunting and kayaking with seals, which are considered sustainable and support local economies (Newsome et al., 2005; Alteg, 2019). In Sweden, the sector generated 9.85 million SEK with 56 companies and 64 full-time jobs in 2017. While in Finland, tourism focuses on the Saimaa ringed seal which is extremely rare and requires strict protection (Tienhaara et al., 2024). Therefore, EUSR policy provides exemptions for traditional and recreational seal hunting as a form of respect for indigenous communities and local economic contribution. These two exemptions reflect the European Commission's efforts to respond to research input before drafting the seal trade ban, which became part of the EUSR policy output.

Commercial Seal Hunt

Seal hunting developed into a major commercial activity from the late 20th century in Northern European regions such as Norway, Sweden and Finland (Ryan, 1994). The main products include fur for the fashion industry, meat for consumption, and oil for pharmaceuticals and cosmetics. Due to high demand, the practice turned exploitative and brutal, leading to widespread protests from IFAW, conservationists and the general public. The main spotlight comes from the animal welfare aspect, as many methods cause suffering and slow death (Sellheim, 2014). It was this controversy that led to the establishment of the EUSR policy to protect the seal population and ensure sustainability in the Baltic Sea region. Currently, commercial seal hunting is banned in Sweden and Finland. Hunting may only be carried out by certified individuals for personal use under strict supervision and quota restrictions.

Predator Control

On the other hand, seals also act as predators in the Baltic Sea and have the potential to disrupt the balance of marine ecosystems, especially by preying on economically valuable fish caught by fishermen (Eero, 2011; Butler et al., 2005). Therefore, seal hunting is also practiced as a predator population control strategy, especially for grey seal species. In Sweden, this management is systematically implemented with conservation plans since 2012 for harbor seals and since 2019 for

grey seals, while ringed seals are in the planning stage (SwAM, 2023). Permits and population status evaluations are conducted regularly through cooperation between SEPA, SwAM, Helcom and Ospar (Aminoff, 2023). The aim is to balance conservation with human interests, including fisheries protection.

In Finland, FMAF manages grey seals and ringed seals based on biological and socio-economic analysis. Grey seals are seen as a natural resource that can be utilized sustainably, while ringed seals are focused on protection because the population is still vulnerable. Hunting is limited to reduce fisheries damage, maintain ecological balance and support local economies, with a balanced and adaptive conservation approach.

European Union Seal Regime and Legislative Measures

The EUSR establishes a ban on trade in seal products in the EU market, but provides strict exemptions for indigenous communities and personal use by travelers. Through regulations and amendments, the EU tries to balance the protection of animal welfare with respect for the cultural rights of indigenous communities, while ensuring transparent monitoring and reporting. Understanding this legal framework is fundamental in assessing how the regulation is being implemented in member states such as Sweden and Finland and the challenges faced in its implementation.

The drafting process of Regulation (EC) No. 1007/2009 stemmed from public concerns and pressure from organizations such as IFAW (Sellheim, 2013). In 2006, the European Parliament issued a declaration banning the import, export and sale of seal products, with an exception for the Inuit hunt which only accounts for about 3% of the total hunt (European Parliament, 2006). A further recommendation from the Council of Europe (Recommendation 1776) highlighted the prohibition of brutal methods and the need to train hunters to be more humane (Parliamentary Assembly, 2006).

Following this, the European Commission requested EFSA to evaluate animal welfare in seal hunt in 2007. The result was that humane killing methods were not consistent in the field (EFSA, 2007). COWI was also tasked with assessing the economic impact of the ban and concluded that it could be detrimental to local economies (COWI, 2008). In the same year, a symposium in Tromsø, Norway, addressed animal welfare issues and the seal product trade from a European perspective.

On July 23, 2008, the European Commission proposed a total ban on seal products such as meat, oil, fat, and skin-for import, export, transit, and local trade. However, exemptions were granted to Inuit communities and other indigenous peoples who depend on the practice for economic and cultural life (European Commission, 2009). The regulations were officially passed on September 16, 2009 and became effective on August 20, 2010. The EUSR consists of three main regulations:

1. Regulation (EC) No. 1007/2009 contains a trade ban, with exceptions for "Inuit and other indigenous communities" and "personal use of travelers";
2. Implementing Regulation (EC) No. 737/2010 contains implementation details, including verification and issuance of evidentiary documents (European Commission, 2010);
3. The amendment through Regulation (EU) 2015/1775 revoked the "sustainable

management of marine resources" exemption as the practice was difficult to distinguish from commercial hunting (European Union, 2015).

In its place, Commission Implementing Regulation (EU) 2015/1850 established a strict system of exemption authorization and regulated the role of recognized bodies and competent authorities in managing evidentiary documents and ensuring compliance (European Commission, 2015). Member states are required to report on the implementation of this regulation every four years to the European Commission, which then prepares a Commission Report for the European Parliament and Council, published first in 2020 and again in 2023.

From this process, it appears that the birth of the EUSR is inseparable from public pressure and political dynamics, which since the end of the 20th century have shown the high sensitivity of the international community to the issue of cruelty in seal hunting. IFAW's visual campaigns and moral narratives successfully shaped European public opinion and urged the EU to take a strong moral position. However, despite this morality, the policy formulation process lacked participation from indigenous communities such as Inuit and Sami, exposing cultural and geographical biases.

Exemptions are granted, but certification mechanisms and strict paperwork limit indigenous communities' access to European markets. This inequality was taken to the General Court of the European Union, but rejected (General Court, 2011). This shows how the pressure of environmental activists and European public opinion is more dominant than the voices of local communities who are in direct contact with the practice.

The creation of EUSR was more like a political reaction to external pressure than the product of a participatory, evidence-based deliberative process. Technical studies such as those from EFSA and COWI only reinforce decisions that have been politically pre-directed by public opinion and moral campaigns. In this context, EUSR was born out of a combination of moral-political impulses and international image interests, while creating tension between the universal values of conservation and the social and ecological realities of directly affected local communities.

Implementation in Sweden and Finland

Since Regulation (EC) No. 1007/2009 came into force on August 20, 2010, Sweden and Finland implemented it directly without ratification. Finland states that seal hunting is carried out under the Finnish Nature Conservation Act through a system of licensed hunting, predator control, and a limited hunting season (hunting ice) with technical requirements on weapons and ammunition. Hunting is sustainable on both large and small islands, and hunters are required to undergo two years of ethics training and an exam to obtain a license (FMAF, 2007). FMAF sets maximum quotas for grey and ringed seals, with methods that prioritize typical effects to minimize animal suffering. The ecological impact of the seal hunt is significant as seals are opportunistic predators that consume 3-5 kg of fish per day, leading to a 30-40% reduction in gillnet fisheries and threatening protected fish species (European Commission, 2020). The report also highlights that banning seal products hinders the development of seal tourism.

Sweden, through SEPA, strictly regulates seal hunts in areas affected by fishing

gear damage from seal populations. The Swedish Hunting Act and Hunting Ordinance require instant killing (typical effects) to avoid suffering. Hunting is reported to have minimal impact on populations and ecosystems, as the number of hunted is small compared to the total population. In the Commission Report 2023, Finland emphasized that seal hunting is part of sustainable marine resource management, although not the sole solution to human-animal conflict. Sweden reported licensed hunting and predator control practices for grey, harbor and ringed seals, with season-based quotas rather than annual calendars, following the Habitats Directive to maintain favorable conservation status (European Commission, 2023).

Administratively, Sweden divides responsibility between Kommerskollegium (National Board of Trade) and Tullverket (Swedish Customs), while Finland designates the Department of International Trade under the Ministry of Foreign Affairs and Tulli (Finnish Customs). Both countries have competent authorities that oversee product legality, validation of certificates from recognized bodies, and reporting to the European Commission. Violations are subject to administrative or legal sanctions such as license revocation and fines. National legality is enforced through the Hunting Act (1987:259) in Sweden and the Finnish Nature Conservation Act in Finland, with oversight from SEPA, SwAM and FMAF. Both also operate population monitoring programs to set science-based hunting quotas to maintain sustainable marine ecosystems (European Commission, 2023; Naturvårdsverket, 2024).

The implementation of EUSR in both countries shows the seriousness in its practice of seal hunting indicates a negotiation between regional integration commitments and domestic socio-ecological realities. The increase in seal populations following the trade ban triggered significant impacts on coastal fisheries, making hunting an instrument of predator control rather than a cultural heritage (Tverin et al., 2019). This makes hunting an adaptive strategy for sustaining local economic resources with strict legality.

While Sweden and Finland continue to implement the EUSR, they do not fully adopt EU animal welfare values in a normative manner. Rather than substantive compliance, this implementation reflects functional compliance, a compromise attempt to meet regional standards while maintaining flexibility with national needs. Thus, the effectiveness of the EUSR in these two countries is not only judged by administrative procedures, but by the extent to which the policy is able to adapt to local complexities without negating the principles of social and ecological justice that are its main objectives.

However, enforcement has faced challenges, particularly in monitoring unreported hunting and cross-border trade of seal products, where occasional cases of non-compliance have been recorded despite the formal oversight mechanisms. Both countries have had to strengthen customs checks and reporting systems to reduce these loopholes. Additionally, there has been political resistance within certain factions of the national governments and coastal communities, where stakeholders argue that EU-level restrictions prioritize abstract animal welfare values over local economic and ecological needs. This tension has influenced the degree of enforcement and driven demands for greater flexibility in national-level adaptations.

Impact and Broader Consequences

This chapter discusses impact as the third dimension of Arild Underdal's regime effectiveness framework, having previously outlined EUSR's outputs and outcomes. Impact is defined as broader consequences, which are long-term impacts that are widespread and often unintended or unexpected, covering environmental, social and economic aspects (Underdal & Young, 2004; Martin & Simons, 1998). This study compares the predicted potential impacts from pre-regulatory studies with the actual post-implementation impacts, based on the Commission Report 2020 and 2023 as well as research from COWI, EFSA and stakeholders.

On the environmental aspect, EUSR encourages killing methods that comply with animal welfare principles, such as typical effects, which minimize the suffering of seals. There is a 90% reduction in commercial seal hunting since 2010 (Waldman, 2024). Followed by a recovery of the grey seal population in the Baltic Sea from 5,000 to around 42,000 (Helcom, 2023). This demonstrates the success of conservation through preventive approaches and the legislative support of the Habitats Directive (1989), and reflects the effectiveness in maintaining environmental sustainability. However, the increase in seal populations has led to new conflicts, such as damage to fishing gear and an alleged decrease in coastal fisheries yields, which, although not scientifically proven, has triggered local unrest. The biggest threats to fisheries sustainability are not seals, but overfishing, pollution and climate change (Altmayer, 2025). This indicates that the environmental impacts of EUSR, while relevant and significant, leave ambiguity in the overall interpretation of ecological sustainability.

Social aspects show impacts on cultural existence and sustainability, especially on indigenous Sami communities in the Arctic. Although given space through exemptions in the EUSR to seal hunt traditionally, Sami communities face severe administrative challenges in meeting product certification requirements, including dual local legalization documents and proof of authenticity from indigenous communities (CSA, 2013). Complex and poorly socialized procedures led to the stagnation of traditional seal skin-based craft production, and disintegrated inter-generational cultural transmission (Nicoll, 2017). The phenomenon of cultural erosion emerges as an unintended impact, when policies aimed at protecting animals are insensitive to the sustainability of local cultures. Negative stigmatization of all seal products, regardless of origin and ethics, influences public perception and weakens the position of indigenous communities within regional policy frameworks. As a result, there is a regulatory gap between EU norms and local social realities that makes the policy appear exclusive to its local minorities.

From an economic perspective, banning the trade in seal products effectively eliminates the economic value of seal hunting at the local level, especially in Sweden and Finland coastal fisheries. Products such as oil and skins can no longer be openly marketed in the EU, depriving coastal communities of an important source of income. Significant economic losses were reported: in Sweden this amounted to 33 million SEK per year (Waldo et al., 2020). In Finland, fishers claimed to lose 45% of their catch and experience up to 17% gear damage (Varjopuro, 2011). This is exacerbated by a 17% decline in the number of certified fishers between 2008-2016 as well as low interest from younger generations due to declining economic incentives in the fisheries sector (STECF, 2018). The argument that the increasing seal population post-EUSR is causing disruption to fisheries is used as a justification for some fishers

to ask for a relaxation of the regime. Although scientifically unconfirmed, this argument reflects the socio-economic reality left behind by ethics-based policies that are not accompanied by adequate compensation mechanisms or local adaptation.

Overall, EUSR has been effective in reducing commercial seal hunting and increasing seal protection, making it a successful policy instrument in both the output and outcome dimensions. However, in the impact dimension, complexities emerge that suggest partial effectiveness, successful in one sense, but with unaddressed social and economic inequalities and consequences. While the EUSR is not a total ban and still allows for traditional hunting practices and predator control, its existence shows that a value-driven regime cannot be separated from the social and ecological context in which it is implemented. This emphasizes that policy effectiveness is not simply measured by formal compliance with rules, but rather the extent to which policies are able to accommodate local complexities without undermining overall principles of social and ecological justice (Sellheim, 2015; Skold, 2023).

Despite these outcomes, the EU has yet to establish comprehensive compensatory schemes or financial mechanisms for affected fishers and indigenous communities, beyond small-scale rural development funds under the European Maritime and Fisheries Fund (EMFF). This lack of structured mitigation contributes to ongoing grievances and requests for more adaptive compensation policies. Additionally, knowledge gaps remain significant due to limited monitoring of illegal seal hunts and potential black markets for seal products, with most existing data relying on voluntary reporting rather than systematic surveillance. These gaps complicate the full assessment of EUSR's broader consequences and challenge the long-term enforcement of its principles.

Effectiveness of the European Union Seal Regime

The effectiveness of the European Union Seal Regime (EUSR) was analyzed using Arild Underdal's approach which includes three stages of policy evaluation: output, outcome, and impact. This approach assesses not only the policy product, but also its implementation and actual impact on the issues addressed, and is particularly relevant in assessing multilevel policies such as the EUSR that involve state actors, local communities, and international organizations (Underdal, 1992).

At the output stage, the EUSR resulted in a strong set of regulations, including Regulation (EC) No. 1007/2009 and its amendments, which prohibit trade in seal products in the EU internal market. This regulation is supported by certification mechanisms and limited exemptions for indigenous communities and personal use (European Commission, 2009; 2015). While legally this regime reflects a high level of stringency and is directly applicable without national ratification, its inclusiveness is questionable. Indigenous communities such as Inuit and Sami are only accommodated normatively, not substantively. The legislative process was dominated by public moral pressure and IFAW campaigns, not the result of inclusive deliberation. The resulting legal structure represents EU moral signaling rather than comprehensive agreement with affected actors.

At the outcome stage, there have been changes in administrative and technical behavior in Sweden and Finland. Both countries have adopted the regime into national law, through the Hunting Ordinance 1987:259 in Sweden and the Finnish Nature Conservation Act in Finland, and appointed competent authorities such as

Tullverket and FMAF to oversee its implementation. Behavioral changes are reflected in the seal hunt, which is now restricted to predator control needs, customary practices, and within annual quotas with hunting methods that comply with animal welfare standards. However, despite these formal successes, Sami communities face obstacles in marketing their traditional game due to certification complications and market resistance (Kommerskollegium, 2019). Despite high levels of administrative compliance, dilemmas remain between technical implementation and the reality of local needs. Sweden and Finland adjust policies through legal loopholes such as exemptions for sustainable management, reflecting an asymmetric form of implementation compared to other EU countries without seal hunting traditions.

At the impact stage, the effectiveness of EUSR becomes more complex. Ecologically, the policy reduced hunting intensity and improved animal welfare, but it also triggered a surge in the grey seal population that put new pressures on the Baltic Sea ecosystem. Grey seals as top predators threaten economic fish stocks such as salmon and cod, triggering conflicts with local fishermen (EFSA, 2007; Carroll et al., 2024). This policy creates ecological trade-offs as predator conservation is not accompanied by sustainable population control strategies.

On the social side, the Sami community is experiencing cultural pressure. The practice of seal hunting, which used to function as an economic activity and cultural symbol, has now shifted to a mere ritual due to regulatory pressure and the complexity of market access. The potential for unintended cultural erosion is getting stronger, showing that policies that are not contextualized can erode local cultural heritage (Hennig & Caddell, 2017). The economy has also been significantly affected: since the 2010 ban, seal skin exports have declined by 90%, and Baltic fishermen have suffered heavy losses due to increased predator populations and damage to fishing gear, without adequate compensation schemes (FMAF, 2007; Kiełpinska & Kowalski, 2021).

By going through all stages of policy evaluation, it can be seen that the effectiveness of EUSR has been partial. Despite its success in establishing international norms and reducing the scale of hunting, its implementation has not reflected comprehensive ecological and social justice. Inequalities arise due to the lack of involvement of affected communities, the absence of adaptation to ecosystem dynamics, and economic barriers for local communities. Periodic evaluation and participatory reforms are essential to balance conservation, animal welfare, indigenous community rights and local economic sustainability in a more equitable and contextualized regulatory framework.

CONCLUSION

Based on the results of research that has been conducted on the effectiveness of the European Union Seal Regime on the seal hunt tradition in Sweden and Finland using Arild Underdal's Regime Effectiveness theory, it can be said that this regime shows partial effectiveness. The policy initiated by the European Union brought significant changes in the management of seal hunt, especially in terms of banning the trade of seal products in the European Union market.

The EUSR, which is regulated in Regulation (EC) No. 1007/2009 along with its amendments and derivative regulations, has provided a clear, binding, and directly

applicable legal framework in all member states without the need for ratification into their respective national laws. With this regulation, the intensity of the trade in seal products in the EU market has been significantly reduced, and in terms of physical changes, there is evidence of an increase in seal populations, especially grey seals in the Baltic Sea, which is one indicator of the success of the regime in environmental aspects as the main objective.

However, the implementation of this policy also poses its own dilemmas. On the other hand, banning the trade in seal products reduces economic incentives for local communities and negatively stigmatizes seal hunting, threatening the economies and traditional sustainability of coastal communities (Fakhri, 2017). On the other hand, an increase in seal populations creates new problems such as damage to fishermen's fishing gear and a decline in fish catches, which has a direct impact on local economies. This is worsen by resistance from the Sami community who feel that EU policies have ignored the sustainability of their culture.

In addition, official reports from Sweden and Finland to the European Commission also highlighted the negative impacts of the regime's implementation on coastal fisheries and local economies, so both countries proposed easing or special exemptions for countries with ecosystem-based management and animal welfare. Thus, it can be said that the effectiveness of EUSR is relatively partial and highly influenced by local conditions, where top-down policies from the EU are not fully able to accommodate the environmental, socio-cultural, and economic complexities of member countries, especially Sweden and Finland.

Future research should consider comparative case studies with other EU environmental regulations affecting Indigenous or local communities, such as whaling policies or forestry management regimes, to better understand the broader implications of top-down environmental governance. Such studies may offer insights into how the EU can design more adaptive and inclusive policies that account for regional diversity and cultural sustainability in its environmental frameworks.

REFERENCES

Alteg, Ebba. (2019). Can tourism Seal the deal? An explorative study on Seal tourism in Sweden. Department of Economics; Swedish University of Agricultural Sciences.

Altmayer, Anne. (2025). *Baltic Sea fishing area: Current challenges*. European Parliamentary Research Service.

Aminoff, Christine. 2023. *Swedish hunting of seals*. Swedish Environmental Protection Agency; Wildlife Management Unit.

Barkin, J Samuel. 2006. *International Organizations: Theories and Institutions*. New York: Palgrave Macmillan.

Barry, Donald. 2005. *Icy battleground: Canada, the International Fund for Animal Welfare and the seal hunt*. Breakwater Books Ltd; Canada.

Beqiraj, Belinda. (2013). The Delicate Equilibrium of EU Trade Measures: The Seals Case. *German Law Journal, Vol. 14, No. 01*.

Burke, Catherine Danita. 2023. *Cultural Violence, Stigma and the Legacy of the Anti-Sealing Movement*. Routledge Taylor & Francis Group; London and New York.

Butler, J.R.A., Cunningham, P.D. and Starr, K. (2005) The prevalence of escaped farmed salmon Salmo salar L., in the River Ewe, western Scotland, with notes on their ages, weights and spawning distribution. *Fisheries Management and Ecology*. 12(2): 149-159. doi: 10.1111/j.1365-2400.2005.00437

Carroll, D., Ahola, M. P., Carlsson, A.M., Sköld, M., & Harding, K. C. (2024). 120-years of ecological monitoring data shows that the risk of overhunting is increased by environmental degradation for an isolated marine mammal population: The Baltic grey seal. *Journal of Animal Ecology*. 93, 525–539. https://doi.org/10.1111/1365-2656.14065

Commission of the European Communities. 2008. *Impact Assessment; on the Potential Impact of a Ban of Products Derived from Seal Species*. (COM(2008) 469 final 2291). Commission Staff Working Document.

Council Directive. 1989. *Amending Directive 83/129/EEC concerning the importation into Member States of skins of certain seal pups and products derived therefore (89/370/EEC)*. Official Journal of the European Communities.

COWI. 2008. *European Commission Directorate-General Environment, Assessment of the Potential Impact of a Ban of Products derived from Seal Species*. April 2008. Kongens Lyngby: COWI, 2008, http://ec.europa. eu/environment/biodiversity/animal_welfare/seals/pdf/seals_report.pdf

CSA. (2013). Seal trade ban affecting indigenous peoples of Europe. Canadian Sealers Association. https://www.sealharvest.ca/seal-trade-ban-affecting-indigenous-peoples-of-europe/#:~:text=The%20EU%20seal%20product%20ban,Swedish%20to%20English%20for%20us.

Easton, D. 1965. *A Systems Analysis of Political Life*. New York: J Wiley

Eero, A, et al. 2011. Grey seal predation on forage fish in the Baltic Sea. ICES Annual Science Conference 2011. https://publications.slu.se/?file=publ/show&id=37057

European Commission. 2009. *Regulation (EC) No 1007/2009 of the European*

Parliament and of the Council of 16 September 2009 on trade in seal products.

European Commission. 2010. *Commission Regulation (EU) No. 737/2010 of 10 August 2010 laying down detailed rules for the implementation of Regulation (EC) No 1007/2009 of the European Parliament and of the Council on trade in seal products*.

European Commission. 2015. *Regulation (EU) 2015/1775 of the European Parliament and of the Councill of 6 October 2015 amending Regulation (EC) No 1007/2009 on trade in seal products and repealing Commission Regulation (EU) No 737/2010*.

European Commission. 2015. *Commission Implementing Regulation (EU) 2015/1850 of 13 October 2015 laying down detailed rules for the implementation of Regulation (EC) No 1007/2009 of the European Parliament and of the Council on trade in seal products*.

European Commission. 2020. *Report from the Commission to the European Parliament and the Council; On the implementation of Regulation (EC) No 1007/2009, as amended by Regulation (EU) 2015/1775, on the Trade in Seal Products*. Brussels.

European Commission. 2023. *Report from the Commission to the European Parliament and the Council; On the implementation of Regulation (EC) No 1007/2009, as amended by Regulation (EU) 2015/1775, on the Trade in Seal Products*. Brussels.

European Food Safety Authority (EFSA). "Animal Welfare Aspects of the Killing and Skinning of Seals." *The EFSA Journal (2007) 610*. Parma: EFSA, 2000

European Union. 2016. *The EU Seal Regime*. Publications Office. https://doi.org/10.2779/70265

Expeditions, Oceanwide. 2025. Arctic Mythology: Inuit, Saami, and the Ancient Greeks. https://oceanwide-expeditions.com/blog/myths-of-the-arctic

Fakhri M (2017) *"Gauging US and EU seal regimes in the Arctic against Inuit sovereignty"*. In Liu N, Kirk EA, Henriksen T (eds) The European Union and the Arctic.

FMAF. 2007. *Management Plan for the Finnish Seal Populations in the Baltic Sea*. Finnish Ministry of Agriculture and Forestry. ISBN 978-952-453-348-5

General Court. 2011. *Order of the General Court (Seventh Chamber, Extended Composition) 6 September 2011; In Case T-18/10*. General Court of the European Union.

Harding, K.C, et al. 2007. Status of Baltic grey seals: Population assessment and extinction risk. *NAMMCO Sci. Publ.* 6:33-56.

Härkönen, T., Brasseur, S., Teilmann, J., Vincent, C., Dietz, R., Abt, K. and Reijnders, P. 2007. Status of grey seals along mainland Europe from the Southwestern Baltic to France. *NAMMCO Sci. Publ.* 6: 57-68.

Helcom. (2023). *Grey seal abundance; Distribution of Baltic Grey seals*. https://indicators.helcom.fi/indicator/grey-seal-abundance/

Hennig M, Caddell R (2017) "On thin ice? Arctic Indigenous communities, the European Union and the sustainable use of marine mammals". In Liu N, Kirk EA, Henriksen T (eds) The European Union and the Arctic.

Huttunen, Hannakaisa. 2019. *Hunting at sea - then and now*. MarineFinland.fi https://www.marinefinland.fi/en-US/Leisure/Leisure_time_at_the_sea/Hunting_at_sea

IFAW. 2019. *IFAW was first founded to end the seal hunt.* https://www.ifaw.org/international/projects/ending-the-commercial-seal-hunt-canada

Johansson, M, & Waldo, A. (2020). Local People's Appraisal of the Fishery-Seal Situation in Traditional Fishing Villages on the Baltic Sea Coast in Southeast Sweden. Society & Natural Resources. DOI: 10.1080/08941920.2020.1809756

Kiełpinska J. dan P.A. Kowalski. 2021. Numerical modelling of the population of grey seal (Halichoerus grypus) from the Baltic Sea in the context of reduction of damage to fishing economy. *Ecological Indicators 124 (2021) 107423.*

Kommerskollegium,. 2019. *Public bodies and EU Law*. https://www.kommerskollegium.se/eu-ratten/myndigheter-kommuner-och-eu-ratten/

Lepola, Marcus. 2018. *"Sjalen"* - Seal Hunting in the Northern Baltic Sea. *A Skari - Living Heritage Educational Project: Northern Wilderness Skills and Traditions.*

Levy, Sarah. 2020. A Tale of Two Seal Hunts: Contesting the Conflation of Canadian Sealing Activities. *Stetson University: International Wildlife Law Conference.*

Littin, K.E. and Mellor, D.J. (2005) Strategic animal welfare issues: ethical and animal welfare issues arising from the killing of wildlife for disease control and environmental reasons. *Revue Scientifique et Technique-Office International des Epizooties*. 24(2): 767-782

Martin. L. L. and Simmons, B. A. (1998) Theories and Empirical Studies of International Institutions, International Organization 52: 729-757'.

McElroy, A. 2013. Sedna's Children: Inuit Elders' Perceptions of Climate Change and Food Security. *In Environmental Anthropology: Future Directions*. Helen Kopnina and Eleanor Shoreman-Ouimet, eds. New York: Routledge.

Miles, Edward L. 2002. *Environmental Regime Effectiveness: Confronting Theory with Evidence*. The MIT Press Cambridge, Massachusetts London, England.

NatureScot. 2024. *Seals*. Scotland's Nature Agency. https://www.nature.scot/plants-animals-and-fungi/mammals/marine-mammals/seals#:~:text=There%20are%20about%20100%2C000%20harbour,Sea%20and%20the%20Barents%20Sea.

Naturvardsverket. 2024. *Hunting seals*. https://www.naturvardsverket.se/en/topics/hunting/hunting-seals/

Newsome, D., Dowling, R. K., & Moore, S. A. (2005). Wildlife tourism. Clevedon ; Buffalo: Channel View Publications.

Nicoll, Ruaridh. (2017). Life on the ice: one last hunt for Norway sealers. The Guardian. https://www.theguardian.com/film/2017/apr/09/last-of-the-seal-hunters-norway-arctic-ice-activism-documentary

Nunny, L., Simmonds, M., & Butterworth, A. (2018). A review of seal killing practice in Europe: Implications for animal welfare. *Marine Policy*. 98, 121-132. https://doi.org/10.1016/j.marpol.2018.08.013

Oma, Paul. 2008. *EU perspectives of seals and sealing; Norwegian-Russian*

Symposium. Counsellor for fisheries; Mission of Norway to the EU.

Onatsu, Jaana. 2019. A hunting party on spring ice. Finnish Heritage Agency. https://www.museovirasto.fi/en/collection-and-information-services/the_picture_collections/whats-on/articles-in-kamera-magazine-2019/a-hunting-party-on-spring-ice

Parliamentary Assembly. 2006. *Recommendation 1776 (2006) Seal hunting*. Parliamentary Assembly.

Ryan, Shannon. 1994. *The Ice Hunters: A History of Newfoundland Sealing to 1914*. St. John's: Breakwater Books Ltd.

Sellheim, Nikolas. 2016. *Legislating the blind spot: the EU seal regime and the Newfoundland seal hunt*. University of Lapland: Lapland University Press.

Sellheim, Nikolas. 2013. The Neglected Tradition? – The Genesis of the EU Seal Products Trade Ban and Commercial Sealing. *The Yearbook of Polar Law V (2013): 417–450*. DOI: 10.1163/22116427-12341287

Sellheim, Nikolas. 2014. Living with 'Barbarians' - Within the Commercial Sealing Industry. Faculty of Law; University of Lapland. Finlandia.

Skold, Martin. (2023). Effect of hunting and by-catches on the observed rate of growth of the Baltic Sea grey seal population. *Department of Environmental Research and Monitoring: Swedish Museum of Natural History*.

STECF. 2018. The 2018 Annual Economic Report on the EU Fishing Fleet (STECF-18-07). Luxembourg: Publications Office of the European Union.

Stokke, Olav Schram. 2001. *The Interplay of International Regimes: Putting Effectiveness Theory to Work*. The Fridtjof Nansen Institute.

SwAM. 2023. *Management system in Sweden with focus on seals*. Swedish Agency for Marine and Water Management.

Tienhaara A, et al. (2024). Seal of approval: Public preferences for the conversation of endangered Saimaa ringed seal. *Journal for Nature Conservation 82 (2024) 126752*.

Tverin M, Esparza-Salas R, Stromberg A, Tang P, Kokkonen I, Herrero A, et al. (2019) Complementary methods assessing short and long-term prey of a marine top predator Application to the grey seal-fishery conflict in the Baltic Sea. *PLoS ONE 14(1): e0208694*. https://doi. org/10.1371/journal.pone.020869

Underdal. Arild. (1992) The Concept of Regime Effectiveness. Cooperation and Conflict 27. 3: 227-240.

Underdal, Arild & Young, Oran R. 2004. *Regime Consequences; Methodological Challenges and Research Strategies*. Kluwer Academic Publishers.

Varjopuro, Riku. 2011. Co-existence of seals and fisheries? Adaptation of a coastal fishery for recovery of the Baltic grey seal. *Marine Policy 35 (2011) 450-456*.

Vergano, Fratini. 2024. EU rules for trade in seal products under review: The comeback of additional exceptions for commercial exploitation? https://www.lexology.com/library/detail.aspx?g=32986215-96da-4410-9302-15b2b2c32984

Waldo S, et al. 2020. The economic costs of seal presence in Swedish small-scale fisheries. *ICES Journal of Marine Science (2020), 77(2), 815-825*. DOI: 10.1093/icesjms/fsz221