

Aquaculture

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1 Summary and Key Points

The Green Party supports the sustainable development and management of aquaculture only where it is ecologically sound to do so. We believe aquaculture developments can be a key economic activity in coastal and island communities and will play an important role in providing nutrition globally. However, such activities cannot be supported where they act to the detriment of marine habitats and populations or inhibit the proper functioning of marine ecosystems. Key to this will be:

- Ensuring communities are engaged with from the outset and are facilitated to give input that is considered as part of any aquaculture development licensing process
- Limiting impacts on biodiversity through:
 - ending offshore salmon farming
 - appropriate siting of aquaculture developments
 - responsible sourcing of feed
 - reducing or eliminating the use of chemicals, antibiotics and neonicotoids
- Improved governance of the aquaculture industry, including the establishment of a national independent licensing and regulatory authority
- Legally defining “sustainable aquaculture”
- Supporting site-appropriate multitrophic aquaculture developments
- Supporting on-going research into improving sustainability in aquaculture

2 Policy

2.1 Introduction

Over the last 40 years, aquaculture increased its global share of the seafood market from 14% to 42% in 2020 [1]. The sector has seen year-on-year increases of around 8% during the same period. It provides cheap, reliable sources of nutrition and protein to many people around the world and will continue to play a large part in global diets. In addition, aquaculture is an important economic activity in many rural coastal regions, directly employing 20.5 million people globally [1] and is also often portrayed as a tool by which to reduce/limit overfishing of wild populations. Despite this, and the global average growth figures, development has stagnated within Europe where it supplies approximately 10% of all seafood consumed [1]. The EU have included actions within the Common Fisheries Policy, the European Maritime and Fisheries Fund and the EU’s Blue Growth agenda to grow the industry within the union [2].

The Irish seafood industry was worth a total of €1.26 billion in 2021, up from €1.09 billion in 2020 [3]. Aquaculture accounted for €175 million with cage reared salmon (13,400t) comprising almost 32% of the total volume produced in 2021, followed by rope farmed mussels (11,800 t or 28%) and pacific oysters (9,900 t or 23%). There are 1,984 individuals directly employed across 319 aquaculture sites in the Irish state, or almost 23% of the total directly employed by the seafood sector [3]. Based on figures in the BIM *The Business of Seafood 2021* report, this equates to approximately 0.8% of the employed population in coastal regions.

Despite these economic benefits, aquaculture does not come without significant environmental costs. Studies have demonstrated elevated levels of pollution [4]–[6], loss of habitat [7], [8], transmission of diseases and pathogens to wild populations [9]–[11], introduction of invasive species [12]–[14], while the capture of wild fish to be reduced to fish meal and oils for feed in many forms of aquaculture is not sustainable [15]–[17] and has been shown to reduce the economic value of wild capture fisheries [15], [18]–[20]. Furthermore, aquaculture production is susceptible to threats posed by climate change, including risks from more frequent high intensity weather systems, ocean acidification, warming seas, etc. [21].

Solutions for many of these challenges do exist but require the adoption of sustainable culturing procedures combined with rigorous environmental safeguards including an appropriate regulatory, control and monitoring environment [1], [22]–[26]. Under the current Irish licensing system, the Department of Agriculture, Food and the Marine has responsibility for both licensing and regulation of aquaculture developments, while an independent body (the Aquaculture Licences Appeals Board) oversees appeals to licensing decisions. An independent review of the aquaculture licensing process [27] was carried out at the behest of the Minister for Agriculture, Food and the Marine. This review found the current system is in urgent need of reform. The Green Party supports the recommendations of this report, particularly those which seek to create full transparency at every stage of the process.

2.2 Principles

1. The Green Party calls on the Government to end new licensing of offshore farmed salmon and supports the development of an alternative onshore salmon farm industry¹. Where marine salmon farms do exist, they should be restricted to offshore locations which are at least 30 km from salmonid rivers.
2. The Green Party supports limiting the environmental impacts of aquaculture through:
 - 2.1. Requiring the ecologically and corporately responsible sourcing of sustainable feed
 - 2.2. Avoid/limit escapees by adopting technical standards
 - 2.3. Limiting impacts on biodiversity, e.g., no non-native stocking of finfish; designate areas unsuitable for aquaculture as “aquaculture free zones”; no finfish licensing in

¹ Passed at Policy Council

- bays with Special Areas of Conservation, Special Protection Areas, Marine Protected Areas, or other protected sites; no finfish licensing within 20km of SACs designated for Atlantic salmon
- 2.4. Reducing or eliminating use of chemicals, including antibiotics and neonicotinoids
 - 2.5. Requiring that appropriate planning guidelines are published.
3. The Green Party seeks to improve aquaculture industry governance by:
 - 3.1. Establishing an independent national regulatory authority to oversee all applications to develop aquaculture operations in the State
 - 3.2. The independent regulatory authority should not be answerable to the department responsible for promoting aquaculture
 - 3.3. The independent regulatory authority should be responsible for monitoring compliance with licensing conditions and with enforcement
 - 3.4. Requiring a 'bottom-up' approach to consultations for all newly planned developments, ensuring to notify and involve all relevant stakeholders of the process, especially local communities
 - 3.5. Seeking consistency across legislation that informs both the relevant statutory bodies concerned with planning and operation of developments, and the enforcement of environmental legislation
 - 3.6. Promoting environmentally responsible and transparent international trading of aquaculture products, including mechanisms to ensure traceability from point of origin to the consumer
 - 3.7. Calling for a clear, legally binding definition of "sustainable aquaculture". This definition must be holistic in nature, having regard for ecosystems, marine spatial areas, economics, social and cultural concerns. Develop a mandatory labelling system for all aquaculture products to reflect their sustainable status
 - 3.8. Introduce requirements on the welfare in the raising, transport, and slaughter of farmed fish, including maximum stocking-density levels, restrictions on the use of artificial light and oxygen as per the Commission's Strategic Guidelines on Aquaculture.
 4. The Green Party calls for the development of integrated multi-trophic aquaculture and aquaponic systems. Where possible and appropriate develop multi-species aquaculture on the same site e.g., a kelp farm could also host crustaceans, echinoderms and finfish species
 5. Fund focused research to address gaps in data and knowledge across all areas related to the sustainability of aquaculture

2.3 References

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