

## RURAL ECONOMY AND CONNECTIVITY COMMITTEE

### SALMON FARMING IN SCOTLAND

#### SUBMISSION FROM HIGHLANDS AND ISLANDS ENTERPRISE

##### Background

Highlands and Islands Enterprise (HIE) is an ambitious Scottish Government agency and is responsible for economic and community development across half of Scotland, from Shetland to Argyll and from Moray to the Outer Hebrides.

HIE works alongside Scottish Development International, Scottish Enterprise and Skills Development Scotland. We are the strategic lead organisation for the enterprise agencies with regards to the aquaculture industry and welcome the opportunity to provide this written evidence to the Committee.

##### Our role

The purpose of HIE is to generate sustainable and inclusive economic growth across the Highlands and Islands. HIE has a distinct remit encompassing economic and community development to tackle disadvantage, address market failure and foster growth opportunities. Stimulating growth and ambition with the businesses and social enterprises that operate across our region lies at the heart of what we do. HIE's experience in addressing inherent economic weaknesses reveals some distinctive characteristics of successful economic development, especially in a rural context.

HIE's Operating Plan (<http://www.hie.co.uk/about-hie/policies-and-publications/operating-plan.html>) sets out our priorities in implementing Scotland's Economic Strategy, our projected outputs and outcomes and the resources we deploy to deliver those outcomes.

We have identified aquaculture as a distinct regional opportunity for our area, contributing to each of our four priorities:

- *Investment* – attracting investment from global operators in a broad range of activities, infrastructure and innovations to grow sustainably and to improve competitiveness.
- *Innovation* – investment in innovation activities both upstream and downstream in new technologies, equipment and models of production to improve productivity and efficiency.
- *Inclusive growth* – creating high value employment opportunities, particularly in the rural economy, and contracting with indigenous supply chain businesses, which encourages and enables people to live, work, study and invest in our region.
- *Internationalisation* – farmed salmon is this country's highest value food export going to markets worldwide.

##### Aquaculture and Rural Economy

HIE and its predecessor organisation HIDB long ago recognised the unique potential of an aquaculture industry to deliver new economic activity, highly dispersed across large parts of the most remote areas in the Highlands and Islands. The present

scale of the Scottish industry exceeds all early expectations. We regard the industry as having substantial net benefits for the Highlands and Islands and for Scotland, offering scope for further expansion, diversification and growth, including development of the indigenous supply chain spanning both high technology and engineering and life sciences.

The Scottish aquaculture industry supports more than 12,000 jobs and aquaculture production has increased by a third in the ten years to 2015, from 142,000 to 188,000 tonnes, according to the HIE and Scottish Government commissioned study 'The Value of Aquaculture to Scotland', published in June 2017 (<http://www.hie.co.uk/regional-information/economic-reports-and-research/archive/value-of-aquaculture-2017.html>). Atlantic salmon production accounts for 90% of this economic impact, supporting 10,340 full-time equivalent jobs and generating £540 million in gross value added (GVA). However, these figures do not reflect the vital importance of the industry in providing well paid employment in many remote communities across our area, helping retain population and key services.

Operating in some of our most remote and rural communities, the salmon farming industry has made a positive contribution to inclusive growth. The following examples are a very small illustration of what we observe.

The sector provides significant year-round employment opportunities across the region, and wages are more often (significantly) above the national living wage. There continues to be ongoing investment in training and skills development, and there are positive career (progression) opportunities through a range of pathways.

Further, employees spend a proportion of their disposable income where they live and work, and this contributes towards sustaining other local businesses and services which the wider community also enjoys.

The industry has made a positive impact on the age demographic in rural communities, affording young people the opportunity to stay in the areas where they grew up and by encouraging new people into the area. Perhaps less visible, individuals employed by the industry and their families make positive contributions to rural communities, for example through participation in vital voluntary services such as the fire and coastguard services.

The development of the salmon farming industry has required investments which also benefit communities. For example, homes and businesses on the remote peninsula of Knoydart and Loch Nevis have benefitted from superfast broadband thanks to a collaboration between a salmon farming business and a rural broadband company. On the island of Muck, a salmon farming business invested to build three houses to accommodate workers and their families (boosting the population in the school) and they installed a new pontoon and improved the existing slipway.

Salmon producers are investing in other key sectors for growth, such as tourism. A visitor's centre is planned in the west of Scotland which will add to the current tourism proposition in the region.

## Key Opportunities and Challenges

There are challenges facing the salmon industry in Scotland in seeking to secure its long-term future which we would summarise as:

- Confronting and overcoming successive biological challenges and evidencing acceptable environmental impacts.
- Competitiveness with other farmed salmon nations, and indeed other animal proteins, in the global market.
- Competitiveness for future investment within corporate circles – the ability to secure investment ahead of e.g. Chile, Canada.
- Societal acceptance – balancing the broad opportunities for equitable and inclusive growth in (rural) communities through an understanding of the net benefits of a growing sustainable Scottish salmon farming industry.

Conversely, Scotland's aquaculture sector has a more certain future in terms of customer demand and scope to grow than many other sectors in its economy. This confidence relates largely to:

- Rapidly growing world population and constraints on growth in other sources of high quality animal protein.
- The low carbon footprint of aquaculture compared with other sources of protein.
- The opportunity to improve models of production, productivity, efficiency and output through investments in innovation, research and development.
- The scope for productivity improvements across the value chains, both upstream and downstream.

Collaboration will be key to overcoming challenges and realising opportunities, both strategically and tactically. The formation of an Aquaculture Industry Leadership Group is a welcome development. Led by industry, the membership of the group includes senior representatives from a range of stakeholders and the public sector, including HIE. Their collective leadership and vision for the strategic growth of the industry, and their ability to inform and influence sustainable development can only be considered positive.

Outside of this structure, industry and partners increasingly collaborate on a broad range of activities, aimed to achieve inclusive and sustainable growth. For example, individual farmers in Shetland are co-ordinating on farm management and treatment plans; HIE and Skills Development Scotland have commissioned research to understand the skills needs over the short, medium and long term and consider how these will be addressed; HIE and SAIC continue to work closely to stimulate and support near market innovation in indigenous supply chain businesses; Scottish Government and partner agencies are arranging a supply chain summit.

There is opportunity and ambition to increase the levels of research, development and innovation. While aquaculture research has been undertaken for over 40 years (e.g. the Institute of Aquaculture established in 1971, Scottish Aquaculture Research Forum established 2004) this is best evidenced in current terms by the establishment of the Scottish Aquaculture Innovation Centre (SAIC) in 2014. SAIC enjoy extensive

engagement with industry, supply chain businesses and academic and private sector research interests to deliver highly focused projects of crucial importance to the industry's long-term sustainable growth in Scotland.

Recirculation aquaculture systems (RAS) present both opportunity and threat from HIE's perspective. We are currently updating a 2014 report we commissioned on the commercial viability of RAS. We are aware of the commercial opportunities RAS is providing in freshwater units producing salmon smolts and the potential production of post-smolts in sea water RAS, which would enable shorter subsequent periods of on-growing in marine cages. We understand that full cycle production of salmon in RAS is not yet commercially viable. Should commercial viability emerge beyond producing for very specific niche markets we would regard that as potentially disruptive in terms of the salmon farming industry in Scotland.

With a wide-ranging economic and community development remit, HIE will continue to endorse the industry as a powerful, positive influence for the Scottish rural economy. Whilst we recognise the opportunities for salmon farming in Scotland, we are equally cognisant of the challenges the industry must address through the adoption of new innovative technologies, equipment and practices. Through a range of strategic and operational activities we will continue to support sustainable and inclusive growth across the breadth of the sector.

Highlands and Islands Enterprise  
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