RURAL ECONOMY AND CONNECTIVITY COMMITTEE

SALMON FARMING IN SCOTLAND

SUBMISSION FROM NAFC MARINE CENTRE

The NAFC Marine Centre is an educational and scientific institute, located in Shetland**.** The Centre delivers training and education, carries out research and development, and provides consultancy, advisory and other services for the maritime industries. The Centre is operated by a charitable trust (the Shetland Fisheries Training Centre Trust) and employs about 40 people.

As part of its work the Centre provides training, education, research and development support to the salmon farming industry in Shetland and across Scotland.

Salmon farming in Shetland is a major contributor to both the Shetland and the Scottish economy. In 2015-16 salmon produced in Shetland was valued at £158,736,060[1] and employed 228 FTE and 19 part-time workers.

Salmon farming is vital component of Shetland's economic and social structure. It is an industry that is actively engaged in the training and upskilling of its employees and can provide genuine career advancement opportunities to those with the appropriate skills and ambition. It provides the opportunity for people to remain within their local communities and also promotes growth by bringing new people into the community. Salmon farming can enhance community cohesion not only by providing employment but also through the engagement and sponsorship of community activities.

1. Do you have any general views on the current state of the farmed salmon industry in Scotland?

The sector is still relatively new in Scotland and has had to respond to a multitude of physical and biological issues, including the inherent difficulties of operating in a frequently hostile environment, in remote areas with limited infrastructure. This is a challenge to any industry and recognition must be given to the fact that despite the scale of the task the industry is making a significant contribution to the Scottish economy.

To ensure sustainable growth the industry must continue to work hard to overcome the biological and technical barriers that might be impeding growth. However, this must be done in conjunction with regulators and industry experts to address concerns around the impact of salmon farming on marine ecosystems.

[1] Scottish Fish Farms Annual Production Survey

2. There have been several recent reports which suggest how the farmed salmon industry might be developed. Do you have any views on action that might be taken to help the sector grow in the future?

Sustainable, demand-led growth will require improvements in efficiencies and likely require expansion into new areas, these may include offshore, land-based and high-energy sites. There will be a requirement for R&D&I in all of these areas to robustly test feasibility and secure meaningful expansion. The development of new production strategies will also be required to mitigate some of the biological and environmental challenges currently faced.

Historically, funding R&D&I activity in aquaculture has been relatively difficult to secure and funding mechanisms have not always been responsive to the needs of the salmon farming sector. Given the rapid growth rate of the industry, research issues and problems that present themselves often require a quick response time, which can be difficult to accommodate within traditional funding mechanisms. For example, the time required to prepare, submit and receive a decision on an application with the administrative and reporting demands of grant funding might seem excessive and prohibitive to a commercial company. Partnering with organisations such as the NAFC Marine Centre, who aim to be flexible, dynamic and responsive to requirements, along with funders that understand the nature and requirements of the sector, such as SAIC, can facilitate appropriate funding sources and research activities. It is important that such funds and research opportunities continue to be made available and are grown to match the sectoral needs.

A skilled and trained workforce is also essential for the growth of the industry and the educational requirement from the industry has grown significantly in recent years. At the NAFC Marine Centre, 37 of their short courses are specialized for the aquaculture industry and have resulted in over 600 participants during the period Jan 2017–Mar 2018. In the last six months alone, the NAFC Marine Centre have developed a further nine short courses in direct response to industry requirements. The demand for Modern Apprenticeships has recently grown at the Centre with 33 Aquaculture Modern Apprentices currently enrolled and with a further 52 to be enrolled in 2018. It is essential that the training and education institutions within Scotland can be flexible and responsive to meet industry requirements to upskill its workforce.

As the sector continues to develop there is a continuing requirement to manage and share information and data for a host of purposes including regulatory, market, fish health and welfare plus general farm and processing purposes. It is important, therefore, that infrastructure for digital connectivity is in enhanced to allow the collection, sharing and interpretation of such data and information.

While much of the focus is on the salmon farming companies themselves, in order to secure sustainable growth in the sector it is essential that a robust supply chain is also in place. There is a need to identify the weak links in the supply chain and offer

support where required to ensure that the supply chain is advancing as quickly as the salmon production companies themselves.

3. The farmed salmon industry is currently managing a range of fish health and environmental challenges. Do you have any views on how these might be addressed?

The sector is expending significant resource on meeting fish health and welfare and environmental challenges. The sector will need access to stocks with increased resilience (healthier and more robust), to help protect against any potential environmental challenges, such as blooms (plankton/jellyfish). Some of this will be achieved through stock selection, but also through fish-centric stock management and husbandry activities.

Much progress has been made in the last 20 years, with greater understanding of fish biology and pathology, the use of vaccines for example, have revolutionised practices and there, and other/new veterinary tools, will continue to be important for health management.

The sector is constantly exploring other non-medicinal technologies and strategies to safeguard stock and uphold welfare. The Marine Centre has helped develop, monitor and advise on a range of these tools, and is aware of management decisions taken by several companies farming in the region to consolidate their activities (from historically-derived permitted activity) to concentrate effort on fewer, more suitable sites, as well as creating biological fire-breaks through more appropriate site-selection.

Collaboration between companies can also have a positive outcome on fish health. The NAFC Marine Centre endorses recent initiatives in Shetland where the sector has sought to meet and regularly discuss health, welfare, production and best practice. Where possible, the Centre has helped to further enable these activities through provision of resources. An example of this enablement has been the development of a platform to aggregate and share fish health data. The platform, ZetFish, has been in continual use since 2010 and is used to display trends for discussion at the monthly meetings of the Shetland Fish Health and Production Group. The Centre believes the sharing of information and joint planning through the Group has been beneficial and valuable, and continues to be an excellent example of a sector-led initiative that is focused on improving management and best-practice in the wider region.

4. Do you feel that the current national collection of data on salmon operations and fish health and related matters is adequate?

Improvements are required on the analysis and interpretation of data to make it more meaningful.

5. Do you have any views on whether the regulatory regime which applies to the farmed salmon industry is sufficiently robust?

The sector adheres to a number of regulatory regimes, some self-imposed (e.g. adopting a suite of Quality Schemes) and some external and independent. We consider these to be sufficiently robust and involve all groups with an interest in salmon farming, including local communities and academia.

6. Do you have any comments on how the UK's departure from the European Union might impact on the farmed salmon sector?

Brexit is likely to have a significant impact on the funding available to aquaculture (salmon) R&D&I. Alternative funding sources and mechanisms need to be put in place if we are to enable Scottish institutions to support the sector in meeting its R&D&I requirements for growth.

Pan-European expertise, migrant workers and migrant specialists have made a substantial and positive contribution to the sector. Recruitment and retention of suitably skilled staff in the rural locations has been challenging and often gaps in these areas has been filled with enthusiastic and willing migrant workers, who have often settled in these areas contributing their skills, experience and culture to the community. If there is a loss of access to such expertise and skills there could be a negative impact on Research and Training organisations such as ourselves as well as the industry as a whole.

NAFC Marine Centre
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