

The Economic Impact of Scottish Salmon Farming

A report to Salmon Scotland
November 2025





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1.

Executive Summary

Scotland's salmon farming sector supports 10,850 jobs across the country, contributing £953 million gross value added (GVA) to the national economy.

Domestically, the Scottish salmon farming sector is vital to the prosperity of the rural and coastal communities where producers and farmers are based. The year-long, permanent, high-wage, employment opportunities the sector provides contributes to the liveability of these areas and reduces population decline by attracting workers, contributing to local infrastructure, and enabling other local businesses and services to thrive. The sector is built into the fabric of the communities in which it is based.

The sheer scale of benefits the sector supports across the country is often not fully understood. Despite accounting for a fraction of Scottish marine environment, Scottish salmon farming supported 10,850 jobs and generated an estimated economic impact worth £953 million GVA to the country's economy in 2024.

Table 1-1 Economic Impact of Scottish Salmon Farming, 2024

	GVA (£m)	Employment (Jobs)
Direct impact	231.2	2,460
Supply chain impact	589.9	7,040
Investment impact	66.5	860
Staff spending impact	65.5	490
Total impact (Scotland)	953.2	10,850

Source: BiGGAR Economics Analysis.

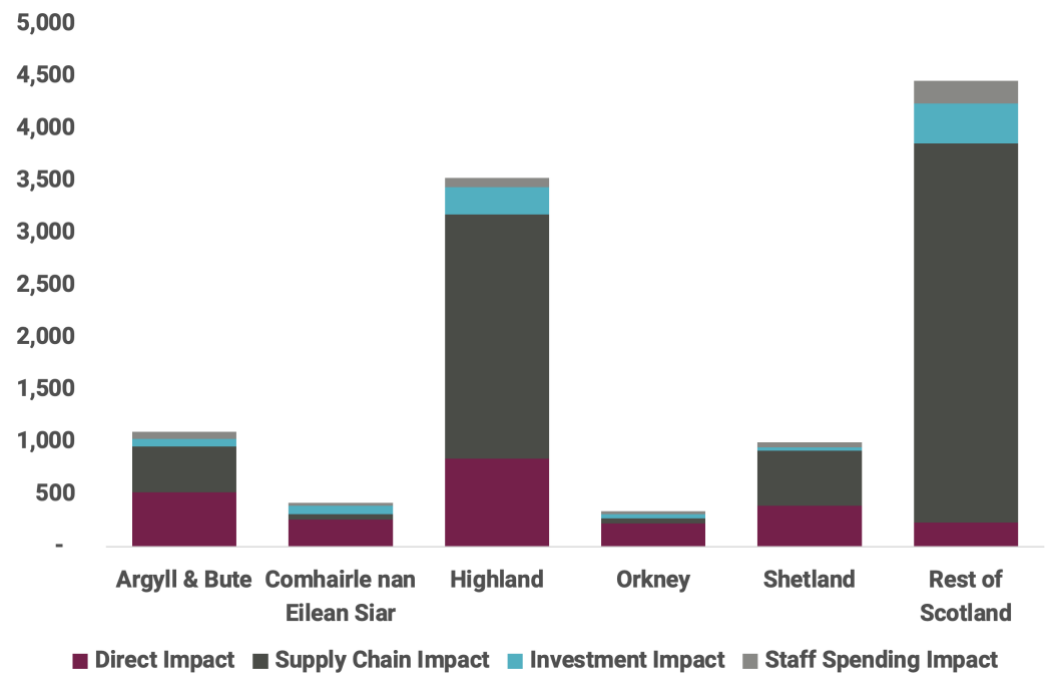
The salmon farming sector has grown and developed significantly from its crofting roots 60 years ago, leading the way globally. Despite being a relatively new farming sector in the country's food and drinks industry, Scottish salmon is a globally renowned, high quality, food source. This reputation is built on decades of collaborative, innovative, and progressive work by those involved in the sector.

The Scottish salmon farming sector is not one which acts in isolation. The sector's global success is heavily reliant on businesses across the country working in collaboration to produce quality products that are distributed across the world.

The sector supports business activity in each area of the country and stimulates continuous innovation and improvement to address environmental and operational challenges. Sustainability is at the heart of many decisions, and the sector is making continuous efforts to incorporate artificial intelligence (AI) to ensure the sector remains agile and adaptive to changing external conditions.

Scottish salmon farming supports significant economic activity across Scotland. It is a vital part of the country's food and drink sector and the country's reputation as a global producer of high-quality salmon. Those who operate in the sector, both directly and through its extensive supply chain, are core to its continued success and role as a permanent employer in economically fragile rural and coastal communities.

Figure 1-1 Total Jobs Supported by Production Region (2024)



Source: BiGGAR Economics Analysis.

2.

Introduction

In 2025, Salmon Scotland commissioned BiGGAR Economics to provide an independent economic impact assessment of the salmon farming sector across Scotland, which this report provides.

2.1 Study Aims and Objectives

The key objectives of this study are to:

- demonstrate the scale of Scottish, and regional, economic impact generated by Scotland's salmon farming activity;
- demonstrate the range of businesses across the country that are actively involved in supporting the operations and delivery of the globally recognised produce; and
- highlight the role of such organisations as employers in the country's rural and coastal communities.

2.2 Method of Assessment

The analysis contained within this report is based on information provided by producers of Scottish salmon¹ to provide an estimate of the **Gross Value Added (GVA)**² and **employment (jobs)** supported across the country.

Impacts presented in this report are inclusive of:

- **direct** economic impacts;
- **indirect** (supply chain) impacts; and
- **induced** (staff spending) impacts.

To estimate the direct impacts arising from economic activity, sectoral ratios from the most recent Scottish Annual Business Statistics³ were applied. Indirect (Type I) and induced (Type II) multiplier effects were estimated using Scottish Government Input-Output tables⁴.

The analysis contained within this report was supplemented with consultations with individuals working in organisations directly involved in the farming process and

¹ Including: Bakkafrøst Scotland, Mowi Scotland (owners of Wester Ross Fisheries), Scottish Sea Farms, Loch Duart, and Cooke Aquaculture.

² Gross Value Added is a measure of the monetary contribution an organisation adds to the economy through its operations

³ Scottish Government (2024), Scottish Annual Business Statistics

⁴ Scottish Government (2024), Supply, Use and Input-Output Tables

supply chain. These discussions provided additional context to support the assessment of wider benefits supported.

2.3 Study Areas

The scale and nature of the Scottish salmon farming sector results in a large and diverse number of businesses having input to its operations and delivery. As such, the assessment focuses on the impact generated for the **Scottish economy**.

Direct operations associated with the production of Scottish salmon are concentrated on farms towards the north and west coasts and islands of the country. Therefore, where possible, impacts have also been assessed for the study areas of:

- **Argyll and Bute;**
- **Comhairle nan Eilean Siar;**
- **Highland;**
- **Orkney; and**
- **Shetland.**

Impacts presented are based on data pertaining to the study year **2024**.

2.4 Report Structure

This report is structured as follows:

- **section 3** outlines the core impact generated by organisations working directly in Scottish salmon farming;
- **section 4** describes the scale, and diversity, of businesses across the country that interact with the sector and contribute to its success;
- **section 5** indicates the sector's commitment to environmental sustainability and the associated innovation and investment made by those operating in the sector;
- **section 6** portrays the vital role the sector plays in creating, and sustaining, communities in Scotland's rural and coastal areas; and
- **section 7** concludes the findings of this report.

3.

Core Impacts

There are over 200 active farms across north and west Scotland that collectively produced 192,000 tonnes of Scottish salmon in 2024.

Key Findings

- In 2024, the salmon farming sector supported **2,460 direct jobs** and generated an estimated **£231 million direct GVA**;
- Those operating in the sector produced 192,000 tonnes of salmon during the year, much of which supplied a thriving global export market.

Scotland's salmon farming sector is a significant driver of economic activity, particularly in the country's rural and coastal communities. The sector is characterised by a small number of large producers whose operations support a wide range of high-skilled, well-paid private sector jobs that extend beyond farming to include roles in hatcheries, processing facilities, and headquarter functions. This chapter outlines the direct economic impact generated by these core activities in 2024.

3.1 Production Cycle

Scottish salmon farming is an innovative practice that has established a global reputation for quality. Since its beginnings 60 years ago, Scotland has established itself as the third largest producer of Atlantic salmon globally, producing around 100,000 tonnes in the 2000's. Over the last two decades the sector has grown at a conservative pace, averaging 1.5% per annum, and the sector now accounts for the majority of all aquaculture activity in Scotland.⁵ The farming of Scottish salmon follows a multi-stage lifecycle, which is depicted in Figure 3-1. The main stages include:

- **Breeding and Fertilisation:** eggs are fertilised in hatcheries;
- **Farming:**
 - Freshwater phase: fry are raised in freshwater until they mature to smolts;
 - Marine phase: once the fry have grown into smolts they are transferred to saltwater pens to grow until market size. At any one time around 30% of farms are fallowed;
- **Harvesting and Processing:** the salmon are harvested from the farms and packed for market and/or transported to processing facilities for secondary processing works, such as filleting and smoking; and
- **Distribution:** the produce is sold to domestic and international markets.

⁵ BiGGAR Economics (2020). The economic contribution of the Scottish Aquaculture Sector.

Figure 3-1 - Scottish Salmon Production, Chain of Activity



Source: BiGGAR Economics.

This entire process, from egg to harvest, can take up to three years, with each stage supporting economic activity in the Scottish economy. For the purposes of this study, the core (or direct) activities are defined as those that occur at the hatcheries and farm sites. The impacts associated with secondary processing and the wider supply chain are assessed in subsequent chapters.

Prior to any of this activity occurring, the sector has to meet a number of planning and regulatory requirements, as well as undertaking a variety of assurance certifications. The sector is regulated and monitored by a number of regulatory bodies including, but not limited to: the Animal and Plant Health Agency (APHA), local planning authorities, Marine Scotland (covering the Fish Health Inspectorate and the licensing operations team), the Scottish Environment Protection Agency (SEPA), Crown Estate Scotland, Maritime Coastguard Agency (MCA), and the Health and Safety Executive (HSE).

3.1.1 Producers

The practice of salmon farming is carried out by a small number of producers who operate over 200 farms across Scotland's north and western coasts, often in communities with fragile economies. The producers included in this report are:

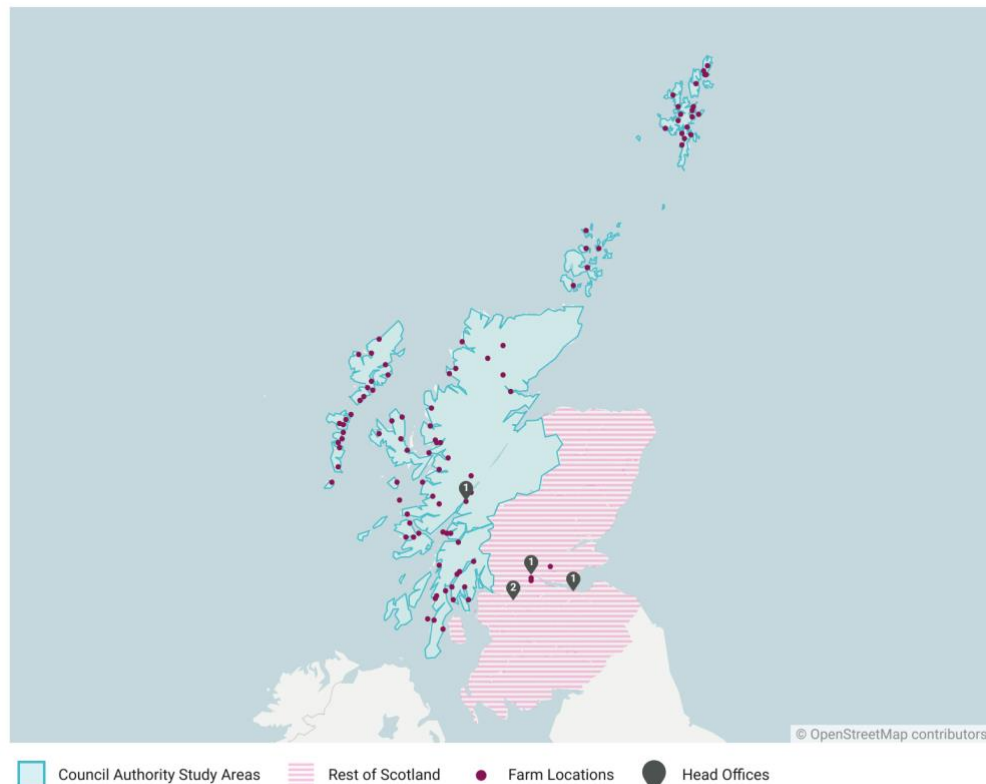
- Bakkafrost Scotland;
- Cooke Scotland;
- Loch Duart;
- Mowi Scotland⁶; and
- Scottish Sea Farms.

While the core farming activities are located in rural and coastal communities, these organisations' headquarters and processing facilities also support significant employment across Scotland. The spread of these producers' operations across Scotland is shown in Figure 3-2.

⁶ Owners of Wester Ross Fisheries

Figure 3-2 Salmon Production Sites and Head Offices Across Scotland

There are 272 active production sites located mostly throughout the west coast of Scotland, Western Isles, Orkney Isles and Shetland Isles.



Only active salmon farms (having produced within the past 3 years) and farms that are in the freshwater stages, grower fish and broodfish production are included. Head offices are from MOWI, Cooke Aquaculture Scotland, Bakkafrøst, Scottish Sea Farms and Loch Duart.
 Source: Scotland's Aquaculture • Created with Datawrapper

Source: Scotland's Aquaculture. Only active salmon farms (having produced within the past 3 years) and farms in the freshwater stages, grower fish and broodfish production are included. Head offices are from Bakkafrøst Scotland, Cooke Aquaculture Scotland, Loch Duart, Mowi, and Scottish Sea Farms.

3.2 Economic Impacts

The direct economic impacts for the year 2024 were calculated using financial and operational data provided directly by Scotland's salmon producing companies. The methodology for calculating the two key impact metrics was as follows:

- **Direct Employment** was determined by aggregating the total number of jobs reported by each company for their Scottish operations. The figure is inclusive of all directly employed staff, from on-site farming roles to head office and supporting functions; and
- **Direct GVA**, which represents the sector's contribution to the economy, was calculated by taking the total turnover reported by the companies and subtracting their expenditure on bought-in goods and services.

Based on this methodology, the direct activities of the Scottish salmon farming sector in 2024 generated **£231.2 million in GVA** for the Scottish economy and **directly employed 2,460 people**.

The majority of this employment is located in the key coastal and island study areas, making the sector a cornerstone of these regional economies. Table 3-1 provides a geographical breakdown of the direct employment supported by the sector, and an estimate of the direct GVA based on the location of employees.

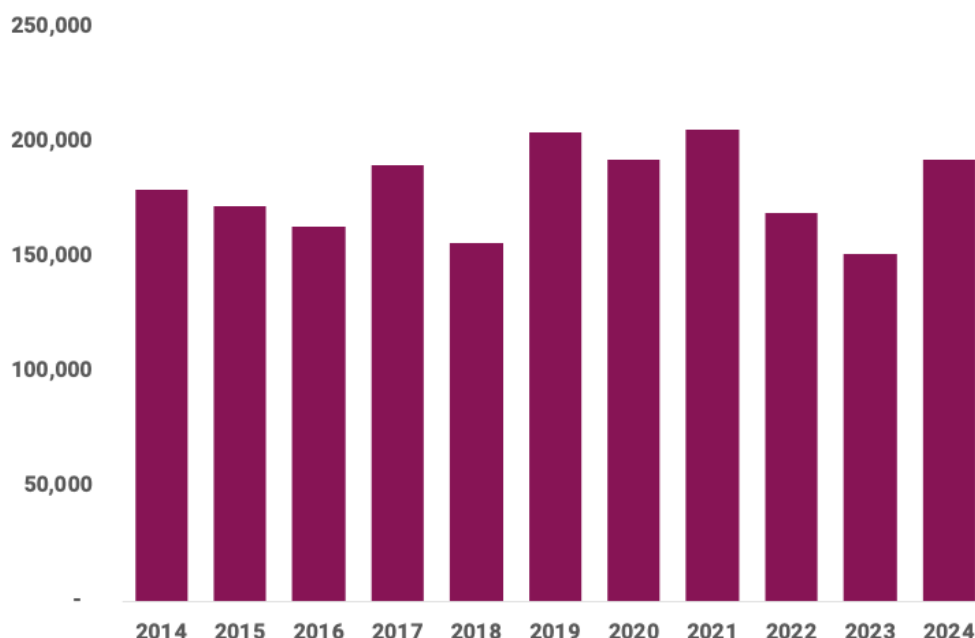
Table 3-1 Direct Impacts by Study Area, 2024

Region	GVA (£m)	Employment (Jobs)
Argyll and Bute	48.7	520
Comhairle nan Eilean Siar	24.7	260
Highland	79.0	840
Orkney	20.3	220
Shetland	36.8	390
Rest of Scotland	21.7	230
Scotland (Total)	231.2	2,460

Source: BiGGAR Economics Analysis. *Totals may not sum due to rounding.

These economic contributions are underpinned by significant production volumes. Although the long lifecycle of salmon farming means that annual output can vary, in 2024, the sector produced 192,000 tonnes of Scottish Atlantic salmon (Figure 3-3).

Figure 3-3 - Volume of Scottish Salmon Production (2014 - 2024), Tonnes (WFE – whole fish equivalent)



Source: Scottish Government, Scottish Atlantic Salmon Production

A significant portion of this production serves a thriving export market, making Scottish salmon the UK's largest food export. In 2024, over **101,000 tonnes** of whole, chilled, salmon, valued at **£844 million**, were exported to customers worldwide. Further processed products, such as sides, fillets and smoked salmon, added a further £106 million to export valuations in 2024. This international demand is a vital component of Scotland's renowned food and drink industry.

The European Union (EU) remains the primary market, receiving 63,000 tonnes in 2024, with North America also being a key destination. The top three individual markets were France, the USA, and China, demonstrating the product's global reach. The removal or reduction of tariff and non-tariff barriers in some key markets would further aid demand and increase competitiveness on a global level and progress was notable in 2024 in terms of smoothing market access. For example:

- negotiations were opened with the European Union in relation to a Sanitary and Phytosanitary (SPS) agreement which should allow quicker access to European consumers once implemented; and
- India and the UK agreed a trade deal which includes the removal of 30 per cent basic customs duty (BCD) on Atlantic salmon entering the Indian market.

This success is driven by the sector's focus on quality and provenance. Premium branding, such as Label Rouge Salmon (a prestigious food quality designation from the French authorities granted to Scottish salmon for having reached a high standard of food production and quality) reinforces the product's reputation and helps command a higher value in competitive international markets, ensuring that the economic benefits flow back to the Scottish economy.



Case Study: Native Hebridean Scottish Salmon

Scotland's Hebridean salmon is globally renowned for its unique heritage and premium quality.

Bakkafrost Scotland (formerly the Scottish Salmon Company) has deep roots in Scotland's Western Isles. Originating from wild salmon sourced from North Uist, Native Hebridean Salmon has a unique genetic strain. Retaining its Hebridean roots, the family selection centre is located in Uist which, combined with its reputation for premium quality, makes it a highly sought after product.

The produce provides a distinct regional identity for local communities in the Hebrides, building on the areas pride and cultural identity. The unique nature of the produce supports Hebridean Provenance and contributes to the wider knock-on effect of the company's role as a primary employer in the region.

3.3 Supporting Employment in Rural and Coastal Communities

Remote and rural areas of the country have experienced population ageing and decline over a number of years, with a lack of local job opportunities often a key driver.

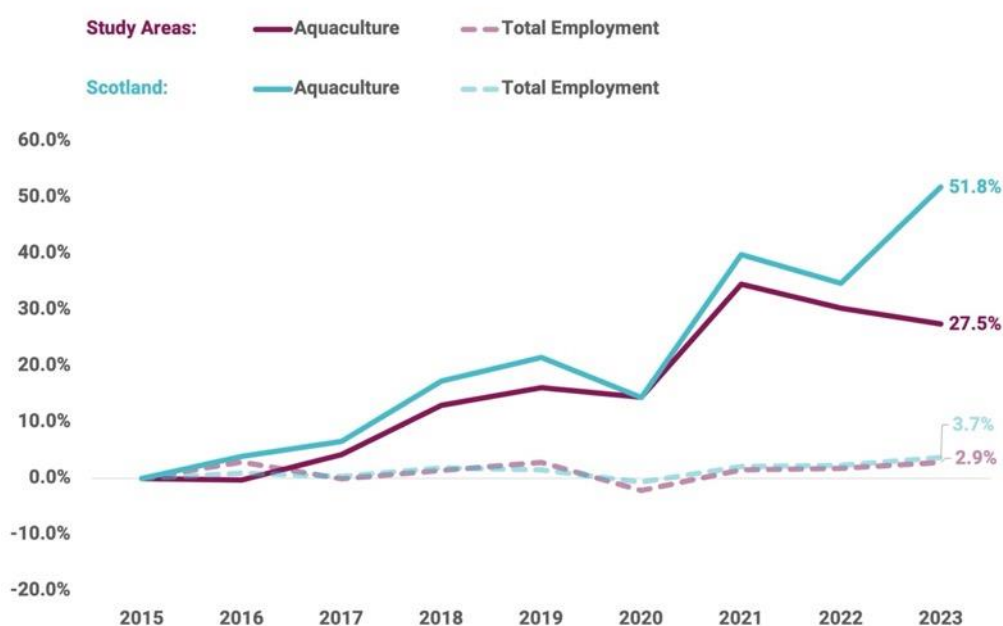
Consequently, as facilities and social services for younger people and families decline, these areas become less attractive for younger age groups to stay creating a spiral of population and economic decline. Providing permanent jobs in these areas is essential to countering depopulation.

Small increases in secure employment often have large effects on the viability of these local economies. They make it possible for people to stay and raise families which in turn supports the provision of essential local services. Secure, well-remunerated employment provides a reason for younger people and families to stay or return to rural communities, reversing the trend of population decline.

“It has had arguably the most powerful effect on the sustenance of rural areas. Enabling families and communities to grow.” (Supply chain company)

Since 2015 the total population across the study areas has increased slightly, growing by 2,480 over the past decade (increase of 0.6%). Over the same period, direct employment in the aquaculture sector (the majority of which is related to salmon) has outpaced the growth in total employment (Figure 3-4). In 2023, 72.5% of Scottish aquaculture employment took place in the study areas.

Figure 3-4 Growth in the Aquaculture Sector Employment, 2015 to 2023 (Indexed to 2015)



Source: ONS (2025), Business Register and Employment Survey 2023.

3.4 Fiscal Impacts

In addition to supporting economic activity, the core operations of the sector generate fiscal revenues. This arises from the employment taxes (income tax and national insurance) associated with salaries and wages paid.

To estimate the level of taxation paid on these earnings, it was first necessary to establish an average salary for those working directly in the sector. Based on total wages and salaries and the number of employees, this was estimated at £44,539 per employee in 2024 (16% more than the median wage for Scotland in the same year).

Income tax and national insurance estimates were then made based on the relevant rates for the salary and applied to the number of jobs supported.

In this way, total employment tax revenues for 2024, arising from those directly employed in production activity, were estimated to be worth at least **£37.1 million**. Further tax revenues would be raised from employment associated with the supply chain.

3.5 Summary

The core activities of Scotland's salmon farming sector support **2,460 direct jobs** and make an estimated economic contribution worth **£231 million direct GVA**. These impacts are largely concentrated in Scotland's rural and coastal communities, providing vital employment in areas with otherwise limited opportunities, while also strengthening Scotland's reputation as a leading producer of premium food exports.

4.

Supply Chain Impacts

Beyond the direct activity on its farms, the Scottish salmon farming sector acts as a vital economic anchor, supporting a vast and diverse supply chain that touches every part of Scotland.

Key Findings

- In 2024, over **£714 million** was spent on Scottish-based businesses to support the country's salmon farming activity;
- This expenditure supported over **£590 million GVA** for the Scottish economy and sustained more than **7,040 jobs** in businesses across the country.

The scale of impact generated by salmon farming activity in Scotland goes beyond those of its direct operations. Many organisations are involved in enabling the delivery of such operations, with sustainable growth in salmon farming activity acting as a catalyst for growth in the wider supply chain.

This chapter quantifies the economic impact generated by the sector's expenditure on the goods and services that underpin its operations.



Case Study: Scottish-bred Salmon

Originating on the Ormsary estate in Argyll & Bute, Landcatch Natural Selection Ltd produces millions of smolts for Scottish-based producers each year.

Based on Scotland's west coast, Landcatch Natural Selection Ltd (a branch of Hendrix Genetics) is heavily involved in the entire salmon lifecycle. The company provides genetic research and tailored breeding services to produce high-quality salmon eggs, smolts, and broodstock. The Scottish-originated business specialises in breeding and raising smolts uniquely for the challenges of Scotland's producers.

Founded in 1980, the company currently has three sites that collectively employ a team of 28 full-time staff, supporting local populations where they are based. To attract people to these roles, the company provides accommodation for the majority

of its employees, with around 20 properties currently occupied. Beyond the breeding and farming process, skills and roles in areas such as engineering, biology, finance, HR, and management are present within the organisation. This range of opportunities supports further job prospects in the area.

The company's own supply chain supports activity in organisations operating in: logistics, civil engineering, veterinary services, and feed supply. This includes global companies such as Biomar, EWOS, and GroAqua, all of which have a presence in Scotland and local champions such as DA McDonald and PPS. Given the scale of salmon production in Scotland, the companies they purchase from are heavily dependent on the sector for basing their activities and supporting employment in the country.

4.1 A Diverse National Supply Chain

The economic benefits of salmon farming extend far beyond the coastal communities where the farms are located. The sector relies on a complex network of suppliers from a wide range of industries, creating a significant ripple effect across the country. Analysis by Salmon Scotland has shown that businesses in every Scottish parliamentary constituency are part of this supply chain.

While producers have a degree of vertical integration, in 2024 they spent around £1.2 billion on external goods and services – of which £714 million (60%) went to businesses located in Scotland. Supply chain companies that make the operation of salmon farms possible are also located in remote and coastal locations. For example, almost all of Inverlussa (140), Migdale (68), and GaelForce (120) employees are based in the Highlands and Islands. Of the £714 million Scottish spend, 65% went to businesses based in the study regions, with the remaining 35% going to businesses located elsewhere in the country.

Many of these companies are reliant on international markets and pricing, impacted by a range of macro-economic factors including geo-political circumstances, resulting in volatile pricing. Key areas of expenditure include:

- **fish feed and health:** the largest single cost, involving major suppliers of specialised feed, as well as veterinary services and medication;
- **equipment and infrastructure:** the purchase and maintenance of cages, nets, boats (including highly specialised wellboats), and other marine equipment;
- **professional and technical services:** a wide range of services including engineering, software development, environmental monitoring, and financial and legal support; and
- **logistics and utilities:** expenditure on fuel, electricity, and the complex transport network required to move smolts, feed, and harvested salmon by road and sea.

Supply chain companies that are heavily reliant on the salmon farming sector often grow in response to demand from the sector and also try to innovate ahead of demand in order to keep their services relevant and competitive (examples of this from Inverlussa and Migdale are provided later in this report). Companies consulted with as part of this study indicated optimism about future growth in the sector, and recent company accounts for Mowi Consumer Products indicate a growth in both turnover and employment over the past year.



Case Study: Gaelforce - Made in Scotland

With sites and facilities located all around Scotland, Gael Force is leading the way in aquaculture design, engineering, and manufacturing.

Gael Force dates to 1983 where it originally started off manufacturing creel in Stornoway. Today, the company has managed to touch on every part of the aquaculture sector, from infrastructure to vessels to equipment. The company offers a wide range of products including moorings, feed barges, feeding systems, lighting, software, services and turnkey solutions for fish farmers.

Making this all possible is a supply chain spread across all parts of Scotland. With over 170 employees, Gael Force has most of its employees located in its Inverness headquarters where key parts of the business such as marketing and sales, finance and engineering take place. Its manufacturing footprint takes place in Stornoway, Oban, Forbes, Kishorn and Inverness itself.

Gael Force estimates that around 60 to 70% of its supply chain is based in Scotland, much of which takes place in the Highlands and Islands. From fish farms to Gael Force and from Gael Force to subcontractors, the Scottish aquaculture sector relies on a network of supply chain companies scattered throughout Scotland.

4.2 Economic Impacts

The approach to quantifying the economic activity supported by the sector's supply chain expenditure builds upon the methodology developed in the previous study in 2020⁷.

⁷ BiGGAR Economics (2020). The economic contribution of the Scottish Aquaculture Sector.

Having established the sectors where procurement spending took place, supply chain expenditure was mapped at Standard Industrial Classification (SIC) level 2 using detailed procurement data. Direct GVA and employment figures were then estimated by applying Scottish Annual Business Statistics (SABS) turnover-to-GVA and turnover-to-job ratios for the relevant sectors.

To capture the wider impacts, indirect and induced effects were also estimated. Indirect impacts represent the economic activity supported through the supply of goods and services into the aquaculture sector, while induced impacts capture the additional activity generated when employees across the supply chain spend their wages in the economy. Type I and Type II multipliers from the Scottish Government Input-Output Tables were applied to calculate these effects.

In 2024, the Scottish salmon farming sector's spending supported a total supply chain impact of **£589.9 million in GVA** and **7,040 jobs**. This significant impact demonstrates the sector's strong multiplier effect, where spending on core operations stimulates substantial secondary economic activity.

Table 4-1 provides a regional breakdown of this impact, highlighting the significant role the sector's supply chain plays in the Highland economy in particular.

Table 4-1 Supply Chain Impacts by Study Area, 2024

Region	GVA (£m)	Employment (Jobs)
Argyll and Bute	37.1	440
Comhairle nan Eilean Siar	3.8	50
Highland	196.4	2,340
Orkney	3.8	50
Shetland	44.8	530
Rest of Scotland	304.0	3,630
Scotland (Total)	589.9	7,040

Source: BiGGAR Economics Analysis. *Totals may not sum due to rounding.

4.3 Summary

The Scottish salmon farming sector is supported by a vast and varied supply chain that delivers significant economic benefits to every part of the country. In 2024, the sector's expenditure supported over **£590 million in GVA** and sustained more than **7,040 jobs** in businesses across Scotland. This demonstrates that the economic contribution of salmon farming extends far beyond its direct operations, playing a crucial role in the wider Scottish economy.

5.

Capital Investment and Environmental Sustainability

Investment in innovative products and procedures contributes to both the environmental and future sustainability of Scottish salmon farming.

Key Findings

- In 2024, expenditure on capital investments made by producers totalled approximately **£107 million**;
- This spending is estimated to have generated over **£67 million GVA** for the Scottish economy and supported more than **860 jobs**.

Continuous capital investment is fundamental to the Scottish salmon farming sector's commitment to sustainable growth and environmental stewardship. This investment not only drives future productivity, aligning with the Scottish Government's Vision for Aquaculture, but is also crucial for addressing the environmental challenges facing the sector. This chapter first outlines the sector's focus on environmental sustainability before quantifying the significant economic impact generated by this investment.



Case Study: Hybrid Vessels

Inverlussa

Inverlussa, a leading Scottish shipping company that operates wellboats for the aquaculture sector, became the first company in Scotland to introduce hybrid-electric vehicles to its fleet. These vessels are capable of operating on either diesel or electric power, depending on the needs of ship, and can be used for any activity requiring a stationary position - such as inspecting nets or feeding the fish. It was first adopted by Inverlussa in Scotland in 2019, and the company has since invested £50 million into this technology.

With the success of this technology becoming apparent, Inverlussa has been able to take this technology to previously built vessels and retrofit them with battery packs, responding to growing demand from farmers who had seen the benefits. This includes: reduced fuel consumption; reduced emissions; and reduced noise from



diesel engines. Increased use of this technology achieves both cost efficiency and environmental sustainability for salmon farming operations.

5.1 Investing in Environmental Sustainability

The salmon farming sector operates in a complex environment and faces consistent scrutiny over its potential impacts, particularly concerning fish health, sea lice, and the marine ecosystem. In response, the sector makes significant annual capital investments in research, technology, and new infrastructure to minimise its environmental footprint, improve fish welfare, and ensure its long-term sustainability.

This investment is directed towards a wide range of areas, including new site development, advanced marine equipment, and pioneering technologies designed to tackle biological challenges. Given the four-year production cycle, the positive effects of these innovations can take time to become fully apparent, but the sector has demonstrated a strong commitment to rapid advancement. For example, Bakkafrost Scotland has recently invested over £100 million in a recirculation unit for the freshwater stage of the farming process, designed to create an optimal environment for rearing the fish. This technology is the largest of its kind in the UK and operates entirely on green energy.

Investments in artificial technology are apparent in each of the producers, with intentions to better identify areas for improvements, such as reducing waste and optimising feeding. Each type of innovation undertaken by those operating across the sector is vital for the sectors long-term security and global competitiveness.

Those operating in the sector are committed to minimising any negative effects on the environment and work closely with wild fisheries and the local community to ensure the areas beaches and waters remain clean. Producers are actively involved in local biodiversity and river catchment management projects, ensuring the sector remains regenerative and continues to improve its performance.



Case Study: Freshwater Treatments

Migdale Transport

Fish health and welfare are fundamental to the continued improvement and long-term success of Scotland's salmon sector. Farmers and supply chain companies are constantly evolving their practices and investing in new approaches to ensure fish thrive in the best possible conditions, recognising that healthy fish underpin environmental responsibility, economic sustainability, and product quality.

One recent sector-wide challenge with regard to fish health has been sea lice - tiny, naturally occurring in the marine environment which can latch on and cause stress and harm to fish. For years, standard practice was to carry out treatments on fish in situ although this was inefficient as well as ineffective in some cases.

With a clear reason to find a better solution, for the fish, environment, and farmers, Migdale Transport invested £3 million into cutting-edge technology. Their new vessel would be able to produce freshwater on-board through reverse osmosis, making it possible to clean the salmon of lice without medicines, reducing the stress and harm towards the fish and without having to make long journeys to collect freshwater.

This supports economic wellbeing in Scotland by:

- increasing productivity gains for fish farmers by reducing fish mortality rates;
- limiting environmental costs in Scotland;
- supporting innovation diffusion throughout Scotland by de-risking new technologies; and
- promoting Scotland as a leader in aquaculture innovation - making it a more attractive investment destination.

5.2 Economic Impact of Investment

The significant capital investment in new technologies, infrastructure, and sustainable practices generates a substantial economic ripple effect. This expenditure supports a wide range of businesses in the construction, manufacturing, and professional services sectors across Scotland.

In 2024, capital investment by the Scottish salmon farming sector supported **£66.5 million GVA** for the Scottish economy and sustained **860 jobs**.



Table 5-1 provides a regional breakdown of this impact, demonstrating how investment spending creates benefits across the key operating areas.

Table 5-1 Capital Investment Impacts by Study Area, 2024

Region	GVA (£m)	Employment (Jobs)
Argyll and Bute	5.7	70
Comhairle nan Eilean Siar	6.6	80
Highland	20.0	260
Orkney	2.8	30
Shetland	2.4	50
Rest of Scotland	29.1	220
Scotland (Total)	66.5	860

Source: BiGGAR Economics Analysis. *Totals may not sum due to rounding.

5.3 Summary

Capital investment is a critical driver of both economic growth and environmental performance in the Scottish salmon farming sector. This expenditure is focused on developing and deploying innovative solutions that address key challenges, improve fish welfare, and ensure the long-term sustainability of the sector.

6.

Fabric of Local Communities

The sector is a vital actor in the communities in which it is based - helping to address local challenges and sustain communities for future generations.

Key Findings

- **2,460 people are directly employed** by the sector, the majority of which are located in rural and coastal communities;
- wages and salaries paid to employees totalled **£108.6 million** in 2024;
- spending of wages and salaries in the local economy is estimated to have supported economic activity worth up to **£65.5 million GVA** and **490 jobs** across Scotland.

Salmon farming is not only a job, but an important stakeholder in rural communities. Were it not for the salmon farming sector, and the employment it supports, in these rural communities it is likely that they otherwise would not exist.

Economic success in these communities is closely linked to cultural pride. The sector is embedded in the local communities and:

- invests in local infrastructure;
- supports a business community and participates in local voluntary services; and
- works to inspire future generations to work in the sector.

Producers and supply chain companies also support local festivals, sports, and events, and give back to the local communities they are based in. This is enhanced by the provision of community benefit funding provided by producers in the areas they are based, which are often managed by the communities and result in investments that are aligned to the needs of those living in the area.



Case Study: Heart of the Community

Scottish Sea Farms provided over £180,000 to local communities in 2024, supporting economic and social wellbeing.

First set up in 2011, the Heart of the Community Fund represents Scottish Sea Farms commitment to making a positive difference in the local communities in which it operates. The company has operations across Shetland, Orkney, and the north and west coasts of mainland Scotland, and has provided over £2 million in funding to local communities since the initiative began. With the decision of which projects to support assisted by local employees, this ensures that funding decisions are made by those who understand the needs of the community.

Examples of causes include sports and recreation equipment, renovation of community facilities such as village halls or play parks, supporting local youth clubs, providing tech equipment to schools, funding local events and festivals, and supporting local charities. Additionally, each farm manager at Scottish Sea Farms received £500 annually to support a local group or project of their choice.

This long-term investment in local communities, led by those living in the area, enhances local services and contributes to the sustainability and vitality of Scotland's rural economies, ensuring they remain an attractive place to live for workers and families for future generations.

6.1 Infrastructure Development

The places where the farms are based are particularly rural and, as such, have traditionally lacked infrastructure necessary to support a working population. This impacts companies' ability to attract workers. As a result, those operating in the sector have contributed to infrastructure development to address this challenge and make the areas they are based more liveable for workers and families. This goes beyond companies' roles as employers in the area, but as an embedded member of local communities that enhance its offerings.

One of the largest infrastructure initiatives that producers have invested in is housing. Addressing rural housing challenges is a key factor in enabling people to

live and work in the area. Producers have purchased housing stock and created purpose-built staff accommodation for those working in the sector, and the wider community.

Cooke Aquaculture invested in Cullivoe pier in Yell – to aid business operations and develop a new marina and bigger industrial estate. It also renovated Aith pier on mainland Shetland - the slipway is a popular facility in the community, with rowing teams and individual sailing boats using it.



Case Study: Mowi in Colonsay

Mowi has been farming in Colonsay since 2015 and has a business agreement with the community to support local entrepreneurship and island infrastructure.

In common with other island communities, the rising cost of housing and lack of available properties has forced many to leave, threatening the sustainability of the island's community and economy. With a population of 120 people and more than 40 per cent of the island's existing housing stock in second homes or self-catering accommodation Mowi was struggling to find accommodation for their workers.

It has helped develop affordable housing on Colonsay in partnership with Colonsay Community Development Company (CCDC), Highland and Islands Enterprise and Argyll and Bute Council. The first phase of development is now complete and includes 4 homes for affordable rent- including 3 for Mowi employees, 2 homes available for low cost ownership and 3 discounted serviced self-build plots. Mowi has committed to giving their 3 homes to the community if the fish farm closes on Colonsay.

Mowi's in-kind contributions to the local community are invaluable for the rural island. This includes providing boat services when ferries are cancelled or not available, supporting transport to and from the island and security of supplies. Additionally, Colonsay Community Development Company, in partnership with Mowi and HIE, has developed 6 new moorings for visiting yachts – enabling a community led enterprise to be developed for local benefit. Mowi also supplies salmon to the Colonsay Smokery at a preferential rate.

6.2 Supporting Local Services and Businesses

A sustainable workforce, supported by well-paid jobs, is essential for providing and sustaining local services, from shops and leisure facilities to schools and healthcare. Producers, and primary supply chain companies, buy from local businesses where possible, and their employment in the area supports the existence of shops and cafes where employees purchase goods and services.

The wages and salaries paid to those employed in the sector supports economic activity when it is spent on goods and services. This is driven by where staff live. In 2024, wages and salaries totalled £108.6 million.

In 2024, staff spending by the Scottish salmon farming sector supported **£65.5 million in GVA** for the Scottish economy and sustained **490 jobs**. Table 6-1 provides a regional breakdown of this impact, demonstrating how spending of staff wages and salaries in the economy creates benefits across the key operating areas.

Table 6-1 Staff Spending Impacts by Study Area, 2024

Region	GVA (£m)	Employment (Jobs)
Argyll and Bute	8.8	70
Comhairle nan Eilean Siar	3.9	30
Highland	11.9	90
Orkney	3.5	30
Shetland	6.6	50
Rest of Scotland	30.9	220
Scotland (Total)	65.5	490

Source: BiGGAR Economics Analysis. *Totals may not sum due to rounding.

As one supply chain operator explained:

“We are providing very well paid jobs to a young workforce who often have young families. They are helping to keep local schools and shops open.”

Employees working at the farming sites usually partake in a lot of other community roles including the council, fire brigade, and local sports clubs. These roles are voluntary, and therefore the employment supported by the organisations in these areas help to sustain other services to support the local population. The community relies on this support to remain a sustainable place to live for workers and their families.

The sector's employment model also supports those who engage in crofting, acting as a primary source of income whilst enabling crofters to work the croft and meet residency requirements. It is rare for crofters to be able to make a full time living from working the croft, yet crofters are required to live on, or close to, their crofts. Non-croft work is therefore required to enable a crofting lifestyle to be financially viable, with non-croft employment often contributing to the management and investment in crofting.

6.3 Inspiring the Future Workforce

Addressing rural depopulation and retention of a working age population is a key challenge for the areas where many of the farms are based. The jobs provided by organisations operating in the sector go beyond those of solely farming, including roles such as head office, marketing, and finance. These roles are typically associated with wages that exceed the average for the area.

A key activity of these organisations is raising awareness of the diverse career paths available. Producer companies often attend university career fairs to highlight the range of careers available within their organisations and go into local schools to embed the prospect of working in the sector from a young age. For example, Scottish Sea Farms recently provided local schools kids the opportunity to visit a farming site and learn about working in the sector.

Many organisations also have modern apprenticeship programmes. For example, Mowi also has an established apprenticeship and graduate programme, providing career paths for young people living in the island communities. The companies on-boarding process helps identify employee's potential and where the company can invest in them, providing training initially over 3-5 years. The apprenticeship schemes offered to school leavers, giving them an immediate pathway to a well-paid job (£28k at the outset) and access to training in a wide range of skills, for example apprenticeships in logistics, operations, warehousing, storage and distribution, procurement, mechanical and electrical engineering.

Skills development is crucial to attracting talent – a focus on skills development helps build more inclusive communities, ensuring that people at all stages of life have the opportunities to thrive, which is essential for the future of rural Scotland. Providing accessible education and skills training helps people in rural areas secure and progress their careers, making these locations more attractive places to live and work. Those working in the sector support its employees in skills beyond those solely associated with their primary job role, such as through funding driving lessons and tests, supporting skippers' qualifications, and running cadetships.

One supply chain company in the sector explained what that their officer cadetship training means:



“They can work anywhere in the world on any ship. It's a good universal kind of qualification and we hope they'll stay within the fish farm sector, but if they don't, then they've got a really useful qualification.”

A focus on upskilling, reskilling, and attracting talent helps to sustain and improve quality of life in these areas, addressing rural depopulation challenges and ensuring communities can sustain themselves for future generations.

6.4 Summary

Scottish salmon farming is a vital contributor to the fabric and sustainability of the local communities in which it is based. Without the presence of the sector in these areas, it is likely that many of the services or business community would not exist. Employers are actively involved in ensuring employees have a meaningful, well-paid career, with opportunities to progress and learn, often in areas where this is traditionally lacking. Highlighting that these types of roles are available in areas beyond the country's central belt is important to retaining and attracting talent to Scotland's rural and coastal communities.

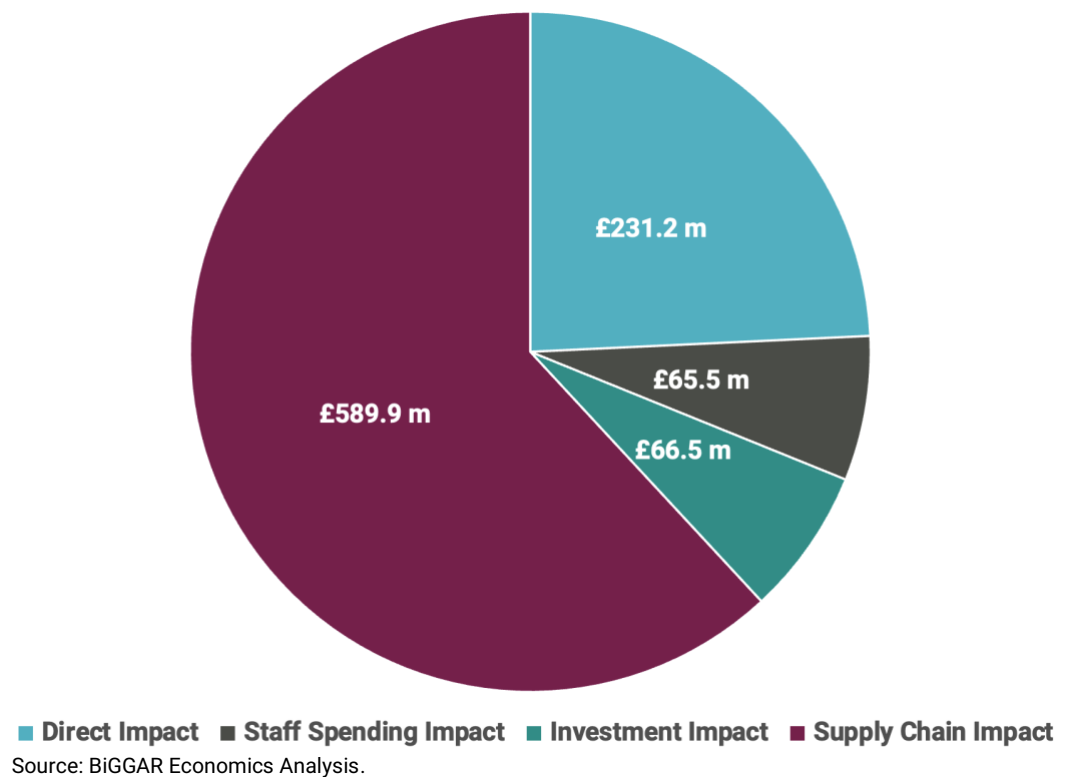
7.

Conclusions

Scottish salmon farming has an anchor presence in Scotland's rural and coastal communities, without which the social and economic landscape of these areas would likely be diminished. It's supply chain spans the length and breadth of the country and is indicative of the sectors role in supporting economic wellbeing across Scotland.

The analysis provided in this report indicates the scale, and depth, of economic activity supported by Scottish salmon farming across the country. Collectively, the activities of those involved in the sector supported an economic impact **worth £953 million GVA and 10,850 jobs across Scotland in 2024.**

Figure 7-1 Economic Impact of Scottish Salmon Farming, Scotland (GVA, £m)



The total GVA and employment impacts for each of the local authorities and at the national level for each of the sources of economic impact are presented in Table 7-1 and Table 7-2.

Table 7-1 Total GVA Impacts (£m) by Study Area, 2024

	Argyll and Bute	Na h-Eilean Siar	Highland	Orkney	Shetland	Rest of Scotland	Scotland
Direct impact	48.7	24.7	79.0	20.3	36.8	21.7	231.2
Supply chain	37.1	3.8	196.4	3.8	44.8	304.0	589.9
Capital spend	5.7	6.6	20.0	2.8	2.4	29.1	66.5
Staff spend	8.8	3.9	11.9	3.5	6.6	30.9	65.5
Total Impact	100.3	39.0	307.3	30.4	90.5	385.7	953.2

Source: BiGGAR Economics Analysis. *Totals may not sum due to rounding.

Table 7-2 Total Employment Impacts (Jobs) by Study Area, 2024

	Argyll and Bute	Na h-Eilean Siar	Highland	Orkney	Shetland	Rest of Scotland	Scotland
Direct impact	520	260	840	220	390	230	2,460
Supply chain	440	50	2,340	50	530	3,630	7,040
Capital spend	70	80	260	40	30	380	860
Staff spend	70	30	90	30	50	220	490
Total Impact	1,100	420	3,530	340	1,000	4,460	10,850

Source: BiGGAR Economics Analysis. *Totals may not sum due to rounding.

The direct provision of well-paid, permanent, jobs in rural and coastal areas, in addition to the vast and varied supply chain, ensures that benefits are delivered to every part of the country. Underpinning the sectors success is a proactive commitment to continuous capital investment, driving innovation that addresses environmental challenges and enhances fish welfare, in addition to securing the sector's long-term sustainability.

Beyond its crucial contribution to the country's economy, organisations involved in the sectors operation are deeply embedded in the social fabric of the communities in which they are based. Providing quality employment in areas where opportunities are

often scarce is key to addressing rural depopulation challenges and supporting local services. Raising awareness of the opportunities available in the sector to both local, and non-local, prospective future employees is fundamental to ensuring such communities remain viable and vibrant for future generations.

8.

Appendix: Methodology

An Input-Output economic model was developed to estimate the economic impact of the Scottish salmon farming sector.

8.1 Economic Metrics

The economic impact was measured using two common indicators: **Gross Value Added (GVA)** and **employment**. GVA measures the economic value added by an organisation or industry and is a convenient way of capturing the entire economic contribution of an organisation in a comprehensive single figure. Employment is measured in terms of long-term, **full-time equivalent (FTE) jobs**. The impacts presented are based on data from the 2024 study year.

8.2 Types of Economic Impact

This assessment considers three standard types of economic impact:

- **direct impacts:** those impacts that arise from the core activities of the firms in Scottish salmon farming sector;
- **indirect impacts:** those impacts that arise from the supply chain of those businesses; and
- **induced impacts:** those impacts that arise from staff spending their wages in the wider economy.

8.3 Geographic Scope

While the primary production activities of salmon farming are concentrated in specific coastal local authorities, the sector's extensive supply chain creates significant ripple effects across the entire country. For this reason, the economic impacts have been presented at a national level for **Scotland**.

However, to understand the localised effects where the core activities occur, impacts have also been assessed for the key study areas of:

- **Argyll and Bute;**
- **Comhairle nan Eilean Siar;**
- **Highland;**
- **Orkney; and**
- **Shetland.**

8.4 Economic Impacts

The economic impacts of the Scottish salmon farming sector were estimated using a bespoke model developed by BiGGAR Economics, which calculates the direct, indirect, and induced effects of the sector's activities.

In line with best practice for input-output modelling, the analysis considers the net economic impact, which requires accounting for additionality. The direct, indirect, and induced effects are estimated after accounting for these additionality factors and then summed to determine the sector's total GVA and employment impacts.

8.4.1 Core (Direct) Impacts

The core (direct) impacts were calculated using data provided by individual businesses within the Scottish salmon farming sector.

- **Direct GVA:** To determine the direct GVA for each business, profits and staff costs were summed. Where this was not possible, the value was estimated by subtracting non-staff operational costs from turnover. The figures for each business were then aggregated to calculate the total direct GVA for the sector.
- **Direct Employment:** Direct employment was calculated by summing the headcount information provided by each firm.

8.4.2 Supply Chain Impacts

In addition to its direct effects, the Scottish salmon farming sector generates significant economic benefits through its supply chain. The approach to quantifying this activity builds upon a detailed methodology first developed for a 2020 study⁸, which established a comprehensive understanding of the sector's supply chain.

This analysis was updated with detailed procurement data for 2024, provided by the firms in the Scottish salmon sector. This data established the value and nature of supply chain expenditure, identifying where and on what goods and services money was spent.

Expenditure was then mapped to the relevant industrial sectors at the Standard Industrial Classification level 2. To estimate the initial GVA and employment supported by this spending, turnover-to-GVA and turnover-to-job ratios from the Scottish Annual Business Statistics⁹ were applied to the corresponding sectors.

To capture wider effects, the appropriate Type I and Type II multipliers from the Scottish Government's Input-Output Tables¹⁰ were applied. The same approach was used to estimate the impacts of capital investment, reflecting its similar spending profile.

⁸ BiGGAR Economics (2020). The economic contribution of the Scottish Aquaculture Sector.

⁹ Scottish Government (2024), Scottish Annual Business Statistics

¹⁰ Scottish Government (2024), Supply, Use and Input-Output Tables

8.4.3 Staff Spending Impacts

In addition to the core and supply chain impacts, further economic benefits arise from staff spending impacts – the effect of employees spending their wages in the wider economy. These impacts can be particularly significant in rural communities, where the success of local businesses often depends on the spending of workers from key local industries.

To quantify this, firms in the Scottish salmon farming sector provided anonymised data on employment numbers, salaries, and staff locations. This information was used to estimate the level of household expenditure by employees within each of the study areas.

This expenditure was then mapped to the relevant industrial sectors at the Standard Industrial Classification level 2. The initial GVA and employment supported by this spending were then estimated by applying turnover-to-GVA and turnover-to-job ratios from the Scottish Annual Business Statistics to the corresponding sectors.

Finally, to calculate the total staff spending impact, Type I and Type II multipliers from the Scottish Government's Input-Output Tables were applied. This estimates the additional economic activity and employment supported as wages from direct and indirect jobs are circulated throughout the wider economy.

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