

## **RURAL ECONOMY AND CONNECTIVITY COMMITTEE**

### **SALMON FARMING IN SCOTLAND**

#### **SUBMISSION FROM ANGUS A MELDRUM**

##### **Introduction and Summary of Recommendations**

Regarding my credentials, hopefully it will suffice to record that I am a retired businessman who has been a managing director and chairman of some of Scotland's well-known companies in the leisure, hospitality and tourism sectors. I'm also a native Hebridean with hands-on knowledge and experience of Scotland's Rural Economy. Over the years I've also had discussions on the same subject as this Inquiry with Government Ministers, their Officials and Scientists, Journalists, etc and so I hope my comments are helpful to the REC Committee.

I'll answer all the questions posed by the committee, but first I must congratulate the ECCLR Committee and its very clear and decisive Report to this Inquiry. I have no doubt that it is right in its conclusions, is well analysed, reasonable and fair. It has my full support in its conclusions and particularly its recommendation on Closed Containment which is clearly the way forward. We see this happening elsewhere in the World, leaving Scotland behind, and is the only clean solution available to solve nearly all of the current production problems of salmon farming.

From a business point of view, the current Open Net salmon farming system is out of date, out of control, unsustainable, and in profit terms heading for the rocks due to escalating costs of disease, sea lice and escapes. Additionally there is fast accelerating international consumer awareness of open-net salmon farming's environmental damage, fish health issues and other factors---especially in the USA where Scottish open net farmed salmon is already in a consumer "Avoid Eating" category and is under threat/promise of a USA Government ban of Scottish open-net farmed salmon due to seal culls.

The Scottish Government is rightly proud of export Sales of Scottish farmed salmon but as every businessman knows it is not Sales that make a business sustainable but Profit ; in Scotland, fish farming profit is in most cases sent to Norway. When worldwide consumer adverse reaction is factored in and further additional Costs, when "the polluter pays" principle must be applied in practice, then the current open-net farming business model will undoubtedly head into Loss territory rather than Profit. This will be disastrous for Scotland---unless urgent action is taken along the lines of the ECCLR Report.

**To protect current jobs, safeguard Scotland's economy and reputation for environmentally safe farmed products, and create new Engineering jobs in Closed Containment manufacturing, I urge the REC Committee to recommend to Parliament that legislation be enacted quickly which will ensure Open Net**

**salmon farming in Scotland, largely Norwegian owned, is ended and replaced by Closed Containment in tanks on land or sea within a maximum of 5 years.**

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

Scottish farmed salmon mortality, disease and sea lice problems are clearly out of control. There is no sign of significant improvement with mortality already around a quarter of production---a situation that's appalling to consumers and also when compared to other livestock farming sectors. The reaction to the recent BBC TV "One Show" fish farming exposure programme, as discussed by the ECCLR committee, has shown how appalled consumers are when this was revealed. As the ECCLR committee has concluded, environmental pollution is out of control and continues with impunity since "the polluter pays" principle (that rightly applies to all other farming sectors) is disastrously not applied to the favoured salmon farming sector. The ECCLR Report is right to conclude that the Status Quo is not an option---otherwise the industry will collapse. The industry continuing to bury its head in the sand and clinging on to an outmoded, financially unsustainable business model will be disastrous for jobs and Scotland's economy, both rural and national. Following on from the BBC TV "One Show" exposure in the UK, it may be worth noting what is happening in two big export markets for Scottish farmed salmon---the USA and France.

In the USA, see <http://www.bbc.co.uk/news/uk-scotland-43532396> ;  
<https://www.seafoodwatch.org/seafood-recommendations/groups/salmon?o=133> ;  
<http://www.cbc.ca/news/canada/british-columbia/washington-state-fish-farms-salmon-farming-1.4560888>

In France, consumers have been concerned about toxicity and other issues regarding farmed salmon produced by the same Norwegian companies that operate in Scotland using the same open net system. I've no reason to doubt the reaction in France to Scottish farmed salmon is any different and damaging Scotland the Brand <http://www.parliament.scot/parliamentarybusiness/28877.aspx?SearchType=Advanced&ReferenceNumbers=S5M-04429&ResultsPerPage=10> . Regarding jobs in the Rural Economy, it is well known and accepted that only a small fraction of the jobs in salmon farming are in genuine rural communities near to fish farms. The great majority of the jobs are in processing factories well away from rural communities. The CEO of the fish farmers' organisation declared to The Herald last year that "over 7000 migrants are employed in fish farming" and the Government website declares a figure of circa 9000 employed in total---so around 2000 are actually in fragile rural communities. These jobs are very welcome. The submission by Aileen Robertson to the ECCLR illustrates that this gross figure is negated by job losses due to fish farm pollution damaging other rural jobs in shellfish and creel fishing, etc. This example when taken together with eg loss of jobs as shown in the Salmon & Trout Conservation Scotland report on collapsed Loch Maree and its jobs, plus eg job loss due to the closure of the Doonfoot fishing beat as explained in its submission to the ECCLR, is extrapolated over large areas of our coastal communities, one can only question any net job benefit of Open Net salmon farming in genuinely rural

communities. However, Closed Containment would protect all these rural jobs and is by far the most sustainable way forward.

**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?**

The ECCLR committee concluded that further development and expansion must be on the basis of the Precautionary Principle and that the Status Quo is not an option. Open Net salmon farming has been shown to be unsustainable and outmoded for all the reasons in the ECCLR Report. Any proposed Open Net expansion must now be rejected and all further expansion must be in Closed Containment where there is biological separation between farmed and wild fish and where the environment is protected from chemical and waste pollution in our lochs and river estuaries. If Scotland does not embrace Closed Containment quickly then we will be left behind, as we are already seeing in fast development of this system across the Atlantic---in a USA State the Open Net system has recently been banned. I have no interest whatsoever to declare but the following chart and other information on existing Closed Containment run by Brits in Canada is worth viewing and shows what could be done in Scotland if only we encouraged our engineers to manufacture this equipment at home [http://sustainableblue.com/?page\\_id=38](http://sustainableblue.com/?page_id=38) ; <http://sustainableblue.com/?p=224> ; [http://sustainableblue.com/?page\\_id=31](http://sustainableblue.com/?page_id=31) ; [http://www.mainebiz.biz/article/20180223/NEWS01/180229962/maine-company-unveils-\\$250m-plan-to-create-land-based-salmon-farm-in-bucksport](http://www.mainebiz.biz/article/20180223/NEWS01/180229962/maine-company-unveils-$250m-plan-to-create-land-based-salmon-farm-in-bucksport)

I won't bore the committee with an analysis of the Annual Accounts of the leading company Marine Harvest with its HQ in Norway <http://marineharvest.com/investor/annual-reports/> but the comments in it on disappointing performance due to biological issues, escalating costs, etc plus their very recent announcement in Jan 2018 of significant job redundancies in Scotland should be an alarming signal to all responsible for Scotland's Rural Economy <http://www.bbc.co.uk/news/uk-scotland-highlands-islands-42809999> . I would be very surprised if their CEO is not well prepared for immediate change to Closed Containment Salmon Farming, especially after reading the ECCLR Report. I guess the REC committee would find an open door welcoming cross-industry change and strictly enforced regulation--- if strong proposals for immediate action were made by the REC Committee to move quickly to Closed Containment. I would expect Marine Harvest to see a competitive advantage in taking an immediate lead.

**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?**

Closed Containment is the way forward. Rising sea temperatures will only exacerbate open net fish farming problems. Trying to grow the industry using

outmoded open net farming will only make things worse. Using Closed Containment, the water will always be at the right temperature on land, and at sea using colder water from below.

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

No. There needs to be real-time publication of data for every farm on sea lice, mortality and disease numbers. The current system as collected in-house, is far from transparent and may significantly be less than truthful---indeed transparency has been obstructed for years by fish farmers as shown by Freedom of Information documents published recently in the Sunday Herald. The data needs to be independently corroborated with unannounced inspection visits.

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

The ECCLR Report is right to conclude that the industry is and has been poorly regulated for decades with little or no protection for wild salmonids or the environment. SEPA appears to be a lapdog and not a watchdog---but may be under-resourced.

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

Tariffs may become an issue as may hiring of cheap foreign labour in processing factories, but more certainly when the UK has no say on EU food policy after withdrawal, it will be much easier for the EU to support a ban on the UK's unsustainable open-net fish farming. Also easier for the EU to support a similar ban like threatened already by the USA as a result of the industry's highly unpopular seal culls unsuccessfully trying to protect the outmoded open net system. Closed Containment avoids such bans.

In summary, the best sustainable solution to deal with virtually all the dangerous issues raised by the ECCLR Committee Report is Closed Containment (Recirculating Aquaculture Systems), on land or sea, with legislation enacted swiftly without further delay to end Open Nets and bring in Closed Containment over a period of 5 years maximum. Contrary to what the fish farmers claim to avoid having to make investment, this system already exists, is now economically viable, is being urgently introduced across the Atlantic leaving Scotland behind, and ideally, if manufactured in Scotland, would create world-leading Engineering jobs. With Economies of Scale, it will prove to be very profitable into the long term, and will be protective of our wild fish, environmentally clean and fully sustainable.

Angus A. Meldrum,  
April 10, 2018.