

## **Report to the Marine Alliance for Science and Technology for Scotland (MASTS).**

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And

Dr Clive J. Fox, Senior Lecturer and Principal Investigator, Department of Ecology, SAMS.

**Workshop Title:** *Seafood & Democracy*

**Location:** Scottish Marine Institute, Oban, UK

**Date:** August 24-28, 2015

### **Attendees (the Group):**

- Dr Clive J Fox, Senior Lecturer/Principal Investigator, SAMS.
- Dr Marcello Graziano, PDRA, SAMS.
- Dr Cristina Pita, Post-Doctoral Fellow, University of Aveiro and Research Fellow, University of Aberdeen
- Dr Karen Alexander, Researcher, SAMS.
- Dr Margaret Crumlish, Senior Lecturer, University of Stirling.
- Dr Sheila Heymans, Head of Department/Principal Investigator, SAMS.
- Dr Adam Hughes, Principal Investigator, SAMS.
- Joly Ghanawi, PhD Candidate, University of Stirling.
- Lorenzo Cannella, Erasmus Visiting Fellow, University of Genoa/SAMS.

### **Other Contributors:**

- Mr Andrew Parker, Development Economist, IMANI Consulting.
- Dr Liam Campling, Senior Lecturer in Political Economy, School of Business and Management, Queen Mary University.

### **Key Takeaways**

1. Use of secondary data for understanding how supply and demand structures have affected producing regions in conjunction with geopolitical, ecological and economic shifts.
2. Similarities in resilience to external shocks between seafood sectors, possibly due to concentration, market drivers and capital intensity.
3. For Scotland: social risk mainly due to lack of alternatives in the context of socially fragile areas (salmon).
4. Cross-fertilization and cross-learning between aquaculture/fisheries and natural/social sciences for identifying and addressing complex social and economic issues.
5. Formation of stronger bond between researchers across MASTS institutions.

### **Summary of the workshop**

Scholars and students from SAMS, the University of Stirling and the University of Aveiro attended a 4-day workshop on the theme social and economic risks and resilience associated with increased and sustained seafood production in the North Atlantic. The group used secondary sources and policy analysis in relation to two UK-based case studies, salmon farming and mackerel, for investigating how producers and producing regions coped with past demand and supply-side changes due to geopolitical and ecological shocks.

The group found several similarities in the ways these two sectors coped with supply and demand shifts, possibly due to the concentrated, capital-intensive, and export oriented vocation these sectors have developed through the years. Additionally, developing countries, often characterized by autocratic regimes, have played a key role for supporting demand in both sectors.

However, within the Scottish context, there are several differences in the way shifts in production will affect producing regions, mainly due to the location and type of employment. Finally, salmon as a product appears to be more resilient due to spare internal untapped demand, thus possibly reducing the risk of major production shifts at least in the medium term.

### **Additional Commentary to the workshop**

Bringing together experts from both fields of seafood primary production, aquaculture and fisheries, and from both social and natural sciences, the workshop was successful in promoting cross-fertilization among different disciplines and partners across MASTS institutions. Additionally, two post-graduate students have been given the opportunity to work in an extremely active transdisciplinary research, sometimes outside of their comfort zones in terms of disciplinary boundaries and approaches.

The Group has started from the brief layout and readings provided, with the underlying generic objective of exploring the issues associated to seafood production expansion in Scotland/UK. The Group has then focussed its scope, working in parallel on two case studies for identifying the social and economic factors of risk of two largely traded seafood sectors (one from aquaculture, one from fisheries).

The research design, as well as the results were discussed during plenary sessions, successfully reducing the ‘work-in-parallel’ risk between different sectors, applying an approach rooted in intellectual flexibility, rather than over-specialization. This approach was deemed pivotal given the transdisciplinary and complex factors determining the research outcomes.

### **Outcomes & Next Steps**

The Group was extremely positive at developing ideas, and it is collectively working on a publication (currently in draft format) based on the research undergone during the workshop. The target outlet for the publication will be a high-impact scientific journal.

This work represents a starting point to develop a full proposal, in collaboration with additional partners, to be submitted to Horizon2020.