

## ECONOMIC AND SOCIAL RESEARCH COUNCIL END OF AWARD REPORT



### For awards ending on or after 1 November 2009

This End of Award Report should be completed and submitted using the **grant reference** as the email subject, to **reportsofficer@esrc.ac.uk** on or before the due date.

The final instalment of the grant will not be paid until an End of Award Report is completed in full and accepted by ESRC.

Grant holders whose End of Award Report is overdue or incomplete will not be eligible for further ESRC funding until the Report is accepted. ESRC reserves the right to recover a sum of the expenditure incurred on the grant if the End of Award Report is overdue. (Please see Section 5 of the ESRC Research Funding Guide for details.)

Please refer to the Guidance notes when completing this End of Award Report.

<b>Grant Reference</b>	<b>RES-061-25-0034</b>		
<b>Grant Title</b>	<b>The Effectiveness of Certification and Eco-labelling in Improving the Sustainability of Fisheries and Aquaculture Resources (EECSAF)</b>		
<b>Grant Start Date</b>	<b>01.01.2008</b>	<b>Total Amount</b>	<b>£123,558.00</b>
<b>Grant End Date</b>	<b>31.12.2009</b>	<b>Expended:</b>	
<b>Grant holding Institution</b>	<b>UHI Millennium Institute</b>		
<b>Grant Holder</b>	<b>Dr Tavis Potts</b>		
<b>Grant Holder's Contact Details</b>	<b>Address</b>	<b>Email</b>	
	<b>Scottish Association for Marine Science Scottish Marine Institute Oban, UK PA37-1QA</b>	<b>tavis.potts@sams.ac.uk</b>	
		<b>Telephone</b> <b>01631-559415 07923465365</b>	
<b>Co-Investigators (as per project application):</b>	<b>Institution</b>		

## 1. NON-TECHNICAL SUMMARY

Please provide below a project summary written in non-technical language. The summary may be used by ESRC to publicise your work and should explain the aims and findings of the project.

*[Max 250 words]*

The eco-labelling of seafood is a considerable industry sector changing the practices of the seafood industry and marine resource governance. This study explores the implementation of fisheries and aquaculture sustainability standards, the organisations behind the standards, and the application of product ecolabels in the context of environmental policy.

The research described the structure and operations of eco-labelling (CEOs) organisations. The results revealed the inner workings of CEOs and the divergent views on standards and sustainability, on organisational structures and processes, transparency, financial models, and engagement. While visions of organisations were similar i.e. achieving sustainable resource use, the means of achieving the vision were diverse. There was often tension within the organisation concerning standard development increasingly competitive relationships between the different CEOs for market share.

The study interviewed consumers and producers over their views and practices concerning certification and eco-labelling. Consumers, while indicating a general preference towards sustainable production, displayed a considerable lack of recognition of the key certification schemes, and were particularly critical of the idea of organic aquaculture. Considering that 80% of seafood is sold in high street chains, this is an area of particular concern and improvement. In terms of industry, we focused on the outcomes of involvement in the Marine Stewardship Council program in Scottish fisheries. Positive views were received about the credibility of the process, but concerns emerged over access, cost, and the squeezing of small scale fisheries in preference to larger scale operators.

## 2. PROJECT OVERVIEW

### a) Objectives

Please state the aims and objectives of your project as outlined in your proposal to the ESRC.

*[Max 200 words]*

In the context of overfishing, eco-labelling has become a central means of informing consumers about product quality and using markets to shift industries towards sustainable outcomes. This research aims to unravel the key questions surrounding eco-labelling within the context of environmental governance. It addresses the following questions:

1. How are fishery and aquaculture certification institutions designed to differentiate 'sustainable' products from other like products?
2. What processes are in place for the certification body to build legitimacy and credibility?

3. What is the impact of certified products in the market? Do labeled products influence consumers?

4. What have been the experiences of producers who have engaged in eco-labelling of their products?

Several propositions underlie the questions. The first is that market-based instruments are a growing component of environmental policy across several sectors. The study addresses the notion that market based certification tools are legitimate management instruments if questions can be answered concerning design, extent and effectiveness of use. A second proposition is the role and power of different 'actors' in the certification and eco-labelling process. CEOs, consumers and industry will take different perspectives, and in a voluntary market based system, these perspectives are important drivers for effectiveness of initiatives.

## b) Project Changes

Please describe any changes made to the original aims and objectives, and confirm that these were agreed with the ESRC. Please also detail any changes to the grant holder's institutional affiliation, project staffing or funding. *[Max 200 words]*

No major changes have been made to the project. A minor change was the balance of effort applied to the research questions with approximately 40% dedicated to question 1 and 2, 30% to question 3 and 30% to question 4.

There was a change of research assistant staff during the middle of the project. This caused a delay in several activities as the new position needed to be advertised, hired and trained.

## c) Methodology

Please describe the methodology that you employed in the project. Please also note any ethical issues that arose during the course of the work, the effects of this and any action taken. *[Max. 500 words]*

EECSAF was a field based and mixed methods research project using three approaches:

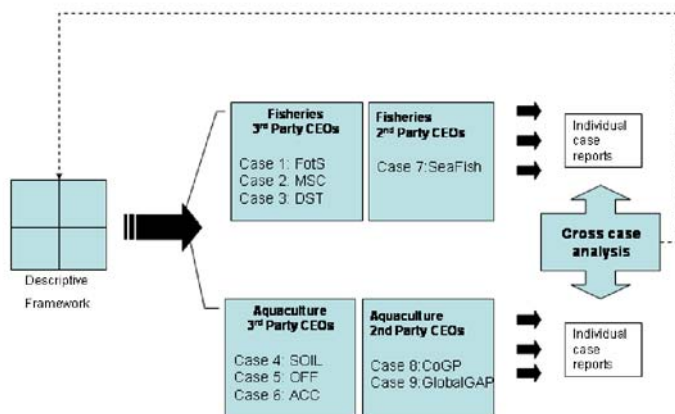
1. Descriptive analytical case studies for questions 1 & 2
2. A consumer survey for question 3
3. Semi structured interviews for question 4.

The project developed a *descriptive* case study approach suited to contemporary policy analysis. A normative framework was constructed from the literature to guide data collection and analysis. It drew reference to the International Social and Environmental Accreditation and Labelling (ISEAL) Alliance Code of Practice for Social and Environmental Standards and the FAO Guidelines for Eco-labelling from Marine Capture Fisheries. Each criterion in the framework and corresponding relationships were defined and used as the basis of data collection: interviews question, archival research, meetings minutes and corporate documents.

	Certification System (pre-Label)	Eco-labelling System (post label & external activities)
Functional processes & instruments	<ul style="list-style-type: none"> <li>Objective and scope of the standard</li> <li>Structure of standard (Principles, Criteria, Indicators)</li> <li>Verification methodology and instruments</li> <li>Application of standard to regions and sectors</li> <li>Resourcing required for certification</li> <li>Accreditation processes</li> </ul>	<ul style="list-style-type: none"> <li>Chain of custody and traceability</li> <li>Corrective measures and compliance audits</li> <li>Application and regulation of label (on product / off product)</li> </ul>
Governance processes	<ul style="list-style-type: none"> <li>Organisational classification &amp; objectives</li> <li>Organisational governance and decision making structures</li> <li>Links to ISO standards or equivalent</li> <li>Stakeholder consultation</li> <li>Verification governance</li> <li>Mechanisms for credibility (consistency, independence and transparency)</li> <li>Review of criteria and reform</li> </ul>	<ul style="list-style-type: none"> <li>Conflict management and appeals</li> <li>Contractual arrangements</li> <li>Monitoring and effectiveness of labels</li> <li>Accountability mechanisms</li> <li>Creating demand, marketing and branding</li> <li>Revenue generation model and sources</li> <li>Label complementarity</li> </ul>

To test the framework and build validity a case structure was developed. Cases were selected across 2 axis: fisheries and aquaculture, and 3<sup>rd</sup> party and 2<sup>nd</sup> party CEOs. This allows for a replication that looks for similar results and explores contrasts. Organisational documents were collected and interviews were conducted with managers to collect additional information. Data was recorded,

transcribed, categorised and coded using NVIVO. A database recorded the source, collection date, classification and comments. Data analysis used a combination of qualitative techniques including coding, document analysis and matrix displays.



For the consumer survey, EECSAF developed an exploratory instrument to gauge the direction of consumer values towards seafood and eco-labels. A purposeful sampling approach was employed that used random sampling elements. This approach was taken as the sampling frame 'seafood consumers' was difficult to isolate from the general

population. It was deemed theoretically relevant and practical to employ a modal instance sampling (a purposive approach) to identify the target market in an environment where a high proportion of answers would be obtained directly from consumers shopping for seafood (where 80% of seafood is purchased). The survey was randomly administered amongst coastal and inland regions, small towns and cities, and retail outlets during weekdays and weekends across Scotland, England, and Nth Ireland during the periods of July to September 2009. Sampling occurred across lunch, afternoon and evening sessions at each site with 270 respondents surveyed overall.

For analyzing the relationship between industry and certification processes, the method comprised of interviews and document analysis around a structured framework. The data was gathered by fieldwork, database searches for journals and primary literature.

Interviews were semi-structured and guided by a set of questions relevant to the circumstances of the organisation. Nine in depth interviews were conducted across June to July 2009 with Scottish fishing organisations. Two of the interviewees were representatives of organisations that had completed the certification process: one of which represented multiple fisheries. Three interviewees represented organisations that were under certification at that time: again one represented multiple fisheries. One interviewee represented an organisation that had not made it through the certification process and the final three interviewees were considered 'industry experts'.

#### **d) Project Findings**

Please summarise the findings of the project, referring where appropriate to outputs recorded on *ESRC Society Today*. Any future research plans should also be identified. *[Max 500 words]*

Eco-labelling may be a victim of its own success with increasing diversification, competition and costs. While important for raising profile and good practice, eco-labelling is one of several solutions to improve sustainability.

The research revealed the diversity of organisational structures, common and differentiated standards, technical content, and relationships between CEOs and stakeholders. Organisations such as the MSC have developed a rigorous approach but the process appears to increase costs. The MSC allows fisheries with problems into the certification gateway as long as they commit to audited improvements. Contrast this with the Friends of the Sea, a streamlined operation that targets smaller fisheries. FotS differentiates itself from the MSC by setting a high gateway and assessable indicators. Thus certification processes have ramifications for industry and the market. In aquaculture, differing interpretations of organic production creates conflict and market impacts. For example the SOIL Association sets minimum coloring content for farmed salmon that leads to a pale product; other producers have allowed higher concentrations that allow them to capture key markets. Hence pressure on certifiers to conform to market expectations is placing demands on the standards. There is emerging competition (and consumer confusion) between organic, sustainable and best practice standards, all competing for market share. Organic standards tend to be well developed (but niche), while 'best practice' standards are emerging and will dominate markets.

The survey revealed the majority of consumers had no preference between wild or farmed (60%). While a majority (60.5%) gave thought to the production processes behind seafood, a further 67% indicated that a label that described the product as 'environmentally friendly' would influence purchase. Organic production was not popular, 74% said an organic label on seafood would not influence a purchase. When asked about the MSC label, surprisingly, 5% of consumers recognised the label, 12% were vaguely aware, and 83% were unfamiliar. In contrast, the Fair trade logo, 40% were very familiar and 44% somewhat familiar. While the survey delved deeper into these trends, these responses highlight that eco-labelling has a challenge in reaching out to the consumer. The public appears to be thinking about the impacts of fisheries, but this is yet to translate into awareness and purchasing of eco-labelled products.

The industry interviews captured themes relating to producer concerns about shifts in MSC standards. This parallels a move by MSC from small-scale to large-scale fishing interests, which has elicited concern that the MSC will become a market entry standard.

This could result in the exclusion of small-scale fisheries due to the cost of certification. Positive views were expressed in the interviews as to the credibility and transparency of the certification process, though many saw the motivation for entry as being market-driven rather than simply a desire for sustainable fisheries.

Future research plans:

- \* The advancement of aquaculture standards in the developing world
- \* The role of the retail sector and market
- \* Aligning eco-labelling with environmental policy instruments e.g. marine spatial planning.

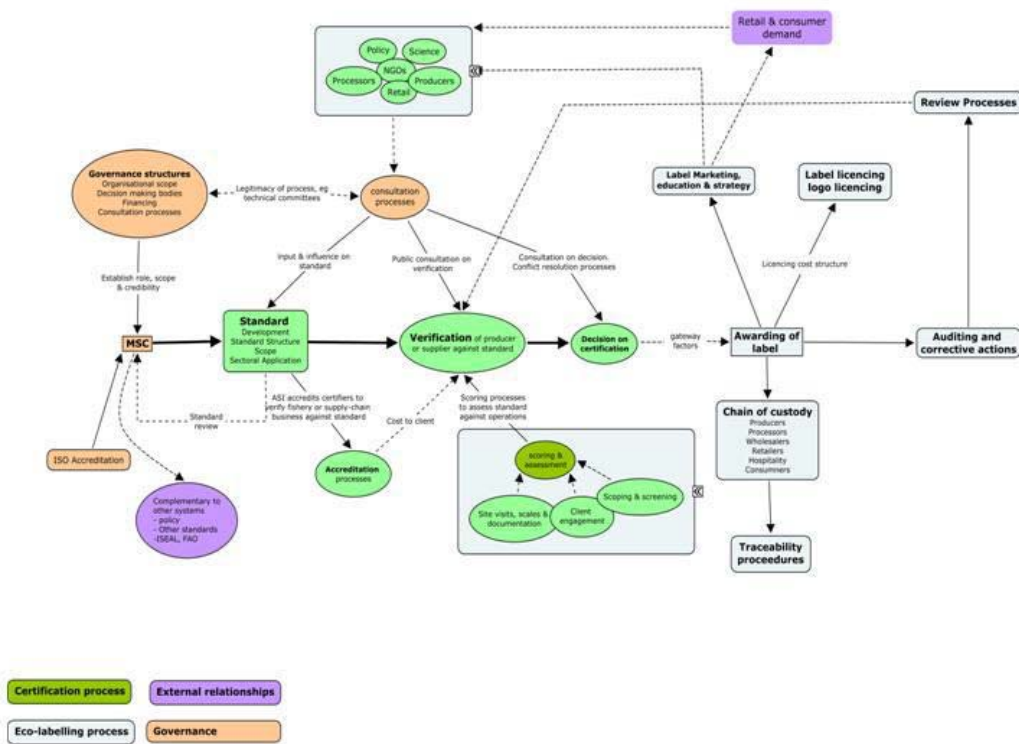


Figure: Generic certification and eco-labelling model.

### e) Contributions to wider ESRC initiatives (eg Research Programmes or Networks)

If your project was part of a wider ESRC initiative, please describe your contributions to the initiative's objectives and activities and note any effect on your project resulting from participation. [Max. 200 words]

This project was not a part of any wider ESRC initiatives.

### 3. EARLY AND ANTICIPATED IMPACTS

#### a) Summary of Impacts to date

Please summarise any impacts of the project to date, referring where appropriate to associated outputs recorded on *ESRC Society Today*. This should include both scientific impacts (relevant to the academic community) and economic and societal impacts (relevant to broader society). The impact can be relevant to any organisation, community or individual. *[Max. 400 words]*

The main impacts to date have been scientific in nature.

Scientific impacts include:

1. The research has filled a niche in the literature: that of examining in detail the practices and operations of the key CEOs and linking this to a consumer survey and industry interview. Most approaches to date in the primary and secondary literature do not delve deeper into the practices, structures, and values of organisations. Many studies have been unsuitably quantitative in this regard and have not captured the complexity of process behind organisational structures and processes, standard development, verification, licensing arrangements, and relationships to broader stakeholders and systems of governance.
2. A novel contribution has been to examine seafood products and processes across all sectors - as they would appear to consumers 'on the shelf'. Most analysis has proceeded in sectoral compartments and not integrated across the seafood industry as a whole. For example the certification and eco-labelling generic model covers both fisheries and aquaculture and will provide a useful focus for developing scientific and socio-economic outputs.
3. Understanding the commercial sector's view, including individual fishermen, has been poorly covered in the literature. EECSAF contributes to this perspective that will be academically and socio-economically useful for improving programs.
4. The development of a mixed methods approach, using qualitative case studies, interviews and a survey has been a novel contribution of the research.
5. The creation of a significant data base of interviews (over 130,000 words), corporate documents, financial information and management processes of each organisation is a key resource for future research. In addition the data and instruments from the surveys will support future research effort.
6. The outputs to date have been presented at 2 international conferences in Norway (Aquaculture Economics 2008) and Greece (International Congress of Social Sciences 2009). In addition the outputs have been used for teaching material in several undergraduate courses.

Social and economic impact to date :

1. Establishment of a network of senior managers and directors of eco-labelling organisations, retailers (e.g. The Coop and Sainsbury's), and relevant regulatory agencies (Scottish Government, DEFRA).
2. Invitation to join 2 advisory panels of ecolabelling organisations.
3. Inclusion of data into key policy discussions and outputs including the Scottish Government (State of Marine Environment report 2010), Scottish Coastal Forum, local councils and community groups.

## **b) Anticipated/Potential Future Impacts**

Please outline any anticipated or potential impacts (scientific or economic and societal) that you believe your project might have in future. *[Max. 200 words]*

Anticipated future impacts (to be reported by December 2010).

Scientific:

1. 3 papers in press in key ISI peer reviewed journals
2. 1 presentation to the ICES Fisheries Science conference in July 2010
3. Student lectures based on the topic.
4. Appropriate data discussed and sent to the ESRC
5. Using EECSAF as the basis of a new ESRC proposal in 2010.

Social and economic:

1. A policy report (colour hardcopy) available to all partners including: CEOs (Marine Stewardship Council, FotS, SOIL Association etc), civil organisations (Scottish Coastal Forum, Marine Conservation Society, ISEAL, WWF), retailers (Tesco, Coop, Sainsburys etc), regulatory bodies (DEFRA, Scottish Government, UKAS), fisheries and aquaculture bodies (Scottish Fishing Federation, Scottish Salmon Producers Organisation, Seafish etc).
2. A community outreach program, launched at the 2010 Festival of Sea in Oban, May. This will be a public panel on the issues surrounding ecolabelling including speakers from CEOs, industry and government.
3. A web page outlining the results and information on ecolabelling, series of blog discussion pieces, a media release of the key outputs, and media materials from SAMS communications team.
4. Seminars delivered to UK CEOs: MSC and SOIL Association, ISEAL; and regulatory bodies on request.

You will be asked to complete an ESRC Impact Report 12 months after the end date of your award. The Impact Report will ask for details of any impacts that have arisen since the completion of the End of Award Report.



## 4. DECLARATIONS

Please ensure that sections A, B and C below are completed and signed by the appropriate individuals. The End of Award Report will not be accepted unless all sections are signed.

Please note hard copies are NOT required; electronic signatures are accepted and should be used.

### A: To be completed by Grant Holder

Please read the following statements. Tick ONE statement under ii) and iii), then sign with an electronic signature at the end of the section.

#### i) The Project

This Report is an accurate overview of the project, its findings and impacts. All co-investigators named in the proposal to ESRC or appointed subsequently have seen and approved the Report.	<input checked="" type="checkbox"/>
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#### ii) Submissions to *ESRC Society Today*

Output and impact information has been submitted to <i>ESRC Society Today</i> . Details of any future outputs and impacts will be submitted as soon as they become available.	<input checked="" type="checkbox"/>
<b>OR</b>	
This grant has not yet produced any outputs or impacts. Details of any future outputs and impacts will be submitted to <i>ESRC Society Today</i> as soon as they become available.	<input type="checkbox"/>
<b>OR</b>	
This grant is not listed on <i>ESRC Society Today</i> .	<input type="checkbox"/>

#### iii) Submission of Datasets

Datasets arising from this grant have been offered for deposit with the Economic and Social Data Service.	<input checked="" type="checkbox"/>
<b>OR</b>	
Datasets that were anticipated in the grant proposal have not been produced and the Economic and Social Data Service has been notified.	<input type="checkbox"/>
<b>OR</b>	
No datasets were proposed or produced from this grant.	<input type="checkbox"/>