



## Beaufort Marine Research Awards

### Work Programme

FINAL

June 2009

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Ref. No.	Topic	Institution
	Economic and Social Research	NUI, Galway

Funded by the Irish Government under the National  
Development Plan (2007 – 2013)

**Work Packages in Detail**

<b>WORK PACKAGE No.:</b>	1
<b>Work Package Title:</b>	The impact of regulation on the development of the marine industry in Ireland
<b>Start Month:</b>	Feb. '08
<b>End Month:</b>	Aug. '12
<b>WP Leader:</b>	Dr Stephen Hynes (Beaufort Senior Researcher)
<b>Objectives of the Work Package</b>	
<ul style="list-style-type: none"> <li>(i) Review the literature on the trade off between regulation and Economic Development <ul style="list-style-type: none"> <li>a. Theoretical models and perspectives</li> <li>b. Review of case studies carried out</li> <li>c. Some conclusions and hypotheses</li> </ul> </li> <li>(ii) Identify key regulatory constraints which have a significant impact on the marine sector;</li> <li>(iii) Select a small number of constraints, which could be the focus of future research in the interests of mitigating the impact of the statutory regulations.</li> <li>(iv) Quantify the impact of the CFP on the fishing sector in Ireland over a recent time horizon</li> <li>(v) Identify areas of best practice in fisheries management: <ul style="list-style-type: none"> <li>a. Within the EU;</li> <li>b. Outside the EU</li> </ul> </li> <li>(vi) Carry out a Portfolio Theory (PT) approach to Irish Integrated Coastal Zone Management that identifies ecosystem risk and returns</li> <li>(vii) Adapt financial portfolio theory as a method for EBFM that accounts for species interdependencies, uncertainty, and sustainability constraints in Irish fisheries. The objective will be to use MPT to assess the impact of ecosystem-based targeting strategies on: <ul style="list-style-type: none"> <li>a. Fishing vessel revenues;</li> <li>b. Variance in fishing vessel revenues</li> <li>c. Sustainability of revenues in the long run</li> </ul> </li> <li>(viii) Articulate a fisheries management strategy for coastal communities in Ireland, which could be generalised within the EU</li> <li>(ix) Identify regulatory and legal national and EU obstacles to implementing such policy</li> </ul>	
<b>Deliverables</b>	
D1.1	Paper on the theoretical aspects of the trade off between Regulation and economic Development
D1.2	Overview of the impact of regulation on the development of the marine sub-sectors and recommendations for further research
D1.3	Paper on the impact of the CFP on the fishing sector in Ireland and on a number of selected local fishing communities
D1.4	Paper outlining Portfolio Theory (PT) approach to ecosystem-based fishery management Approach in Ireland
D1.5	Paper outlining Portfolio Theory (PT) approach to environmental management issues with specific reference to Integrated Coastal Zone Management Approaches
D1.6	Proposal for a fisheries management strategy for coastal communities in Ireland and the EU

<b>WORK PACKAGE No.:</b>	2
<b>Work Package Title:</b>	Sustainable Innovation & Competitiveness in the Irish Seafood Sector through Market Orientation
<b>Start Month:</b>	Sep. '09
<b>End Month:</b>	Aug.'13
<b>WP Leader:</b>	Prof. J. Ward
<b>Objectives of the Work Package</b>	
<p>(i) Primary Objective: The primary objective of this study is to provide detailed and actionable recommendations to improve competitiveness and innovation in the Irish seafood sector in a manner that is aligned with the strategic goals set-out in the Sea Change Strategy and the National Seafood Development Strategy.</p> <p>(ii) Secondary Objectives: To achieve this primary objective, the secondary objectives will be to:</p> <ol style="list-style-type: none"> <li>1. Undertake a comprehensive review of all of the relevant reports and strategies that have been compiled in recent years in relation to the Irish Seafood Sector to bring together the main insights, findings and recommendations outlined in same;</li> <li>2. Review the academic theory relating to innovation and competitiveness and international best practice of both, combined with a review of consumer behaviour, towards a more comprehensive insight into market orientation;</li> <li>3. Investigate the market orientation of firms operating within the Irish seafood sector, with a particular focus on their understanding of consumer trends and opportunity recognition;</li> <li>4. Identify the factors that affect the competitiveness of the Irish Seafood Sector;</li> <li>5. Identify the barriers to innovation within the Irish Seafood Sector;</li> <li>6. Explore consumer behaviour with a view to identifying key values and motivations driving global consumption trends;</li> <li>7. To study models of competitiveness and innovation in other countries and to assess their relevance to Ireland.</li> <li>8. To develop proposals for the improvement of competitiveness and innovation in the industry.</li> </ol>	
<b>Deliverables</b>	
D 2.1	Report key findings on competitiveness and innovation best practice internationally and its implications for Irish marine food.
D 2.2	Workshop 1 : stakeholders informed about best practice in competitiveness and innovation from the marine food sector perspective and have obtained stakeholder ideas regarding the scope of the fieldwork study
D 2.3	Provide paper on competitiveness and innovation in the Irish marine food sector
D 2.4	Workshop 2 : present key findings from fieldwork study to stakeholders and have obtained their input regarding its implications
D 2.5	Submit proposals to improve competitiveness and innovation in the Irish marine food sector in the context of its current performance and the objectives outlined in the Sea Change strategy.

<b>WORK PACKAGE No.:</b>	3
<b>Work Package Title:</b>	The economic and social impact of the marine sector in Ireland
<b>Start Month:</b>	March 2008
<b>End Month:</b>	December 2011
<b>WP Leader:</b>	Cathal O'Donoghue / Stephen Hynes
<b>Objectives of the Work Package</b>	
<p>(i) Social and demographic profile of coastal communities</p> <ul style="list-style-type: none"> <li>- Define areas of the country regarded as "Coastal Communities"</li> <li>- Contextualise the structure and characteristics of Irish Coastal Communities</li> <li>- Carry out a social profile of these communities using quantitative and qualitative techniques</li> </ul> <p>(ii) Down-stream impact of marine sector on other sector's in the Irish economy</p> <ul style="list-style-type: none"> <li>- Define the marine sector</li> <li>- Understand the structure of the marine sector in terms of inputs, outputs and employment</li> <li>- Understand the downstream impact of the marine sector</li> <li>- Carry out policy simulations of external market changes on the sector</li> </ul> <p>(iii) Impact of marine sector on local economy and employment</p> <ul style="list-style-type: none"> <li>- Identify where the marine sector is located</li> <li>- Identify the employment profile of the sector locally</li> <li>- Identify the contribution of the marine sector to the local economy</li> <li>- Identify the impact on local poverty measures of income from the marine sector</li> </ul>	
<b>Deliverables</b>	
D 3.1	Paper that develops alternative definition of Irelands Coastal Community
D 3.2	Report detailing the results of interviews conducted in coastal communities focusing on the understanding the social construction of coastal communities
D 3.3	Paper on the social determinants of cultural dynamics in rural areas
D 3.4	Summary report outlining the composition and structure of marine sector in terms of inputs, outputs and employment
D 3.5	Paper on the downstream impact of the marine sector
D 3.6	Paper on the development, structure and features of the SAM
D 3.7	Paper on the output from policy simulations from the SAM
D 3.8	Report identifying the distribution and structure, composition and contribution of the marine sector to coastal communities as identified in 3.1

<b>WORK PACKAGE No.:</b>	4
<b>Work Package Title:</b>	Economic evaluation of marine based energy sources
<b>Start Month:</b>	October 2008
<b>End Month:</b>	December 2011
<b>WP Leader:</b>	Cathal O'Donoghue
<b>Objectives of the Work Package</b>	
<ul style="list-style-type: none"> <li>(i) Collaborate with UCD energy engineers to assess the likely economic inputs required for alternative energy sources, particularly marine based renewable energy as well as the costs of development, construction and operation.</li> <li>(ii) Disaggregate electricity generation within RERC-REM model into non-renewable, non-marine renewable and renewable energy</li> <li>(iii) Develop a Greenhouse Gas (GHG) emissions module to measure emissions from alternative energy usage mechanisms</li> <li>(iv) Simulate a costed reform to develop marine based renewable electricity generation capacity of different scales.</li> <li>(v) Assess the macro-economic impact on the country of this policy</li> <li>(vi) Assess the impact of the policy on GHG emissions</li> <li>(vii) Assess the "legacy" in the future impact of the development of this capacity</li> </ul>	
<b>Deliverables</b>	
D4.1	Report on data required to model the marine energy sector. This report will highlight data infrastructure gaps and propose measures to overcome the gaps
D4.2	Report on the development of a GHG emissions module
D4.3	Report on economic issues associated with the development of marine based energy sources
D4.4	Evaluation of the potential future impact of marine energy capacity

<b>WORK PACKAGE No.:</b>	5
<b>Work Package Title:</b>	Measuring the non-market benefits of eco-system service provision from marine resources in Ireland
<b>Start Month:</b>	September 2011
<b>End Month:</b>	September 2014
<b>WP Leader:</b>	Stephen Hynes/Tom van Rensburg
<b>Objectives of the Work Package</b>	
<p>5.1 Literature review and scoping study of non-market benefits</p> <ul style="list-style-type: none"> <li>Identify major coastal sites of national importance and of high potential non-market value.</li> <li>Conduct a review of the composition of local communities and the role played by eco-tourism, the development of recreational amenities in the main coastal areas and new settlement.</li> <li>Review literature to ensure contingent valuation and travel cost methodology is appropriately applied in the context of the research.</li> <li>Literature review of marine recreation goods and services and their valuation (best practice) in Ireland and other relevant countries.</li> <li>Conduct a workshop involving valuation practitioners and key stakeholders.</li> </ul> <p>5.2 Measuring marine public good values: a CVM approach</p> <ul style="list-style-type: none"> <li>Identify major users of coastal recreation sites according to recreation use.</li> <li>Measure the <i>direct</i> public demand and preferences by local, national and international users for marine coastal recreation based activities based on a CVM modelling approach.</li> <li>To identify public preferences for different types of payment vehicle and different institutional mechanisms involved in providing marine recreational public goods.</li> </ul>	
<b>Deliverables</b>	
D5.1	Literature review and scoping study on non-market benefits
D5.2	Identification major coastal sites of high non-market value
D5.3	Stated Preference survey on value of good bathing water standards
D5.4	Stated Preference survey on value of good bathing water standards
D5.5	Write-up report on results relating to Stated Preference survey on value of good bathing water standards
D5.6	Write-up report on results relating to non-market values associated with different coastal landscapes in Ireland

<b>WORK PACKAGE No.:</b>	6
<b>Work Package Title:</b>	Economic data collection and reporting on the state of the marine sector in Ireland
<b>Start Month:</b>	September 2008
<b>End Month:</b>	August 2015
<b>WP Leader:</b>	Stephen Hynes/Michael Cuddy/Cathal O'Donoghue
<b>Objectives of the Work Package</b>	
<ul style="list-style-type: none"> <li>(i) Define scope of marine sector and relate to traditional industrial classifications such as NACE used by other data collectors and providers</li> <li>(ii) Identify data requirements of different marine economics users, WPs and data needs of policy makers.</li> <li>(iii) Identify existing data availability and accessibility: CSO, relevant ministries and state agencies, MI, Marine Scientists, Other</li> <li>(iv) Design mechanism for data collection (primary and secondary)</li> <li>(v) Collect and archive secondary data sets to make available for analysis</li> <li>(vi) Identify data gaps</li> <li>(vii) Primary data collection</li> <li>(viii) Archive and disseminate to users</li> <li>(ix) Provide Bi-Annual Report on the State of the Marine Sector in Ireland</li> </ul>	
<b>Deliverables</b>	
<b>D6.1</b>	Bi-annual report to the MI on the situation and outlook for the Irish Marine Sector
<b>D6.2</b>	Report on the collection, collation and assessment of marine sector related data, its utility and limitations and contemporary data gaps.
<b>D6.3</b>	Report on the development, application and utilisation of a marine sector database housing primary and secondary datasets

<b>WORK PACKAGE No.:</b>	7
<b>Work Package Title:</b>	Project Management
<b>Start Month:</b>	Sept. '08
<b>End Month:</b>	Dec. 2015
<b>WP Leader:</b>	Prof. Michael Cuddy
<b>Objectives of the Work Package</b>	
<ul style="list-style-type: none"> <li>▪ To ensure that the administrative and technical objectives of the project are met in full in a timely and efficient manner.</li> <li>▪ To meet the contractual obligations of the Beaufort Award</li> <li>▪ To ensure good communication among the Beaufort community, with the Marine Institute and with external groups.</li> <li>▪ To oversee the project communication and dissemination strategy</li> <li>▪ To provide a focal point for any issues arising on the project</li> </ul>	
<b>Deliverables</b>	
D7.1	Annual financial reports
D7.2	Annual technical reports
D7.3	Interim technical reports every six months
D7.4	Strategic Review Report in and completed proposal for Research Programme 2011-2014
D7.5	Implementation of WP8 of <i>Beaufort Award Ecosystem Approach to Fisheries Management (EAF)</i> through collaborative approach with that project on the assumption that the necessary funding can be put in place
D7.6	Enhanced research capacity through success in sourcing additional funding (See Section A3)
D7.7	Publication and implementation of Communication and Dissemination Strategy
D7.8	Peer reviewed publications and international conference presentations