

GEOGRAPHY OF INSHORE FISHING AND SUSTAINABILITY (GIFS)



GEOGRAPHY OF INSHORE FISHING AND SUSTAINABILITY



GIFS Activity 1.2 FINAL REPORT:

Coastal zone governance and Inshore Fishing: Inshore Fishing Community Governance Case Studies

Case studies: Belgium [Nieuwpoort]; The Netherlands [Arnhemuiden]; England [Hastings, Northern Devon, Cornwall, North Norfolk]; France [Bay of Granville Normandy, Saint Brieuc Bay]

April 2014

This report is based on the research undertaken within the INTERREG 2 Seas project 'GIFS' (Geography of Inshore Fishing and Sustainability). The GIFS project addresses the challenge of incorporating the socio-economic and cultural importance of inshore fisheries to coastal communities along the English Channel and Southern North Sea more explicitly into fisheries and maritime policy, coastal regeneration strategies and sustainable community development. The research on the inshore Fishing Community Governance Case Studies within the GIFS project, was undertaken by Kathy Belpaeme (Coordination Centre ICZM, Belgium), Marie Lesueur and David Picault (Agrocampus Ouest, France) and Dr. Johanne Orchard-Webb, (University of Brighton, UK). Dr. Ann-Katrien Lescrauwaet and Marleen Roelofs (Flanders Marine Institute VLIZ)) are co-authors of the reports.

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Restauration of historic ship at shipwreck in Arnhemuiden, the Netherlands. Photo: © Jack Doms
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The GIFS Project

The *Geography of Inshore Fishing and Sustainability* (GIFS) project is an INTERREG IVa 2 Seas project that aims to capture the socio-economic and cultural importance of inshore fishing to better inform fisheries policy, coastal regeneration strategies and sustainable community development through a range of research projects, regeneration activities and case studies across the 2 Seas region. Figure 1 outlines the 2 Seas region of southern England, northern France, Flanders (Belgium) and the southern Netherlands. The GIFS project works along three main activities and supporting research topics:

- Coastal zone governance and inshore fishing,
- Fishing places & community,
- Economy and regeneration in fishing communities.

In each activity, GIFS partners worked with local stakeholders and communities to record the geographical diversity and similarities of fishing places and people along the Channel and Southern North Sea.

The main focus of GIFS is the inshore sector, however, definitions of 'inshore' vary greatly between the Member States. Defining inshore fishing is not easy – do we define it by the length or power of the vessel, days at sea, gears used, distance from port travelled or by the target species? At the EU level the term small-scale fisheries is used to distinguish operators working at a small-scale from industrial operators. In 2011 the European Parliament published a study called 'Characteristics of Small-Scale Coastal Fisheries in Europe' (Macfadyen *et al.*, 2011). This study explains the difficulties of trying to establish a common definition across all Member States and suggests the most specific description available is 'vessels under 12m in length not using towed gear'. However, some of the traditional fishing practices along the Southern North Sea and English Channel that are considered typically 'coastal or 'inshore' fisheries (such as brown shrimp bottom trawlers and sprat or herring pelagic trawlers), actually use towed gear. **For the purposes of the GIFS project, we broadly defined inshore fishing as fishing activity carried out by vessels operating within 12 nautical miles of the coast (as well as shellfish harvesting conducted on foot or, in one instance, on horseback).** Even though achieving a single definition was not possible, we wanted to include consideration of fishing activity that was applicable in the context of different Member States while acknowledging a broad distinction between 'small-scale' and 'industrial' fishing operations.

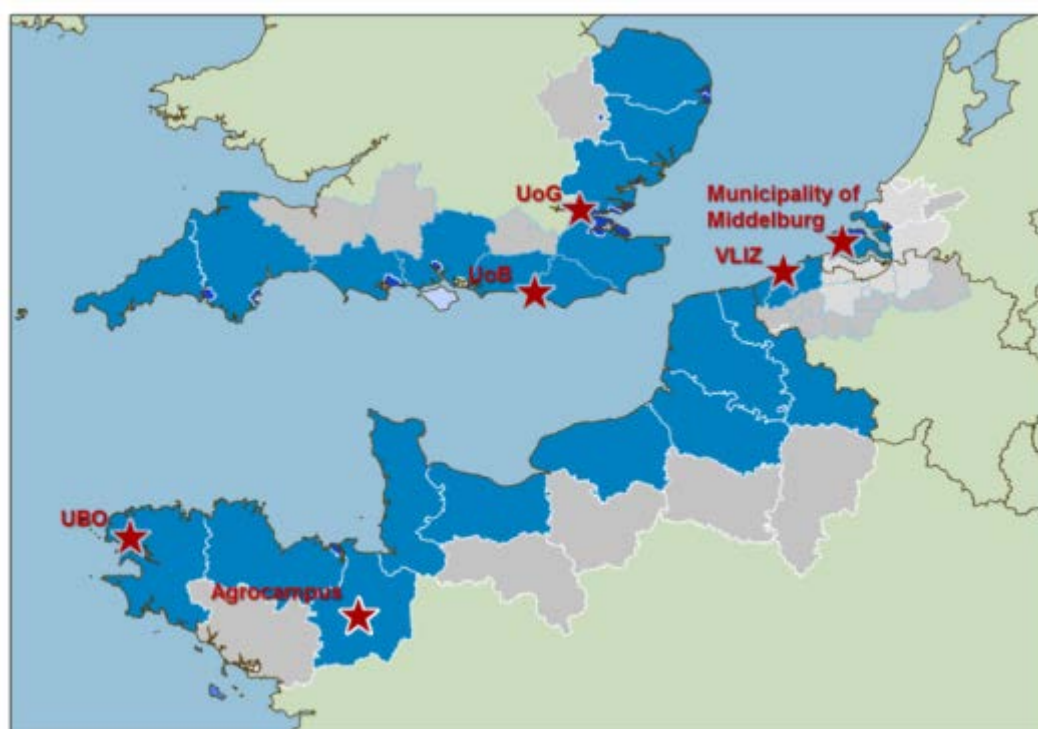


Figure 1: The 2 Seas region and location of GIFS partner institutes (University of Greenwich (UoG), University of Brighton (UoB) in England, Flanders Marine Institute (VLIZ) in Belgium, Municipality of Middelburg in the Netherlands, Agrocampus Ouest and Université de Bretagne Occidentale (UBO) in France) (Source: VLIZ, 2014).

The current report addresses the 'Coastal Zone governance and Inshore Fishing' activity. Coastal zones are subject to an array of different policy and management regimes. Inshore fisheries are both affected by these policies *and* play an important role in putting these management regimes into practice. Integrated coastal zone management (ICZM), local development plans, marine spatial planning (MSP), coastal habitat and species marine protected area (MPA) management are a few examples of management regimes that both affect and involve inshore fisheries. In addition to

the plethora of formal management regimes there is also a widely acknowledged need to introduce the ecosystem approach in fisheries planning and management in order to comply with EU policies and international conventions. There is increasing recognition that more devolved and participatory management structures are required to achieve this approach. Yet, achieving successful practices in this field is not straightforward and requires an understanding of the different legal, social, economic and political arrangements that exist across the area and the way that inshore fishing is incorporated into these.

This element of the GIFS project has been developed to explore how inshore fisheries (IF) in the GIFS partner regions interact with policy-making and key decision-makers at multiple scales of governance (locally, nationally and Europe wide) in terms of integrated marine and coastal governance. An in-depth understanding of governance mechanisms for inshore fisheries requires both top down and bottom up approaches:

In a **first phase** - further referred to as activity 1.1 - a description and exploration of the features of formal fisheries governance mechanisms and structures that are in place in the different regions is analysed by means of questionnaires that were designed to capture a range of expert views on IF governance within a broader coastal and marine management context. This questionnaire data is supported by a literature background study providing information about formally established instruments (legislation, policies & plans, formal organisations and mechanisms). However, each IF is unique in its socio-political and economic context and the history of the complex interactions between these different sectors. To take account of the influence of these variables and the wider context in which they have developed in-depth case studies with semi-structured interviews with a range of stakeholders were used in a **second phase** of the research. This case study approach was used to analyse the role of local fisheries management and key ways in which the existing infrastructures and governance processes engage with economic, environmental and socio-cultural sustainability issues. The purpose of this approach was to better understand the social and political processes of governance (such as power, social capital, participation and identity) and the specific fisher and community engagement in place in the different localities. **By providing a more granular analysis of the social processes involved in the delivery and workings of governance in the eight case studies, the current report - further referred to as activity 1.2 - is intended to complement the findings of the first phase, activity 1.1. Note: To access the final report for Activity 1.1 please go to: <http://www.gifsproject.eu/en/themes/coastal-zone-governance-and-marine-fishing>.**

The results of the two phases together provide a valuable insight into and understanding of the different formal and informal management frameworks and approaches that exist for inshore fisheries in the GIFS partner areas. The research conclusions identify opportunities for wider integration of fisheries management in coastal management; appropriate governance structures for different areas depending on fishery type, scale and stakeholders; and examples of best practice in coastal zone governance and inshore fishing that raise the possibility of win-win situations for the fishing sector in its interaction with the wider coastal community.

Executive Summary

The focus of the research in activity 1.2 is to obtain an increased understanding of the fisher and wider coastal stakeholder experiences of inshore fisheries (IF) governance in selected fishing communities in France, Belgium, The Netherlands, and England. Specifically, we explore the challenges and opportunities differing governance approaches present in efforts to secure sustainability goals in these coastal communities. With a particular interest in the presence or absence of more **integrated and participatory approaches to fisheries management**, (such as those encouraged in an Ecosystems Approach to Fisheries and Integrated Coastal Zone Management), the research unpicks the locally specific experience of examples of fisher-led conservation, co-management of resources, integration of Local Ecological Knowledge in marine spatial planning, and fisher participation in local regeneration and development. By providing a more granular analysis of the social processes involved in the delivery and workings of governance in eight in-depth IF case studies this report is intended to complement the findings in the GIFS Activity 1.1 report which provides an inventory of the formal fisheries governance structures and policy in place in the 2 Seas region (i.e. southern England, northern France, Flanders and the southern Netherlands).

It is hoped that in combination the two reports will contribute to a growing body of work seeking to better understand the complex interdependencies and processes of IF governance practice (Bavinck *et al.*, 2013; Carter, 2014; DG MARE, 2013; Rodwell *et al.*, 2013) and as such inform an approach to fisheries management that supports an economically, environmentally and socially sustainable future for small-scale fishing communities. In practical delivery terms, this report provides insight around dominant barriers to devolved, participatory and integrated IF governance that need to be overcome; as well as approaches to governance that can be employed to enable both an improved marine environment and sustainable communities.

The case study methodology used in this work allowed the researchers to explore how, why, and to what extent, each fishery is engaged (or not) in various governance structures that influence and contribute towards marine and coastal sustainability goals. **The policy, practice and research context suggests a compelling and urgent requirement to better understand the wider socio-economic-environmental inter-linkages that shape fisheries management.** Consider the introduction of socio-economic indicators in the recent Common Fisheries Policy (CFP) reform (EC COM, 2013); an emerging body of research suggesting a knowledge gap and planning deficit around the socio-cultural elements of IF (Reed *et al.*, 2012; Urquhart and Acott, 2013; Urquhart *et al.*, 2013; Urquhart *et al.*, 2014); and a policy consensus around the need to introduce an ecosystems based approach to fisheries management (EAF or EAFM) (Urquhart and Acott, 2013) that is coupled with wide ranging struggles faced by authorities and stakeholders in attempting to introduce more participatory approaches (Mikalsen and Jentoft, 2008). **We suggest that one way these inter-linkages are usefully understood is through an analysis of governance as experienced at the local level.** For this reason in-depth case studies using semi-structured interviews with a broad range of local governance stakeholders provides an appropriate methodological tool to take account of the influence of different sectors, stakeholders, and structures, and the wider context in which they have developed. This data has in turn been analysed using a thematic analysis approach based on a critical literature review led framework of analysis.

The eight case studies provide a uniquely detailed exploration of inshore fisheries governance documenting existing, potential for, or challenges involved in, securing more integrated co-management and good governance (both from a grass-roots approach and progressive structures initiated by local, national or European authorities). Specifically, governance inter-linkages have been viewed in relation to the wider coastal economy (e.g. the integration and linkages between the fisheries sector and tourism and regeneration); social sustainability (e.g. in terms of social capital, community cohesion, cultural identity and coastal community development); and the conservation of the coastal and marine environment (e.g. via sustainable fishing and tourism practices, fisher links with marine science and valuing of local ecological knowledge (LEK)).

One of the dominant findings from the research is a picture of **considerable institutional diversity and governance complexity**. Across the case study sites there is a highly varied infrastructure of formal and informal governance organizations; variance in the degree of engagement in the structures that do exist (both in terms of fisher/ fishing industry engagement and broader stakeholder engagement); and considerable variance of experience of collaborative co-management style approaches (from very limited experience or appetite, with the continued dominance of a top-down hierarchical and narrow governance model; through to mature and established inclusive multi-stakeholder and participatory models). This institutional diversity reinforces the widely held view that the **complexity of fisheries management challenges** are due in part to the fishery (and place) specific manifestation of policy and governance infrastructure in each locality (Jentoft, and Chuenpagdee, 2009). The importance of context is amplified by the locality specific **increases in competition for use of the same marine resources** from different sectors (e.g. renewable energy, conservation or recreation-leisure users), which in turn has resulted in a diversity of responses to this risk of displacement. Yet regardless of this institutional and socio-economic context diversity, **inshore fishing communities face an ever growing number of challenges to their livelihood** that include: increased regulation, reduced quota, an ageing population, the unsustainable increase in cost of overheads, loss of fishing grounds to differing interests, unsustainable stock levels and climate change. The **varying adaptive strategies** used to respond to these challenges reflect differing internal and external fisher/fishery capacity and these are now often framed in terms of fishing industry and coastal community 'resilience' (Pope and Allen, 2014; Symes, 2014).

The findings from this research show us that the governance arrangements in each locality must be understood and evaluated both in terms of their function as an indicator of community capacity to withstand internal and external challenges, but also as a potential feature of an adaptive strategy to improve resilience and sustainability.

Despite this diverse governance picture the case studies have highlighted a number of common issues around challenges and opportunities for co-management. Selecting just a few from the detailed discussion in the case chapters below, we observed a repeated need for social capital development for industry stakeholders to enable them to overcome the **alienating nature of bureaucratic and technocratic governance** norms; while in some case studies participants noted that **stakeholders and authorities often underestimated the time needed to build trust between stakeholders** to secure the relationships needed for a more positive experience of collaboration. Many participants described the **absent or uneven evidence of an IF collective voice** which made engagement with the industry more challenging for other sectors, with implications for effectiveness of political lobbying and influence. That said the researchers noted that there are examples emerging of local, national and regional pan-European **structures attempting to overcome that leadership and collective voice deficit**. Some of the case studies show an emerging (if tentatively adopted) trend for **re-framing local economic development strategy to include the fishing industry**. While governance efforts at the local level is often focused on working to attract and train the next generation of fishers as the IF in these case studies is often characterised by the low levels of new entrants and an ageing demographic. In a number of the case studies the governance response to the multiple challenges faced by the industry has been to focus on **reconnecting the fleet with their wider regional community** in terms of education, sharing the cultural traditions associated with fishing, and promotion of responsible tourism around the local catch, the physical presence of inshore fishing activity, and fishing practices (e.g. encouraging local catch in local restaurants; fisher-led education; cooking demonstrations; supply chain innovation; environmental accreditation; regional branding; contemporary fishing heritage and oral histories; and fish festivals). The research findings also show a good number of examples of **fishing communities working with the science and conservation sector to develop joint projects** to improve the reliability and trust in the data that informs conservation planning. In this way they help ensure LEK (Local Ecological Knowledge) is valued, fishers are involved in the decision-making process, they are more likely to comply with regulations that emerge from a process they helped shape, and this encourages knowledge exchange between marine scientists, conservation NGOs and the fishing industry to work together to better protect the marine environment.

The findings from this project suggest future research questions in IF governance might look to capture this data on a longitudinal basis to build on the snap shots offered in this report and gain an insight into how these findings and the social processes that shape them evolve over time. Such a study would take better account of the highly dynamic policy, political and institutional context in which an expanding list of stakeholders are trying to address the complex issues of fisheries management that include both social equity and marine ecology integrity. This approach would be all the more valuable given the 'communicative turn' in fisheries governance forecast by Linke and Jentoft, (2013) that suggests we are now observing the **potentially transformative integration of multi-stakeholder LEK in fisheries management**.

Finally, but most importantly, we would like to thank all the participants who have taken part in this research who have so generously given up their time and shared their expertise and experience to help contribute to this project. As we share the findings of the research with the participating communities, and indeed other IF communities, we hope the local knowledge and insight inherent in these case studies will provide a valuable catalyst for planning improved routes to industry engagement, and progress towards securing sustainable economic, social and environmental futures for inshore fisheries and their communities.

1. Introduction

- 1.1. Introduction to the report structure
- 1.2. Report purpose and aims
- 1.3. Key literature and case study themes summary
- 1.4. Summary of the framework of analysis

1.1 Introduction to the report structure

This report documents the findings of a detailed study of the governance of inshore fishing explored through eight in-depth case studies in the GIFS (Geography of Inshore Fishing and Sustainability) project area (<http://www.gifsproject.eu/en>). The case studies include: Nieuwpoort (Belgium); Arnemuiden (The Netherlands); Hastings, Northern Devon, Cornwall, North Norfolk (England); Bay of Granville Normandy, Saint Brieuc Bay (France). The research has been completed by a cross-channel research team from VLIZ and province of West-Flanders (Belgium), Agro-Campus Ouest (France) and University of Brighton (UK). The work on Inshore Fisheries Governance was further enriched by the research developed in the case studies of Barfleur, Bay of Somme and the Iroise Sea (France), although the outcome of this research is not included in the present report, but available from the [GIFS interactive map and wiki](#). The term governance can be used in varying contexts and with differing focus in meaning, but for the purpose of this report it has been used in the following terms:

The term “governance” covers both: (i) the activity or process of governing; (ii) those people charged with the duty of governing; and (iii) the manner, method and system by which a particular society is governed. In fisheries it is usually understood as the sum of the legal, social, economic and political arrangements used to manage fisheries. It has international, national and local dimensions. It includes legally binding rules, such as national legislation or international treaties as well as customary social arrangements (FAO, 2014).

The report firstly provides an overview of dominant themes in fisheries governance and governability research that have informed the research purpose and design (Chapter 1 Introduction) and how these themes are explored through the case study method (Chapter 2 Methodology). The analysis of the detailed empirical findings from the case studies and how these interact with issues of sustainability and fisheries governance make up the bulk of the report (Chapter 3 Case Studies 1-8). In Chapter 4 the report draws out and offers a discussion of the common and exceptional themes observed in the eight different cases and what this means for efforts to secure sustainable fishing communities. **Finally, in Chapter 5 the reader can find a summary table of key policy recommendations that have emerged from this detailed analysis.** This report provides insight for fishing communities around the common barriers to integrated governance that may need to be overcome, as well as opportunities via governance mechanisms and practices that will lead to more successful approaches to fisheries management both in terms of an improved marine environment and sustainable communities.

In the context of macro policy changes in the industry (i.e. Common Fisheries Policy reform and the increased focus upon Integrated Coastal Zone Management and Marine Protected Areas) the role of co-management and collaborative/participatory governance is becoming increasingly relevant (Bavinck *et al.*, 2013). Co-management (also referred to as co-governance) has been defined in various ways but typically includes “a range of arrangements, with different degrees of power sharing for joint decision-making by the state and communities (or user groups) about a set of resources or an area” (Berkes, 2009:1693). Increased understanding of the lived reality of contemporary inshore fisheries governance, and the challenges and opportunities this presents for introducing a more integrated and participatory approach to governance is the driving focus of the research. Specifically, by providing a more granular analysis of the social processes involved in the delivery and workings of governance at a local level this report is intended to complement the findings in the GIFS Governance Report (Activity 1.1) which provides a comprehensive overview of the formal fisheries governance structures and policies in place in the cross-channel region. It is hoped that in combination the two reports will inform planning to help secure sustainable fishing communities by contributing to a growing body of work seeking to better understand inshore fisheries governance practice (Bavinck *et al.*, 2013; DG MARE, 2013; Rodwell *et al.*, 2013, Urquhart *et al.* 2014).

1.2 Report purpose/aim

In order to effectively situate the role of marine inshore fishing into a broader sustainable development framework in the coastal zone, an understanding of coastal governance mechanisms and the legal, social, economic and political arrangements that are in place for managing inshore fisheries and their interaction with other sectors is required. This understanding is delivered through a combination of the critical mapping of policy instruments (see [Report Activity 1.1](#)) and an analysis of social aspects of governance (such as issues of power, stakeholder representation, participation, and partnership) as explored in this report. There is a widely acknowledged need to introduce a broader ecosystems based approach to fisheries management (EAF) coupled with an integrated coastal zone management (ICZM) approach to wider marine/coastal planning in order to comply with European policy (such as the Common Fisheries Policy and Marine Strategy Framework Directive). These approaches are seen as important governance mechanisms to securing social, economic and environmental sustainability goals (Rodwell *et al.*, 2013). The definition of ecosystem-based approach to fisheries management by the new regulation of the CFP ([\(EU\) No 1380/2013](#)) states that:

Ecosystem-based approach to fisheries management means an integrated approach to managing fisheries within ecologically meaningful boundaries which seeks to manage the use of natural resources, taking account of fishing and other human activities, while preserving both the biological wealth and the biological processes necessary to safeguard the composition, structure and functioning of the habitats of the ecosystem affected, by taking into account the knowledge and uncertainties regarding biotic, abiotic and human components of ecosystems.

However, it is also widely acknowledged that successfully achieving such an integrated whole system approach to fisheries governance is a complex objective that has proved challenging to implement (FAO, 2009; Pitcher *et al.*, 2009; Rodwell *et al.*, 2013; Symes, 2014). **In recent years both policy and research have made clear that to achieve EAF requires an understanding of the human dimensions of this approach that starts with the premise: “EAF is a human pursuit and human beings, their objectives, their behaviour and their institutions, are key to successful implementation of EAF.” (FAO, 2009: xvi).** In this way the FAO (2009) advises fisheries to take better account of human dimensions (including: “policies, legal frameworks, social structures, cultural values, economic principles and institutional processes” (ibid:V) in their management. Efforts to secure this approach has led to an increasing recognition that in addition to familiar top down centralised, science led approaches (typified by the Common Fisheries Policy) (Carter, 2014; Rodwell *et al.*, 2013), more devolved, collaborative and participatory management structures (such as co-management, integrated or interactive governance) are required to secure sustainable outcomes for both the fishing communities and the marine environment (Berkes, 2009; Gray, 2005; Linke and Jentoft, 2013; Rodwell *et al.*, 2013). **This approach has gained increased purchase following recent CFP reform (effective from January 2014) that now indicates that Member States take account of social, economic and environmental factors in the distribution of quota (EC, 2013):**

Article 17 - Criteria for the allocation of fishing opportunities by Member States

When allocating the fishing opportunities available to them, as referred to in Article 16, Member States shall use transparent and objective criteria including those of an environmental, social and economic nature. The criteria to be used may include, inter alia, the impact of fishing on the environment, the history of compliance, the contribution to the local economy and historic catch levels. Within the fishing opportunities allocated to them, Member States shall endeavour to provide incentives to fishing vessels deploying selective fishing gear or using fishing techniques with reduced environmental impact, such as reduced energy consumption or habitat damage (EC, 2013)

In anticipation of this reform DG MARE research indicated the need to better understand at a local level the broader role played by fisheries in coastal communities and what they describe as their underestimated indirect value contribution to local economies (DG MARE, 2013).

This research seeks to respond to the challenges and risks described in the literature in securing a more holistic approach to governance that look to integrate inshore fishing into different management mechanisms (such as local development and regeneration plans, Integrated Coastal Zone Management and marine protected areas). **By using governance as our analytical entry point we are able to improve our understanding of the evolving barriers, risks and opportunities the sector faces in adopting more devolved and participatory approaches to management that evidently have implications for the changing role of different stakeholders (e.g. fishers, local government, conservation bodies, fisheries authorities, the private sector) and the relations between them.** This approach enables us to highlight how institutional inter-linkages and processes of governance are helping or hindering the direct and indirect value contributions fisheries make to their coastal economy and what this might mean for community sustainability. To this end the research explores the different elements of governance within these fishing communities, their purpose, processes and their implication for the potential for sustainable fishing communities. To satisfy this aim we interviewed members of the fishing communities, fisheries management authorities, conservation bodies, local government and other local fisheries governance related stakeholders. In these interviews participants were asked about their views and experiences of the different governance organisations that the community engages with (both within and external to the industry).

By understanding the challenges faced and overcome in the day-to-day elements of fishing community governance it is hoped this insight might be used to secure more effective fisher representation and engagement and so their ability to realise sustainability goals; for example through their contribution to a sustainable local economy (DG MARE, 2013), through their role in the co-management of marine resources (Arthur, 2005; Rodwell *et al.*, 2013), and also their contribution to social and cultural issues such as community heritage and identity (Urquhart and Acott, 2013; Urquhart *et al.*, 2014).

1.3 Overview of key themes in fisheries governance/governability literature and how these relate to the issues explored through the case studies

This next section provides an introduction to some of the key themes within fisheries governance and governability literature that have helped inform the framework of analysis (see Section 4) that was used by all members of the research team to achieve a common approach to the thematic analysis of the interview data. Drawing on the dominant themes in contemporary research in this field we have sought to understand how these issues played out in our own detailed case studies. In brief the following section will discuss how recent trends in fisheries governance are situated within wider governance theory debates around: the shift from government to governance; ascendance of co-management and participatory whole system governance models (like the ecosystems approach to fisheries and interactive governance); the emergence of the ‘social’ agenda in sustainability and fisheries research and policy; the

growing interconnectivity and linkages between fisheries and wider socio-economic development or regeneration planning; and governance related enablers and challenges in efforts to secure sustainable fishing communities.

Why understand stakeholder experiences of IF governance? The summary below of the key themes in recent major work into fisheries governance, provides an important reminder of why interrogating the stakeholder experience of new forms of governance is important in planning for a sustainable inshore fisheries sector. Studies repeatedly tell us that top-down hierarchical centralised governance models are often detrimental for small-scale fisheries (Arthur, 2005; Jentoft, 2003) and that the varying co-management and interactive governance models that encourage increased multiple user group participation in the management process have been shown to increase regulation compliance (Carter, 2014; Kaplan and McCay, 2004); to increase local community empowerment with potential implications for social justice and equity (Berkes, 2009); to improve the quality, legitimacy and relevance of local management plans (Berkes, 2009; Garaway and Arthur, 2004); to increase social learning, conflict resolution and the availability of locally specific ecosystem knowledge (Berkes, 2009); and to assist in building an understanding of the linkages between social and ecological systems that are so essential for developing sustainable fisheries (Carter, 2014). Equally, we are warned not to see co-management or interactive governance (and related models/mechanisms) as a panacea given the risk that they “lead to the reinforcement of local elite power or to strengthening state control” (Berkes, 2009:1692) or are simply ‘cosmetic’ in their impact on fisheries management (Symes, 2014). Understanding how these approaches are being deployed and experienced on the ground (or why they are absent) takes us beyond comprehending their theoretical value, to gaining insight into the practical barriers and risks faced in making them a reality.

Shift from fisheries management to fisheries governance

The academic interest in fisheries management is situated within a wider political science body of work concerning a ‘turn to governance’ (Griffin, 2012; Jessop, 2002) that involves a shift in approach to policy making (that devolves responsibility to local or regional public-private partnerships) and a reconfiguration of the makeup of policy communities (to include multiple sector stakeholders) (Jessop, 2002; Symes, 2006). **In the case of fisheries the turn to governance is situated within a growing acceptance of the limitations of existing fisheries management (dominated by a centralised hierarchical model based on a narrow scientific and bureaucratic policy community at national or European Commission level); and a growing acknowledgement of the necessity for co-governance (involving a more devolved, participatory and multi-sector stakeholder co-management model)** (Jentoft and Chuenpagdee, 2009; Rodwell *et al.*, 2013; Symes, 2006; Wilson *et al.*, 2003). Since the European Commission (EC) introduction of the CFP in 1983 it has been characterised as a hierarchical science led approach to governance that is now seen as part of the failure of fisheries management to secure the environmental or socio-economic sustainability goals for which it was intended (Carter, 2014; Linke and Jentoft, 2013; Rodwell *et al.*, 2013). As part of its reform in 2002 and again in 2012-13 we are witnessing a (frustratingly) slow move from the traditional top-down governance to a more inclusive and participatory model that makes efforts to include a wider knowledgebase and breadth of stakeholders (Linke and Jentoft, 2013). Many observers believe the current crisis of fisheries management that drives this shift towards increased co-management between the industry, scientists and other user groups (such as environmental NGOs) is underpinned by the failure of narrow high level policy communities that do not understand and therefore cannot possibly hope to manage such dynamic, diverse and locally specific fisheries systems (Carter, 2014; Kooiman *et al.*, 2005; Symes, 2006). Sadly, despite the growth in recent years of more participatory or co-management style models of governance (e.g. through the RACs introduced in 2004 and more recently in England through the introduction of IFCAs in 2011), fisheries management continues to be dominated by highly centralised inflexible, top-down natural science led governing instruments (Linke and Jentoft, 2013; Symes, 2014).

The problem for such inflexible centralised structures of governing is that fisheries management is what is described as a ‘wicked’ challenge owing to its highly complex, mutable and multi-scale nature (Jentoft and Chuenpagdee, 2009). **Solutions to this crisis in fisheries management are framed in calls for the re-structuring of traditional hierarchical models of management and policy-making by introducing a more interactive governance approach (involving greater multiple stakeholder inclusion, deliberation, adaptive learning, and self-correction)** (Kooiman *et al.*, 2005; Linke and Jentoft, 2013). Interactive governance is “built on ideas of inclusivity of representation, interactive learning and partnership building” and principles of “rationality, efficiency and performance” (Symes, 2014:26). Such models it is argued are better able to govern the complexity of fisheries systems so that they might contribute positively to “ecosystem health, social equity, employment, food security, and safety” (Symes, 2006:115). It is widely understood within this approach that such societal challenges can rarely be solved by a technical fix or scientific solutions alone, instead, it is argued they require a collective and multiple stakeholder response (Jentoft and Chuenpagdee, 2009; Linke and Jentoft, 2013). Further this solution is often sought through governance at the local level owing to the **need for local (ecological) knowledge to inform this process**. As interactive governance models have emerged, there is a knock-on empirical research requirement to better understand the processes and people that shape and determine the outcomes of this model of governance (Symes, 2006). For example this might be to do with how power relations between different users manifest in the balance and composition of representation, the processes (and practices) of representation, and the policy agendas and outcomes advanced or marginalized as a consequence at different scales (Griffin, 2012). It is also clear that in trying to develop this interactive model there must be an understanding “that governance is rooted in the conditions of society” (Symes, 2006: 114). For many, it is the absence of this understanding within the traditional approach to management – i.e. **a failure to account for the interdependency and interaction between natural and socio-economic systems - that has been a major contributing factor in the contemporary global crisis of fisheries management** (Carter, 2014; FAO, 2009).

Examples of interactive governance, and other integrated or co-management approaches, have been explored by fisheries researchers over the last decade through detailed case studies and also in terms of the development of theoretical frameworks to help structure and evaluate such approaches (see: Arthur, 2005; Bavinck *et al.*, 2005; Bavinck

et al., 2013; Gray, 2005; Jentoft, 2003; Kooiman *et al.*, 2005; Symes, 2006, 2014; Wilson *et al.*, 2003). Against this research context the complexity of fisheries systems has been amplified in recent years with the growth in competing interests and stakeholders in coastal and marine habitats, and maritime economies. **This congestion of interested parties (e.g. tourism sector, aquaculture, renewable energy and conservation) has made the need for more holistic governance and a broader definition of ecosystem values within EAF all the more pressing (Potts *et al.*, 2013).** Similarly, interactive governance places importance on fishers and the fishing industry as integral to a whole socio-economic-ecological system that includes the ecosystem, the market (including tourism and regeneration), society (education, knowledge production, identity, skills), and science all across a number of scales (Kooiman *et al.*, 2005).

Proponents of interactive governance argue that by understanding the specificity of local fisheries and their wider community interaction or socio-economic context (Kooiman *et al.*, 2005) they should be better placed to help secure local management of common resources; improve sensitivity in planning regarding the local diversity of fishing practices; and demonstrate inclusivity of decision-making that draws upon a wider range of skills, knowledge and actors (Kooiman *et al.*, 2005; Symes, 2006). Yet the development of co-management and interactive approaches that aim to better secure representation of growing multiple user groups has been an uneven and slow process (Bavinck *et al.*, 2013).

The increased prominence of multiple stakeholder involvement in the policy process within all these new models of governance (Symes, 2006) has led to **questions over the hegemony of the 'expert' in policy making** relative to the role, influence and value placed on the knowledge of local stakeholders (particularly fishers) (Linke and Jentoft, 2013). With the increased focus on stakeholder knowledge and representation the **risk of barriers to representation within both existing science-driven governing processes and emerging participatory models of governance** have been highlighted as needing further research (Berkes, 2009; Gray, 2005; Linke and Jentoft, 2013). Linke and Jentoft, (2013) describe the increasing role of stakeholder LEK as part of a 'communicative turn' with challenges around balance of representation in the institutional infrastructure, overcoming vested interests to achieve a more strategic consensus, and the degree of influence, or to what extent, LEK is taken seriously in a historically natural science driven governing landscape. While in other areas of social policy (such as urban regeneration) the implications of this devolution of decision-making to local level community public-private stakeholder partnerships (often without parallel devolution of power or finance (Raco, 2005)) has been widely interrogated with concerns raised around democratic deficit owing to lack of depth or legitimacy of processes of representation for marginalized community members (Swyngedouw, 2005). From a fisheries perspective these efforts to embed a co-management approach have led to observations that there is a **risk that: "[T]he new inclusivity of policy making is more apparent than real. There is a common concern that institutional changes are not keeping pace with the needs of new forms of governance and that until these transformations are complete, power will remain in the hands of the old oligarchy"** (Symes, 2006:115-16). A critical view of this trend for devolved, participatory governance mechanisms is that the reality is that they are *"cosmetic – part of a 'progressive' jargon that attempts to mask a largely unreconstructed view of how fisheries should be handled"* (Symes, 2014:24). Observers question the legitimacy of such devolved and multi-stakeholder co-management mechanisms while highlighting the **risk that such mechanisms may well perversely result in a reinforcement of the power of local elites, the strengthening of state control, or the further exclusion of marginal stakeholders** (Berkes, 2009; Linke and Jentoft, 2013). This is an observation echoed in the wider critical governance literature around the empowering reality of the flurry of localisation policies of the last decade which are often framed within government commitments to sustainable development and sustainable communities (Raco and Flint, 2012; Swyngedouw, 2005). This critique is not just due to the controlling strings of central government or European funding targets that accompany these localised structures, but also due to questions over the capacity and willingness of local communities to fulfil devolved but centrally determined responsibilities (Raco, 2005). Data from the case studies discussed in the conclusion show how these questions concerning the empowering reality of local partnership and co-management models readily translate to contemporary fisheries governance.

Within the EU this turn to governance has manifest in the support and funding of local partnership led mechanisms called FLAGs (Fisheries Local Action Groups). FLAGs are public-private multi-sector stakeholder partnerships that are set up at a local level to support fisheries (and fishing communities) in decline. FLAGs are funded by the European Fisheries Fund (EFF) with Axis 4 (sustainable development of fisheries areas) funds in order to support a range of projects proposed and carried out by a wide variety of local stakeholders. In 2013, more than two hundred and fifty FLAGs in twenty-one EU Member States involve thousands of local stakeholders as project promoters and FLAG members (FARNET, 2013). These partnerships between fisheries actors and other local private and public stakeholders work towards the sustainable development of their areas. Together, the stakeholders design and implement a bottom-up locally specific integrated development strategy that seeks to improve the socio-economic situation of the area; to increase its fisheries value; to maintain the environment in a good condition and aid the reconstruction of the fisheries sector in order to create employment (FARNET, 2013). **It is the intention that the FLAG mechanism be used as "[F]irst and foremost a tool that allows fishermen and fishing communities to take their future into their own hands"** (FARNET, 2013:3). We return to this example of local and participatory governance in the case study analysis to reflect on the perceived role and impact of FLAGs in securing a more collaborative approach to fisheries governance.

Elements of successful interactive (or integrated) governance and co-management

The growth in recent years of the inclusion of fisheries within wider coastal and marine planning has been underpinned by commitments to integrated coastal zone management (ICZM) and an ecosystems approach to fisheries (EAF) as advocated at European and national level (e.g. Marine and Coastal Access Act, 2009 (UK), the European Integrated Marine Strategy and more recently in the reform of the CFP) (Urquhart and Acott, 2013). In response there has been a growing body of research on the governance requirements for a successful integrated approach in this policy landscape. Observers note that **for co-management to work fishers must have a genuine part in decision-making** (Reed *et al.*, 2013) and take a role in the design of new measures in order to improve industry compliance to management (Pita *et al.*,

2010). The **top-down hierarchical model of governance is criticised for its lack of flexibility and local adaptability**, which advocates of the interactive model and emerging applications of resilience theory fisheries governance suggest are essential features of fisheries/ fishing community sustainability (Symes, 2014). As a mechanism of increased fisheries integration with other coastal stakeholders some of the local FLAG partnerships have focussed on community empowerment through enabling routes to fisher participation and decision-making (i.e. increased inclusivity of representation). While work by other FLAGS are concerned with building the links to non-fisheries sectors through supply chain innovation, and opportunities of diversification both within the catching sub-sector and through alternative income streams (FARNET, 2013). It is argued that these multi-sector inter-linkages would be more difficult to forge and less beneficial to fishers without this more collaborative / interactive approach. Often the most controversial issue facing fisheries management is the fair and sustainable allocation of fishing opportunities. It is hoped that this ongoing 'wicked' management issue may be better addressed through **an approach that secures good governance through devolved decision-making; legitimate stakeholder engagement; and democratic accountability** (Phillipson and Symes, 2010; Symes, 2006). Securing this integration and engagement is challenging owing to the institutional diversity that accompanies this heterogeneous and complex system (DG MARE, 2013). Researchers note that for co-management or interactive governance to be successful in this context requires an understanding and embedding of the local culture and local knowledge within this approach thus situating humans as an agent, provider and consumer in EAF (Begossi, 2012). In this way a successful EAF must be adaptive to new ecosystems knowledge by designing in an interactive and inclusive learning process (Rodwell *et al.*, 2013). To do this means securing routes to inclusion within these governance processes for a broader and evolving spectrum of marine/coastal environment users (FAO, 2009). Yet detailed local case studies show that the mere existence of these routes to inclusion are not enough in themselves to secure the collaboration they seek. Gutierrez *et al.*, (2012) show that without the presence of a strong community leader, stakeholder/community social capital, or the clear motivation for community engagement, such structures will often struggle to succeed in meaningful co-management.

With these various features of integrated, inclusive and interactive governance in mind, we purposefully selected a local case study approach that would explore the uniquely local nature of human interactions, networks and norms in each governance space and how these impact upon the processes and outcomes of fisher (community) representation and engagement. Specifically, through these case studies we explore institutional issues key to EAF such as wider stakeholder inclusion with increased roles and involvement in policy and management; planning for change and uncertainty in the system; devolution of authority; and finally increased co-ordination and collaboration between different sectors and marine user groups (FAO, 2009).

Examples of barriers to interactive governance and co-management

As we have already hinted at above there is a growing literature around the challenges of how to develop this more holistic whole system approach that considers multiple stakeholder values and how to capture those voices. One such challenge centers on **how to persuade political and policy elites of the need for a genuinely different governance approach** that will inevitably involve devolution of power and control to enable legitimate (not just the impression of) self-determination at the local and regional level (Rodwell *et al.*, 2013). The proposal of regionalisation in the recent CFP reform (EC, 2013) will be observed closely in this respect. While probably the most frequent challenge noted in the literature with regard to the inshore fleet is the limited historical representation of their interests at national government or European level that has resulted in a political and organisational capital deficit (MARE, 2013). Gray (2005) observes historical under-representation at the European level is partly a function of an absence of adequate processes for stakeholder participation or routes to active decision-making for this part of the sector. This **political and democratic deficit** is made more difficult by the very uneven pattern of representation and institutional coverage of fisher interests at local, regional, and national level meaning developing a collective and legitimate voice is problematic. A **history of disengagement and sometimes disenfranchisement in these different levels of management can be aggravated by a lack of fisher willingness and sometimes capacity to engage. Fishers, for the most part, want to fish not attend meetings. Thus we return to the Begossi (2006) point around the need to understand local cultures and norms.** For example, the very individualistic nature of fishers (Symes, 2006) means they are less inclined to collaborate and so have limited experience of the benefits of partnership working structures. FLAGS in particular have worked hard to bring politically reluctant and isolated fishing communities together to strengthen their influence (FARNET, 2013). Even if you are successful in achieving collaboration of some form this inclusive model of governance may be undermined by democratic deficit owing to an imbalance of stakeholder representation (Rodwell *et al.*, 2013). The risk is the processes of representation within these structures are not transparent and there are community voices missing from that representation (Linke and Jentoft, 2013).

Trying to engage fishing communities is made more difficult by the capacity deficit and cultural barriers of shifting from traditional informal organisation to more formal organisation (with all the off putting and even intimidating technical governance norms associated with this such as large complex documents, the extended time burden of long formal meetings and technical language). Further, a history of mistrust of formal authorities in the fishing communities creates an additional barrier to the co-operation and transparency required for co-management of this kind (Pita *et al.*, 2010). Achieving fisher voice and engagement in multiple scales of governance as needed for real influence over policy making is made difficult by fisher perceptions that the sense of value and relevance they see in their local level organisations (such as fishers groups, associations and co-operatives) is missing in higher levels of governance (DG MARE, 2013:103). These barriers are compounded by **fisher perceptions that they are not adequately involved in decision-making or have any real control or influence over the European policy-making process** (DG MARE, 2013; Pita *et al.*, 2010). In fact the further away from the locality that fisheries management decisions are made the less fishers feel that there is any understanding for the specific impact of those policy on local fisheries (DG MARE, 2013). The absence of local knowledge and influence is something the more interactive model of governance like EAF seeks to

overcome through the inclusion of a broader knowledge base and spectrum of marine/coastal environment users (Rodwell *et al.*, 2013). In contrast, the perceived disconnect between the local reality of policy implications and high level planning has been built up in the context of a traditional top-down governance model driven by environmental science modelling of fish populations (with **little whole systems focus to consider LEK or the social contribution of fleets to local communities**) (Reed *et al.*, 2012; Urquhart and Acott, 2013). This limited valuing of stakeholder driven science and knowledge (specifically fisher local ecological knowledge) in the context of fisheries governance is counter to the principles of the ecosystems approach that seeks to better value and integrate this knowledge in decision making (Gray, 2005; Linke and Jentoft, 2013). The valuing (or not) of LEK within formal fisheries governance has been brought into sharp focus with the recent MCZ (Marine Conservation Zone) consultation process. With this in mind there is a common view throughout the fisheries governance literature that there is a need to **make room for fisheries-science partnerships to help remedy this barrier to fishing community ability to inform marine conservation and planning** (Linke and Jentoft, 2013; MARE, 2013). For example, the broader socio-economic remit of the IFCAs (Inshore Fisheries and Conservation Authorities) responsible for the management of the inshore fleet in England is seen to offer an opportunity to move towards a more integrated co-management approach that takes account of both the socio-economic viability of inshore fishing communities and the marine science and conservation responsibilities of the IFCAs (Phillipson and Symes, 2010; Rodwell *et al.*, 2013).

Examples of such fisheries-science partnerships and inter-linkages are explored in the case studies in terms of building resilience in social-ecological systems and the challenges such partnerships face in securing the successful collaboration of a very diverse (and sometimes conflicting) set of stakeholders and views (Rodwell *et al.*, 2013).

The rise of the social agenda and the historical bio-political focus of fisheries management

In the increasingly devolved governance context described above the sustainable communities agenda has emerged as a common policy of governments across Europe “in which sustainability came to be defined as a modernised, consensus-based mode of thinking and acting” (Raco and Flint, 2012:9). In this way we see that **governance and sustainability are heavily interdependent with potentially critical outcomes for both**. With this in mind, we note that sustainability research and policy has to date been dominated by an economic or environmental focus, while social sustainability has only received increased attention in the last decade (for example, Colantonio and Dixon, 2011; Cuthill, 2010; Davidson, 2010; Manzi *et al.* 2010;). The relative absence of focus on the ‘social’ in broader sustainability research and policy is interestingly reflected in the prioritisation of economic and environmental sustainability goals in fishing policy (Reed *et al.*, 2013; Symes and Phillipson, 2009; Urquhart *et al.*, 2014). Observers note this **historical bio-political focus within fisheries management needs to be complemented by a social and cultural agenda** that seeks to better address social equity, local employment, full ecosystem health, food security, and socio-cultural values (Reed *et al.*, 2012; Urquhart *et al.*, 2013). As noted above the emergence of calls for EAF in EC marine and fisheries policy was swiftly followed by a realization this required an understanding of the human dimensions of EAF that are critical to the successful introduction of this approach to governance.

“The fishery system (i.e. the social-ecological system surrounding the fishery that is at the core of the EAF) – is the starting point for defining the scope of the EAF. An EAF puts the fishery in a context of three main facets: its biotic components, its abiotic elements and its human dimensions, including social, economic and institutional frameworks and factors” (FAO, 2009:xvi).

In response to the historical bio-political bias in fisheries management; and as calls grow more pressing for an EAF that takes account of human dimensions and the local socio-economic and institutional context; and finally in light of a growing EU wide sustainable communities and social sustainability policy agenda, **fisheries management is now witnessing demands for greater research into the social and cultural features of marine fisheries:**

“... the social and cultural aspects of marine fisheries are often overlooked in fisheries policy and management frameworks that focus on the biological and economic impacts of fishing in their efforts to halt the decline of fish stocks. While this is understandable, sustainable fisheries are only likely to be achieved if management approaches integrate environmental, economic and social dimensions.” (Urquhart and Acott, 2013: 1).

Commentators such as Reed *et al.* (2013) argue a traditional bio-political approach has led to a crisis of governance and failure to secure environmental sustainability of marine habitats. The social and cultural agenda has been boosted by the recent 2013 reform of the Common Fisheries Policy that indicates Member States must now consider the distribution of quota based on social and economic objectives, and not just environmental concerns (EC COM, 2013). **This move shows a potentially dramatic shift to include socio-economic factors in fisheries management (though these are subject to caveats regarding the member state delivery of Article 17 in practice)**. The growing policy and research context of an increased focus on the social contribution of coastal fisheries (COM, 2009; EC COM, 2013) demands a clearer understanding of how, or if, these social issues are afforded greater attention via the co-management and collaborative/participatory governance models described above.

Hence there is a need in this context to increase our knowledge of the complex interconnectivity of fisheries governance and the social, economic, political, cultural and environmental aspects of small-scale fisheries and their communities **(including issues largely overlooked such as social fabric, personal and community identity, sense of place, community cohesion and social wellbeing)** (DG MARE, 2013; Urquhart and Acott, 2013). For example, commentators note the need in the formation of fisheries policy and governance to be move beyond the premise that fishers are simply motivated by money and form part of a market. Instead (or in addition) **research shows a need to include their wider aesthetic and emotional motivations to fish (i.e. fishing as a way of life tied to their family tradition and sense of identity):**

“Fisheries in most locations are a part of local tradition and continuity amid what are still seafaring cultures facing significant challenges. Fishing is what you do, if you can, and its existence value – let alone the more traditional financial values of fishing and related activities – feed into other economic sectors, notably food and tourism. The historical and cultural importance of fisheries provides the sector with a source of meaning and resilience to negative change – and a motivation to adapt that may derive from factors intrinsic to family and community traditions than necessarily the incentives provided by extrinsic drivers such as markets and policies operating at multiple scales” (DG Mare, 2013:72).

As CFP reform filters through to member state government and then local governance the implications of increased consideration of social objectives in fisheries planning will be a dominant area of governance research going forward as responsible authorities, academics and communities consider how to evaluate and collect data around fishing community socio-economic indicators. How this data is then presented and the degree of influence this has on quota allocation will be partly a function of processes and models of governance processes and industry engagement.

The emerging policy and research focus on the socio-economic contribution of small-scale fisheries to local communities, and the parallel policy debate around how to secure EAF (and the often under researched human dimensions of EAF so critical to this) (FAO, 2009), helped forge the analytical focus for this research.

For example, we explored social sustainability within fisheries governance in terms of social capital, local cultural identity, social infrastructure to support community involvement in local decisions and the different barriers to community engagement and participation. Littig and Griessler (2005) offer a definition of social sustainability that unusually centres on the role of work. This was productive in our analysis when considering the role fishing/fishers play in shaping a coastal community-marine environment relationship. This definition draws upon the sentiment that there are social values and resources that exist within communities that are worth preserving for future generations, and that there is a role for governance (described below as institutional arrangements) in shaping the links between environmental, economic and social sustainability goals (or as they describe nature-society links):

“Social sustainability is a quality of societies. It signifies the nature-society relationships mediated by work, as well as relationships within the society. Social sustainability is given, if work within a society and the related institutional arrangements satisfy an extended set of human needs and are shaped in a way that nature and its reproductive capabilities are preserved over a long period of time and the normative claims of social justice, human dignity and participation are fulfilled” (Littig and Griessler, 2005:72).

Growing coastal economy integration and institutional connectivity

With the emergence of collaborative approaches to governance in local policy observers have noted an increased connectivity between the fishing sector and other coastal community stakeholders. The **growing number of stakeholders involved in the maritime economy (tourism, renewable energy, ports, conservation) mean it has never been more important for fisheries planning to be seen as part of a much wider policy landscape and their linkages to these other sectors understood:**

“[T]he flows of good and services – if not their integration (fisheries tourism and net-mending in ports) – highlights how fisheries need to be seen in the round in their broader context. ... Upstream and downstream linkages from the fishery were important at locations where they exist, and desirable where they do not. These linkages need to be better understood and accounted for in management and policy.” (DG MARE, 2013:12)

Commentators repeatedly note the need for fisheries to (re)connect with local society by forging links with other sectors of the coastal economy in order to better secure their livelihoods. **A key part of this connectivity involves building broader political alliances (Jacob *et al.*, 2013) and developing institutional cross scale linkages (horizontal and vertical) to secure their sector voice and influence over a wider sphere of social, economic and environmental policy areas** in their coastal communities (Berkes, 2009; Symes, 2006). The research was particularly interested to see if the case studies provided any examples of wider integration of fisheries into local development policy and the parallel increase in maturity of political alliances and institutional linkages this demands. For this reason it is felt that understanding the rapidly evolving and dynamic relationship between a wider socio-economic development context and fisheries/ coastal governance requires greater research attention. This is all the more important given the indication in the literature that the extent of fisher influence over their direct economic contribution ranges from very limited (with financial and non-financial benefit realised further down the supply chain) to improved control at the point of the catch (as a result of innovative reconfiguration of the supply chain to achieve increased added value for the fisher). While in terms of indirect contribution this is also very context-dependant and requires a further investigation into how these linkages and interactions through informal and formal governance play a part in shaping that contribution at the local level.

Given the **often underestimated indirect contribution fisheries make to the identity (or ‘attractiveness’) of an area and wider coastal economy (notably through food and tourism)** (DG MARE, 2013; Urquhart and Acott, 2013) the case studies were used to explore what role/impact (if any) a more integrated governance might have in acting as a catalyst for further enabling this contribution and in making it more explicit in regeneration and socio-economic development planning. The literature notes that the cultural and aesthetic elements of local fisheries can act as a trigger for economic regeneration and fishing community resilience where it is employed in tourism and product branding; through providing alternative income streams for fishers and their families; and importantly acting as a bedrock for fishers sense of identity, purpose, belonging and community (DG MARE, 2013). Given the centrality of the fishing industry to this sense of place researchers raise questions over their role in shaping how that representation is employed in terms of place making, the tourism offer, spatial planning and community development (Urquhart & Acott, 2013). With the increasing role of high profile media representations of the fishing industry playing a role in this process and driving a

popular culture interest in ethical narratives around locality of catch and fishing methods **there are both political and economic repercussions for the industry and coastal economy that in turn plays out in governance inter-linkages**. For example, high profile campaigns by Greenpeace, WWF and celebrity chefs have all sought to influence CFP reform through the European Parliament. While in some cases a shifting consumer trend around food tourism and the slow food movement (with a focus on food provenance, traceability and sustainability values) is resulting in the need to increase catering supply chain links and education around a seasonal menu and sourcing sustainably caught fish (Reed *et al.*, 2013).

In the context described above of collaborative and participatory models of governance that seek to better integrate fisheries into the broader coastal economy, the European Commission developed the FLAG structures (first launched in 2008). **FLAGS (Fisheries Local Action Groups)** are Axis 4 EFF funded community led local development style structures that involve a broad partnership of public and private sector stakeholders working towards an integrated development strategy to help secure a sustainable future for currently declining local fisheries and the communities (and coastal economy) around them. Through enabling funding for fisheries related tourism, culture, education, training and economic/market development projects these local governance structures have been set up to **encourage a more collaborative and whole system approach that sees the fishing sector as part of a highly integrated social, environmental and economic system**. To this end the case studies in this report (the English case studies in particular) pay attention to the FLAG governance structure as a relatively new model of community led local development (CLLD) employing a micro example of a multi-sector collaborative approach to fisheries governance. The FLAGS as an early example of the CLLD style model provides a **valuable insight into the challenges and opportunities faced in securing local level and multi-sector engagement**, that is gaining increasing purchase and use in European funding and development (FARNET, 2014b). The rise of CLLD is consistent with the wider paradigm shift from government to governance with which we began this discussion of contemporary literature. Devolved responsibility for decision-making to local or regional level partnerships (public and private sector), who must take ownership of the solutions needed to secure the sustainability of their locality is an underlying principle of the political modernisation project (Raco and Flint, 2012). We see this being echoed in the recent focus in UK environmental policy on 'community resilience' (Raco and Flint, 2012). It is likely that going forward fishing communities will be encouraged to develop increased community resilience (i.e. the ability of a community to survive, adapt to and respond to external and internal shocks) while the concept will feature more prominently in fisheries governance debates (Pope *et al.*, 2014; Symes, 2014).

This brief introduction to fisheries governance literature describes priority issues for inshore fisheries in terms of developing adaptive and locally relevant organisational infrastructure (through formal and informal structures); the use of inclusive co-management and interactive governance approaches that take account of the dynamic and complex linkages between socio-economic and environmental systems; and the need for that governance to operate at a variety of scales and within a range of sectors to secure the level of integration required to overcome the barriers to effective sustainable fisheries management described above. In order to inform this evolution of governance researchers need to develop a more intimate knowledge of the fishing communities that engage (or not) in these governance mechanisms so we might better understand the relationship between fisheries governance and the normative objectives of sustainable fishing communities and ecosystem health (DGMARE, 2013). We hope through the eight European case studies presented in Chapter 3 we can contribute to this debate in a meaningful and critical way.

1.4 Summary of the framework of analysis

Drawing on the dominant themes in the governance literature above the following framework of analysis was developed to inform both data capture (participant sample and interview template) and the process of thematic data analysis. The literature and policy informed framework was essential for enabling the comparison of case studies across different areas and by different researchers. The four key themes explored are detailed below but are framed within the broader question of:

"If and how coastal governance structures (such as those relating to ICZM and regeneration) can support Inshore Fisheries in securing their economic, environmental and social sustainability goals."

Key themes

1. Fisher influence and participation in governance at different scales – including reflection on the barriers to, and opportunities for a participatory and collaborative co-management approach to governance
2. What role does governance play in shaping fisheries economic sustainability?
3. What role does governance play in shaping the social sustainability of a fishing community?
4. What role does governance play in determining the contribution of a fishery to environmental sustainability?

The eight case studies provide a uniquely detailed exploration of inshore fisheries governance in order to better consider the themes above. They have done this by documenting existing, potential for, or challenges involved in securing more integrated co-management and good governance (both from a grass-roots approach and progressive structures initiated by local, national or European authorities). In practice this involves investigating governance in relation to the wider coastal economy (e.g. the fisheries sector, hospitality/retail, tourism and regeneration); social sustainability (e.g. community cohesion, cultural identity and community development); and the restoration and conservation of the coastal and marine environment (e.g. sustainable fishing practices, fisher links with marine science and valuing of local

ecological knowledge). The framework in turn informed the template of questions in the Interview Guide in Table 1 below. The framework themes are developed upon below for clarity:

1. Fisher influence and participation at different scales (local, regional, national, EU) and in different sectors (public, private, academic, political, NGOs) of governance. Including:

- Barriers to fishing industry engagement and participation
- Opportunities for and routes to influence fisheries related management, planning and policy
- Evidence of collaboration in inshore fisheries governance including gaining an understanding of successes and challenges to this approach to governance

2. How governance structures impact (directly and indirectly) upon a fishing community's economic sustainability. For example, through its impact upon supply chain security and innovation, industry diversification, local economy connectivity, tourism and regeneration planning (including destination and product branding).

3. How governance structures impact upon a fishing community's social sustainability. For example, through issues of cultural identity and sense of place, fisher training, community cohesion and connectivity with wider coastal communities.

4. How governance structures impact upon a fishing community's contribution to environmental sustainability. For example, through the development of partnerships with marine science and conservation stakeholders; through securing the input and valuing of local ecological knowledge; through the negotiation and adoption of sustainability led fishing practices (like no catch zones); through achieving environmental accreditation; and through efforts to adopt EAF.

2. Governance Case Study Methodology

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- 2.1 Introduction to methodology
 - 2.2 Justification of case study selection
 - 2.3 Method detail
 - 2.4 Interview Guide
 - 2.5 Research team reflections on this methodology
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2.1 Introduction to methodology

This next section provides an overview and explanation of the case study method used, a justification of the case studies selected and then a more detailed summary of the data capture and analysis process. Clarity of the methodology adopted is key for two reasons. The first is to give confidence in the legitimacy and relevance of data collected. The second is to enable this approach to be repeated in other fishing communities thus allowing comparison and the development of an empirically led evidence base to inform fisheries governance planning.

The case study methodology employed in this research enables us to look at fisheries governance not just from a policy/technical perspective (i.e. the skeleton of governance infrastructure in place in each area) but also from a socio-political perspective. The Activity 1.1 report provides a comprehensive mapping of the policy and infrastructure baseline indicating the technical policy requirements and objectives. To complement this data this case study report highlights the motivations and perceptions of the people that deliver or engage with these policies and the institutions that are responsible for delivering the associated fisheries management or sustainable community objectives. Understanding these social processes of governance (such as power, social capital, participation and identity) and the unique experience of differing degrees of engagement in each case study gives an insight into how an ecosystems based approach to fisheries management (that seeks a more inclusive multi-sector format that includes fisher voice, values and knowledge) might be achieved.

To this end the researchers explored how, and to what extent, each fishery is engaged (or not) in various governance structures that influence and contribute to the respective sector agendas. With the introduction of the consideration of socio-economic indicators in the recent CFP reform (EC COM, 2013) there is now a greater need to understand that fisheries are situated within a wider socio-economic policy landscape (DG MARE, 2013) and so the inter-linkages between these diverse policy areas. We suggest these linkages are usefully explored through an analysis of governance. The in-depth case study approach is necessary to explore and understand the complex and highly dynamic social processes that make up the interactions between the fisheries and governance structures (e.g. FLAGs, Fishing Associations and national industry bodies) including their processes of engagement, the stakeholders involved and agendas developed in terms of local regeneration and coastal economy planning, tourism and marine/ coastal conservation. Each fishery is unique in their socio-political and economic context and the history of their complex governance interactions between these different sectors. For this reason in-depth case studies with semi-structured interviews with a broad range of stakeholders (thus capturing a rich and detailed data set) provide the most appropriate methodological approach to take account of the influence of different sectors, stakeholders, and structures and the wider context in which they have developed.

2.2 Justification of each case study selected

A simple definition used by Hay *et al.* (2005) best reflects the research team's understanding and use of the case study approach: *"Intensive study of an individual, group, or place over a period of time. Research is typically done in situ"* (ibid:276). Case studies were selected in part owing to the existing baseline knowledge the partners had accumulated over the course of the GIFS project which ensured the sensitivity and relevance of the questions asked in interviews. By building on the relationships between each GIFS partner and their respective case study we were better able to remove barriers to access to key stakeholders, better understand the complexity of the processes involved, and importantly continue the co-learning between the partners and the respective fishing communities that is important in terms of the project impact. The specific case study selection criteria for each site is outlined below.

Nieuwpoort (Belgium)

The fisheries in Nieuwpoort has a very specific profile. In 2013 a total of 9 fishing vessels are registered in the port of Nieuwpoort from which 6 are defined as inshore fisheries according to the definition used in the wider GIFS project (only 1 vessel is officially registered as 'coastal fisher'). Of all Belgian coastal municipalities, Nieuwpoort is most strongly associated with fisheries, and fishery is closely linked with tourism. Knowing the city council plays a very specific role as owner of the fish auction, this case study provides a useful example in which to explore how these linkages with both the public sector and tourism operate in order to support Nieuwpoort fisheries and the wider community.

Arnemuiden (The Netherlands)

Although the fishing vessels are no longer located in Arnemuiden, fisheries still remain an important source of income. The municipality of Middelburg use fisheries as a selling point to attract more visitors to this small village. This case study was selected to analyse the nature and impact of recent fisheries-related initiatives, and how this can strengthen both the tourism and fisheries sector. The fisheries in Arnemuiden is not strictly IF according to the definition used in the wider GIFS project ("fishing activity carried out by vessels operating within 12 nautical miles of the coast (as well as shellfish harvesting conducted on foot or, in one instance, on horseback)) as this community has fishing vessels that fish beyond the 12 nautical miles zone. However the unique integration of fisheries into the economy in Arnemuiden (specifically through tourism and cultural heritage based identity and a specific focus on the aesthetic and cultural contribution of the fleet) makes it a useful example to explore how governance plays out where fisheries is so comprehensively integrated into the local government regeneration and economic planning. The research was concerned on understanding how (if at all) the fishers and fishing community are engaged in and influence this broader economic development planning. To this end the interviews discuss how and to what extent the community is engaged in various governance structures, and if and how government institutes support the fisheries in Arnemuiden.

Bay of Saint Brieuc (France)

The first French case study examines the governance of scallops fishery in Bay of Saint-Brieuc for several reasons. On the first hand, it is an iconic species of the bay of Saint-Brieuc caught by a fleet of small trawler-dredgers. It is a very important activity in this region either in economic terms (5 710 tonnes landed in 2012 (CAD22, 2013)) or cultural terms (events related to scallops fishery). This species is famous and well-known in France. On the other hand, it is a very interesting case from the point of view of governance of inshore fishery in France. Scallops fishery in the bay of Saint Brieuc is based on a co-managed system at the request of fishermen since the 1970s. This is the first most importance fishery in the Channel for which a special regulation with licence was created to try to limit the number of vessels. That is why we have a feedback on the strengths and limitations of this governance based on co-management. In recent years, there are more and more projects in the bay which have repercussions on scallops fishing. Bay of St Brieuc is a maritime area in mutation due to the multiplication of sea-users. It is interesting to study how an important fishing community can defend their interests.

Bay of Granville (France)

The second French case study focuses on lobster (*Homarus gammarus*) in the Bay of Granville. This is also emblematic and added valuable specie of the West of France. It is caught by a fleet of small pot vessels from West Cotentin. The first choice criterion was the geographical position of this fishery. The Granville Bay is a special area because of its geographical location. Indeed, it is a maritime trans-border area shared between England (Jersey) and France (Normandy and Brittany regions) which required modifications in the governance and management of the fishery for this specie. The study about the agreements between different nations to share a resource can provide elements for a good governance. The second choice criterion is the involvement of the fishermen community in various projects either to promote their products and their work (sea festivals, implementation of an ecolabel) or to defend their interests (energy project, creation or project to establish MPAs).

North Norfolk, Hastings, Northern Devon and Cornwall and Scilly Isles FLAGs (England)

The four English case studies were predominantly selected based on their FLAG (Fisheries Local Action Group) status. While other case studies are part of FLAGs, at the point of case study selection they were a relatively new structure in the English fisheries governance landscape (first launched in 2010/11) that was undergoing considerable change at this time (for example, with the recent introduction of IFCAs). We identified there was a knowledge gap around the impact and experience of this new model of fishing community governance within the specific English context of swingeing public sector funding cuts, resurgence of focus on localism structures by central government (Lowndes and Pratchett, 2012), and a history of social and economic deprivation in many English coastal towns (Beatty *et al.* 2008). With this context in mind, a prominent feature of the English case studies is how inshore marine fishing is incorporated (or not) into programmes of regeneration (often through tourism, but also through community cultural and heritage projects, as well as examples of fisher-led or fisheries related education provision). The role of FLAGs in this respect with their stated aim of helping to develop more sustainable fishing communities is explored in terms of how they facilitate the integration of fisher voices and the fishing industry more generally into social and economic renewal of the broader coastal economy. By exploring the differing and common experiences of this young collaborative and participatory style structure we are able to highlight challenges, threats and successes in terms of delivering co-governance/ co-management. In the case studies the FLAG structures are situated within the wider governance landscape in each locality in order to understand how the inter-linkages between different institutions operates within and between scales and sectors. The FLAGs are part of an EFF (European Fisheries Fund) programme administered in the UK by the Marine Management Organisation (MMO) to develop more sustainable fishing communities in England. There are six FLAG areas around the English coast including: North and West Cumbria, North Norfolk, East Riding Yorkshire, Hastings, Cornwall and the Isles of Scilly and Northern Devon since late autumn 2011. We have selected four of these FLAGs in differing parts of the country in order to gain an insight into how their own specific socio-economic and political context contributes to the social construction of the governance landscape (including the actors, processes/norms and cultures of knowledge) in which the FLAG and other examples of co-management are to develop.

2.3 Method detail – case study research approach, data capture through semi-structured interviews and thematic analysis of findings

The use of a case study approach in this research is partly in response to the call by leading governance authors for more locally specific, empirically informed governance led research in both sustainability (Jonas *et al.* 2003; Raco, 2007; Whitehead, 2003) and fisheries management (Bavinck *et al.*, 2013; MARE, 2012). What is more, Yin (2009) notes that a case study approach is particularly well suited and commonly used to investigate complex organisational structures and related socio-political phenomena like the congested and highly complex institutional landscape of fisheries governance. While this research will offer an in-depth insight into the specific governance workings of each case study, it also offers insight into broader conceptualisations of collaborative and participatory approaches to fisheries governance that can be utilised to inform their evolution and delivery in other fishing communities.

The rest of this section will now describe the case study pilot, participant sampling strategy and the data capture and analysis processes employed in this research. A case study pilot was conducted in Hastings (2012) to provide early insight into some of the dominant themes in fisheries governance, but also to help develop and refine the research design. The data from this pilot informed the interview guide in terms of approach and themes explored, the participant sample criteria and framework of analysis. The initial governance structures and stakeholder populations were identified through scoping meetings with key gatekeepers (identified through the course of the GIFS project work). Following scoping meetings the full sample of possible participants was identified. From that a purposive sample of interviewees was selected based on the following criteria:

1. Stakeholders from a mix of sectors involved in each fishing fleet/community including public, private, voluntary and the fishing industry itself to understand the nature of their participation from a range of positions.
2. Stakeholders in a range of scales of governance from local, regional, national and international to understand how and why the fleet engages/participates or not at different scales.
3. Stakeholders with a range of depth and length of experience and involvement with the community in order to gain a longitudinal perspective of the evolving role of governance and participation relating to fishing.

It should be noted that the specificity of the case studies shapes the exact nature of the stakeholder sample and so the participant list varies to some degree for each case study. This is particularly the case where stakeholders 'wear multiple hats' and so provide a range of perspectives on local and regional governance. Further, in some cases, recruitment of higher-level authority participants was unsuccessful where they felt unable to answer the questions or that these issues weren't relevant at this level. These issues are noted in the case study analysis and reflected upon in the method limitations below. The participant table for each of the eight case studies is detailed in the introduction to each case study chapter below. The names of all the participants have been changed for the purposes of anonymity.

A semi-structured interview method was selected as this provides an opportunity for a more in-depth questioning of the interviewee allowing detailed probing of themes and opportunity for clarification on points raised (May 2001). Following May (2001) a thematic guide of open questions was developed and opportunities to expand or introduce new themes were included. The interview guide was informed by themes and questions identified in the critical review of writing on fisheries governance introduced in Chapter 1 and the Hastings pilot in 2012. The themes explored in the interviews covered: governance practices; the governance landscape in terms of dominant structures, stakeholders, agendas, routes to and barriers to participation; and examples of partnership structures and sector inter-linkages (for example with conservation, tourism, cultural/heritage, and education and training). Semi-structured interviews give the researcher an opportunity to better address complex social processes (like governance) in a more interactive process (Dunn, 2001). Seventy-seven semi-structured interviews were conducted between April 2012 (11 interview pilot in Hastings) and December 2013. Most interviews were conducted in person in the participants place of work or at a community space to ensure convenience, comfort and privacy for the participants. Some interviews were conducted by phone owing to the logistics of their location and limited schedule. The majority of interviews were digitally recorded to improve the accuracy of the data collected. Where the participant requested not to be recorded notes were taken. This methodology made available detailed and rich data concerning the complex and dynamic social processes in these communities.

A thematic analysis approach (TA) was adopted to analyse the raw data (Brewer, 2000). Thus the interview scripts were analysed using an approach to establish common and outlier patterns or themes. This process involves inductive coding of the data by identifying codes as they emerge from the data, not pre-empting them in advance as done in theory testing. However, it is also understood in this approach that coding will be in part shaped by the key issues identified from existing literature detailed in Chapter 1 that in turn informed the framework of analysis detailed above. When demonstrating these themes and patterns in the case study chapters (Chapter 3) qualitative descriptions have been provided with supporting evidence, in the form of data quotations from interviews, with the intent of providing 'thick descriptions' that improve the reliability of the findings.

2.4 Interview Guide (Table 1)

1.	What core structures exist internally within the IF in terms of management, networking, lobbying or representation in broader networks?
2.	How have those core structures evolved? What is the purpose of those structures?
3.	Which structures are perceived as most valuable to advancing the community voice and influence? and why?
4.	What external local/regional governance structures or networks do the fishers engage in? and why? (i.e. where do they seek to make their voice heard and how) [Note: this will be adjusted to each case study depending on which IF/sector interactions they seek to explore: local community; economic regeneration; tourism; marine conservation etc.]
5.	Who represents the IF in these key structures? How did they come to be a representative (e.g. voted in/self-selected...)?
6.	What is your experience of capturing, representing and feeding back the fisher's voice/interest in local/regional governance?
7.	What sector agendas are they/you seeking to affect?
8.	What impact/successes (economic/ social/ cultural/ political) have they had in shaping those agendas?
9.	What barriers exist in affecting that change or agenda?
10.	Which structures most impact the IF community through their decisions and policy?
11.	How has /will engagement in those structures evolved in terms of shifting wider politics or economy (e.g. in terms of MCZs or CFP reform)?
12.	What interaction or engagement does the community have with national and European bodies?
13.	How does the community seek to lobby at this scale/ in these forums? And to what effect?
14.	[Detailed IF/FLAG questions] Describe the relationship between the IF and the FLAG? (e.g. in terms of representation/voice (board & panel membership); fisher involvement in/influence over FLAG projects; attending & contributing to FLAG meetings; remit of this FLAG (objectives)? Evidence/experience of co-management? Evidence of increased integration of IF governance (in terms of range of stakeholders and aspects of ecosystem considered)? Positives & negatives?
15.	Has the relationship evolved? If so how? What are the drivers of that change? How do you want that relationship to develop?
16.	[Detailed IF/Marine governance questions] How does the IF specifically engage with marine and/or coastal governance bodies and related issues? (i.e. Representation on relevant management structures? Lobbying of relevant bodies (technical/ scientific and/or political)? Practical engagement/ partnership with the relevant bodies?)
17.	How has that engagement changed (if at all) over recent years? And what (or who) are the drivers of that change?

2.5 Reflections on this approach

The section above outlines the research team justification of the use of a detailed case study approach based on extended semi-structured interviews with a variety of key stakeholders as a productive research design in satisfying the our objectives in gaining a more granular understanding of the day to day lived processes, experience and challenges of fisheries governance. The semi-structured interviews method conducted in these case studies certainly helped to build trust between the interviewees and the interviewer, thus enabling participants to provide rich detailed accounts of their feelings about the governance landscape (both positive and critical). The combined picture this data provides is a much more nuanced understanding of stakeholder views of the governance of inshore fisheries and how it is perceived within the fishing communities explored.

Despite this rich insight into the complex governance space researchers felt the research would benefit from a larger participant sample given the diversity of views expressed (both within and between each case study area). In addition, it was felt that given the diversity of views and issues addressed through mechanisms of governance the interview guide was not suitable for all stakeholders and required various additions and adaptations for different sector representatives. In future case studies the guide would be further developed (for example with slightly different versions for each sector) to take account of this limitation and the experiences from this project.

Interview data is never intended to be, or presented as objective. Indeed the value of this method is in accessing the personal experiences and perceptions of stakeholders in any given social context. Given the subjective nature of the data collected through this method the results are carefully situated within the broader context of the case study and the selection of relevant quotes given in the wider context of their comment so that the reader situates the data accordingly. Such limitations are mostly a product of the semi-structured nature of the interview method which meant that there were views and representations that could be misunderstood by the researcher. By choosing to digitally record interviews this helped identify those missed verbal representations. Not being able to record some of the interviews created a very practical and analytical limitation.

The variation in participant sample size between case studies is in part a function of the specificity of the governance landscape in each case study, and also the diversity of challenges of recruitment of participants in a study. That said in each case study the research team purposively gained access to a broad spectrum of sector views to try to ensure the research presents a true snapshot of the governance experience in each location. In future if the case studies are extended or revisited the team would seek to augment the participant sample given both the fast changing nature of fisheries governance (and so relevant stakeholders), and also owing to the insights and perspectives gained from the different case study sites that could be further developed in future iterations of this work.

The interviews were conducted by three different researchers (one for the English cases, one for the French case, and one for the Belgian and Dutch cases), which can inevitably lead to varied researcher impact throughout the research process. The research team sought to limit this variance by using a common interview guide and framework of analysis.

3. Case studies

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- 3.1 Arnemuiden (The Netherlands)
 - 3.2 Nieuwpoort (Belgium)
 - 3.3 Bay of St. Brieuc (France)
 - 3.4 Bay of Granville (France)
 - 3.5 Hastings (England)
 - 3.6 Northern Devon (England)
 - 3.7 North Norfolk (England)
 - 3.8 Cornwall and Scilly Isles (England)
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The following chapter sets out the findings from the eight in-depth case studies from across the 2Seas Channel area. Each case study follows the same format with a general introduction to contextualise the findings from the area including the key features of IF and the dominant governance infrastructure. This is followed by a map of the area and a table of the anonymised research participants. The main analysis in each case study addresses: a. areas of strength and opportunity in terms of good governance and collaborative approaches; b. areas of concern, challenge and vulnerability in terms of good governance and collaborative approaches; c. and finally provides a short conclusion setting out the key findings presented in a useful summary table divided into social, economic and environmental elements of sustainability.

3.1 Arnemuiden (The Netherlands) Case Study

Introduction

1. Local governance infrastructure and representation deficit
 2. Limited impact of local government and disconnect with national and European levels
 3. Relationship with the environment and conservation sectors
 4. Improving sector connectivity through Fisheries Local Action Groups (FLAGs)
 5. Integrating fishing into the local community and local economy
 6. Local community, place based identity and the relationship with the fisheries
 7. General conclusion and key sustainability issues
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Introduction

Arnemuiden is a small city located in the municipality of Middelburg in the province of Zeeland, the Netherlands with a population of 6000. Arnemuiden was once located near the sea. Nowadays, little elements referring to the proximity of to the sea are left mainly due to the natural process of siltation (see figure 2). Fishermen moved their fleet to nearby located ports; Veere and Vlissingen in the late 19th century. Although fishing vessels are no longer located in Arnemuiden, fisheries still remain an important source of income. In 1901 the fishing fleet of Arnemuiden was at its largest, counting 65 vessels (van Dijke, 2012). In 2014, 21 vessels are registered in Arnemuiden (Ministerie van Economische Zaken, 2014) from which 10 vessels are actually active in professional fisheries. These vessels do not fulfill the GIFS definition for inshore fisheries ("fishing activity carried out by vessels operating within 12 nautical miles of the coast (as well as shellfish harvesting conducted on foot or, in one instance, on horseback)) as this community has fishing vessels that fish beyond the 12 nautical miles zone. Despite this the case study has been chosen to analyse the nature and impact of fisheries-related development initiatives associated with the inshore fishing of the past, and how this can strengthen both the tourism and fisheries sector. The municipality of Middelburg, together with the GIFS project have made use of the (old) fisheries activities in Arnemuiden to re-develop the town around its' fishing identity and heritage. For example, by introducing street furniture, signs and decorations, such as outdoor paintings representing historical topics; an installation of a "Hoogaars" replica and a typical sailing ship of Arnemuiden used for IF in the past. The celebration of Arnemuiden as an historic fishing has been valuable in contributing to the town's economy and this case study focuses on the role of governance in this context.



Figure 2. Arnemuiden, Province of Zeeland, in the Netherlands (Source: VLIZ, 2014)

Table 2: Arnemuiden interviewee sample

Interviewee	Sector/role	Date	Length
1. Participant A	Fisheries Local Action Group (FLAG)	26.6. 2013	57 mins
2. Participant B	Local politician	26.06. 2013	70 mins
3. Participant C	Fish auction	26.06.2013	41 mins
4. Participant D	Local politician	27.06. 2013	33 mins
5. Participant E	Local shop owner/member of women think tank	29.10. 2013	69 mins
6. Participant F	Fisher	29.10. 2013	46 mins

1. Local governance infrastructure and representation deficit

In the Netherlands IF is managed by the Cooperative producers organisations (PO). These PO's deal with all the fishing communities within a designated area rather than just one specific fishery community. Arnemuiden is part of the PO Delta South and so the interests of the local fishers are presented through a regional structure.

The fisheries in the Netherlands are represented by two organisations: Vissersbond and Visned. The PO Delta South is a member of Visned. These two organisations have the same representative responsibilities, and fishers can choose to become a member of either of them. There have been attempts in the past to merge both organisations to achieve a single organisation and so industry voice at national level, but this has proved elusive thus far:

"They have been trying for years to get those two (Visned and the Vissersbond) together, but it does not happen. They have always had the same goals. Now they are both knocking on the Ministry's door with two organizations. They would be much stronger if they would work together." (Fish auction, 27 June 2013)

The Vissersbond and Visned represent the fishers in fisheries related bodies including at European Commission level. The fishers in Arnemuiden are not organised locally within their own local fishing association and therefore don't have any specific fisher-led local representation. The fishers note that the fragmented nature of the sector representation at national level owing to the division between the Visned and the Vissersbond undermines the impact of the sector voice:

"There is actually a fragmentation, which is a pity. Actually, there is need for one organization with one powerful punch. Not just in the Netherlands but immediately in "Brussels" (European Commission). That would be better" (Fisher, 29 October 2013)

The idea of developing such a governance forum to secure representation and engagement at a local level, either specifically for Arnemuiden or jointly for other fisheries in Zeeland, is supported by a local council member. He feels this

would improve the local connectivity and engagement with the fishers as the local government would have a single contact person specific to the Arnemuiden fisheries, which could serve to express the interests of the fishermen in other local organisations, sectors or government institutes.

"No, that (a fishers network for Arnemuiden) does not exist. They talk about it of course. But fishers also see each other as competitors. Each Friday they want to know: which ship is the winner? Which one has the best landing value? An organized association would surely be an added value. In that way, one or two persons could represent Arnemuiden or serve as a spokesmen and contact person for the local politicians. Such an association could also make joint applications, e.g. for grants, and come forward together as a stakeholder." (Local politician, 26 June 2013)

Despite this interest in developing local fisher governance, all the case study respondents felt that this representation should not be extended to a lobbying function at national or international level. This should instead be dealt with at the level of North Sea fisheries, with Arnemuiden fishers raising their voice through the relevant regional channels of engagement. However, it is also recognised that there are real barriers to this level of fisher engagement and representation owing to their lack of available time; a lack of interest in governance partly owing to the alienating norms of governance associated with these processes of engagement; and the relatively poor literacy levels in the sector that make securing fisher participation in governance all the more challenging. The result is that as a sector the fishers are perceived by participants to be politically disengaged with poor levels of representation and so influence over relevant local policy decision-making:

"A lobbying structure could better be set up for the North Sea fisheries as a whole. Pure lobbying for Arnemuiden makes little sense. Besides, the fishers do not have time for that, their core activity is fishing, they are really hard workers. They feel free at sea; a meeting room is not their thing. Moreover, it is very likely that finding a representative who can speak for all families would be difficult." (Local politician, 26 June 2013)

"The fisheries sector is administratively very poorly represented. If you look at agriculture, it is administratively much stronger, and is also much stronger than fishing as a lobbying club. The education level in that sector is also much higher. The point is for fishing: they leave on Sunday and come back on Friday, there is football on Saturday, Sunday they go to church, and there is no time for the rest." (Fish auction, 26 June 2013)

"Fishing training has always been very brief. In the agricultural sector, one gets agricultural education, one son is going to study agriculture specifically and the children often remain actively involved in the company and are administratively part of it. Maybe this will be the case in the future for fishing, as there will be fewer ships and the children could thus go to college." (Fish auction, 26 June 2013)

However, although there is not a separate fisher organisation for Arnemuiden, the local fishers are represented on the board of the co-operative organisations and the fish auction and in this way, they do have local forums to raise their sector concerns.

2. Limited impact of local government and disconnect with national and European levels

One of the key questions we have explored in this research has been if and how governance structures can support sustainable Inshore Fisheries. In The Netherlands the national government implements the overall fisheries policy yet they do not deal with specific fishing community challenges and planning. The government levels involved with the fisheries in Arnemuiden are the local municipal (Middelburg) and provincial level (Zeeland). Yet as fisheries policy is determined at the European level, and implemented through national legislation the province or municipality have a limited remit regarding strategic fisheries issues and cannot influence legislation, quota or fisheries policy. They can influence fisheries through permits for fisheries related activities such as the fish auction, (outdoor) exhibitions, and through subsidies. The research shows that participants felt the local level government should play a greater role in voicing the concerns of the fishermen in national or international forums but at present, this is not the case:

"The municipality has an impact on the fishing communities by giving permission for initiatives (e.g. wall paintings, they have to give authorization for the clubhouse or help with the construction). The province can also have an influence through spatial planning and subsidies." (FLAG representative, 26 June 2013)

"There is not just one person who can represent all the families. This will be very difficult. ... The (the fishers) support the idea (that the councillor would represent the fishers), but the fishers have not contacted me yet, and they have a strong sense of responsibility. They think, "we don't need the municipality, we will see what is coming at us." (Local politician, 26 June 2013)

"If somebody is doing his best for fishing, it is definitely Jaap Broodman, but of course his influence is limited, as he has nothing to say on regulations. What can a province do more than trying to support and encourage the projects that are put forward?" (Fish auction, 26 June 2013)

The findings show that the local government do support fisheries events (such as the fish festival), but the participants felt quite strongly that such initiatives should emerge from the community itself in order to better engage the fishers:

"I do not believe that the government can put together such things. Fishing days are organized by the fish auction in collaboration with the municipality... On that day you do not see the real fishermen. They don't feel involved at all. They don't care about these initiatives." (Fish auction, 26 June 2013)

The fishers feel that the municipality could play a greater role in supporting fisheries in relation to decision-making at European Commission level. This might go some way to remedy the current disconnect between the European level

governance and local level fishing community which creates a sense of disempowerment made worse by the growing number of challenges faced by the industry and alienating bureaucracy:

"Of course, that (fishing) is our future. There will always be space for it. But it will be made very difficult. We need governments (local, national, regional, city of Middelburg), to lobby in Brussels. This is important" (Fisher, 29 October 2013)

3. Relationship with the environment and conservation sectors

A key element within integrated governance is the interaction and inter-connectivity between different marine and coastal stakeholder sectors. As users of the marine area, the fishery sector interacts with different sectors such as wind farms, shipping, but the most problematic relationship is found in the interaction with the environment and conservation (nature) sector. In the Netherlands, separate platforms have been established between the fisheries and nature sector (not specific for Arnhemuiden), but the relationship remains difficult with conflicting views over the environmental impact of bottom trawlers a particular issue. The fishers are represented by the fishing organisations.

"In some cases there is some tension, but the conversation platform is there. At the provincial level, there is such a Steering Committee for Fisheries Initiative Zeeland. There's the Zeeland environmental federation and the fishing organization is at the table. But not individual fishermen" (FLAG representative, 26 June 2013)

The research shows the fishers have no direct ambition to get involved in discussions about marine environmental management. However, they do have a lot of knowledge about the sea and the fish stocks, but feel this is not taken into account by marine scientists. The dialogue between the fishers and science sector remains very difficult. While their relationship with environmental NGO's such as Greenpeace is equally fraught with opposing positions:

"In the beginning, Greenpeace was, even quite strongly, opposed to fishing. They all hate Greenpeace now. Just look at the movies recorded in the Pacific, pretending to represent fishing in the North Sea, that Greenpeace shows. That just creates resentment, of course. " (Fish auction, 26 June 2013)

Despite this problematic relationship the findings show the fishers do have an awareness of the effects of overfishing and feel scientists and NGO's should take better account of their LEK in decision-making.

Only in situations where collaboration with the environment sector is obligatory, in order to secure fishing permits, will the fishers collaborate. Sadly this has not led to a wider voluntary collaborative approach:

"Here in the Netherlands at the Wadden Sea for example, you have to work with nature associations to get a licence, with Natura 2000 and closed areas. They also cooperate with the North Sea Foundation and other organizations to obtain the MSC label, but that is more of a urge to obtain something rather than a spontaneous act. If they work together it is just because they benefit from it. " (Fish auction, 26 June 2013)

"They (the nature sector) will never become our friends, and that is a shame because we are people from nature, we live from nature, but we need those people around the table to compromise, otherwise we are in a difficult situation, because eventually politics wants greening anyway" (Fisher, 29 October 2013)

The absence of a structured collaboration between environmental scientists and fishers makes developing an inclusive co-management approach to IF highly problematic. One respondent felt that the fishers could play a role in monitoring or management of the marine area, while one others felt this is a task for the government:

"On our ship, with four people, we are so busy to process the catch, and then you have to perform all other activities, which is very hard to do" (Fisher, 29 October 2013)

"The problem is that the government usually chooses an independent company to perform such tasks (monitoring and management). The fishermen would possibly be seen as not neutral enough for monitoring." (Local politician, 26 June 2013)

4. Improving sector connectivity through Fisheries Local Action Groups (FLAGs)

The Fisheries local action groups (FLAGs) are set up to manage Axis 4 (sustainable development of fisheries areas) of the European Fisheries Fund. The FLAGs are partnerships between fisheries actors and other local private and public stakeholders. Together, they design and implement a bottom-up strategy that fits and addresses their area's needs to increase economic, social and environmental welfare. The FLAG does not only deal with Inshore or small-scale fisheries, but with the fisheries sector as a whole. The research shows that in Arnhemuiden, the FLAG is a point of contact for the fishers that can help stimulate innovative projects and give financial support. However, the FLAGs are not viewed as a policy instrument, nor as a mechanism to represent the fishermen and their interests. Participants felt the FLAG helps the sector to develop ideas for improved sustainability, and is particularly important in acting as a catalyst for bringing the right people together around the table to develop these ideas and new relations. The FLAG role in improving the industry connectivity with other sectors is important in helping share knowledge and erode barriers to future governance inter-linkages:

"... we are not a representation body for the fishers. That is not our role. This has to be done by other organisations. The province represents fisheries, but also the nature sector. The province stands for integrated policy, and have to approach all the sectors equally " (FLAG representative, 26 June 2013)

Some of the ideas proposed through the FLAG and discussed by participants in this research process in terms of extending the profile, value and scale of the market for local fish, as well as reconnecting the fishers and fishing industry into the wider community identity are described below.

5. Integrating fishing into the local community and local economy

With the declining number of new entrants to the industry and growing number of families in Arnhemuiden without any connection to, or understanding of the contribution of fishing to the local identity, the local government and network of entrepreneurs have been exploring how best to re-integrate fishing in the local community and economy. Projects have been developed to protect this fishing heritage and reinterpret it for contemporary audiences (both residents and tourists). Further, by improving the knowledge within the wider local community and tourists around the fishing industry and the importance of consuming fresh local fish the profile and value of the market is improved. In Arnhemuiden, these type of activities are stimulated by the local government and the entrepreneurs. They serve to attract visitors and tourists to Arnhemuiden, and hence support the local economy:

"By developing a number of regional products, such as the fishermen jumper or local fish, this could strengthen the economy. By using the fishers DNA. And also other sectors can benefit. That is, in fact, the reason why we have participated in the GIFS project" (Local politician, 26 June 2013)

Ideas being developed but not yet implemented include a building a fresh fish market, a wet fish shop and a specialist fish restaurant in Arnhemuiden could highlight the link with fisheries activities, and draw more visitors to Arnhemuiden. However, there are barriers to these initiatives and a concern they contribute to the tourism economy only rather than being of direct link to the fishing community. Currently the fish is sold directly in the fish auction and then exported and there is limited fisher support for a local fish market as they perceive such an activity simply as a tourist attraction. While many of the local residents of Arnhemuiden buy their fish directly from the fishing families and therefore see no need for the market. We have seen in a number of the case studies the fishing community rejection or reluctance to support initiatives that are in their view too tourism sector focussed and in this case (the local fish market, fish shop and restaurant) they are viewed as superfluous to their established (though often low-price high-volume) supply chain arrangements:

"The question is, who will do it? The economic policy has already mentioned literally that money is foreseen, but there is no one who has picked it up. In the end, it is a lot of work. It would be largely on a voluntary basis. You cannot count on the fishers because there is no economic advantage and they are five days a week at sea. But for the image of the fishing sector and tourist attraction of a place, it might well be positive." (FLAG representative, 26 June 2013)

Participants note barriers to a fish shop include not being able to guarantee that the fish is landed by the Arnhemuiden fishers. While a fish shop has no financial added value for the fishers owing to the limited scale, it would be an added value for the wider community by contributing to the fishing identity of the village and providing a place for tourists and new inhabitants, not linked to fishers families, to access and learn about fresh, local and seasonal fish. However, there is resistance to this contribution to the tourism / retail offer of the town:

"It will not contribute economically to the income of the fishermen, because it is about small amounts. Other sales happen through the auction" (Local politician, 26 June 2013)

"There is no fish shop. If there was an economic opportunity for it, it would have been here for a long time. But there is, of course, so many fish sold by the crew and the ships, all of which having their ways in such a village, the locals would not buy fish in a shop. The majority anyway would not. It would be just for a few tourists but Arnhemuiden is not really a touristy place " (Fish auction, 26 June 2013)

Events like the Day of the Zeeuwse fisheries that support the image of the fisheries are not organised by the fishers themselves, but by the entrepreneurs and volunteers. Any suggestion of promoting "fish from Arnhemuiden" as a separate local speciality is not seen as a good option by the fishers who would rather the branding exist at a regional scale, "Flatfish from Zeeland" (e.g. Zeeland sole could be one of these flagship species). Though this would require additional quality control around this labelling which would need to be led by the regional government as there isn't an appetite to lead this from within the fishing community.

"I doubt whether the fishers see any added value in it. They will wait to see which way the wind blows. The government can play a role again here in order to achieve that label" (Local politician, 26 June 2013)

Equally, the participants do not indicate any sense of wanting to get involved in fish related education activities such as cooking workshops. At present there is no demand for such activities:

"I do not think the people of Arnhemuiden are waiting for it. The fishers themselves have no time for this. During the week they are at sea. I don't think they are interested in a cookery course or education activities" (Fish auction, 26 June 2013)

As stated above, the main concern for the fishers is fishing and to be able to earn a living to support their family. Their initial reaction towards fisheries related tourism activities was highly critical: "Nonsense, does so much money really have to go in there?" (Fisher, 29 October 2013). They now feel "moderately positive" about the fisheries related tourism activities that are being undertaken.

Part of the barrier to their support maybe that they do not feel involved in these projects, partly because they are at sea during the week and have other activities during the weekend (including attending church). While participants noted that the fishers' wives in particular did not feel very involved at the beginning of these initiatives. The local shop owner also

feels the fishers have other concerns to worry about, (such as the fuel prices) so tourism projects are just not a priority. Also

"These are 2 separate worlds. I really doubt if they (the fishers) know about this European fisheries project. They can see that the village is decorated and hear that the word "fish" pops-up more, but I wonder if they link it to their fishing activity? Their problems are so much bigger than the hassle about a statue or something like that" (Local shop owner, 29 October 2013)

After some time, the respondents now feel that the fishers do appreciate the initiatives, but they do not seek to participate in or lead these projects (with the exception of those who participated in the photo shoot to promote the local fishers jumper). The wider fishing community as a whole is more involved, but it took some time to develop their trust. For example, the community played a crucial role in deciding how the artwork in the village would look and where it would be placed. With such recent initiatives in the public realm the municipality has worked hard to make fisheries heritage of Arnhemuiden visible again. The benefits for fisheries from this work can be seen in terms of promoting the image of fishing and making their activities more visible. The activities have led to improvements in the public domain and it promotes the village of Arnhemuiden as a tourist destination.

While the respondents can see the added value in promoting fish and the fisheries as a sector and strengthening the identity of the village to support this, the fishers are not interested in taking these initiatives up themselves. Despite this lack of engagement some participants felt that these initiatives would work better by securing the involvement of the community from the beginning to ensure the initiatives grow from the 'bottom-up.' This was an important finding from the research in terms of future collaboration between the fisheries and local authority around wider socio-economic policy (including tourism and economic development):

"I do not really see opportunities: the government can give support through grants and incentives. In Nieuwpoort (Belgium), the municipality has a different function. There the fish auction has the same turnover in a year that we have in Vlissingen in a month. But if the municipality pays for the debts, just to keep up the tourism activity going, then you obviously have a very different role as a municipality. In Hastings the activity is also mainly there to attract the tourists but not to preserve the fisheries. If there were no tourists, they would not support the fisheries." Concerning Nieuwpoort: "If the municipality does not continue to support the fisheries, then it would be dead within a year. I do not think it is viable without tourism in Hastings either." (Fish auction, 26 June 2013)

6. Local community, place based identity and the relationship with the fisheries

By understanding the value the fishing traditions contribute to the tourism and regeneration activities of the area the local structures (local municipality and the women's think tank) are trying through their place marketing projects to secure a sense of place around a common fishing heritage identity. This work is made more difficult by the absence of the physical aesthetic of the fishing fleet and the activity associated with their presence (such as fish stalls, wet fish shops and restaurants):

"If the fleet of Arnhemuiden would have been still located there, you probably would have had some restaurants and a lot of activity. Because it automatically attracts people " (Fish auction, 26 June 2013)

This local shop owner also feels it is still difficult to attract tourists simply because of the fisheries:

"When visitors come here, it is always a bit disappointing. Where is the harbour? That's what they ask. The small sailing boats in the canal is not what they had in mind. There is no fish shop, no fish restaurant, because the fish goes from family to family" (Local shop owner, 29 October 2013)

Despite a lot of the fisher families still living in Arnhemuiden (although their ships have moved to Vlissingen) a growing section of the local population have no direct links with fisheries. The research indicates the fishing community and wider local community are very separate. This perception of separation is a risk to the sustainability of the fishing community and the continuation of its traditions, values and sense of purpose:

"Yes of course, we live in the same village, we go to the same church, the children go to the same school,...But it is two worlds (the fishers and non)fishers families)" (Women's think tank representative, 29 October 2013)

"There is an interest (in the fishing families), but really a bond in any way what so ever is gone" (Fisher, 29 October 2013)

Families that have lived in Arnhemuiden for a long time, identify themselves with the fishing community, while recent and new inhabitants, do not have this link and do not feel involved with the fishing history. This creates social cohesion challenges for the Arnhemuiden community.

7. General conclusion and key sustainability issues

The table below provides a summary of the key ways in which the existing fisheries governance processes engage positively with economic, environmental and socio-cultural sustainability related issues. The fishing sector in Arnhemuiden is not overly involved in, or seeking to further develop fishing-related tourism initiatives as they do not see any direct economic benefit to the sector. Instead these fisheries related initiatives are mainly adopted by the wider community and local government to promote Arnhemuiden as a tourism destination. The fishers are not dependent on the tourism activities for their survival and were in the beginning very skeptical about the public domain (art, new infrastructure) and the communication initiatives (such as the fisher jumper). However, with time and closer consultation with the fishing community the fishers now appreciate the activities undertaken, without really wanting to get involved themselves. There

is an understanding that the activities that have sought to connect the industry with tourism and economic development planning will support the image of the fisheries activities and keep that identity alive in the village, while also attracting more visitors to Arнемuiden.

Environmental sustainability issues
Arнемuiden fishing vessels participate in the pilot project on electric (pulse) fishing.
Governance issues
FLAG support of projects related to small-scale fisheries.
Existence of Cooperative Producer Organisations (CPO). These can be for specific fisheries areas or species (lobster, shrimp, mussel, oyster). There is however no separate for Arнемuiden.
Social sustainability issues
Involvement of fishers in initiatives to boost tourism in Arнемuiden (Arнемuiden jumper, fisheries related art, etc.) to improve multi-sector collaboration.
Growing awareness and education of tourists about the fisheries activities (past and present) in Arнемuiden.
Development of fisheries related cultural assets including the fisheries museum and historic ship yard in Arнемuiden.
The "Women's think tank" was set up to develop innovative ideas to bring fisheries alive in Arнемuiden and provide a voice for women in the community.
The FLAG has a good relationship with the Arнемuiden fishers and works with them to help develop new projects to improve their sustainability and to bring different sectors together to improve industry connectivity.
Economic sustainability issues
Initiatives to attract tourists to Arнемuiden using fisheries as a selling point. This benefits the tourism sector and local enterprises in Arнемuiden.
Promotion of fish and fisheries as a sector. Strengthening the fishing heritage identity of the village supports this process.

3.2 Nieuwpoort (Belgium) Case Study

Introduction

1. Vulnerability of existing routes to representation for the Nieuwpoort fisheries
2. Strong fisheries / local government collaboration
3. Extension of the presence and value of fish and the fishery to the city in terms of contribution to tourism and place marketing
4. Innovation in the supply chain in efforts to secure a better price for fish
5. Interactions with the environment and conservation sectors through data collection, fish labelling and marine spatial planning
6. General conclusion and key sustainability issues

Introduction

Nieuwpoort is a town situated in the province of West Flanders at the western part of the Belgian Coast (see figure 3). It was given city rights in 1163 and has a population of 11.000. The port of Nieuwpoort is the only natural harbour at the Belgian coast and is located at the mouth of the IJzer river. Nieuwpoort has a rich history in fisheries (Beun *et al.* 2006) and still is strongly associated with fisheries.

The city of Nieuwpoort received a concession agreement from the Flemish government after the Second World War to own the fishing harbour. Since then the exploitation of the fish auction is a service of the city. The city set up regulations and users agreements, take care of maintenance of the building including the introduction of new pontoons that are especially built for the new generation polyester fishing ships. In Nieuwpoort (and Oostende) a municipal police regulation is imposed that implies that fish landed in the harbour may only be sold in the fish auction (Anon., 1975). The city is responsible for fish weighing, arranging the sale and it acts as an intermediary between ship owner and merchant; the municipality pays the ship owner, which need to have a fishing licence, and then collects this sum from authorized fishmongers. In 1999 an electronic auction system was introduced in the fish auction of Nieuwpoort and since 2012 there is a joint auction system between the fish auction of Nieuwpoort and Oostende-Zeebrugge. With this investment, the city council wants to encourage further economic development of the fish auction of Nieuwpoort (Promovis, 2013). Promovis Nieuwpoort, was founded in 2003 as a non-profit organization to promote inshore fisheries and the fish market of Nieuwpoort (Promovis, 2013). The committee of Promovis is composed of people with different expertise which each have the same objectives; determining the geographic and quality criteria to which fish must meet in order to receive the local quality label in order to promote the fish of Nieuwpoort as a quality product, support the professional/commercial fishing fleet and fish market of Nieuwpoort but also support and promote the fishing port of Nieuwpoort as an economic, cultural, touristic and maritime unit. Some examples of promotional activities organized by Promovis are "Friday Fish Day", "Brintje met garnaal", the fisheries weekend. In addition, Promovis aims to strengthen the relationship, which is so often lacking, between the different actors. Promovis tries to strive for 'alliance' between ship-owners, fisherman, fish auction and fish traders.

In 2013, 9 fishing vessels are registered in the port of Nieuwpoort from which 6 can be considered as inshore fisheries according to the GIFS wider project definition, although only 1 vessel is registered as a 'coastal' or inshore vessel (Anon., 2014). The Belgian definition of inshore or coastal fisheries refers to vessels with an engine power of 221 kW or less (this includes any additional installed power) and a tonnage of no more than 70 GT, that make trips with a maximum period determined by the Minister (today being 48 hours) with start and end in a Belgian port. Moreover, vessels with engine power >221 kW are not allowed to fish within the 12 nm which is reserved for the inshore fisheries or Small Fleet Segment (Ministerial Decree of December 16, 2005).

This case study explores how the linkages with both, the public sector and tourism operates in order to support Nieuwpoort fisheries and the wider community.

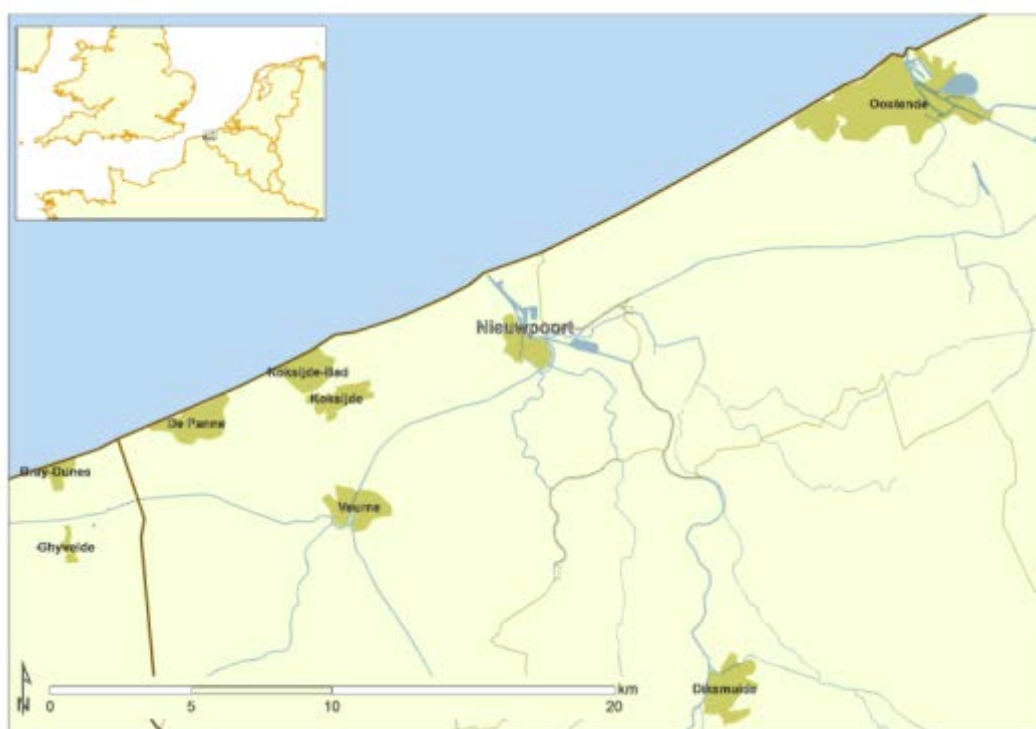


Figure 3. Nieuwpoort, Province of West-Flanders, in Belgium (Source: VLIZ, 2014)

Table 3: Nieuwpoort interviewee sample

Interviewee	Sector / role	Date	Length
1. Participant A	Ex-fisher/Cooperative organization	29.07. 2013	57 mins
2. Participant B	Private sector (restaurant)	29.07. 2013	38 mins
3. Participant C	Local council / Fisheries Local Action Group	30.07.2013	70 mins
4. Participant D	Fisheries organization + fish shop owner	5.08.2013	98 mins
5. Participant E	Local government politician	5.08.2013	66 mins
6. Participant F	Local government politician	8.08.2013	94 mins
7. Participant G	Local government / Civil servant	8.08.2013	62 mins
8. Participant H	Fisher	16.08.2013	74 mins

1. Vulnerability of existing routes to representation for the Nieuwpoort fisheries

The research findings show that participants felt that given the small size of the Nieuwpoort fleet there is limited value in fragmenting the fisher representation in formal governance in order to set up a distinct entity just for the Nieuwpoort fisheries. However, there was concern that the central ship-owners' association (the main representative organization for both inshore fishers and larger vessels) does not adequately represent the interests of inshore fishermen. This is a common perspective across a number of the case studies where there is a combined inshore and offshore representative body as the interests of the different size fleet can be so divergent:

"From the big ones, yes. But not from the smaller ones. There is a lot of gnashing of the teeth in Nieuwpoort. They say: 'The small segment of the fleet is not discussed enough'. I hear a lot of noise about it." (Fisheries organization, 5 August 2013).

Another organization, the Flemish Fisheries Cooperative, on occasions will provide representation for the coastal fishermen but they have not been formally appointed to do so. The respondents believe that a separate vote for inshore fishermen within the regional and national fisheries bodies would be a positive development as this would enable a representative to be nominated by the inshore fleet to work with relevant networks at European policy level, or in specific fisheries-related forums (e.g. FLAG), or to organize position papers in order to voice the specific interests and concerns of the inshore fleet as distinct from those of the larger vessels. With regard to the FLAG it is viewed as an valuable network and grant channel, but not more than that. Not one respondent felt that the FLAG can or should play a role in policy-making or act to represent the fisheries.

2. Strong fisheries / local government collaboration

The Nieuwpoort City Council has a unique and special role as regards the Flemish coast. The city still owns and operates the fish market, as was also the case for Oostende and Zeebrugge (municipality of Brugge). The fish markets in the latter two cities have since been privatized. Nieuwpoort is, strictly speaking, a loss-making activity, but the fish market is a catalyst for other economic activities in the city including fishmongers, restaurants and tourism. The value of this collaboration in terms of the wider coastal economy and support of the remaining inshore fleet was underlined by all the research respondents. All were convinced that the fish market would close if the city's support was withdrawn with negative implications for local restaurants and fisheries related tourism.

"If the city had not intervened, the fish market would long have ceased to exist" (Cooperative organization, 29 July 2013).

The fact that the city owns the fish market indicates the political priority accorded to the fisheries sector and the major impact this has on the sustainability of fishing activities for this community (note this is not the case in Arnemuiden). However, questions remain about the future of this partnership, (particularly regarding the use of the zone to the north of the fish market) and so the explicit interaction/ inter-dependence between fisheries management and wider local authority coastal planning was evident in this case study.

Fishing in Nieuwpoort is done on a very small scale (just four active ships). Because it is such a small community and because of the city's strong role in the activity, all aspects of policy and stakeholder relations are interwoven: policy (political, civil service), civil society, the fishmongers and shipowners / fishermen. This is a uniquely collaborative governance space:

"I think we should consider ourselves lucky that all players, policy, the owners, traders have created a kind of alliance in Nieuwpoort. Everyone pulls on the same sail" (Fisheries organization, 5 August 2013).

For example, the creation of a common auction system with Oostende and Zeebrugge was a positive development for Nieuwpoort which enables access to more buyers as they no longer have to be physically present. However, according to the Fisheries Local Action Group (FLAG), there are still further opportunities to be created in bringing together potential buyers and fishermen and so exploring further innovations in the boat to plate supply chain.

Members of the local council have a clear vision of the future of fishing in Nieuwpoort based on smaller vessels, such as those now used for sport fishing. The city has already invested € 36,000 in a pontoon, which enables such smaller vessels to be moored near the fish market. If more pontoons are built, then even more small vessels can be moored here with the potential to grow and focus on the inshore fleet. Currently, Belgian law does not allow for sport fishing vessels to be converted to commercial fishing vessels. In the Netherlands this is regulated by law, and many such Dutch ships already dock in Nieuwpoort's harbour. Through agreements with a Dutch fisherman, Nieuwpoort hopes to attract other Dutch fishing vessels to the side of the fish market where the new pontoon is located. A voluntary agreement has already been established with one Dutch fishing company that involves a free berth for the fishing vessel in exchange for landing at least 40% of its fish in Nieuwpoort. This creates a new channel to bring more fresh fish to the Nieuwpoort fish market, and it creates a valuable fisheries related tourism asset with tourists able to watch the activities of this type of small, modern fishing vessel. The city also hopes to attract French vessels of this size and as such has developed a promotion leaflet in French.

"I have an agreement with that man. We have offered him a place to dock, but he must then sell his fish in the Nieuwpoort fish market... The deal I have now is about 60% in the Netherlands and 40% in Belgium. If I could, I would build more of these pontoons, because only three ships can be moored concurrently at the moment. They are really very nice boats. It also looks good from a touristic point of view." (Local politician, 8 August 2013).

The city has undertaken to represent the Nieuwpoort fisheries in multiple layers of governance with a dedicated council member for fisheries responsible for this representative role. For example, the city represented the interests of the Nieuwpoort fishery by developing a cooperation agreement for the sale of fish with the Flemish fish market, which has a stronghold in Oostende and Zeebrugge. Together, they act as a partner to the fishmongers.

Members of the city council also indicated that there is room for improvement in terms of the further alignment of tourism and fisheries policy in the city. There is already good cooperation, in terms of operational functioning, between the fish market and the tourist office, which takes care of bookings for groups and classes.

This close alignment of fisheries management and wider supply chain planning (such as tourism) shows the benefit to a small inshore fishing fleet of close local authority collaboration and inter-linkages with multiple sectors that works to protect the future of a sustainable fleet and the contribution it makes to the wider community.

That said when developing this more interactive approach to management the research shows that stakeholders need to take account of the fact that the fishers largely just want to be free to fish and secure a fair price for their catch rather than participating in tourism activities:

"[It's] Folklore ... People will still come to see fishermen. Not really positive, as long as they leave me alone. They always get in the way when fishermen unload their catches, they don't see what's appropriate. They ask a lot of stupid questions" (Fisher, 16 August 2013).

Yet other respondents believe that there is a mutual dependence between both industries that must be acknowledged in a more interactive governance approach. The demand for fish and its price both rise at the onset of holidays or nice weather. While one local politician went so far as to suggest that the fishery would not be viable without tourism:

"If you ask (shipowners and fishmongers) whether they sell the most fish in the winter or the summer, their answers will be different. Sales can vary as a result of the weather or a better catch, but it is ultimately the impact of tourism that makes the figure "(Local politician, 5 August 2013)

3. Extension of the presence and value of fish and the fishery to the city in terms of contribution to tourism and place marketing

The research shows the variety of ways the governance infrastructure of the local city council and the Promovis have developed routes to extend the presence and value of fish/the fishery to the city in terms of tourism and identity. These are detailed below and indicate varying degrees of fisher involvement and raise concerns over where these projects need to be firmly grounded in the fishing community if they are to be truly sustainable. According to all the respondents in this case study, the majority of the population of Nieuwpoort have little to no ties with the contemporary fisheries. Some links still exist within the older generation and those who have fishermen in their families, but not with the younger generation or new residents.

"When you see how many boats there used to be... it is inevitable that ties with the fisheries have withered throughout the successive generations" (Politician, 5 August 2013).

Despite this disconnect to a once dominant industry in the city the council is investing heavily in the fish market in the belief it is important for both the local community and tourists to maintain the fisheries in Nieuwpoort and so the city's identity as a fishing town.

The findings show this fishery is further protected through the existence of an association called Promovis, which is unique on the Belgian coast in its multi-sector structure developed to promote Nieuwpoort fish. No such cooperation between the city, traders, ship owners and other fisheries stakeholders exist in Oostende and Zeebrugge. According to its president, the association's success lies in the small size of Nieuwpoort's fisheries. Other towns and regions find it difficult to get all stakeholders around the same table, because there is no one to take the lead and because there is no similar symbiosis between stakeholders in larger fleets. An organization such as Promovis is also known by the regional government though the extent of their influence on policy is still unclear and so may yet present a further opportunity to secure the future representation of the fleet at a regional scale. The city of Nieuwpoort also actively participates in Promovis again indicating a highly inter-connected and inclusive governance infrastructure in Nieuwpoort:

"Promovis cannot do without the city. And the opposite is also true... Promovis is actually the ultimate partner that establishes the link between the fishmongers and the shipowners." (Cooperative organization, 29 July 2013)

Promovis organizes two activities: "Friday Fish day" and "Brown beer with shrimp". Both events enable visitors to take a tour of the fish market. These initiatives are perceived by all as positive experiences for raising awareness of fishing, but the researcher noted the fishermen have not been asked to participate and as a consequence do not feel involved or lose the opportunity to share their LEK.

According to a local politician, there is still growth potential to be found in Friday Fish Day. It is currently organized sixteen times per year, with a focus on the summer season. However, the initiative is rapidly becoming fully booked and they see this as an opportunity to expand the event to other times of the year. Yet concern over the imbalance of fisheries related tourism and direct fishing activity was also raised in this case study as it has been elsewhere in the research:

"An inactive fish market should not be exploited for tourist activities, according to me. It all starts with fishing and everything else is an extension of that." (Local politician, 8 August 2013).

The city of Nieuwpoort organizes an annual "Day of the shrimp" and the fisheries festival. Both events are a great success and attract a lot of visitors. This is due to Nieuwpoort's reputation as a fishing town. Zeebrugge's fisheries festival attracts fewer people, for instance. The city believes that these events are very important for Nieuwpoort's image and for profiling the relationship with fisheries. The centrality of the fishing industry/community contribution to the city's identity is key these local council place marketing activities. One local politician also sees tourism opportunities in the development of a more heritage approach to fishing related tourism in Nieuwpoort, even if the fisheries should disappear entirely in the future. While other respondents believe that it is important to preserve the contemporary fisheries or to focus on a new future, and that the heritage approach will fail to protect a sustainable fishing fleet. The risk of what is described in other case studies as the 'Disney-fication' of the fleet and their traditions through tourism practices is clearly a concern if the heritage approach was pursued. The balance of diversification of income through tourism activities for the fishers and loss of their central traditions and practices is a consideration in this proposal from a local council member that the ships should change their time of day they land their catch to better suit the tourism market. He argues the city could encourage this by offering favourable rates for catches landed during those times. It would create an additional tourist attraction to see the ships unload their catches. It could be coupled with sightseeing tours and guided tours and thus generate extra income for the fishers.

4. Innovation in the supply chain in efforts to secure a better price for fish

Pintafish represents a new channel or route to market for fish sales. The fish is filleted and snap-frozen, and offered in a box scheme. While this may be a solution to a lack of (affordable) fishmongers inland the Fisheries cooperative regrets that the fish on offer is filleted and not offered on the bones. Their concern is that the buyers do not learn about the full fish product and how to prepare it. While the fishermen regret that Pintafish does not work to develop the fresh fish market.

"(Pintafish) is all rubbish, cheaply filleted cheap fish but no fresh fish. They work with deep-freeze boxes. That in itself is a step too far" (Fisher, 16 August 2013).

Poor cooperation with Nieuwpoort's restaurants – Surprisingly the research shows that very few of Nieuwpoort's restaurants promote local fish or even to put sustainably caught fish on the menu. The reason cited is that the restaurants are doing so well already that there is little motivation to drive them to commit to local, fresh seasonal fisheries product.

"According to our analysis, it is because business is going too well. The restaurant is already full; there is no incentive for them to fill it up any more than it already is" (Fisheries organization, 5 August 2013).

Yet the respondents are convinced that the restaurants profit from the presence of the fish market as customers, both those of the fishmongers and the restaurants, have the perception that they are eating fish that was landed on that day in Nieuwpoort's fish market, although that is not necessarily the case. Some restaurants do participate in "Friday fish day", offering a fish dinner to the group that booked a tour of the fish market, but the meal is not focused specifically on local fish. Participation is seen more as a means for promoting one's own restaurant than for promoting the link with fishing. The fisherman complained about the quality of the fish served in restaurants. The fish is often not fresh and not locally-sourced. A minority of restaurants make efforts to serve lesser known fish or seasonal fish. This absence of inter-linkage between the fishery and the restaurateurs undermines the security a market for sustainably caught local catch and so the future of the fleet. According to one local politician it is necessary to open a dialogue with the restaurants, to convince them of the usefulness and importance of cooperation.

In order to get a better price for fish the fisheries organization representative proposes to establish close cooperation between the ship-owners and traders, from which recommendations can be made regarding policy. For example, better cooperation between fishermen, through agreements on who goes fishing for a specific species at a given time so that there are fewer fish of that species on the market at any one time, could improve the prices obtained by fishermen.

"... (to) organize a sort of States-General for Fisheries. But based on a bottom-up approach. The traders and shipowners talk to each other, and make recommendations to the policy, and not vice versa" (Fisheries organization, 5 August 2013)

Such cooperation between the ship-owners and traders could also lead to a better alignment with what customers want and what the fishermen provide.

"A professional organization that also brings together potential buyers. For example, for live shrimp. Sit down together and listen to what the customer wants. Then it will be clear that those with trawl nets cannot ensure the quality needed to keep the shrimp alive for a sufficient time" (Local politician, 30 July 2013).

Alternative suggestions proposed by the fishers include opportunities for direct sale of fish without going through the fishmongers by letting the consumer see what has been caught via a webcam and the Internet, and let them order directly from the fisherman (e.g. this approach has been developed in the Cornwall case study). While the FLAG has explored the possibility of processing fish products such as making a Nieuwpoort-style fish soup, Nieuwpoort-style shrimp croquette or fish tapenade, which would have positive job creation impact.

The fishers also feel that the consumers need to be educated in order to develop a premium market for fresh fish. They argue that they need to know about the different local fish, the quality of fish, fair prices, the right taste and smell of fish. One participant felt that initiatives such as "Friday fish day" are failing with respect to consumer education:

"People are very interested in these projects, but they learn nothing about fish. I do not believe that this is the right way of going about it. It's a nice day out, they get sandwiches, a boat trip and a good drink..." (Fisher, 16 August 2013)

Several initiatives have been launched to raise awareness among customers as to how fish can be filleted and as to what you can do with a full ("raw") fish. For example, the cooperative puts on demonstrations in restaurants, or people can buy whole fish and fillet it at the cooperative. The fisherman consider consumer awareness to be a very important part of securing the value of fresh local fish and so their future. Their concern is that at the moment the consumer does not know about the different regional fish, how to gauge the quality of the fish, how to judge freshness on the basis of smell and appearance, how fish tastes or how it should be cleaned. According to one fisher this heavily influences purchasing behaviour with consumers gravitating towards cheap fish, that drives the fishmongers sell lower quality fish to reduce the price, and the restaurants failing to offer quality fish on their menu – all due to this lack of education around fresh, local, seasonal and sustainably caught fish. The city council sees opportunities in education on fisheries as needing to be focussed on the school system.

Direct fresh fish sale - Most respondents were in favour of a fresh fish market where fish is sold directly from the ship to the customer, thus attracting tourists and locals and securing a better price for the fish, because of the reduced number of intermediate steps. However, the respondents believe that certain preconditions should be imposed to avoid competition with the fishmongers selling in a fish shop. Examples include: restricting sales in time (just before shop opening hours, or on certain days), offering only whole fish (not filleted), only fresh fish caught the same day by vessels from Nieuwpoort. However, some participants had concerns over the financial benefit and unintended supply chain implications of this development. For example a local politician fears this may lead to breach of health and safety regulations while stressing the value of the fish offer in Nieuwpoort relies on the supply chain remaining hygienic, of high quality, controllable and manageable (as per the current process of sales via fishmongers' shops). Further, he noted the risk of clandestine sales and the need to ensure that all fish is included in the quota calculations. Direct sales increase the risk of abuse. Moreover, he highlighted the existing short boat to plate journey precisely because of the fact that the fishmongers are located just 50m away from the fish market:

"We have the finest fishing structure on the Belgian coast and all located next to one another. So people have a choice... There is actually a type of fresh fish market, but in the shape of stores"(politician, 8 August 2013).

Fishers also raised concerns as they find running a fresh fish stall hard to combine with existing fishing activities due to the need for additional staff; extra costs; questions over the likelihood of increased prices; restrictive time commitments and the expectation that you will land a variety of fish every day, which can be difficult to achieve:

"But if you sell according to the fish market, there are already too many people waiting for cheap fish. There are already too many people on the coast anyway, there is no need to attract them more" (Fisher, 16 August 2013)

5. Interactions with the environment and conservation sectors through data collection, fish labelling and marine spatial planning

There is at present no formal co-operation between the fishing industry in Nieuwpoort with the environment (nature) sector. However, the Fisheries organization indicated that it would be of real interest to the fishermen to work with marine and environmental scientists to build collaboration and share their knowledge of the marine environment and local fish stocks (rather than with the nature sector or nature organizations). The participants felt that the interests of the nature (or conservation) and fishing spheres are much too different to ever allow for effective collaboration. Yet there was an understanding there would be new roles for fishers including increased involvement in co-management, which might include data collection and co-operation with scientists to try to determine consensus on marine policy positions.

Opinions are divided concerning sustainable fish labels. One of the cooperatives and the fisherman noted that this is just about money; the labels only make the fish more expensive because the underlying inspection system is so expensive. It was noted that fish without a label can also be cheap, good quality and sustainable. The fisherman also believes that both sorts should be offered: fish with and without a label, because that with a label will always be more expensive.

A specific "Nieuwpoort fish" label would garner very little enthusiasm. What is Nieuwpoort fish precisely, and how can you guarantee authenticity? Secondly, the respondents can see greater benefit from the promotion of Belgian or Flemish fish.

"It's just North Sea fish. Nieuwpoort's fishermen also fish for Oostende"(Local politician, 30 July 2013).

One local politician is in favour of such a label. According to him, labelling products could attract tourists, and he gave the example of Zeeland mussels and the Liège waffle. He sees an advantage in the traceability of fish and believes that customers would be prepared to pay a better price for the fish. Shrimp is currently promoted specifically as "Nieuwpoort shrimp" because Nieuwpoort sees this as a niche product. The fish market advertises which fishmongers sell Nieuwpoort shrimp. This system seems to work and lead to a price increase. Though not everyone is in favour of the branding as "Nieuwpoort shrimp", for example, the VLAM advocates "fresh" or "Flemish" shrimp.

The labelling systems are also usually considered too expensive, cumbersome and difficult to supervise, and their value is questioned by some of the participants. While one local fishmonger believes that they can have a positive impact - both MSC and local labels, and refers for comparison to the value of the "Zeeland mussel". While the restaurant owner finds labels useful as a guarantee of quality and as a tool for raising awareness among customers. However, the risk of a possible proliferation of labels resulting in trader and consumer confusion was raised by a number of participants. The research indicates a variety of conflicting views on this subject across the supply chain, which could be detrimental in terms of delivery and compliance. If pursued careful thought and co-ordination needs to be applied to the communication strategy, recognition and standardization. On the other hand, it was also noted that fish without a label can also be caught in a sustainable way.

Involvement in Marine Spatial Planning (MSP) – The research findings indicate it has proven difficult to involve individual fishermen or cooperative structures in MSP. Several reasons were cited: firstly, the absence of technical skills in the industry that are required to meaningfully participate in the consultation. While on the other hand the fishermen feel that they can't influence the process regardless and therefore it is pointless to try. The central ship owners' organization has followed up the discussions with the fishers, but the respondents have expressed concern as to whether it will take the interests of the coastal fisheries into consideration. In contrast the city is trying to take up the interests of small-scale fisheries and to represent them at relevant MSP consultation meetings. They can take on this role thanks to their strong commitment to the operation of the fish market. They know the situation with which the fishermen are faced and the fishermen have confidence in the city council. The city council takes up this societal role in order to bring forward a nuanced vision which takes into account the verbally expressed wishes of the fishermen. The fishermen receive feedback mainly through informal conversations or through meetings with ship owners that the city organizes two or three times per year.

6. General conclusion and key sustainability issues

The table below provides a summary of the key ways in which the existing infrastructures and governance processes engage positively with economic, environmental and socio-cultural sustainability issues. The fisheries in Nieuwpoort are unique in Belgium, mainly owing to the central role the city council plays in its maintenance and evolving role within the town. Keeping fisheries alive in Nieuwpoort is an important policy priority for the council, and hence the city invests in the fish auction. The city owns and operates the auction and they have a close relationship with the four remaining fishers. Also unique in Nieuwpoort is the existence of an organisation, Promofish, to promote Nieuwpoort fisheries and support their commercial fishing fleet and fish market.

Of all Belgian coastal municipalities, Nieuwpoort is the one most associated with fresh fish. This central fishing identity is due to the position of the auction in the centre of the city, the presence of many fish shops and the many fisheries-related activities organised for tourists and schools. Tourism and fisheries are strongly interrelated in Nieuwpoort. The city council wants to invest in small-scale fisheries (freshly caught fish) as a niche market, and has a clear view on this. However, there are existing regulation and legislation barriers to this transition at present.

Environmental sustainability issues
Some Nieuwpoort vessels apply sustainable fishing techniques (gill nets, pots, angling, instead of beam trawler).
Nieuwpoort wants to specialize in “freshly caught fish” and small scale fisheries.
Governance issues
The city owns and operates the fish auction, and is hence strongly involved in fisheries policy.
Close relationship between city council and fishers.
Existence of a specific non-profit fisheries organisation for the promotion of fisheries in Nieuwpoort (Promovis) and to support the professional/commercial fishing fleet and fish market of Nieuwpoort.
The city represents the Nieuwpoort fisheries in committees of higher authorities or network structures.
The FLAG can support projects related to (not only) small-scale fisheries and creates a platform for the sector.
Agreement with a Dutch sports fisher to land 40% of his fish in Nieuwpoort.
Clear vision of responsible politician at local level on future for Nieuwpoort fisheries.
Social sustainability issues
Participation of several involved parties in numerous projects: city council, restaurants, fishers, cooperative organisation, fisheries organisation.
Year round communication initiatives to promote fish and fishery (e.g. fish festival, Friday Fish day, Day of the Shrimp).
Visit to fish auction for tourists and school groups.
Economic sustainability issues
Working with the private sector (restaurants, fish shops).
Joint action system with Oostende & Zeebrugge led to better prices and higher diversity of buyers. A cooperation agreement for the commercialization of fish with the Flemish fish market which has a stronghold in Oostende and Brugge is in place.
The presence of the fish auction in Nieuwpoort has a positive effect on the fish shops and the fish restaurants. Nieuwpoort is associate with FISH and FISHERIES, and consumers tend to think fish comes from that auction.
Exploration of the geographic and quality criteria to which fish must meet in order to receive the local quality label (Fish of Nieuwpoort)
Economic diversification (e.g. participation in festivals, fish box scheme « Pintafish »)

Strong interrelation between fisheries and tourism.

3.3 Bay of Granville (France) Case Study

Introduction

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Introduction

The lobster (*Homarus gammarus*) is of particular importance for the Granville Bay fisheries. It is an iconic and very present species due to the numerous island groups and rocky shore platforms that provide shelter to one of the largest French lobster nursery habitats (Delayat, 2011). 220 professional fishing licences¹ for large crustaceans are allocated each year in Lower Normandy. Only about sixty specialised lobster fishermen from the western part of the Cotentin navigate to the Norman and Anglo-Norman island groups for fishing. In addition to these Norman fishermen, Breton ships (from the departments of Ille-et-Vilaine and Côtes d'Armor) and ships from Jersey fish in the Granville Bay (Figure 4). In all, 239 ships practice trap pot fishing in this bay (Leblond, 2013a; Leblond, 2013b). It is unusual due to its cross-border positioning, as community fishermen have fishing rights in the area of Jersey and vice versa. Lobster fishing is carried out using lobster pots (passive fishing gears that have very little impact on the environment). Moreover, this fishery is MSC certified with regard to its sound management and its healthy lobster stock. 130 ships from Lower Normandy and Jersey are participating². This fishery is composed for the most part of ships that are less than 12 meters in length and target lobsters mainly between March and November. Fishermen mostly catch lobsters and spider crabs but also, incidentally, velvet swimming crabs and common littoral crabs. The most important port in terms of lobsters is Granville with 44 tonnes landed in 2013 (France Agrimer, 2014).

The lobster fishery in the Bay of Granville is based on a collectively managed regulatory system, with an involvement of the fishermen. The fishermen community has recognised the importance of managing the resource, which resulted in the creation of a system of governance based on co-management, involving occupational structures and the government, with scientific support.

¹ <http://www.crpbn.fr/comite-regional-peche-licence.html>.

² <http://www.comite-peches.fr/site/index.php?page=g66>.



Figure 4. Bay of Granville in France (Source: VLIZ, 2014)

Table 4: Interviewee Sample

Interviewee	Sector/Role	Date	Length
1. Participant A	Regional fisheries organisation	5.11.2013	61 mins
2. Participant B	Regional fisheries organisation	13.11.2013	123 mins
3. Participant C	Academic stakeholder	4.11.2013	85 mins
4. Participant D	Scientific	6.11.2013	94 mins
5. Participant E	Local administration	2.12.2013	79 mins
6. Participant F	Scientific	25.11.2013	62 mins
7. Participant G	Fishery certification	4.11.2013	55 mins
8. Participant H	Quality organisation of fishermen	4.11.2013	108 mins
9. Participant I	Fisherman	19.11.2013	74 mins
10. Participant J	Fisherman	13.11.2013	63 mins
11. Participant K	Public institution (development of aquaculture and fisheries)	22.11.2013	93 mins

1. A co-management based system of governance within an atypical area

The Bay of Granville (Figure 4), a shared maritime border area between England (Jersey) and France (regions of Lower Normandy and Brittany), takes on a special significance because of its geographical situation. Accordingly, the governance of fisheries within this specific maritime space involves a co-management system between the French government and the French fishermen that takes into account the cross-border nature of the fishing ground. However, the study of the governance of this fishery focuses mainly on that of Lower Normandy.

1.1. A governance based on co-management

There are two main actors of fisheries management for the lobster in Lower Normandy: the State with a regional administrative representation and the Regional Committee for Maritime Fisheries and Marine Fish Farms of Lower Normandy (Comité Régional des Pêches Maritimes et des Élevages Marins de Basse-Normandie - CRPMEM BN).

1.1.1. The government and the CRPMEM, actors of the governance

In Lower Normandy, a true co-management system prevails between administrative and occupational structures for the lobster fishery. In this system (Picault *et al.*, 2014a), the lobster resource management initiative originates mainly from the local users. The latter are represented here by the CRPMEM BN, an occupational organisation representing fishermen in this region, and its offices. The participatory decision-making thus provides all stakeholders with the opportunity to voice their positions. Fishermen thereby enjoy a degree of autonomy because they hold some control over the management of the fishery (Ferracci, 2011). However, the regulatory decision-making falls to the national or regional authorities. At the regional scale of Lower Normandy, the fisheries authority is represented by the Interregional Directorate for the Sea Eastern English Channel–North Sea (Direction InterRégionales de la Mer (DIRM) Manche Est - Mer du Nord) and the region prefect. At the local scale (department of Manche), it is the Departmental Directorate for the Territories and the Sea (Direction Départementale des Territoires et de la Mer - DDTM) and the prefect of the department that officiate.

In this context of co-management, the French government gives the CRPMEM BN missions of representation and defence of the interests of the trade³ in all areas pertaining to the sector (production, marketing, social, training, environment, ...). *“It gives the opportunity to participate in the development of regulations pertaining to fisheries management and the harvesting of marine plants for species that are not subject to TACs [Total Allowable Catches] or catch quotas in application of a European Union (EU) regulation in territorial waters, to participate in the development of regulations governing the use of gears and the coexistence of maritime trades, to participate in the implementation of economic and social actions in favour of their members, to participate in regional public policy for the protection and valuation of the environment, so as, notably, to promote the sustainable management of marine fishing and marine farming, to provide scientific and technical support to their members as well as where safety, training and promotion of marine trades are concerned”* (CRPMEM of Brittany, 5 Nov. 2013).

The community of lobster fishermen relies on this co-management system for the development of the regulation specific to their trade and to the region, which is then validated by the State. Within this system, the fisherman is a source of proposals. The governance of this fishery remains based on local and regional structures that have a crucial role in terms of representation of the fishermen, which, nevertheless, is common to a large number of inshore fisheries in France such as that of the Great Atlantic scallop in the Bay of Saint-Brieuc (Picault *et al.*, 2014b).

1.1.2 The role of the fisheries Committees – occupational structures – in the management of the fishery

The lobstermen community of the Granville Bay in Lower Normandy is directly represented in terms of governance by the intermediary of the CRPMEM BN and its local offices (notably that of Granville for lobster)⁴. Although a first institution had been created in Lower Normandy as early as 1980, the CRPMEM BN was officially founded in 1991, at the same time as all other regional Committees of France. This structure represents the fishermen before the State, before its decentralised services and local as well as regional authorities, so as to defend their interests and the sustainability of the fishery on a national, regional and local scale: *“We represent 500 ships from different fisheries and 2 000 sailors along 500km of coastline! Our role is to manage the resource, the licences and raise funds to finance actions for the sustainability of our fisheries and the preservation of jobs within the fishing communities”* (CRPMEM, 13 Nov. 2013). Its President, elected by fishermen of the Region of Lower Normandy, is supported by permanent employees for technical issues. This occupational institution, prescribed by Law⁴, enables it to benefit from State prerogatives (compulsory accession, deduction of a professional contribution, ability to establish resource management rules that are enforceable by law, capacity to put in place juror-guards (gardes jurés), etc.).

From the interviews, the CRPMEM BN positions itself as a preferred interlocutor at the level of the government and of the politicians: *“All fishermen may vote for the President of the Regional Committee and the offices that will represent them. We place all our trust in them because the team is very good”* (Fisherman, 19 Nov. 2013).

Through this system, the CRPMEM BN and the community of lobstermen wish to make their voices heard at the national and European level as in, for example, the framework of the reform of the CFP: *“It is necessary to get new impetus on the dawn of the CFP because the coastal belt is oversaturated and has reached its development limit, the pressure on it is increasing. It is necessary to focus on inshore fishing (including lobster fishing) more than on offshore fishing”* (CRPMEM BN, 13 Nov 2013).

On a more local level, for the lobster, the CRPMEM BN offices (also with an elected President), enable a representation “at source”, close to the field. The Granville office, being the most significant for crustaceans on a regional scale, positions itself as the voice of the lobstermen community.

1.1.3. The role of scientists

Scientists are an important link for the governance of the inshore lobster fishery. One of the objectives of this management is to ensure the sustainability of fisheries resources and this cannot be done without scientific knowledge of the exploited stocks. It is Ifremer that is intervening in France on this aspect, and more particularly on the lobster. Founded in 1984, Ifremer is a public body with industrial and commercial functions (Établissement Public à caractère Industriel et Commercial - EPIC) under the joint authority of the Ministry of Higher Education and Research and that of

³ Law n°2010-874 of 27 July 2010 on the modernisation of agriculture and fishing - LMAP – French Republic Official Journal of 28 July 2010 pages 3 to 90.

⁴ In this region, there are no departmental Committees as in Brittany for example (Picault *et al.*, 2014b) but there are, however, CRPMEM antennas.

Ecology, Sustainable Development and Energy. It indirectly intervenes in the co-management as scientists do not have the power to vote in the decision-making system but merely have an advisory role. Another structure also intervenes at the scientific and economic level: the Joint Syndicate for the equipment of the coastal zone (Syndicat Mixte pour l'Équipement du Littoral – SMEL). Being a public body whose mission is to promote the expansion of economic activities linked to marine living resources, the SMEL may intervene in the English Channel at all stages of the seafood value chain: from natural riches to production and operations, to their value enhancement⁵. This structure, funded by the General Council of the Manche department (Conseil Général de la Manche) is positioned at the interface between professionals, elected officials and researchers, thus contributing to the reconciliation of these different actors within the management process.

According to those surveyed, the different actors working on the lobster fishery are in very good terms, this is notably true for the CRPMEM BN and its local offices, Ifremer, and the SMEL. *“There are close links with the Regional Committee and its offices, the SMEL, and IFREMER to carry out the sampling and data retrieval work. In this fishery, there are good management rules with numerous exchanges between all the actors of the sector.”* (Scientist, 6 Nov. 2013).

The fisherman has his place in this system where all necessary competences are pooled together for an optimal management of the fishery and to promote these ideas. These good terms are one of the strengths of this governance and have led to the development of relations with other actors (such as those from Jersey) who also coexist within this Bay of Granville.

1.1.4. The lobster co-management decision-making system

The co-management system directly takes into account the fisherman or group of fishermen. The latter will be able to influence regulations by raising up their request to the CRPMEM. This request, recorded at the level of the local offices of the CRPMEM of Lower Normandy is then discussed within a specific CRPMEM commission, the “Crustacean” Commission, chaired by a fisherman. The objective of this commission is to form an opinion about the demands of local offices pertaining to new elements of regional regulation.

It must relay this opinion up to the board of the CRPMEM BN for validation. Place of exchange between specialised fishermen, it involves scientists who provide opinions on the issues addressed. Although this committee does not have any decision-making power, it has, however, a key role of proposal, such as for example the limitation of the number of trap pots per boat in Lower Normandy. In the end, this “Crustacean” Commission proposes one or several proceeding projects which are then submitted to the board (composed of elected representatives) of the CRPMEM BN. If the latter gives a favourable opinion, the project is forwarded to the administrative authority at the regional level (the DIRM) who may adopt it by delegated authority from the region prefect of Lower Normandy (Picault *et al.*, 2014a). After verification of its legality, it is translated into a prefectoral order. The scheme of adoption of the proceedings is summarised in figure 5. This decision-making scheme of the co-management of the lobster is very close to that of the Great Atlantic scallop in the Bay of Saint-Brieuc, with the exception that in the department of Manche, there are no departmental Committees but rather local offices of the CRPMEM BN (Picault *et al.*, 2014b).

⁵ <http://www.smel.fr/>

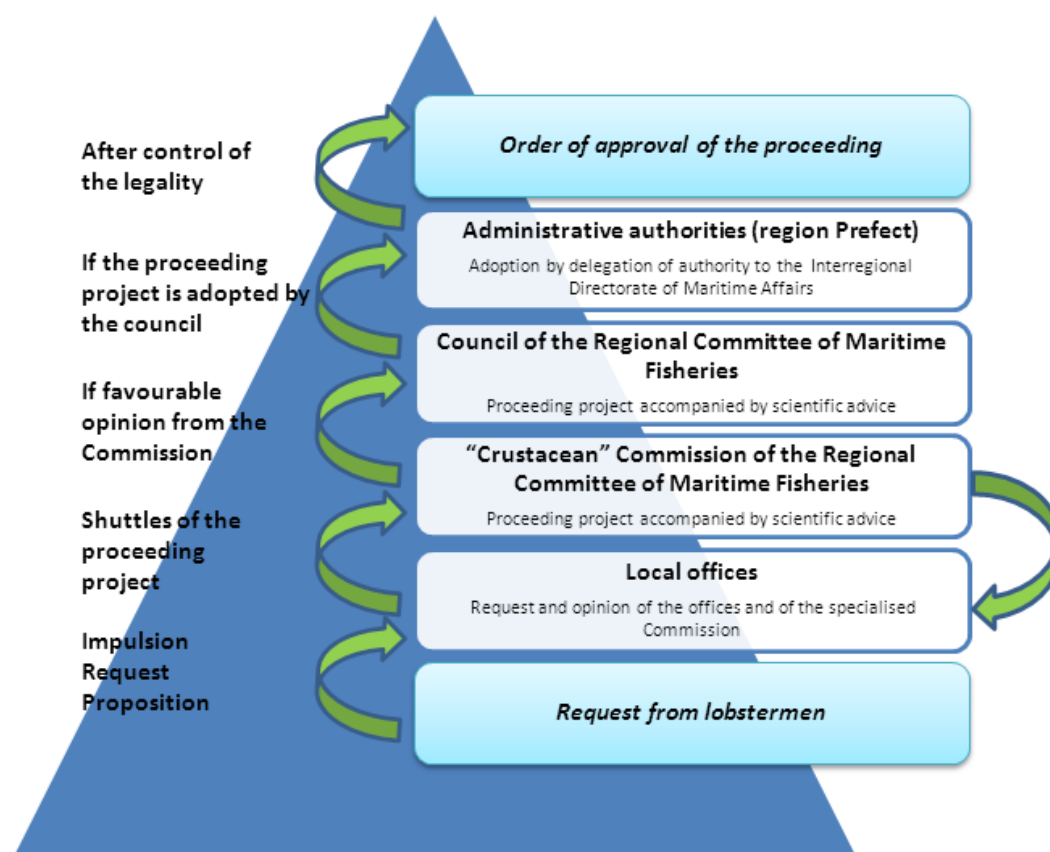


Figure 5. Lobster co-management decision-making system in the Bay of Granville

There also exists a “Crustacean” Commission at the national level, chaired by a professional. In the framework of participation to the balanced management of resources, it may develop and propose draft proceedings to the board of the CNPMM BN pertaining to the general working conditions of the profession. These proceedings may be made mandatory by the Ministry of Ecology, Sustainable Development and Energy. Other national commissions, such as the “Commercially gathered shellfish” Commission, also exist at the French national scale and along the same modes of operation (Picault *et al.*, 2014b).

1.1.5. The establishment of a licencing system as a management measure

The management of lobster fishing in the Bay of Granville (which is not a species under European quota) is based on a system of national (*via* the CNPMM) and regional (*via* the CRPMM) licences. *“This system aims to maintain social and economic equilibriums by the sharing of resources and a balanced resolution of cohabitation or market disputes. It differs, in this, from the Common Fisheries Policy which favours the reduction of production tools to limit fishing effort”* (CRPMM, 5 Nov. 2013).

Since 1993, vessels desiring to fish for lobster must hold a national licence, which is mandatory for any ship wishing to fish for crustaceans in French waters (Corre, 2010). This licence sets out the attribution conditions.

In the case of the Bay of Granville, this licence is issued to Norman ships by CRPMM BN. This structure fixes allotted shares, attribution criteria, the practical arrangements for the campaign as well as the specific technical measures while ensuring compliance with national proceedings. Assigned to the pair owner/ship, the licence is neither assignable nor transferable. The terms of attribution are subject to necessarily strict rules and procedures. This system allows the lobstermen community to limit access to the resource and protect it. Fishermen thereby have the opportunity to act on the economic orientations of the sector in order to optimise the balance between fishing effort and the resource. The choice which was made for this fishery is to have a significant number of small boats (therefore jobs) instead of a limited number of large ships, even if possibly more profitable.

The licences attribution criteria are the following:

- The fishing anteriority (proof of fishing for the concerned species/practice of concerned trade during the years preceding the request),
- market orientations (definition of the number of licences or limitation of the applicant ships according to the market so as to obtain a correlation between supply and demand),
- the socio-economic equilibriums (for example by a sharing of resources between various small units so as to increase the number of businesses and preserve jobs in a port).

The interviewees underline the effectiveness and the successful adjustment of this system towards sustainably maintaining the community's fishing activity within a working environment where everyone has a place.

1.2. A cross-border management of the lobster fishery

The Bay of Granville has a rich history in terms of maritime law. Agreements in this area started in 1839 and aim to define the maritime boundaries between the two bordering countries (France and England), agreements which resulted notably in the breakdown of three fishing grounds amidst the Bay. In 1959, the British obtained sovereignty over the Minquiers by decision of the International Court of Justice in The Hague. Following recurring exchanges between the French and the British since 1992 (Fleury, 2011), the “Granville Bay Agreements” were signed in July 2000 and delineate a marine border between France and Jersey. They also define a fisheries agreement taking into account both the boundaries and historical fishing rights (Fleury, 2006). Relations have been tense, nevertheless, during negotiations between Jersey and France, notably on the side of the French fishermen, who, feeling excluded from discussions between the two governments, exert a great deal of pressure. Indeed, the stakes were high for French fishermen, as part of their fleet exercises within the territorial waters of Jersey: *“The negotiations from 1992 to 2000 have been felt as a compromise with a loss of fishing ground. Spirits were not high on the side of Granville. There was a tendency to forget the fishermen. Fishermen exerted pressure. The problem came from the fact that the mode of fisheries management is not the same between Jersey and France”* (CRPMEM 13 Nov. 2013). With hindsight, the fishermen still able to preserve their fishing grounds and close the Bay with a protective “curtain” against foreign ships. Today, these agreements are not challenged and lobster fishermen can work peacefully, even in the territorial waters of Jersey.

From these agreements also emerged the creation of a Granville Bay Joint Consultative Management Committee (Comité Consultatif Conjoint de Gestion de la Baie de Granville - CCCBG), a pioneering example of cross-border fisheries management: *“The CCCBG enables discussion between the stakeholders of the sector. Its role is to build a maritime area with barriers and an internal management consistency.”* (Researcher, 4 Nov. 2013). The function of the CCCBG is to ensure the effective conservation and management of the fishery resources of the sector governed by these agreements. This cross-border structure involves two States with a representation of the professionals of the fishing industry (Brittany and Normandy for France), the government, and scientists. Fishermen therefore have a forum where they can exchange on different topics to find management consensus between Jersey and France for a given resource. For example, an agreement on the sharing of certain zones by gillnetters and pot setters was reached; these fishermen agree to exploit the same resource on the same zone but at different times.

There are two organisational levels for the Granville Bay Agreements (see Figure 6): the Joint Consultative Committee (Comité Consultatif Conjoint) which recommends the measures necessary for the conservation of resources to the Joint Administrative Commission (Commission Administrative Mixte - CAM) and the CAM which has a decision-making role.

“The CAM consists of government representatives and scientific advisors. It examines the results of scientific investigations, receives the reports, observations and recommendations of the Joint Consultative Committee. It is also attentive to the evolution of fishing regulations in the sector, since it must not be forgotten that the citizens of the Bay of Granville are at a minimum subject to European regulations in Community waters. Based on these factors, the CAM decides whether or not to implement the recommendations.” (Scientist, 6 Nov. 2013).

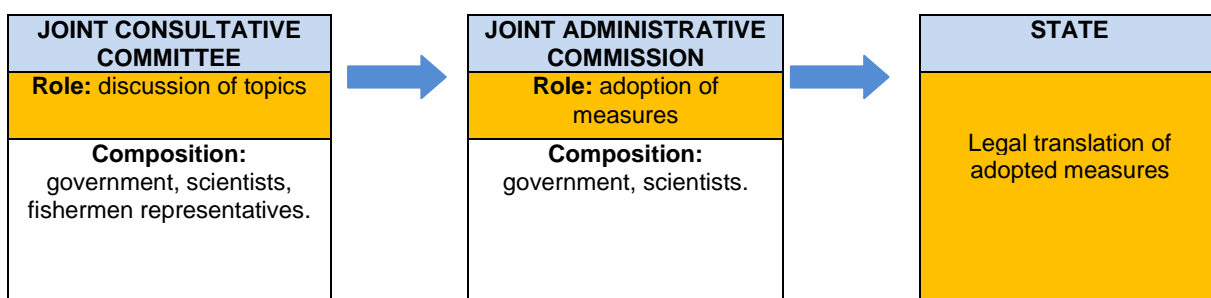


Figure 6: Decision-making process of the Granville Bay Agreements (Fleury, 2011)

According to those surveyed, in addition to developing new rules of management and the great involvement of the fishermen, notably for lobsters, three positive developments pertaining to the governance of the fishery can be identified: *“(1) A true consensus for a match between the resource and the number of operators with a limitation of the number of operators authorised to intervene in the area of the agreement. (2) Several management measures adopted progressively over 10 years mainly for large crustaceans with relatively successful results globally in terms of stock management. (3) A significant improvement in the status of the stock of large crustaceans (cf. studies undertaken in Paimpol and in the cantonments of West Cotentin, but also Jersey)”* (Scientist, 6 Nov. 2013).

Beyond the involvement of the fishermen in the management of the resource, they are also actors in various projects to make their voices heard. These projects may directly or indirectly have impacts on the management of the lobster fishery in the Bay of Granville.

1.3. Participation of fishermen to joint projects

Various projects are carried out or directly involve the community of lobster fishermen in the Bay of Granville, and at different scales. It is the fishermen's occupational structures that will carry their voices in different meetings or

negotiations during the elaboration of projects. They can be environmental or come from the industrial sector (activities related to energy: wind or water turbine installation sites). These projects are discussed within the CCCBG or amidst regional Committees and offices when they are outside the scope of the Granville Bay Agreements. The fishing community can thereby give its opinion *via the intermediary* of these structures. However, the multiplication of projects in recent years is not without posing some problems: *“There is a lack of staff, as many topics and projects arrive at the same time! There are many requests from all sides”* (CRPMEM, 13 Nov. 2013).

1.3.1. Projects pertaining to the environment and the resource

Beyond the management of the fishery, fishermen participated in various projects related to the marine environment such as the establishment of marine protected areas or of no-take zones for lobster.

Marine protected areas: consultation and debate

Member States of the European Union must take the necessary measures to reduce the impacts of activities on this habitat in order to achieve or maintain a good environmental status of the marine environment. To meet EU commitments, France must, by 2020, achieve the target of 20 % of marine protected areas in French waters (Grenelle de la Mer, 2009) under the Marine Strategy Framework Directive (MSFD⁶). The establishment of marine protected areas is a mode of action and governance of marine areas which contributes to any comprehensive strategy for the management of the marine space. They target areas delineated on the basis of the value of the natural heritage, the importance of ecological functions and nature of uses. They are dedicated to the objective of protecting the habitat, often associated with an objective of sustainable usage, and provide it with a governance framework and suitable means. There are mainly two types of MPAs for marine habitats that may have an impact on the management of inshore fishing:

- **The Marine Nature Parks (MNP)** have multiple objectives: healthy ecosystems, patrimonial or ordinary species and habitats, the good condition of marine waters, sustainable uses and activities and the preservation of the cultural maritime heritage (Khayati, 2011). MNPs already exist in France, including the Iroise Nature Park in which fishermen are stakeholders. Their impacts on the ecosystem are taken into account in the park's management decisions (establishment of no-take zones, monitoring of the no-take zone, limitation of certain fishing gears, ...).
- **The Natura2000 sites** that have a marine part have objectives of conservation or restoration of natural habitats and populations of species of fauna and flora. In case of non-negligible impacts of fishing on natural resources, measures may be taken by the Natura 2000 site Committee (establishment of no-take zones, limitation of certain fishing gears, ...).

Since 2009, a project to create a marine park in the Norman-Breton Gulf is under study (Grenelle de la Mer, 2009). It should enable to bring together all the stakeholders of the sea, including fishermen, to work on the sustainability of the area. With regard to the fishing community, there is a real debate around this project, especially during consultation or information meetings, with fishermen using local structures to communicate on their position and arguments for or against this project.

“There is a fairly strong refusal of fishermen, notably in the Côtes d'Armor and within the Regional Fisheries Committee of Brittany because they have retained only the negative aspects of this project and think the park will manage their affairs” (Scientist, 6 Nov. 2013).

“The MPA project is impossible because it includes 2 regions, 3 departments, 2 region prefects and Jersey. It is an unmanageable project because it is too far-reaching” (CRPMEM, 5 Nov. 2013).

“This park will make it possible to regulate recreational fishing more easily, because in Chausey, in the summer, it is so crowded that you cannot fish. In addition, we are a bit like clowns that everyone goes to watch, we are unable to work” (Fisherman, 19 Nov. 2013).

Establishment of no-take zones for lobster

For the purpose of preservation of the marine environment, scientific approaches have also been initiated, such as the establishment of no-take zones for lobster. These are zones delineated at sea and within which lobster fishing is prohibited in order to protect the resource. The CRPMEM BN and the SMEL work jointly on these no-take zones, which are mostly located in the West Cotentin, and promote what has already been undertaken in the past (the first no-take zone was established in 1964; Delayat *et al*, 2011). The main objective of this approach is to study the conditions for successful management of a no-take zone, in collaboration with the fishing professionals, actors in their environment.

Scientific works on knowledge of the stock

Lobstermen have a keen interest towards the resource and its preservation. Every year, a sampling campaign is carried out to assess the stock in close cooperation with the fishermen. The MSC certification on lobsters has enabled an improvement in research with Ifremer and the SMEL, who perform sampling campaigns to assess the stock in very close contact with the fishermen: *“Fishermen collaborate with self-sampling and the validation of their logbook data to avoid errors. They are integrated into the research process on their fishery. The data transparency of the various structures*

⁶ Within the framework of Directive 2008/56/CE of the European parliament and the Council of 17 June 2008 called “Marine Strategy framework Directive”

facilitates the management of the fishery” (Scientist, 25 Nov. 2013). Fishermen participate to the sampling campaign by performing measures on their own or by accompanying scientists in the field. They are also seeking feedback: *“I am very interested in the return of surveys or scientific publications on the fishery but we have a very low feedback from Ifremer”* (Fisherman, 19 Nov. 2013).

In addition to sampling, many other scientific projects are ongoing and have been initiated by fishermen:

- a study on the movement of lobsters using tagging, conducted by the Departmental Committee of Paimpol.
- the protection of spawners to ensure the reproduction of the species. Egg-bearing females are automatically discarded back in the water and some are tagged with a prohibition to be kept if caught again in the future.
- experiments on lobster survival in different types of trap pots⁷ in the no-take zone of Chausey.

Some projects are drawn from the “Lobster” working group that was created with Jersey to address the scientific specificities of this species and which brings together fishermen and scientists outside of the CCCBG.

Therefore there is a respect from the community of lobstermen for their resource, which is confirmed by the low number of offenses related to fishing: *“There are very few offenses on lobsters: for example, in 2013, there was only one offense (on size).”* (Local authority, 2 Dec. 2013).

1.3.2. Projects pertaining to enhancing the value of the lobster

To enhance the value of lobsters, the fishermen have implemented marketing and communication projects around their product.

The Marine Stewardship Council eco-label

“Quality” approaches began with Normandy Fraîcheur Mer (NFM) which is a quality group comprising fishermen, fish auctions and wholesalers of Lower Normandy. This structure has considerable experience in certification as it has developed the red label on the Great Atlantic scallop “nut” (adductor muscle) and, especially, on this fishery, a collective mark “lobster of Cotentin”⁸. It has a great strength of communication with the public.

One of the flagship projects of the lobster fishery is the establishment of the Marine Stewardship Council (MSC) eco-label on lobsters from the Cotentin and Jersey in 2011. This approach, which was developed jointly between fishermen of Jersey and those of Lower Normandy underlines the good terms in place between these two communities. According to interviews, the Bretons did not want to be associated with the process because they saw no economic interest in it, and would have preferred for the French State to establish a public eco-label.

As early as 2001, the Jersey Fishermen Association suggested the establishment of an MSC ecolabel. The joint approach came to be in 2011 with the recognition of the sustainability of the fishery by the MSC. It is the CRPMEM BN who took the decision to start the certification with the help of Normandy Fraîcheur Mer. The latter has provided technical assistance due to his experience in quality and communication processes to promote the products. The fishing community has adhered to the process for several reasons: *“The MSC is regarded by fishermen as recognition in terms of management of their stock of lobsters”* (Quality Group, 4 Nov. 2013). *“The MSC will, I hope, cause the regulation of Jersey to evolve towards that of France”* (Fisherman, 13 Nov. 2013).

The MSC approach has been implemented following the reduction of the selling price of lobsters in France, due to massive landings of these crustaceans from English ships. The fishing community thought it could stand out with the MSC to obtain better prices and counter this competition. But today, these same fishermen perceive less and less economic interest in this MSC label and therefore many of them do not MSC-label their lobsters anymore, due to the lack of impact on the selling price. This problem of motivation from a lack of economic interest remains perceptible among the producers interviewed: *“The wholesalers do not play the game of MSC, they do not buy at a higher price and there is no dialogue between fishermen and wholesalers”* (Fisherman, 19 Nov. 2013).

Despite this, the stakeholders that were met nevertheless agree on the fact that MSC has enabled an increase in exchanges between the French scientists and those from Jersey. Before, the monitoring of the stocks was done in a day-to-day manner, in the short term with little exchange between the two countries. Now this monitoring is much more supervised and exchanges more numerous, thanks in part to the growing involvement of Ifremer in observation works of this fishery.

Value enhancement of products through communication

In a general manner, the fishing community is willing to communicate on its trade and the sustainability of its activity. They notably do this through the organisation of festivals, the best known one being that of Granville, “the sea on a plate”, where lobsters are thus promoted since 2012. The objective of this event is to present seafood to the public by focusing on one species per year. To answer to people demanding information on the fishing methods, the biology, the resource, etc., the community organises itself: *“The SMEL has a joint stand with NFM and the Regional Fisheries Committee to propose activities of discovery of fishing and of the products with quiz games, the public loves it and it sparks their interest”* (Joint Syndicate, development of aquaculture and fisheries, 22 Nov. 2013). The SMEL also organises visits for primary classes to help them discover the marine environment and fishing trades.

⁷ Double-chamber pot (“parlour” pot or trap pots) and common pot.

⁸ <http://www.normandiefraicheurmer.fr/les-produits-stars/entry-21-homard-du-cotentin-msc.html>

Communication about the trade and the species is also done through direct sales (market, associations, restaurants, ...). The lobster is a product that is not under an obligation of sale at fish auctions and which, in most cases, therefore is traded on local markets. During these sales, the fishermen communicate a lot and explain to customers how their fishing activity is carried out: *"People are often curious about the fishing, notably about fishing on the Minquiers. They often want to accompany me but I cannot"* (Fisherman, 19 Nov. 2013). Through this direct selling, fishermen can expect up to 5 €/kg of added value on the lobster which represents an increase of approximately 24 % compared to the average price (Petre, 2011).

Another way to enhance the value of fishery products remains communication via the medias. Thereby, the MSC certification has managed to increase the interest of journalists for the lobster: *"The MSC on the lobster of the Granville Bay also helps attract people to get interested to this fishery such as for example the Thalassa television broadcast that did a piece"* (Researcher, 4 Nov. 2013). Numerous videos, recipes ideas, and other press articles were thereby emitted, notably under the leadership of NFM who organises this communication campaign (cf. its website). On the other hand, this fishery which has little impact on the environment, is also put forward as an example of an exemplary fishery by NGOs (notably the WWF⁹).

2. The limitations to the governance of this fishery

In the Granville Bay, the governance of the lobster based on co-management enables the strengthening of the sustainability of this fishery, atypical due to its cross-border nature. Many initiatives are thereby established by the fishermen and the sector as to ensure the future. But despite all this, there are some limitations to this governance that will be detailed below.

2.1. The weak points at the scale of the fishery

The community of lobstermen is directly involved in the management of this species at the local level. The persons surveyed have nevertheless raised some points to be improved at this scale to enable better governance.

2.1.1. The limitations of a three-way management: Jersey/Brittany/Lower Normandy

Although the trends are in the right direction in terms of relations between the parties from France and from Jersey, several points were identified for management improvement. Indeed, if the management approach gives priority to consensus, the decision process is thereby rather slow. Differences in terms of resource management, language difficulties, and very different political, legislative and legal systems require a lot of time for the adoption of a regulation. On the other hand, there is a historical conflict between Bretons and Normans which does not facilitate the taking of positions by France.

The fact that regulatory differences remain between Jersey fishermen and their French counterparts annoys the latter, notable on having the right to more trap pots on board, which increases fishing capacity (maximum of 1 500 trap pots per ship for Jersey and 1 000 per ship for Lower Normandy according to different criteria) (Macalister Elliott and Partners Ltd, 2011): *"The greater number of trap pots for Jersey is a bit of an injustice, they undercut prices when they land at auction in France"* (Fisherman, 19 Nov. 2013).

Finally, representatives of the French government who chair at the CCCBG are often not the same from one year to another, in contrast to those of Jersey. This regular renewal may involve a lesser knowledge of the issues at hand; lobster fishermen notably fear that they will be less effective during negotiations.

2.1.2. The issue of renewal and of involvement at the level of the occupational structures

The spokespersons of the fishing community within the CRPMEM BN and local offices have been in office for many years. They are very familiar with the issues and know how to present them to be heard. Questions arise pertaining to their renewal. At each election of fishermen representatives (Regional Committee, offices, ...), the few registered lists limits the choice of fishermen. What is worrying, in the future, is when they no longer want to stand for re-election. *"A large part of fishermen do not enter the game. There is therefore little succession. They do not want to be drowning in the administrative paperwork"* (Fisherman, 19 Nov. 2013). *"The governance is a story about men, young fishermen are in an individualistic movement and are not/little involved in governance and therefore there is a lack of succession!"* (CRPMEM, 13 Nov. 2013).

This movement within the fishing community is felt during the "Crustacean" Commission meetings or at information meetings about less sensitive issues. According to the respondents, less and less fishermen are present at meetings: *"There are increasingly less people at commissions!"* (Fisherman, 19 Nov. 2013).

2.1.3. A support deemed insufficient?

A point that is often mentioned during interviews with the lobstermen community is the distance of elected officials from their fishery. Elected representatives of the Manche department communities do not come from the maritime world and sometimes have difficulty understanding it and taking initiatives for the development of this sector. *"Maritime politics are not very present in the political sphere, they have no maritime awareness. We must therefore communicate!"* (Joint Syndicate, 22 Nov. 2013). *"We do not do enough communication because politicians of Normandy forget the marine side, there is not enough maritime culture in the department, unlike Breton people. There is a need for a political leader"*

⁹ <http://www.youtube.com/watch?v=xMvFPsqejWo>

that is turned towards the sea" (CRPMEM, 13 Nov. 2013). The fishermen community is aware of the lack of communication towards politicians, and of the fact that their situation contrasts with that of Brittany where the maritime aspect is very present within political spheres.

In addition to this lack of maritime sensitivity, there has recently been a reorganisation of the State services which was accompanied by a decrease in staff dedicated to the control and the management of fisheries at the local level: *"There was a decrease in the staff of the Delegations to the Sea and the Coastal Zone, which complicates things and gives professionals the feeling to have lost some degree of contact with the government. In addition, there have been changes in the organisational system of state services, which generates small confusions with professionals, but nothing serious"* (Local authority, 2 Dec. 2013).

Finally, with respect to information exchange, the central authority has access to all logbook¹⁰ data; fishermen regret not having access to it, even in an aggregated form. This data could be very useful in terms of management for the fishermen community because it would give a better picture of what is caught in the area.

2.2. Make its voice heard beyond the fishery, a real difficulty

Even if it is managed at the local level, it is forced to comply with certain regulatory constraints of the European Union (EU), notably through the CFP. Indeed, the EU benefits from an exclusive competence in terms of the conservation of the biological marine resources by defining fishing rules to control and limit the harvesting of fishery stocks (Picault *et al.*, 2014a). Due to the small size of this fishery, fishermen are struggling to make their voices heard beyond the fishery.

2.2.1. Failure to listen at the national and European level

This fishery is not listened to because of its small size (60 vessels in the West Cotentin) and the fact that the lobster is not a species under quota. So there are few relationships between Europe and the fishing community, and even less lobbying for continued support to new fishing business creation or renewal of the fleet during the next EMFF for example. To pass messages at the European level, it is necessary that the local structure passes through all levels (regional, national and European), which is long and not always successful. Some fishermen use related structures dedicated to the defence of inshore fisheries for lobbying at the European level, for example by integrating the "small scale inshore fishing" platform. This association consists of fishermen (mostly small inshore units) who feel poorly represented in their occupational structures or who think that they have little impact at the European level. This European movement, which allows lobbying on a larger scale, asks decision makers of the European Union to protect their way of life, their communities and their heritage. For them, it is essential that the new CFP puts an end to unsustainable practices and puts the actors of an artisanal and small impact fishing model at the heart of future European decisions. There is, indeed, a certain disconnect between the inshore lobster fishery (the field) and Europe (bureaucracy): *"About Europe, there is a certain disgust because decisions are often not adequate. There is a lack of consultation"* (Fisherman, 19 Nov. 2013).

2.2.2. Difficult to be heard in an increasingly saturated space

According to survey respondents, the community of fishermen suffered the brunt of the transformation of the maritime space with the arrival of new users (boaters, recreational fishermen, water sports, energy, ...). The maritime space is becoming saturated. Inshore fishing is forced to adapt to be preserved, in order to maintain a sustainable and annual activity for the maintenance of the local community, the primary goal of these fishermen being to catch fish for human consumption. The expansion of tourism, and the profits that are looming, must therefore be able to coexist with the fishing: *"We need tourism to also benefit fishermen, we must maintain as many jobs as possible in inshore fishing. We do not want to be Indians in a reservation"* (Fisherman, 13 Nov 2013). But, for the moment local authorities tend more to want to develop the recreational boating sector than that of fishing, as is the case for example in the port of Granville: *"Granville has been evolving in recent years and recreational boating is taking a more important place than fishing because there are many tourists"* (Joint Syndicat, 22 Nov. 2013). We must therefore bank on the development of tourism around, and with fishing in the English Channel which historically has been present for a long time: *"A city like Barfleur has a great historical heritage turned towards fishing. The fishing entity is not emphasized in the Manche department although there is a great history of fishing in Normandy"* (CRPMEM, 13 Nov. 2013).

3. Conclusion and key points

The following table lists all the stakeholders involved in the governance of the lobster fishery in the Bay of Granville and briefly summarises their respective roles. Fishermen are positioned at the heart of the local and regional governance through the "Crustacean" Commission of the CRPMEM BN, which is a force of proposal. In addition, occupational organisations are key actors in the management of the fishery with the introduction of licences for the lobster, being a system which is also used for other species (Picault *et al.*, 2014b). The government plays its commanding role at the national, regional and local level by controlling the correct implementation of the fisheries policy. Therefore, this pattern of governance reflects a strong cohesion and collaboration between actors but also a true willingness from fishermen to ensure the sustainable development of their trade. Scientific research plays a role within this sector, notably on management aspects (biological) of the resource. This governance of the lobster also involves actors (administrative and professional) from Jersey who exchange with French structures within the framework of the Joint Consultative Committee of the Bay of Granville.

¹⁰ Official register of the activities of a fishing vessel (including positioning and time of capture, configuration of fishing gears, volume of catches).

Table 5: Organisations directly involved in the governance of the lobster fishery

LEVEL	ORGANISATION	ROLE
FRANCE		
OCCUPATIONAL ORGANISATIONS		
National	National Committee for Maritime Fisheries and Marine Fish Farms of Lower Normandy (Comité National des Pêches Maritimes et des Élevages Marins - CNPMM) “Crustacean” Commission of the CNPMM	Regulatory measures and recommendations for crustacean licences at the national level Stakeholder group that provides advice and guidance on fishing for crustaceans at the national level
Régional	Regional Committee for Maritime Fisheries and Marine Fish Farms of Lower Normandy (Comité Régional des Pêches Maritimes et des Élevages Marins Basse-Normandie - CRPMM BN) “Crustacean” Commission of the CRPMM BN	Licence management at the regional level and force of proposal for the regulation and implementation of projects Stakeholder group that provides advice and guidance on fishing for crustaceans at the regional level
Local	CRPMM BN Offices of the CRPMM BN	Force of proposal for the regulation
GOVERNMENT		
National	Directorate for Marine Fisheries and Aquaculture (Direction des Pêches Maritimes et de l’Aquaculture - DPMA)	Translation and implementation of EU legislation at the national level
Régional	Interregional Directorates for the Sea Eastern English Channel–North Sea (Directions Interrégionales de la Mer (DIRM) Manche Est-mer du Nord)	Conduct of State policies with regard to fisheries at the regional level
Local	Delegation to the Sea and the Coastal Zone of Lower Normandy – Manche (Délégation à la Mer et au Littoral de Basse-Normandie - DML DDTM Manche)	Law enforcement dock-side and at sea as well as controls
OTHER STRUCTURES		
National	French Research Institute for Exploitation of the Sea (Institut Français de Recherche pour l’Exploitation de la Mer - Ifremer)	Scientific research and stock assessments
Régional	Joint Syndicate for the equipment of the coastal zone (Syndicat Mixte pour l’Équipement du Littoral - SMEL) Normandie Fraîcheur Mer (NMF)	Local partner for scientific research Implementing value enhancement processes for fishery products production in Normandy
JERSEY		
OCCUPATIONAL ORGANISATIONS		
Local	Jersey Fishermen Association	Represents the offshore fishermen of Jersey
	Jersey Inshore Fishermen’s Association	Represents the inshore fishermen of Jersey
GOVERNMENT		
National	Department of Fisheries and Marine Resources	Implementation of fisheries management, enforcement, scientific research; represents the administering in the CAM
Local	Fisheries and Marine Resource Advisory Panel FMRAP	Decision-making body for the management of fisheries in Jersey - includes the stakeholders and politicians
JOINT CONSULTATIVE COMMITTEE OF THE BAY OF GRANVILLE (COMITÉ CONSULTATIF CONJOINT DE LA BAIE DE GRANVILLE).		
Cross-border	Joint Administrative Commission (Commission Administrative Mixte - CAM)	Committee composed of the managing authorities of Jersey, Lower Normandy and Brittany. Decisions at the level of the Granville Bay Treaty

	Joint Consultative Committee (Comité Consultatif Conjoint - CCCM)	Committee that debates and proposes management measures to the CAM
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The lobster fishery is a fishery that has managed to evolve in recent years. It can now be considered as a sustainable fishery in which all stakeholders work together. The governance that has been established is an example of co-management where professionals work together with the government with the support of scientists.

The surveys conducted within the framework of the GIFS Project allowed us to summarise the principal means by which the existing structures contribute to the environmental, socio-cultural and economic sustainability of the fishery (cf. Table 6).

Table 6: Synthesis of the key aspects of the fishery

Sustainability of the environment
Establishment of a <i>Marine Stewardship Council</i> (MSC) ecolabel for lobsters in the Bay of Granville
Participation to scientific works: collaboration with Ifremer and the SMEL for the gathering of scientific data; establishment of scientific programs on the biology of lobsters and the effects of no-take zones
Creation of a scientific working group on the lobster with Jersey
Selective fishing
Healthy stocks
Social sustainability
Healthy working environment between numerous actors that appreciate and know each other
Increasing interaction of the community of fishermen with the tourists
Efforts of communication of the community of fishermen on their trade
Implementation and participation in numerous projects
Economic sustainability
Economic diversification (direct sales, participation in festivals)
Participation of occupational structures to training (in fishing schools, aquaculture, ...)
Project of value enhancement of the product (collective mark, label, short-cycle)
Governance based on co-management
Concerted management with the involvement of the fishermen
Integration of the fishermen's ideas during decision-making
Organised occupational structures integrating fishermen
Existence of local authority structures to support the sector (SMEL)
A well-established licencing system to protect the resource
Positive evolution in relations with Jersey

The environmental dimension, first item of the sustainable development triptych, is one of the pillars of this fishery and its governance. The fishery exploits a healthy stock which has also led to the MSC certification of the fishery. In addition, fishermen show respect for the resource, resulting in a better understanding of the latter and a communication of information on their best practices. An analysis conducted on this fishery in 2011 (Petre, 2011) pointed out a lack of scientific data to monitor the stock. Since then, the MSC certification has allowed actors to improve on this aspect by creating a specific working group on knowledge of the lobster resource by increasing, for example, the gathering of scientific data. The socio-cultural aspect, another key element of sustainable development, is present within the fishing community and is underlined by the existence of a healthy working environment with many interactions with other sectors, other communities.

There is a strong will from fishermen to develop the economy of their trade by advertising the fact that this fishery is managed in a reasoned manner with quality and eco-labelled products. The means used by the lobster fishermen community are, for example, staging festivals enabling them to communicate on the trade, the fishing methods, and enhance the value of lobsters caught in the Granville Bay. Finally, the economic dimension, last pillar of sustainable development, is essential for fishing businesses that exploit this resource. The fishermen's income comes from the sale of the catch on the basis of two factors: the quantity and the selling prices. The quantity that is landed partly depends on the resource which, through effective local management, is preserved. The price, however, is a function of supply and demand at the time of the sale. Certain fishermen, to increase the selling price, and thereby their income, sell their catch directly on the markets or to restaurants, which also enables them to communicate on their trade. At the level of the

lobster fishermen community, valuation approaches were put in place to sell at a better price, such as the MSC eco-label or the collective mark “lobster of Cotentin” (homard du Cotentin).

These different dimensions of sustainable development are an integral part of the local management of this fishery. Members of the community of lobster fishermen and various associated stakeholders are attempting to secure the future of the fleet on the basis of co-management. This governance allows fishermen to benefit from local regulations that are pertinent to their needs and to the sustainability of the fishery, notably with the development of management tools such as licences for example. The management of this fishery is atypical because the Granville Bay is a cross-border area within which French and Jersey fishermen cohabit. Both communities have established a shared resource management with the creation of the Granville Bay Joint Management Committee (Comité Consultatif Conjoint de Gestion de la baie de Granville), which is a pioneering example of cross-border fisheries management. Relationships and partnerships that are maintained between all actors are a solid foundation for the future of the fishery. Despite all this and according to the survey respondents, there are some limitations to this governance.

At the fishery level

Despite the efforts made over the past five years, the management system of the fishery at the Granville Bay level has not allowed a full harmonisation of regulations between Jersey and France. Between the two countries still linger regulatory disparities that discriminate against some fishermen in terms of fishing capacity. It is therefore important for the representatives of fishermen to be involved in the management Committees so as to defend their views. Currently, these appointed representatives are fulfilling their role perfectly. However, according to those surveyed, few people wish to represent the community of lobster fishermen in the future, or to get involved in occupational structures. There is a certain neglect of key representation positions of the sector, which will be problematical in the medium term to defend and make the voice of fishermen heard at the local as well as national level. Finally, according to the fishermen, elected officials of the Manche department are not sufficiently invested in maritime activities. Fishermen do not always feel supported politically.

At the national and European level

At the national and European level, this small scale fishery and its representatives are struggling to make their voice heard. Yet, even if it is managed at the local level, it is forced to comply with the regulatory constraints of the European Union, in particular through the Common Fisheries Policy (CFP). In addition, fishermen operate in a space where uses are increasingly diversified and where conflicts of use are multiplying. As a result, they fear a loss of support from political bodies in favour of other sectors.

3.4 Bay of Saint Brieuc (France) Case Study

Introduction

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Introduction

Nicknamed “white gold”, the Great Atlantic scallop (*Pecten maximus*) is an emblem of the Bay of Saint-Brieuc. It is a bivalve found on loose sandy bottoms, generally between 20 and 50 meters depth, and is present in European temperate waters from the Norwegian coastline to northern Spain (Ifremer, 2010). In France, the Great Atlantic scallop (also referred to as the “scallop” in text) is the fourth commercial species in terms of value and represents a turnover of 40 million euros (France Agrimer, 2013). Its exploitation is subject to a strict regulation, the aim of which is to preserve the stock in the long term. In the Côtes d’Armor, scallop fishing is a major activity. Indeed, it is the department where the largest deposit in France is located, with about 150 000 ha (Figure 7). Three distinct zones are exploited in the Saint-Brieuc Bay, the main deposit called “of the Bay”, the offshore deposit and the Nerput deposit.

The scallop deposit experiences a high interannual variability of the stock (Laubier, L., 2003). Since 1973, a scientific monitoring carried out by Ifremer, at the request of the fishermen, is established each year to better understand the stock and adjust fishing effort to the available resource. In addition to this is a regulatory framework, originally established by the professionals, which among other things includes a licencing system to control access to the resource

This seasonal fishing activity is carried out from October until April approximately, so as not to disturb the reproduction of the scallops. It concerns, for this zone, 255 ships for the 2013-2014¹¹ season, of which 85 % come from the maritime districts of Côtes d’Armor (other vessels originating mainly from the ports of Finistère). Ships gather this shellfish using fishing dredges, the characteristics of which are determined by local regulation. A maximum two dredges are authorised on board. Although scallops represent the bulk of the annual turnover (up to 40 %), these ships often practice another trade (shellfish dredges, trawls, nets or long lines, crustacean pots) when the season is over (Macher *et al.*, 2011). During the 2012-2013 campaign, some 5 710 tonnes were landed mainly in the Côtes d’Armor fish markets of Erquy, Saint-Quay Portrieux and Loguivy de la Mer, generating nearly 11 million euros (CAD22, 2013).

The Great Atlantic scallop fishery in the Bay of Saint-Brieuc is based on a regulatory system that is managed collectively at the request of the fishermen since the 1970s. It is the first fishery of importance in the English Channel for which a dedicated mechanism was created in order to attempt to limit the number of ships (Meuriot *et al.*, 1987). From the onset, the fishermen have recognised the importance of managing the resource, which resulted in the creation of a system of governance based on a co-management system with involving occupational structures and the government, with scientific support.

¹¹ Proceeding 2013-059 of 11 June 2013 of the Regional Committee setting the number of fishing licences for Great Atlantic scallops in the sector of Saint-Brieuc.

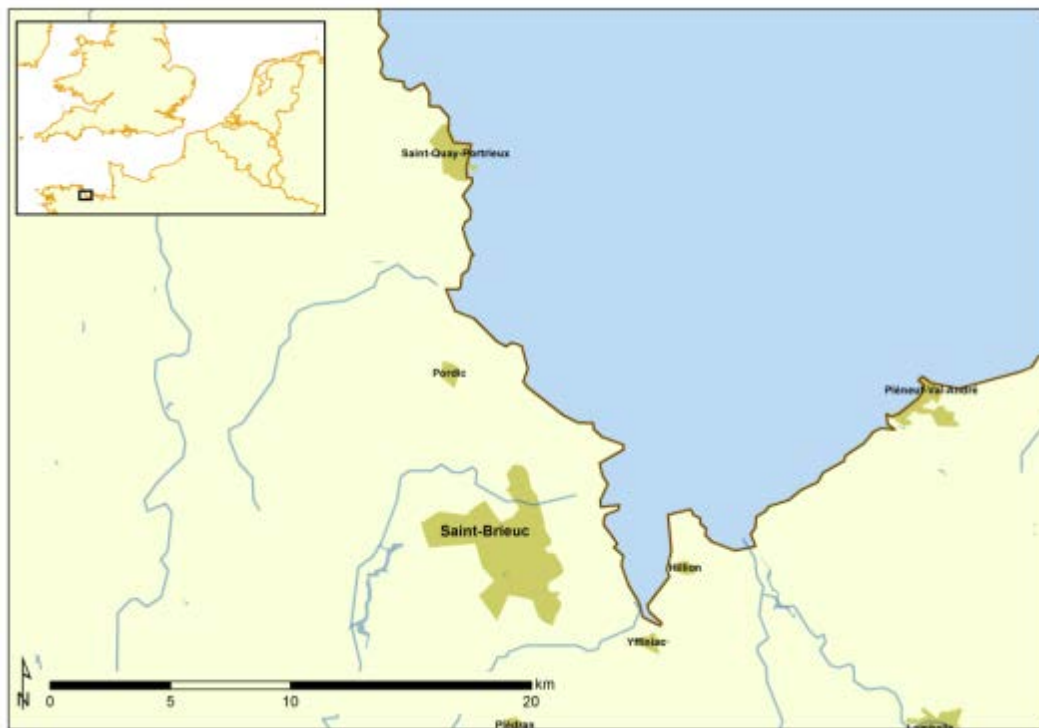


Figure 7. Bay of Saint-Brieuc in France (Source: VLIZ, 2014)

Table 7: Interviewee Sample

Interviewee	Sector/Role	Date	Length
1. Participant A	Regional fisheries organisation	5.11.2013	61 mins
2. Participant B	Fish auction director	21.11.2013	60 mins
3. Participant C	General council	10.12.2013	109 mins
4. Participant D	Scientific	20.12.2013	60 mins
5. Participant E	Local administration	12.11.2013	74 mins
6. Participant F	Community governance	12.11.2013	76 mins
7. Participant I	Fisherman	22.11.2013	34 mins
8. Participant H	Organisation of fishermen	14.02.2014	108 mins

1. A historical system of governance based on co-management

Fishing-for Great Atlantic scallops in the Bay of Saint-Brieuc is one of the most supervised fishing activities in France. The collective management of this fishery, established for over forty years, allows a rational exploitation of the resource with the joint participation of the State and the fishermen.

1.1. A historical collective management

The exploitation of the Great Atlantic scallop has truly restarted after the decline of the stock of clams in the early 1960s, with the rediscovery of the deposit. The stock was quickly exploited intensively, starting in 1962, notably following the disappearance of the octopus, its main predator. The rapid increase in the number of ships and the significant decline in the stock then make it necessary to implement supervisory measures for the fishery. This first stage of collective awareness of the need for management, initiated by the fishermen, results in a de facto limitation of authorised fishing time (4 days per week and 6 hours per day).

In 1972, a "Shellfish" section of the Interoccupational Committee for commercially harvested shellfish¹² is also created at the request of the fishermen and their representatives in order to better manage this resource. The following year, this section opts for the creation of a special fishing licence for the Great Atlantic scallop in the Bay of Saint-Brieuc (Lesueur *et al.*, 2009). Assigned to the pair captain/owner, this licence allows a limitation and a modulation of the number of ships exploiting the resource. Gradually, the daily hourly schedule system established is completed by specific authorised

¹² This committee will later become the Regional Committee for Maritime Fisheries and Marine Fish Farms (Comité Régional des Pêches Maritimes et des Elevages Marins - CRPMEM).

fishing days and more restrictive technical regulations: *“In 1977, we decided to implement a draconian regulation. It limits the size of vessels to 13 meters and 250 horsepower”* (France Filière Pêche, 2013).

Today, the regulation relating to this Licence is developed by the Regional Committee for Maritime Fisheries and Marine Fish Farms (Comité Régional des Pêches Maritimes et des Élevages Marins - CRPMEM) of Brittany. It is then adopted by the region prefect.

1.2. A governance based on co-management

There are two main actors in the management of this scallop fishery in the Bay of Saint-Brieuc: the State, with a regional administrative representation, and the Regional Committee for Maritime Fisheries and Marine Fish Farms (CRPMEM).

1.2.1 The government and the fisheries committees, actors of the governance

In this system which is predominant in the territorial waters of France (Picault *et al.*, 2014a) the resource management initiative originates mainly from these local users. The fishermen are represented here at the regional level by the Regional Committee for Maritime Fisheries and Marine Fish Farms (CRPMEM) of Brittany, and by the Departmental Committees for Maritime Fisheries and Marine Fish Farms (CDPMEM) at the departmental level. These are occupational organisations. Decision-making is participatory, giving stakeholders the opportunity to voice their positions. Fishermen enjoy a degree of autonomy because they hold some control over the management of the fishery (Ferracci, 2011). However, the regulatory decision-making falls to the national or regional authorities. The fisheries authority is represented in Brittany by the Interregional Directorate for the Sea Northern Atlantic-Western English Channel (Direction InterRégionale de la Mer Nord Atlantique-Manche Ouest - DIRM NAMO) and the prefect of the region. At the local level (department) is the Departmental Directorate of the Territories and the Sea (Direction Départementale des Territoires et de la Mer - DDTM) and the prefect of the department.

The State of France has given the Regional Committees for Maritime Fisheries and Marine Fish Farms (and more globally to the National Committee for Maritime Fisheries and Marine Fish Farms), that represent the fishermen, missions of representation and defense of the interests of the trade in all areas pertaining to the sector (production, marketing, social, training, environment, ...). *“It gives the opportunity to participate in the development of regulations pertaining to fisheries management and the harvesting of marine plants for species that are not subject to TACs [Total Allowable Catches] or catch quotas in application of a European Union (EU) regulation in territorial waters, to participate in the development of regulations governing the use of gears and the coexistence of maritime trades, to participate in the implementation of economic and social actions in favour of their members, to participate in regional public policy for the protection and valuation of the environment, so as, notably, to promote the sustainable management of marine fishing and marine farming, to provide scientific and technical support to their members as well as where safety, training and promotion of marine trades are concerned”* (CRPMEM of Brittany, 5 Nov. 2013).

The community of Great Atlantic scallop fishermen thus relies on this co-management system for the development of the regulation specific to their trade and to the region, which is then validated by the State. Within this system, the fisherman is therefore a source of proposals. The governance of this fishery remains based on local and regional structures that have a crucial role in terms of representation of the fishermen, which, nevertheless, is common to a large number of inshore fisheries in France such as that of the lobster in the Bay of Granville (Picault *et al.*, 2014b).

1.2.2. The role of the fisheries committees – occupational structures – in the management of the fishery

The community of Great Atlantic scallop fishermen in the Bay of Saint-Brieuc is represented directly by the Departmental Committees for Maritime Fisheries and Marine Fish Farms (CDPMEM). The main committee, for scallop fishing, is that of the Côtes d'Armor which represents 211 ships (in 2013) and, to a lesser extent, those of Ille-et-Vilaine and Finistère. In these structures, the president who was elected by the fishermen has the role of spokesperson as well as of defending their interests. There is therefore a representation of the fishermen “at source”, close to the field. These committees enjoy a legal and financial autonomy and have the trust of their fishermen: *“I do not really have the time to get involved in the structure because I fish during the week, sell during week-ends. I trust the President of the Departmental Committee”* (Fisherman, 22 Nov. 2013).

At the regional level, the CRPMEM of Brittany remains the referent occupational structure and the preferred interlocutor for the government and politicians. Indeed, it represents the fishermen before the State, before its decentralised services and local authorities, and has notably the mission to defend their interests while participating to improving the sustainability of the fishery on a national and regional scale. Its president, elected by Breton professionals, is supported by permanent employees for technical issues. This occupational institution, prescribed by Law¹³, enables it to benefit from State prerogatives (compulsory accession, deduction of a professional contribution, ability to establish resource management rules that are enforceable by law, capacity to put in place juror-guards (gardes jurés), etc.). Inside the areas statutorily located within territorial waters (12-mile belt), the organisation of fisheries is entrusted to the CRPMEM of Brittany, including all the deposits of the Bay of Saint-Brieuc.

¹³ Law n°2010-874 of 27 July 2010 on the modernisation of agriculture and fishing - LMAP – French Republic Official Journal of 28 July 2010 pages 3 to 90.

1.2.3 Participation of other actors

- **Scientists**

Scientists are an important link for the governance of the Great Atlantic scallop fishery. One of the management objectives is to ensure the sustainability of fishery resources; this cannot be done without scientific knowledge of the exploited stocks. It is Ifremer that is intervening in France on this aspect, and more particularly on the scallop in the Bay of Saint-Brieuc. Founded in 1984¹⁴, Ifremer is a public body with industrial and commercial functions (Établissement Public à caractère Industriel et Commercial - EPIC) under the joint authority of the Ministry of Higher Education and Research and that of Ecology, Sustainable Development and Energy. It indirectly intervenes in the co-management as scientists do not have the power to vote in the decision-making system. They have an advisory role.

The representatives of professionals and the fishermen themselves got organised with the support of the maritime authority and scientists from Ifremer to manage the resource as best they can. Even if the Great Atlantic scallop fishing is not supervised by European Community “Total Allowable Catch” (TAC – maximum quantities not to be exceeded), the CRPMEM of Brittany advocates an overall fishing quota since 1980. This recommendation is based on the advice of Ifremer which conducts annual campaigns since 1966 to estimate the abundance of the stock. According to the survey respondents, the knowledge that Ifremer has is essential for the management of the fishery because *“the recommended quota is not just the result of a simple cross-multiplication”* (Scientist, 19 Dec. 2013). Research conducted by Ifremer is communicated to fishermen through the departmental committees to inform them on the state of the resource. Scientific knowledge is the basis of the management of this fishery. Scientists in charge of monitoring the Great Atlantic scallop have good contacts with occupational structures and send scientific observers on fishing boats when needed: *“I have permission to take Ifremer staff and trainees onboard. I've always had a good contact with the observers and it allows us to keep informed about what they are studying”* (Fisherman, 22 Nov., 2013).

- **The Producer Organisations**

Producer Organisations (POs) are associations that have “for objective to ensure the rational practice of fishing and the improvement of sale conditions of their members” (EC Regulation 104/2000). In the case of the Great Atlantic scallop in the Bay of Saint-Brieuc, the main PO is COBRENORD. The POs have two main missions (Vidie *et al.*, 2013). The first pertains to the management of the resource, in particular the allocation of quotas (for species under European quota) between their members and their monitoring. This mission does not exist in the case of the scallop because it is not a species under European quota. The second concerns the development of business strategies and the marketing of seafood (marketing standards) detailed in section 1.3.3.

1.2.4. The Great Atlantic scallop co-management decision-making system

The co-management system directly takes into consideration the fisherman or group of fishermen who will issue a request pertaining to the management of the fishery. Directly linked to the fishermen and the departmental committees, there is a “Great Atlantic scallop” Commission. It is within this commission that local representatives of the fishermen are able to provide opinions in terms of management of the fishery and propose the opening and closing dates of the scallop fishing season, the fishing days and hours, the indicative quotas as well as the date of closing of the fishery when the indicative quota is reached. This “Great Atlantic scallop” Commission therefore represents a first level of governance by which fishermen can make their voices heard and relay their requests up to the CRPMEM of Brittany: *“We can voice our opinions to the Great Atlantic scallop Commission, but not beyond, if we are not involved in, or members of the Commission, or elected representatives”* (Fisherman, 22 Nov 2013).

At the regional scale, within the CRPMEM of Brittany, the “Shellfish” Commission chaired by a professional, has for objective to give an opinion on the demands of the departmental committees (via the “Great Atlantic scallop” Commission) pertaining new elements of regulation.

This “Shellfish” Commission is thus supposed to relay this opinion up to the Board of the CRPMEM of Brittany for validation. Place of exchange between specialised fishermen, it also involves scientists who provide opinions on the issues addressed. Although it does not have any decision-making power, it has, however, a key role of proposal, such as for example the opening dates of the fishing season. In the end, this “Shellfish” Commission proposes one or several proceeding projects which are then submitted to the board (composed of elected officials) of the CRPMEM of Brittany. If the latter gives a favourable opinion, the project is forwarded to the administrative authority at the regional level (the DIRM) who may adopt it by delegated authority from the region prefect (Picault *et al.*, 2014a). After verification of the legality, the proceeding project will be translated into a prefectural order. The scheme of adoption of the proceedings is summarised in figure 8. This decision-making scheme of co-management of the Great Atlantic scallop in the Bay of Saint-Brieuc is similar to other inshore fisheries albeit a few adjustments (for example, for the management of the lobster in the Bay of Granville there are no departmental Committees but rather local offices of the CRPMEM BN (Picault *et al.*, 2014b).

¹⁴ <http://www.ifremer.fr/L-institut>

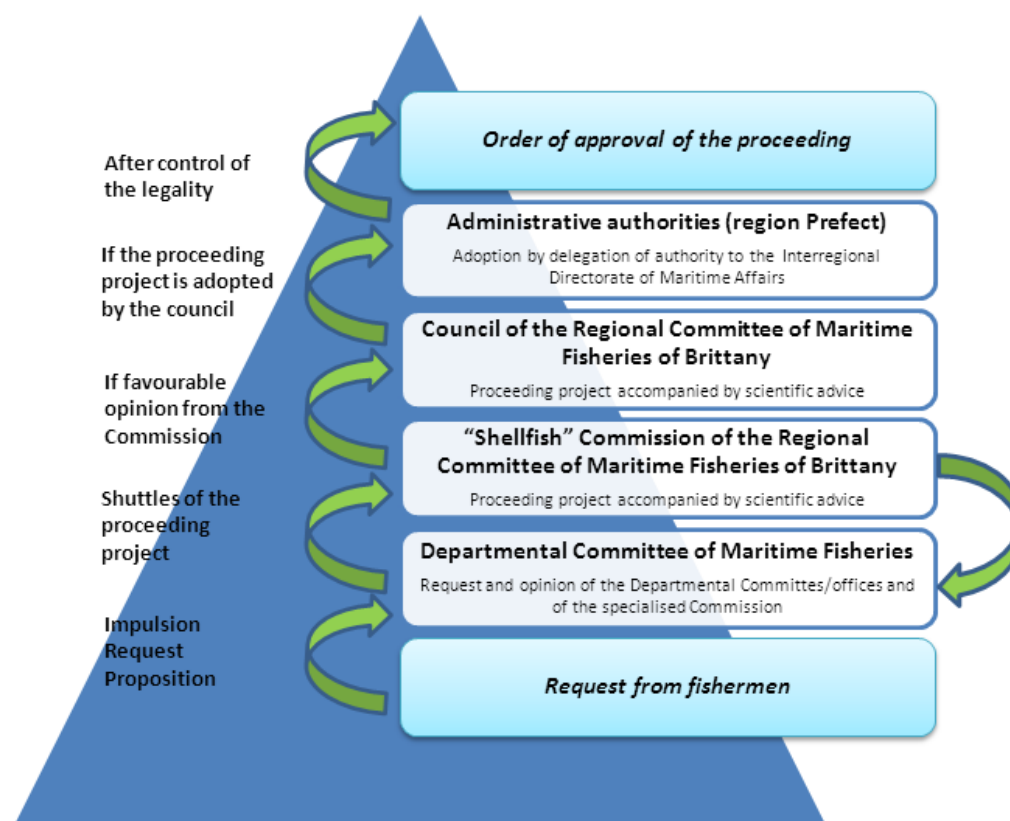


Figure 8: Decision-making system of co-management for the Great Atlantic scallop in the Bay of Saint-Brieuc (according to the CRPMEM of Brittany, 2013)

There also exists a “Commercially harvested shellfish” Commission at the national level, chaired by a professional. In the framework of participation to the balanced management of resources, it may develop and propose draft proceedings to the board of the CNPMEM pertaining to specific issues relating to the working conditions of the profession. These proceedings may be made mandatory by the Ministry of Ecology, Sustainable Development and Energy. Other national commissions, such as the “Crustacean” Commission, also exist at the French national scale and along the same mode of operation (Picault *et al.*, 2014b).

1.2.5. The establishment of a licencing system as a management measure

The management of scallop (which is not a species under European quota) fishing in the Bay of Saint-Brieuc is based on a system of national (via the CNPMEM) and regional (via the CRPMEM of Brittany) licences. *“This system aims to maintain social and economic equilibriums by the sharing of resources and a balanced resolution of cohabitation or market disputes. It differs, in this, from the Common Fisheries Policy which favours the reduction of production tools to limit fishing effort”* (CRPMEM, 5 Nov. 2013).

The Great Atlantic scallop fishing licence was established in the Bay of Saint-Brieuc in 1973 at the local level. The licence is issued by the CRPMEM of Brittany which fixes allotted shares (limitation of the number of ships), attribution criteria, and the practical arrangements for organisation of the campaign as well as the specific technical measures while ensuring compliance with national proceedings. Each year, a *numerus clausus* of licences and allotted shares by CRPMEM is defined by the CRPMEM of Brittany. The terms of attribution are subject to necessarily strict rules and procedures. Licences have allowed the evolution of the fleet, the market and the technical characteristics of fishing gears and ships to optimise the balance between fishing effort and the resource. The various elements of regulation¹⁵ can be summarised this way:

- Reduction in the size of the ships authorised to fish:
 - In 1974, the maximum allowed vessel length was 16 m. Since 1990, the maximum length is 13 m for 184 kWh.
- Limitation of fishing time:
 - Fishermen benefit from a system of individual hourly fishing quotas with a fishing authorisation of 45 min for two days of the week on the deposit of the Bay.
- Technical measures:

¹⁵ According to the proceeding No 150 “Coquilles Saint-Jacques (Great Atlantic scallops)-sb-2012-A” of 28 September 2012 of the Regional Committee for Maritime Fisheries and Marine Fish Farms of Brittany establishing and setting the attribution conditions of the Great Atlantic scallop fishing licence in the sector of Saint-Brieuc.

- Number of fishing dredges on board limited to 2,
- Maximum width of the dredge is 2 m,
- Inside diameter of the metal rings: 92 mm
- Recommended annual catch quota.
- Minimum catch size of 10.2 cm.
- Obligation of sale at fish auctions.

Licences are assigned to the pair owner/ship, and are neither assignable nor transferable, and subject to the following attribution criteria:

- The fishing anteriority (proof of fishing for the concerned species/practice of concerned trade during the years preceding the request),
- market orientations (definition of the number of licences or limitation of the applicant ships according to the market so as to obtain a correlation between supply and demand),
- the socio-economic equilibriums (for example by a sharing of resources between various small units so as to increase the number of businesses and preserve jobs in a port).

According to the persons surveyed, this system allows the lobstermen community to limit access to the resource and protect it. The number of licences has thereby evolved from a maximum of 469 in 1975 to 255 in 2013. Fishermen thereby have the opportunity to act on the economic orientations of the sector by favouring, in this case, a significant number of small profitable boats (therefore jobs) instead of a limited number of large ships. This system, according to the interviewees, is effective and suitable for the sustainable preservation of the community's fishing activity with an integration of scientific knowledge.

1.2.6. A strong control of the fishery wanted by the fishermen

The community of fishermen and the French government have established a control system on the fishery to reduce fraud and prevent the collapse of the resource (Le Gallic *et al.*, 2010). Through the Delegation to the Sea and the Coastal Zone (DML) of the departments at the local level and the other decentralised services, the French State ensures the enforcement of management rules, whether at sea or ashore during the landing (control of size passing through a fish auction): *"we control the ships at sea or on land, before and after fishing hours, or very offset to detect fraud, whether it be the non-compliance with time limitations or non-compliant fishing gear. All this is organised within the Codop¹⁶ in order to control the fishery with the gendarmerie maritime (coastguards), customs, and veterinary services. We work together to avoid the overabundance of resources and excessive controls"* (Local authority, 12 Nov. 2013). According to persons surveyed, the fishermen are fully integrated and transmit; for example, information concerning the fishing days or catching up to the DML: *"Information pertaining to the management of the fishery is then immediately transmitted to the Maritime Affairs so that the information flows well"* (Local authority, 12 Nov. 2013).

Part of the control is even supported directly by fishermen with chartering an airplane to monitor time overruns of ships. This method is very effective. It is funded entirely by the CDPMEM of Côtes d'Armor which demonstrates the very strong desire of self-monitoring on the part of the fishermen. This is a unique case in France. *"The departmental committee pays a plane 35 000 euros/year for the monitoring; it is funded by rebuys of licence following a fraud"* (CDPMEM, 12 Nov. 2013). This funding is obtained by, among other things, the mechanism of re-acquisition of licences from the CDPMEM; in other words, when the fisherman commits an offense, he loses his licence and is obliged to buy it back.

Beyond the involvement of fishermen in the management of the resource, they also are actors in various projects to make their voices heard. These projects may directly or indirectly have impacts on the management of the Great Atlantic scallop fishery in the Bay of Saint-Brieuc.

1.3 The participation of the fishermen to common projects

Various projects are carried out or directly involve the Great Atlantic scallop fishermen community of the Bay of Saint-Brieuc, and at different scales. It is the fishermen's occupational structures that will carry their voices in different meetings or negotiations during the elaboration of projects. They can be environmental or come from the industrial sector (activities related to energy: wind or water turbine installation sites). They are discussed within the CRPMEM of Brittany and at the level of CDPMEMs. The community can thereby give its opinion (and defend its trade) *via* these structures. However, the multiplication of projects in recent years is not without posing some problems: *"There are too many surveys on the Great Atlantic scallop in the Bay of Saint-Brieuc, too many projects. We are fed up as we do not have enough time any longer to represent our fishermen"* (CRPMEM, 13 Nov. 2013). Currently, the main project in the Bay of Saint-Brieuc is that of offshore wind power in which fishermen are fully involved.

1.3.1. Wind power projects: the role of the fishermen

Since 2006, fishermen are faced with the issue of offshore wind power, which still generates more reluctance than enthusiasm. At the time, Poweo and Nass&Wind Technologie first began to explore the Bay of Saint-Brieuc to position wind turbines. They had the desire to build wind turbines around the plateau of Grand Lejon, an area that is very rich in fish and with a lot of scallops (Figure 9b). During these studies, the local Committee of Saint-Quay Portrieux was consulted directly by industrialists but without any guarantee for the fishermen that their views would be taken into account, especially with regard to the implementing area and the compensations.

¹⁶ CODOP: Operational departmental committees (COMités Départementaux OPérationnels) of maritime fisheries monitoring in charge of the implementation of the regional monitoring Plan.

Concerned in the first instance by these projects, the fishermen visited a wind farm in Denmark with the CRPMEM, the Regional Council of Brittany and Ifremer. Nass&Wind organised and financed the trip. *“This study tour in Denmark with the panel of fishermen and the elected officials has made it possible to appreciate the actual scale of the wind turbines. The views of these people started to change. Fishermen realised they had bargaining power with positive benefits for the territory”* (CRPMEM, 5 Nov. 2013). After this trip, fishermen got organised and launched the creation of an information system in order to provide finer data on their fishing activity in specific areas. Supported by the Regional Council of Brittany and the General Council of Côtes d'Armor, the fishermen have got more weight in the decision of location of this wind farm area, thanks to this tool. They were able to define an implementation area that was less penalising for them than those originally proposed by various companies (Figure 9b). *“The wind farm is a very structuring project with great potential. We listened to the fishermen, and their arguments. The General Council of Côtes d'Armor helped the CDPMEM to develop the “fishing” Geographic Information System to show interlocutors where fishing activities take place and to define the best wind farm area”* (General Council, 10 Dec. 2013).

According to respondents, it is the local Committee of Saint-Quay Portrieux that raised the awareness of elected officials on the stakes of wind power for fishing and shared with the CRPMEM of Brittany their desire for support of this case at the national level. The CNPMEM, national level of representation of the fishermen (following requests from the CRPMEMs of the areas concerned by wind power), asked the State to take care of the wind power issue for a more structured approach. The State launched a national tender procedure¹⁷ with an area in the Bay of Saint Brieuc in 2011 (Anonymous, 2011). This tender notably aims to take a first step towards the objective of 6 000 MW of offshore wind and marine energies by 2020, inscribed in the Grenelle de l'Environnement (Grenelle de la Mer, 2009). At the beginning, although 5 main areas were identified – Le Tréport, Fécamp, Courseulles -sur-Mer, Saint-Brieuc and Saint-Nazaire - ultimately only four of them were assigned (Figure 9a).

The Spanish Iberdrola won the contract in the Bay of Saint-Brieuc. The CDPMEM of Côtes d'Armor was the strong actor of the Bay of Saint-Brieuc during this tender process. All the communication and negotiation work for this project was beneficial to the fishermen. *“The result of the tender has made it possible to choose a project in which the geographic location of wind turbines has less impact on fishing [cf. desired zone of fishermen in Figure 9b] and with positive benefits for fishermen: signature of a convention setting the work terms on site, involvement of the industrialist in fishery studies, accompanying measures, collective projects funded by the consortium (fight against slipper shells, seeding of Great Atlantic scallops)”* (CRPMEM, 5 Nov. 2013).

The fishermen have thereby been able to defend their interests to safeguard the Great Atlantic scallop fishery, and are now even recognised for their expertise: *“The CDPMEM of Côtes d'Armor is a true referent and a resource person for wind power projects because our expertise, and notably our knowledge of the sea bottom is recognised”* (CDPMEM, 12 Nov. 2013).

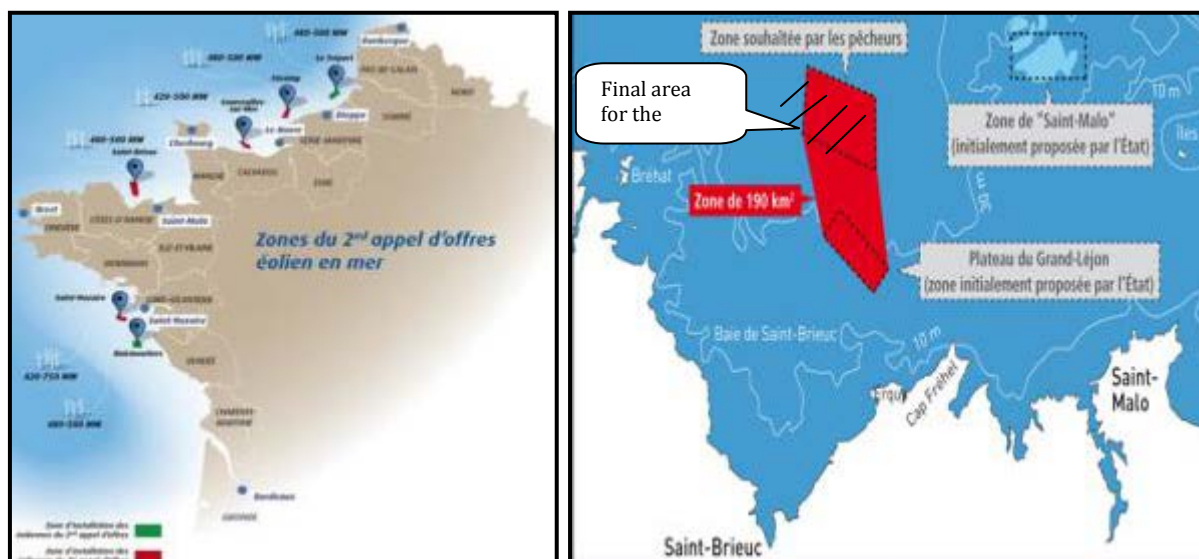


Figure 9a: Sites for wind power projects in France (source: Le Monde, 2013)

Figure 9b: Site for the wind power project in the Bay of Saint-Brieuc (source: Le Télégramme, 2010)

1.3.2. Projects pertaining to the marine environment

Other projects pertaining to the marine environment are being implemented to enable the development of a responsible and sustainable development of the fishing activity. This is the case of the establishment of a Marine Protected Area (MPA) and the reseedling program of the Bay with Great Atlantic scallops.

¹⁷ Tender procedure No 2011/S 126-20887 on offshore wind power.

Marine protected areas: consultation and debate

Member States of the European Union must take the necessary measures to reduce the impacts of activities on this habitat in order to achieve or maintain a good environmental status of the marine environment. To meet EU commitments, France must, by 2020, achieve the target of 20 % of marine protected areas in French waters (Grenelle de la Mer, 2009) under the Marine Strategy Framework Directive (MSFD). The establishment of marine protected areas is a mode of action and governance of marine areas which contributes to any comprehensive strategy for the management of the marine space. They target areas delineated on the basis of the value of the natural heritage, the importance of ecological functions and nature of uses. They are dedicated to the objective of protecting the habitat, often associated with an objective of sustainable usage and provide it with a governance framework and suitable means. There are mainly two types of MPAs for marine habitats that may have an impact on the management of inshore fishing:

- **The Marine Nature Parks (MNP)** have multiple objectives: healthy ecosystems, patrimonial or ordinary species and habitats, the good condition of marine waters, sustainable uses and activities and the preservation of the cultural maritime heritage (Khayati, 2011). MNPs already exist in France, including the Iroise Nature Park in which fishermen are stakeholders. Their impacts on the ecosystem are taken into account in the park's management decisions (establishment of no-take zones, monitoring of the no-take zone, limitation of certain fishing gears, ...).
- **The Natura 2000 sites** that have a marine part have objectives of conservation or restoration of natural habitats and populations of species of fauna and flora. In case of non-negligible impacts of fishing on natural resources, measures may be taken by the Natura 2000 site Committee (establishment of no-take zones, limitation of certain fishing gears, ...). There are 5 Natura 2000 sites in the Bay of Saint Brieuc.

It is in this context that consultation meetings are held in order to present and discuss the creation of a marine park¹⁸ in the Norman-Breton Gulf. The marine park should enable to bring together all the stakeholders of the sea, including fishermen, to work on the sustainability of the area. With regard to the fishermen, there is a debate around this park project during consultation or information meetings. Fishermen and elected officials are mostly against: *"The MPA project is impossible because it includes 2 regions, 3 departments, 2 region prefects and Jersey. It is an unmanageable project because it is too far-reaching"* (CRPMEM, 5 Nov. 2013). *"Where the MPA is concerned, we are present during meetings with all the stakeholders and there are a lot of conflicting views! The implementation was biased from the start because it is a Norman-Breton park but driven by Normandy (Maritime prefect of the Manche department). Brittany is a little excluded while much of the MPA is on its territory."* (General Council, 10 Dec. 2013). The project is not viewed as acceptable by the scallop fishing community of the Bay of Saint-Brieuc who is afraid that the MPA will not take the sustainable development of the fishery into account.

Reseeding of the Bay

In addition to the Great Atlantic scallop stock assessment (conducted by Ifremer), fishermen participate in other scientific projects. Due to the ongoing decline of the stock for several years (due to the high variability of scallop recruitment), a reseeded project emerged to introduce Great Atlantic scallop spat purchased from the Tinduff hatchery (Télégramme, 2012). *"The scallop resource is very fragile and shrinking for several reasons: problem with the water quality, global warming, and proliferation of common slipper shells. The fishermen wanted to launch a program of reseeded of Great Atlantic scallops in the Bay of Saint-Brieuc. The General Council of Côtes d'Armor co-finances this project and pushed for the acceptance thereof. We follow the project with Ifremer and ask for progress reports"* (General Council, 10 Dec. 2013).

1.3.3. Projects pertaining to the marketing of the Great Atlantic scallop

The management of the scallop resource is highly supervised in the Bay of Saint-Brieuc and allows fishermen to have access to the resource each year. However, its marketing remains difficult (Le Gallic, 2013) because the Great Atlantic scallop market is very competitive in France:

- British fishermen are direct competitors of French fishermen on the domestic market. Indeed, the British population not being a major consumer of scallops, British fishermen will more easily turn towards the French market. This additional supply contributes to lower prices on the French market.
- The trade name "coquille Saint-Jacques" (Great Atlantic scallop) is reserved for the species *Pecten maximus*, sold whole. This is the species fished in the Bay of Saint Brieuc. The "nut" (adductor muscle) of the mollusc is also sold under the trade name "Saint-Jacques" that includes other Pectinidae¹⁹ which are imported for much cheaper. This competition pulls prices down.

To increase its market share and be sold at a higher price, the Saint Brieuc Bay Great Atlantic scallop must set itself apart. For this, the fishermen are organising themselves and directly intervene in the marketing through the fish auctions and producer organisations.

¹⁸ Within the framework of Directive 2008/56/CE of the European parliament and the Council of 17 June 2008 called "Marine Strategy framework Directive".

¹⁹ Since 1996, the WTO has authorised the trade name "Saint Jacques" for all pectinidae.

An atypical marketing and sale

Since 1978, ships are obliged to weigh and sell²⁰ their scallops in fish auctions. This process has several benefits for fishermen and for the resource: *"This system of obligation to declare at auctions improves cash flow and reduces fraud"* (Local authority, 12 Nov. 2013). After passing through the auction, the fisherman may buy back its production to sell it directly, which is common in the Côtes d'Armor: *"Fishermen buy back a lot of their scallops. At the beginning of the season, this represents 3 % and can go up to 60 % during holiday periods. They go on to sell them to works committees, on markets, ..."* (Fish auction Director, 21 Nov. 2013). If the fisherman does not buy back its catch, wholesalers can buy the Great Atlantic scallop batches at auction, sales also taking place online, simultaneously in Erquy and Saint-Quay Portrieux.

One of the peculiarities of the Great Atlantic scallop marketing is the existence of a partnership between the producer organisation COBRENORD – not all fishermen being members - and a specialised freezing industrialist (Celtarmor). The PO COBRENORD wanted to improve the sale of scallops by acquiring tools enabling it to influence the market. If the initial goal was to find sales opportunities, it is increasingly evolving toward a goal of value enhancement of the products.

Until 2007, COBRENORD used the system of Community withdrawal price established in the framework of the common market organisation for the Great Atlantic scallop. In 2007, the price reached 1.70 euros per kilo, but was not considered to be high enough by the fishermen of the Bay, so they decided to set up another system. COBRENORD also made the choice not to apply the Community scheme to switch to a system of autonomous withdrawal price. Today, the autonomous withdrawal price is 2 euros per kilo, with an average selling price of 2.14 euros²¹. When the price of the scallop drops below this price of withdrawal, the PO intervenes by using the membership contributions. Indeed, the contributions of scallop fishermen replenish a specific fund that helps support the price of scallops.

Celtarmor, when founded, enabled the creation of a new market: the frozen scallop "nut" (adductor muscle) which comes from its shelling/freezing plants. Today, this tool makes it possible to influence prices and sell all of the scallops. Indeed, the plant can process large quantities when sales are low at auction and thus provide a buffer between supply and demand. Celtarmor customers are supermarkets and hypermarkets as well as wholesalers who buy large volumes to resell at the national level. Currently, Celtarmor means to develop the catering business. With Celtarmor, the PO has two strategies to control the market: in November, December and April, a market orientation towards the fresh product, and the rest of the time, a market orientation towards frozen products. This market organisation was enabled by a real discussion and a negotiation between producers and processors. The Great Atlantic scallop sector of North Brittany is grouped and strong in the face of distribution pressure. There is an integration of the two sectors with sales mainly by mutual agreement without going through an auction. This purchase price is set in accordance with Celtarmor and COBRENORD to establish a contracting system (Vidie *et al.*, 2013).

Another method of marketing and promotion of seafood products is direct sales (market, associations, restaurant, ...). The Great Atlantic scallop is a product that is under the obligation of being sold in fish auctions but may be bought back by the fisherman who will then sell it directly. Fishermen buy-backs are more significant before the Christmas holiday season (15-20 % of auction sales in November and December). The share that is sold directly by professionals is between 10 and 12 % of the volume sold (Lesueur *et al.*, 2009).

"Quality" approaches: Bretagne Qualité Mer and the Red Label

COBRENORD and Normapêche (interoccupational association of the "fishing" and "shellfish farming" sectors in Brittany and Loire Atlantique) have established a "quality" approach with the trademark "Bretagne Qualité Mer" (BQM). This is a collective mark which includes seafood products of Brittany that comply with specific terms of reference. The BQM products must be landed in Brittany and Loire Atlantique and be of the "Extra"²² quality. A specific charter exists for the Great Atlantic scallop of the Bay of Saint-Brieuc and rests on the following criteria: a living and undamaged shell, a clean shell (slider shells removed), a size greater than or equal to 11.5 cm, in 15 kg bags identified by a nominative and dated sanitary label, a transition through cleansing pools before shipping, further identification of the fisherman by a label on the shipping container (traceability), and finally a shipping on the day of or the day after fishing if the scallops are in a cleansing pool.

To go further, the PO COBRENORD and Normapêche want to set up a Red Label on the Great Atlantic scallop of the Bay of Saint-Brieuc. The approach, in progress, has for main objective an increase in selling price in order to consolidate the fishermen's incomes. To accompany these marketing efforts, fishermen are setting up a promotion of the products through communication.

1.3.4. Value-enhancement of products through communication

To accompany these marketing efforts, fishermen are setting up a value-enhancement of the products through communication.

In a general manner, the fishing community is willing to communicate on its trade and the sustainability of its activity. They notably do this through the organisation of festivals, the best known one being that of "the Great Atlantic scallop

²⁰ "Coquilles Saint-Jacques (Great Atlantic scallops)-sb-2012-A" proceeding of 29 September 2006 setting the attribution conditions of the Great Atlantic scallop fishing licence in the sector of Saint-Brieuc.

²¹ Average price for the 2012-2013 campaign.

²² Highest degree of quality in the grading of seafood products at fish auctions.

festival". It takes place every year in one of three fishing ports of Côtes d'Armor: Erquy, Saint-Quay Portrieux and Loguivy de la Mer. The objective of this event is to introduce the Great Atlantic scallop and its fishing trade to the general public. To answer to people demanding information on the fishing methods, the biology, the resource, etc., the community organises itself: *"For the Great Atlantic scallop festival of Saint-Quay Portrieux, the CDPMEM of Côtes d'Armor organises the event from beginning to end and puts up a stall to communicate on the trade and the products. It organizes boat trips with a passenger ship to watch the boats fishing and explain the fishing method. These activities are really successful because people want to know more about fishing"* (CDPMEM, 12 Nov. 2013). On the side of Erquy, the fish auction also organises events during the Great Atlantic scallop festival: *"During the Great Atlantic scallop festival, an educational stall on fish species and scallops is set up in the fish auction in order to promote quality products. We tried to organise a voice auction as in the past but the concept was not successful"* (Fish auction Director, 21 Nov. 2013).

Other events exist outside of the festival such as visits of the Erquy fish auction: *"The visit of the auction is done by the association "des caps" which manages sea classes, schools, tourists. The association explains how the auction is run and showcases the fish and the scallops"* (Fish auction Director, 21 Nov. 2013). The auction also organises Great Atlantic scallops value-enhancement events in Paris and Belgium with the Association Réginéenne de la coquille Saint-Jacques (Great Atlantic scallop association of Erquy).

These communication initiatives are supported by local elected officials, notably in Côtes d'Armor where there is a real desire to promote the local fishery products and to create a fishing-tourism relationship beyond the Great Atlantic scallop fishery: *"The General Council has launched a turquoise economy Program in 2012 to think about the economic development of the coastal zone (terrestrial and marine environment). Fishing is a challenge because it maintains an activity and some attractiveness on the coast throughout the year. It is planned to launch actions of communication, awareness of the marine environment, to hold conferences, exhibits on maritime history while promoting the fishing world"* (General Council, 10 Dec. 2013).

2. The limitations to the governance of this fishery

The co-management based governance of the Great Atlantic scallop in the Bay of Saint-Brieuc enables the strengthening of the sustainability of a fishery that contributes to the social and economic fabric of the Côtes d'Armor department. While many initiatives are established by the fishermen and the sector so as to make this activity sustainable, there are some limitations to this governance that will be detailed below.

2.1. The weak points at the scale of the fishery

The community of Great Atlantic scallop fishermen is directly involved in the management of this species at the local level. The persons surveyed have nevertheless raised some points to be improved at this scale to enable better governance

2.1.1. A dangerous fishery

The management system that was established for the Great Atlantic scallop (notably the regulation), may encourage fishermen to take more risks. This fishery is known to be especially dangerous for several reasons:

- the ships are under considerable strain, the boat and the cables are subjected to high tensions due to the resistance met by the dredge on the ground in the presence of natural obstacles,
- numerous boats share a small space, requiring a careful watch by captain,
- because of the restrictive regulation, fishing is allowed only 2 days per week for a period of 45 minutes per campaign. This pushes the crews to go as fast as possible thus increasing the risk of an accident.

The scallop fishing season always constitutes a sensitive issue in terms of risk for ships and sailors even if no significant accident has been reported in this trade in 2012 (CROSS CORSEN, 2012).

2.1.2. The issue of renewal at the level of the occupational structures

The management system of the fishery is based on elected officials, representatives of the community. However, it would appear that the number of volunteers is decreasing. Indeed, the spokespersons of the fishermen within the CDPMEM of Côtes d'Armor, in office for many years; are very familiar with the issues and know how to present them to be heard. According to respondents, the problem of renewal of these key positions is acute. At each election of the Presidents, the few registered lists limit the choice of fishermen. The concern for the future is the resignation of these people. *"I do not really have the time to get involved in the structure because I fish during the week, sell during week-ends [] There is no use getting involved and do not going to the meetings"* (Fisherman, 22 Nov. 2013). The administrative burden repels fishermen.

2.1.3. A co-management system that is not always complied with

The management of the Great Atlantic scallop is complex and the control measures are numerous but mandatory for good governance. According to respondents, the relationship between the fishermen community and the French government are not always good, especially with regard to the sanctions of fishermen during the fishing season. These sanctions may be of two kinds:

- administrative, with a fine and loss of the licence that must be bought back thereafter;
- penal, with heavier penalties that depend on the public prosecutor.

Fishermen complain about the double sanction that may be inflicted to them and that they deem to be unfair with regard to the sanctions inflicted “on land”. However, these double sanctions are the result of many frauds of vessels during the fishing season. *“There are on average 80 reports of fraud per season on 200 boats. We set up a reflection on the implementation of a VMS [satellite Vessel Monitoring System] to facilitate the control because there are too many offenses, even if they are minor”* (Local authority, 12 Nov. 2013). At the fishery level, despite significant control costs, the level of fraud remains relatively high (Le Gallic, 2010).

2.1.4. A lack of promotion of the resource: matching supply to the demand

The governance of the scallop fishery in the bay of Saint-Brieuc is suited to the resource and to the fishing effort in this area with the establishment of several management measures. In addition, there are difficulties in marketing this species, which is sold in a very competitive market (see Part 1 of the report). Indeed, the sale price of the Saint-Brieuc Bay Great Atlantic scallop is a real problem for the community of fishermen. It lies between 1.9 and 2.2 euros per kilo and tends to approach that of the common whelk (Le Gallic *et al.*, 2013). It is a product recognised for its quality but for the past ten years, we are witnessing a stagnation of average prices that shows a lack of promotion of the product.

The chosen governance in the Bay of Saint-Brieuc can explain this low price because the way of management does not always facilitate the adjustment of supply to demand. Indeed, it is a management system that is considered to be inflexible²³ due to the imposed fishing days. The supply of auctions is therefore not adaptable because all ships go fishing at the same time. It is very difficult to adapt supply to demand and thus achieve better selling prices.

2.2 Make its voice heard beyond the fishery, a real difficulty

Even if the fishery is managed at the local level, it is forced to comply with certain rules of the European Union, notably through the Common Fisheries Policy (CFP). Indeed, the EU benefits from an exclusive competence in terms of the conservation of the biological marine resources by defining fishing rules to control and limit the harvesting of fishery stocks (Picault *et al.*, 2014a). Due to the small size of this fishery, fishermen are struggling to make their voices heard beyond the fishery.

2.2.1. Good listening at a local level

Brittany is a maritime region within which fishing plays an important role in the sectoral policy. The fishermen community is supported in its various projects by the local elected officials in order to maintain a socio-economic fabric in the coastal belt: *“Small scale inshore fishing is very important for the local economy! For example, in Saint-Quay Portrieux, there fish wholesalers and Celtarmor with a factory employing 70 people full time!”* (CDPMEM, 12 Nov. 2013). The General Council of Côtes d'Armor supports the economic development of the sector: *“The General Council acts as a financier of our fishing ports with concessions and subsidies to the Chamber of Commerce and Industry; and at the level of economic development of fishing with a subsidy policy subservient to the European Fisheries Fund (EFF) and to the European Maritime and Fisheries Fund (EMFF). These aids are matched to the demands of the European Union. We support the modernisation of the fleet, the installation of young fishermen, the fish wholesale, processing, producer organisations and the CDPMEM of Côtes d'Armor”* (General Council, 10 Dec. 2013).

Politicians and local elected officials also support the inshore fishery and the Great Atlantic scallop fishery by defending it while participating in debates on the CFP: *“It is the region that leads the negotiations to defend the interests of inshore fishing for the future CFP. The General Council of Côtes d'Armor is fights with the Regional Council to get their ideas through in favour of the development of the sector but we are not listened to enough. We can send notes directly to the European level but it does not carry much weight”* (General Council, 10 Dec. 2013). Relationships between elected officials and fishermen are healthy: *“We have a fairly close relationship with the fishing world and good quality discussions, there is no tension”* (General Council, 10 Dec. 2013).

With the government, relations can be different: *“There is a problem with the government because there is too much turnover. People need time to adapt to the context which wastes time and efficiency when developing our projects”* (CDPMEM, 12 Nov. 2013). Government staff, most of the time, occupy specific positions for a few years before switching to a different service or location, which may cause a loss of information. Relationships must be rebuilt each time.

2.2.2. Failure to listen at the national and European level

This fishery, as is the case with many others in Brittany, fears for the economic sustainability of its fleet with the introduction of the new CFP. Indeed, fishermen notably fear that Europe will remove the continued support to new fishing business creation or renewal of the fleet during the next EMFF²⁴ for example. To pass messages at the European level, it is necessary that the local structure passes through all levels (regional, national and European), which is long and not always successful. In reality, fishermen ask decision makers of the European Union to protect their way of life, their communities and their heritage. For them, it is essential that the new common policy takes into account the artisanal fisheries more, as it may disappear. *“There is a reduction in the fleet, divided by 2 in 10 years! And tomorrow I do not know what is going to happen ... there will be no more boats. They do not want fishing on the coastal belt anymore”* (Fisherman, 22 Nov. 2013) *“If there is no more public support for the modernisation of the sector and its tools then we are going toward the death of fishing”* (General Council, 10 Dec. 2013). There is, indeed, a certain breakage, a lack of

²³ Communication during the final meeting of the ANR COMANCHE Project, 11/12/2013 in Caen.

²⁴ Le FEAMP est le nouveau fonds proposé par l'Union européenne (UE) dans le domaine des affaires maritimes et de la pêche pour 2014-2020.

connection between the inshore scallop fishery (the field) and Europe: *“There is a gap between management at the local level that is daily and management at the level of Europe. Europe is too far from the field”* (CDPMEM, 12 Nov. 2013).

The reduction of the fleet also arises as a future problem for the fishermen community. Not due to a lack of biological resources but rather a lack of means to renew its fleet. The fear of abandonment of measures aiding the renewal of the fleet in the next CFP, as well as criticism of the choices in political direction at national level, are noticeable in the following quote: *“We have completely let our fishing and our commercial fleet go. We have turned to agriculture and tourism, it is all that is left...”* (Fisherman, 22 Nov. 2013). There also are criticisms at the local level: *“I am attached to the port of Dahouët, fishing has created a certain dynamism on the port. It is one of the oldest ports of northern Brittany, it has quite a long history with Newfoundlanders. But they no longer think about fishing because they want to remove the fuel pumps following an upgrading up to standards. Only three trawlers remain and it is too little for them. [] We are thinking of going through the elected representatives to fight because there is an interest for fishermen and recreational boaters!”* (Fisherman, 22 Nov. 2013).

2.2.3. Difficult to be heard in an increasingly saturated space?

According to survey respondents, the community of fishermen suffers the brunt of the transformation of the maritime space with the arrival of new users (boaters, recreational fishermen, water sports, energy, ...). The maritime space is thus becoming saturated; inshore fishing is therefore forced to adapt to be preserved, in order to maintain a sustainable and annual activity for the preservation of the local fabric. *“Between the Natura 2000 areas, wind power, ... the coastal belt of France will be saturated. Recreational boating is also developing”* (Fisherman, 22 Nov. 2013). Cohabitation between fishermen and recreational boaters remains particularly difficult, in particular due to the fact that the latter are not constrained by fishing quotas: *“The recreational boaters fish what they want, they have no quota, ... they are numerous. Individually it is not serious, but when there are 350 boaters on the site, the fishing pressure is high. And on top of that we are seen as destructors of the environment!”* (Fisherman, 22 Nov. 2013). According to the respondents, tourism is not seen by fishermen as a financial windfall but as a competitor, as is recreational boating.

3. Conclusion and key points

The following table lists all the stakeholders involved in the governance of the Great Atlantic scallop fishery in the Bay of Saint-Brieuc and briefly summarises their respective roles. Fishermen are positioned at the heart of the local and regional governance through the “Great Atlantic scallop” Commission of the CDPMEM of Côtes d’Armor, and the “Shellfish” Commission of the CRPMEM of Brittany. These commissions are a force of proposal. In addition, occupational organisations are key actors in the management of the fishery with the introduction of licences for the scallop, being a system which is also used for other species such as the lobster in the Bay of Granville (Picault *et al.*, 2014b). The government plays its commanding role at the national, regional and local level by controlling the correct implementation of the fisheries policy. Therefore, this pattern of governance reflects a strong cohesion and collaboration between actors but also a true willingness from fishermen to ensure the sustainable development of their trade. Scientific research plays a role within this sector, notably on management aspects of the resource. Finally, the producers organisations will manage the marketing of the Great Atlantic scallops landed by their members.

Table 8: Organisations directly involved in the governance of the Great Atlantic scallop fishery in the Bay of Saint-Brieuc

LEVEL	ORGANISATION	ROLE
	OCCUPATIONAL ORGANISATIONS	
National	National Committee for Maritime Fisheries and Marine Fish Farms of Lower Normandy Comité (National des Pêches Maritimes et des Élevages Marins - CNPMEM)	Regulatory measures and recommendations for the “Commercially harvested shellfish” licences at the national level
	“Shellfish” Commission of the CNPMEM	Stakeholder group that provides advice and guidance on fishing for shellfish at the national level
Régional	Regional Committee for Maritime Fisheries and Marine Fish Farms of Brittany (Comité Régional des Pêches Maritimes et des Élevages Marins de Bretagne - CRPMEM)	Licence management at the regional level and force of proposal for the regulation and implementation of projects
	“Shellfish” Commission of the CRPMEM of Brittany	Stakeholder group (fishermen, fish wholesalers,...) that provides advice and guidance on fishing for shellfish at the regional level
	Producer organisations	Manages the marketing of landed products. COBRENORD in Brittany is specialised in Great Atlantic scallops

local	Departmental Committees for Maritime Fisheries and Marine Fish Farms (Comités Départementaux des Pêches Maritimes et des Élevages Marins - CDPMEM) (Côtes d'Armor, Ille-et-Vilaine, Finistère and Morbihan)	Force of proposal for regulations
	"Great Atlantic scallop" Commission of the CDPMEM of Côtes d'Armor	Stakeholder that provides advice and guidance on fishing for shellfish at the local level (Bay of Saint-Brieuc)
GOVERNMENT		
National	Directorate for Marine Fisheries and Aquaculture (Direction des Pêches Maritimes et de l'Aquaculture - DPMA)	Translation and implementation of EU legislation at the national level
Régiona	Interregional Directorates for the Sea Eastern English Channel–North Sea (Directions Interrégionales de la Mer (DIRM) Manche Est-mer du Nord)	Conduct of State policies with regard to fisheries at the regional level
Local	Delegation to the Sea and the Coastal Zone of Côtes d'Armor (Délégation à la Mer et au Littoral des Côtes d'Armor- DML)	Law enforcement dock-side and at sea
SCIENTISTS		
National	French Research Institute for Exploitation of the Sea (Institut Français de Recherche pour l'Exploitation de la Mer - Ifremer)	Scientific research and stock assessments

The surveys conducted within the framework of this project allowed to summarise the principal means by which the existing structures contribute to the environmental, socio-cultural and economic sustainability of the fishery (Table 9).

Table 9: Synthesis of the key aspects of the Great Atlantic scallop fishery in the Bay of Saint-Brieuc

Sustainability of the environment
Participation to scientific works: collaboration with Ifremer for the gathering of scientific data, seeding the Bay with Great Atlantic scallops, fight against slipper shells
Establishment of an annual monitoring of the stock by Ifremer
Measures to preserve the resource, including the recommendation of an annual quota based on the stock assessment
Social sustainability
Communication works of the fishery on its trade
Implementation and participation in numerous projects
Organisation of a Great Atlantic scallop festival
Fish auction visits for tourists and children
Economic sustainability
Work with the industrial sector for the value-enhancement of the products (Celtarmor)
Work with the industrial sector for the production of sustainable energy (wind power)
Economic diversification (notably through direct sales)
Work on product quality
Governance based on co-management
Integration of the fishermen's ideas during decision-making
Organised occupational structures integrating fishermen

Regional and departmental political support to the inshore fishing sector
Establishment of a specific regulation: with notably a system of licences and a system of controls in relation with the fishermen

The environmental dimension, first item of the sustainable development triptych, is one of the pillars of this fishery and its governance. The fishermen have implemented a management on the basis of the availability of the resource, notably through the recommendation of an annual quota which is calculated from an assessment of the stock of scallops carried out prior to the start of each fishing season. Various scientific projects conducted with Ifremer help improve the knowledge of the resource. This scientific approach is an integral part of fisheries management. The socio-cultural aspect, another key element of sustainable development, is present within the fishing community and is underlined by the existence of a healthy working environment with many interactions with other sectors, other communities. There is a strong will from fishermen to develop the economy of their trade by advertising the fact that this fishery is managed in a reasoned manner and that the products are of a high quality. The means used by the fishermen community are, for example, fish market visits for tourists and schools or the staging of festivals allowing them to communicate on the trade and the species. Finally, the economic dimension is an unavoidable aspect of the sustainable development triptych for fishing businesses that exploit this resource. The management of the scallop resource is highly supervised in the Bay of Saint-Brieuc and allows fishermen to have access to the resource each year. However, its marketing is difficult (Le Gallic, 2013): the market is very competitive in France (competition with other species, foreign competition) and the selling price of the Great Atlantic scallop is quite low when compared to other deposits. Approaches to enhance the value of the scallop were implemented to increase the selling price, and thereby enable a more efficient exploitation of the resource. For example, a collective mark was created for the Great Atlantic scallop, which highlights the quality of the product. More occasional initiatives, such as direct sales, are very present within this fishermen community, which allows an increase of the selling price. A specific marketing system was also set up with the producer organisation as well as an industrialist, to produce frozen scallops so as to segment the market and provide commercial outlets when demand decreases.

These different dimensions of sustainable development are an integral part of the governance of this fishery. Members of the fishermen community and various associated stakeholders are attempting to secure the future of the fleet through co-management. This governance allows fishermen to benefit from regulations that are pertinent to their needs while enabling the sustainability of the fishery. Despite all this and according to the survey respondents, there are some limitations to this governance.

At the fishery level

The management system that was established for the Great Atlantic scallop, notably the regulation, may encourage fishermen to take more risks. This fishery is known to be especially dangerous because, in particular, of the limitation in fishing time and the large number of vessels on site. Although regulations arose from the fishermen, compliance is not always forthcoming. There is therefore a significant monitoring system in place emanating from the administration as well as the fishermen themselves. Another consequence of this strict management system is the non-correspondence between supply and demand. Indeed, the limitation imposed on fishing days and the prohibitions of catches during the summer create a concentration in time of the landings of scallops, thereby triggering a drop in prices at certain periods.

At the national and European level

This coastal fishery and its representatives, despite being well up on the policies of Côtes d'Armor, are struggling to make their voice heard at the national as well as European level. They feel that inshore fishing is not sufficiently supported. Yet, even if the fishery is managed at the local level, it is forced to comply with the regulatory constraints of the European Union, in particular through the CFP. In addition, fishermen operate in a space where uses are increasingly diversified and where conflicts of use are multiplying. As a result, they fear a loss of support from political bodies in favour of other sectors.

Next to the French case studies discussed in this report, 3 additional case studies were investigated in France: fishing mussels in Barfleur, beach fishery in Somme and line-caught Pollack fishery in the Iroise sea. A summary of the governance systems in these case studies is available via the [GIFS interactive map](#).

3.5 Hastings FLAG (England) Case Study

Introduction

1. Part A - features of governance enabling IF voice and a sustainable fishing community
 - 1.1. Centrality of fishing to the town's sense of identity
 - 1.2. A professional local community governance structure (re)embedding the cultural and social sustainability of the fleet into the wider town identity
 - 1.3. The Stade/FLAG catalyst and an evolving relationship with the local council – developing local allies and structural resilience
 - 1.4. Active political profile and collective local voice
 - 1.5. Engaging and participating in science to leverage the Hastings fleet voice
 - 1.6. Inclusion of fishing industry in strategic economic regeneration planning
2. Part B - governance barriers to IF voice and a sustainable fishing community
 - 2.1. Depth of community representation and reliance on community leader
 - 2.2. Fragmented national voice and the 'wicked' challenges of fisheries management
 - 2.3. Challenge of over-coming local conflicts and mistrust of enforcement authorities
 - 2.4. FLAG specific challenges for industry engagement
 - 2.5. Risk of extinction, diversification and 'disney-fication'?
3. Part C – conclusions and key sustainability issues

Introduction

Hastings is one of Britain's oldest fishing ports with boats launched from the shingle beach in front of the Old Town (an area known as the Stade) for over 1000 years (Urquhart and Acott, 2013). Once a medieval Cinque port, today it is home to one of the largest beach launched fishing fleets in Europe (approximately 23 boats). All the boats are under ten metre inshore vessels. Hastings is a mixed fisheries with MSC (Marine Stewardship Council) certification for its Dover Sole, Mackerel and Herring fisheries. Hastings is an urban coastal town situated on the south east coast of England (see Figure 10) with a population of approximately 90,000 (Office of National Statistics, 2011). It has a rich historical and cultural history, including its association with nearby Battle and the 11th century Norman Conquest. This was followed by many centuries as a successful fishing town and the 19th century emergence as a popular and affluent Victorian spa resort. Sadly this was followed by a well-documented economic decline from the mid-20th century onwards (Hastings Regeneration Partnership, 2002). Hastings is ranked in the 2010 Indices of Multiple Deprivation (IMD) as the 19th most deprived district in England (DCLG, 2011). Hastings has sought to address pockets of severe social and economic deprivation through intensive government and community led regeneration interventions over the last twenty years. This is an important context for fisheries governance integration within wider local development planning as outlined below.

Efforts to reverse this economic and social decline with regard to the fleet and fishing community (which faces challenges of rising fuel and licence costs, reduced quotas, an ageing demographic, risk of reduced fishing grounds and limited number of new industry entrants) has manifest most recently with the town securing FLAG status and funding. FLAGs are funded by Axis 4 of the European Fisheries Fund (EFF) and are intended to support the sustainable local development of fishing industries and their related communities without increasing fishing effort. EFF is managed in the UK by the Marine Management Organisation (MMO), a non-departmental public body under the government Department for the Environment, Food and Rural Affairs (Defra). Hastings is one of six English FLAGs. This funding programme has been developed in part owing to the acknowledgement at European Commission level that fisheries in smaller communities often make a considerable contribution to direct and indirect tourism, cultural and social value (DGMARE, 2013). Thus many of the FLAG projects focus on capitalising on these contributions through encouraging tourism and cultural fisheries related projects for example through fish festivals. In addition they often work to secure a higher value for catch landed through marketing and supply chain innovation. In the case of Hastings the social value (through education and training) has also been developed through the fisher-led education provision in the Classroom on the Coast based just off the beach. Making fishing a more secure profession to attract the next generation of fishers has also been central to a lot of the FLAGs with investment in port/ beach infrastructure and other health and safety elements on the boats. EFF will be replaced with the EMFF (European Maritime and Fisheries Fund) in 2015 with a particular focus on Integrated Marine Policy (IMP).

The Hastings FLAG board has a membership of a mixture of stakeholders from private, public and community sectors and of course strong representation from the fishing industry. The FLAG partnership reports into Hastings Borough Council (the allocated local accountable authority). Locally, the FLAG also connects with and submits updates to the Local Strategic Partnership set up in 2002 under Neighbourhood Renewal funding to drive the Hastings Community Strategy) to ensure connectivity between local regeneration activity and planning. In terms of fisheries and beach related governance at the local level the Hastings fleet is represented by their fishing association the Hastings Fishermen's Protection Society (HFPS). The fleet also interact and have linkages with other local governance structures that govern and shape the space on the beach and in the area directly off the beach (including The Stade Partnership and The Foreshore Trust); with the neighbourhood forums for the communities directly behind the beach (East Hastings Area Management Board and Old Town Residents Association); and finally with broader user group forums (such as the Coastal Users Group). In terms of fishing industry representation at a national level the fishers have the option of membership through the NFFO (National Federation of Fishermen's Organisations)

and the inshore fleet specific national association NUTFA (New Under Ten Fishermen's Association). The Hastings fleet is an inshore fishing fleet and has been a strong advocate of NUTFA.

English inshore fisheries management (operating within six nautical miles) is policed and managed by the IFCAs (Inshore Fisheries and Conservation Authorities). The Hastings fleet work with the Sussex IFCA. The IFCAs co-operate with the MMO on several areas including fisheries enforcement and marine protected area management. IFCAs are funded through local authorities, but report to Defra. **IFCAs replaced the sea fisheries committees in April 2011, with an important expanded socio-economic remit to "lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry"** (Defra, 2010). The MMO is responsible for regulation and licensing of fishing in England. The duties and powers of the IFCAs and the MMO are set out in the Marine and Coastal Access Act 2009 (UK) and this takes account of the European Union instrument for fisheries management, the recently amended Common Fisheries Policy (EC COM, 2013). The Marine and Coastal Access Act, 2009 (UK) establishes the marine planning regime for the UK including underlying ICZM principles and the designation of a network of Marine Protected Areas (MPAs) (and in England Marine Conservation Zones (MCZs). Natural England (an Executive Non-departmental Public Body that is responsible for advising the UK Government on the natural environment) works with relevant stakeholders in helping inform Defra on their planning for these sites. UK fisheries management and marine planning is informed by the work conducted by Cefas (Centre for Environmental, Fisheries and Aquaculture Science), who are an executive agency responsible for carrying out research and monitoring of fish and shellfish stocks.

The following section highlights the key themes that emerged from the research based on detailed manual thematic analysis of the interview transcripts. The dominant themes identified in the data make explicit that this is a community under pressure with distinct sustainability challenges. Central to the future of the fleet is an environmental sustainability driven challenge (endangered fish stock management) that has resulted in reduced Cod quota available to the fleet. In the context of accelerating quota reductions over the last ten years the fleet has been dramatically downsized in numbers of actively operating boats (down to just 23 active fishing vessels) with resulting social and economic sustainability implications for this community. However, as the discussion below will make clear the nature of fishing community governance, influence and politics is increasingly integral to both aggravating and resolving the sustainability challenges that pose a direct barrier to the fleet's future. The findings are divided into three sections. Part A highlights the mechanisms, structures and agendas that are used by the fishing community and stakeholders to advance their voice and influence in different scales of government (e.g. local to EU) and through different sectors (e.g. public and private). Part B highlights the key issues, structures and governance features that are acting to obstruct that voice and agenda advancement for fishing. While Part C offers a summary table of the manner in which these findings engage directly with the environmental, social and economic sustainability of the fleet.



Figure 10. Hastings, East Sussex, southeast England (Source: VLIZ, 2014)

Table 10: Hastings Case Study Interviewee Sample

Interviewee	Sector/Role	Date	Length
1. Participant A	Fisherman (community leader)	10.04. 2012	80 mins
2. Participant B	Scientific/ conservation enforcement & funding	11.04.2012	62 mins
3. Participant C	Private	13.04.2012	69 mins
4. Participant D	Local Council	19.04.2012	32 mins
5. Participant E	Local council	11.04.2012	45 mins
6. Participant F	Local economic governance	12.04.2012	60 mins
7. Participant G	Fishermen	10.04. 2012	54 mins
8. Participant H	National lobbyist	10.04. 2012	44 mins
9. Participant I	Councillor	13.04.2012	43 mins
10. Participant J	Regional governance / enforcement & funding	12.04.2012	75 mins
11. Participant K	Community governance	10.04. 2012	72 mins
12. Participant L	Local council - Regeneration	16.10.2013	32 mins
13. Participant M	FLAG member	09.10.2013	52 mins
14. Participant N	Scientific/ conservation enforcement & funding	30.09.2013	64 mins
15. Participant O	Local politician	10.10.2013	17 mins
16. Participant P	Regional governance / enforcement & funding	16.10.2013	53 mins

1. PART A - Features of governance enabling the IF voice and a sustainable fishing community

1.1. Centrality of fishing to the town's sense of identity

The centrality of the fleet to the town's identity was evident in interviews with all the participants. This sense of identity is at the core of the historical and contemporary local political support for the fishers and their sustainable livelihood:

"First of all as a politician and local representative I want to support local businesses, local sustainable businesses and local communities, which is what they fall into. Secondly, it is to do with Hastings, its heritage and the importance of the fishing fleet to the town itself ... So right from the start of being elected it has been an important part of my campaign for regeneration in Hastings. ... I get a lot of questions about the fishing fleet when I do public meetings. Much more than you would expect given the number of people that are actually employed, because it is part of the heart of the town." [Local politician – 10/10/13]

Hastings MPs and Councillors actively lobby central government and relevant ministers to advance the fisherman's interests underlining the centrality of the industry to the town's identity as these comments make explicit:

"There's never been a case when leading politicians [in Hastings] weren't prepared to meet leads in the fishing community ... politically it has always been very very significant partly because of public support that exists ... given it indirectly affects so few people, it's very very important to the town. That's because the town has empathy and support with that function." [Senior council member – 16.10.13]

The work in Hastings by Urquhart *et al.*, (2013) underlines the value of the fleet and fishing to the sense of place and identity for Hastings residents. The value placed on their role in the town's identity directly impacts political representation (as noted above) and also the importance of the overt re-connection of the wider community to this identity through the HFPS and FLAG cultural and education projects (see below):

"I think Hastings and the governance of Hastings have made much play of the historic nature of Hastings, and the fact that it has gone back to fishing here for an incredibly long period of time, and the fact that a lot of the fishing families are still connected. I think that is quite a powerful message. It is about communities. It's about trying to involve the town in what's going on. ... They have raised provenance and the importance of having a primary industry in the town, and what it does and what it means." [Regional governance/ enforcement – 16.10.13]

Through both processes of government (democratic mechanisms) and governance (in the form of a fisheries local action group) this value is being made explicit to those that determine policy (in arts, regeneration, education and tourism for example) and so capitalised upon to help secure the social and economic sustainability of this fleet.

1.2. A professional local community governance structure (re)embedding the cultural and social sustainability of the fleet into the wider town identity

HFPS (Hastings Fishermen's Protection Society) has been the dominant local fishing community structure for decades. Participant A and Participant K (in more recent years) have been key to the increasingly professional, commercial and political sophistication of this structure (e.g. through ensuring the charitable arm of the protection society is self-financing). This governance structure is involved in running a charitable arm, active political lobbying, funding applications, partnership representation and formal administration for the fleet. Locally the increasingly professionalised nature of the HFPS was evident in terms of the influence this has as a lobbying and representative group for the fisherman in terms of interaction with the local council, and national and regional enforcement and management bodies (e.g. MMO, IFCA, Natural England and MSC). HFPS supports the fisherman's voice in a number of ways that enables their voice to be not only heard from local to national scales (i.e. securing their presence at tables they would otherwise be absent from) but also perceived as a professional and informed voice to be taken seriously. This perception and its progressive impact was made clear by HBC directors, private sector representatives and enforcement/ management bodies alike:

"The professionalization of the HFPS has promoted a very different image. And has focussed much more on the fishing, and they are kind of winning hearts and minds over the unfairness of it. So I think that has helped get more universal support amongst the Hastings people generally. ... when it comes down to fishing the real business that they are about they [the fisherman] seem pretty united and I think that is to do with the HFPS and the way they behave and kind of shape themselves as a professional organisation. And an increasingly campaigning organisation." [Councillor -13.4.12]

This professional and vocal local governance structure impact manifests in terms of facilitating legal representation for the fisherman when needed, and in terms of collating and broadcasting the fisherman voice around core issues affecting the fleet (e.g. quotas, net size, and council development): *"it has now become far more a voice for the community"* [Local economic governance – 12.4.12]. All the fisherman are members of the HFPS: *"the FPS actually fight our local causes. It is a really, really strong body. It is something that a lot of fisherman really don't have"* [Fisherman – 10.4.12]. The strength of this structure was repeatedly presented in contrast to other protection societies (or equivalent) along the south coast with particular reference to funding and investment they have secured for the fleet:

"I think in some ways it does reflect back on the organisation they've got in place themselves, to be where they are today, when smaller industries and smaller fishing communities have literally fizzled out of sight." [Regional scientific/conservation enforcement & funding – 02.10.13]

Importantly for the Hastings fleet HFPS have acted in terms of securing the fleet's geographical base and assets through dialogue with the local council around the historical rights to the use of the Stade, the beach and running of the fish market. Further, the HFPS secures the fishing community representation at local community structures (such as the Stade Partnership and East Hastings Area Management Board), which has proven key to linking the fishing community (and their needs) with the wider town:

"On the Stade Partnership there is more than one fisherman. So what we have tried to do is bring more fisherman to the table so that others can hear their points of view." [Community governance – 10.4.12]

HFPS are also a point of contact and key relationship holder with Natural England and the Marine Stewardship Council when securing the MSC accreditation for the fleet:

"It [HFPS] is very strong locally and it's very strong on a national basis because we go to meetings and we are asked through the MSC accreditation for instance, that gives us national recognition that Hastings is a sustainable fleet. That couldn't be done without a strong protection society going through the process." [Fisherman – 10.4.12]

As will be discussed below this relationship contributes to a broader theme of governance in the Hastings fishing community that highlights the central feature of the sustainability agenda in shaping the fleets interaction with the private sector, media, other Hastings communities, political structures and enforcement bodies.

One aspect of this sustainability agenda has been the development and protection of the social sustainability of the fishing community in terms of the community cultural identity and history. HFPS have been an instrumental player in directing and communicating a powerful and engaging narrative in the town centred around the story of the fisherman, the under ten metre fleet, and the sustainable nature of their catch. In order to raise the profile of the fisherman, their story and the integral nature of this community to the history/ identity of the town this narrative is advanced at every opportunity in order to reach into another part of the wider community (for example through educational tours, liaison with film crew and celebrity chefs, collaborative projects and presentations at festivals, or membership of other partnerships):

"I suppose the FPS was quite key in the gallery [Jerwood] and the value added that came with that ... we were keen there was a classroom of some kind here that the fisherman could use for training and where it could portray what they do ... having had all this interest from the MSC and from film crews and artists ... [they could now host them] in their own yard, yes. Without feeling that it's not their space. So that was important for the Stade that there was somewhere for fisherman that was theirs that was also part of the community." [Community governance - 10.4.12]

This practical cultural investment focus was also evident in the central role of HFPS in driving the FLAG project application (see below) and their proactive engagement with the media (including celebrity chefs) to advance the sustainable fisheries story and the challenges they face in terms of quotas and economic viability. In this way the social sustainability of the fishing community has been strategically intertwined and further embedded into the broader cultural identity of the town. This has been accelerated by the FLAG project, the Stade location of the Jerwood Gallery and new community spaces (e.g. Stade community hall and Classroom on the Coast) that has been developed with the fisherman

and the fleet physically at their core. The shift of the HFPS focus from a single issue structure to this wider mandate and social sustainability approach described above was referred to by one long-term council member as a focus on “hearts and minds”. The research makes clear that the HFPS structure is key to protecting and enabling the economic, social and political sustainability of the fleet. The sustainability agenda is revisited in the next theme in terms of the FLAG’s role in enabling fisher training, diversity of income streams through the Classroom on the Coast (fisher-led alternative education provision), and the ‘good governance’ shift as a result of the improved partnership approach with the council.

1.3. The Stade/FLAG catalyst and an evolving relationship with the local council – developing local allies and structural resilience

The shifting relationship between the fishing community and HBC is partly a function of a more receptive political body of councillors locally from the end of the 1990s and the increasingly professional and high profile representation of the HFPS via Participant A and Participant K. Also this relationship has been enabled by the constructive work of allies within the HBC such as Participant E, I and D in building relationships over many years. The historical conflict and opposition between the two bodies, (the 1970-1990s are described by participants as a ‘them and us’ relationship) is now one of greater partnership as a result of the work of allies, the Stade destination/Jerwood gallery project experience of working together, resolution of the Foreshore Trust governance to ensure the fleet can continue operating from the beach, a more strategic approach adopted by HFPS, and the FLAG project. There has been a shift from:

“In the mid 70s it was very much the Council versus the fisherman, the fishing community. Very much us and them. And neither side really understood each other and there was little sympathy between them.” [Local economic governance – 12.4.12]

... to a more collaborative relationship:

“We’ve got a really good symbiotic relationship with the town. We’ve got this relationship where we understand the benefits of each other. ... There is a much better understanding [now] from local authorities [with] cross-party support. And we have a marvellous working relationship with the town now. And that fact [means] we stand out from anywhere else in the country.” [Fisherman – 10.4.12]

Engagement, however, is still made more difficult by some historical perceptions of the fishing community as ‘beach gypsies’ within parts of the council. Eroding this prejudice is an ongoing effort for the community allies.

Nevertheless, as noted above this council and community relationship is now commented on as an unusual and more progressive partnership by other fleets. The multiplicity of contacts HBC have with the fleet and the centrality of the fleet to the town’s identity and tourism offer makes this an important relationship for the fleet and its role in future planning:

“...from the council’s perspective the fleet has to be extremely important because it’s so embedded in the projection of Hastings itself, and of course the town’s own image of itself. The significance is far beyond the value of the fish.” [Senior council member – 16.10.13]

In addition to the Stade project, the FLAG partnership has clearly acted as a key catalyst in extending the fishing community input or reach into other aspects of Hastings economic and regeneration governance (including developing relations with the Chamber of Commerce). The FLAG project manager has become an important ambassador for the fishing community within the council and as such is central to facilitating a more constructive relationship where the community and council interests (and attitudes) are more aligned. FLAG has resulted in bringing together diverse stakeholders from the council, private sector, voluntary and community sector, enforcement bodies, and the education sector, to focus on and work with the fishing community. This has raised the profile of the Hastings fishing community and the issues it faces locally (via local partnerships), nationally (via national agencies such as Natural England) and Europe wide (via the FLAG network).

“I think it is a real opportunity to engage more effectively, not just with the local council but with other agencies and other community sectors within the town. And I think if we get that up and running while it’s got the funding behind it we should establish firm foundations to carry things on when it runs out. Because it is bringing together a much broader cross section of people from various industries, various enforcement agencies and local businesses and community ... and it is generating a lot more interest in the fishing industry.” [Local council – 19.4.12]

The FLAG creates an important forum for the fishermen to begin to meet more regularly with, and develop alliances with this more diverse stakeholder base. The concerns of some participants around the depth of representation, personality dependence and absence of community leadership succession (discussed below) are in some ways mitigated by the FLAG project. It extends the number of fisherman involved in the governance/ political process while increasing their experience and skills in representing and lobbying for their community. This social capital investment may enable possible future representatives to continue the work of the current community leader:

“We have a strong representation from the fleet on our FLAG partnership. So a third of the membership are fishing industry direct people, which is unusual, because I’ve looked at the others [FLAGS across EU] and they are dominated by public sector organisations with some token fisherman or a representative of a fishing association. Well that’s not good enough.” [Local council – 11.4.12]

This FLAG forum participants felt gave the fishing industry an opportunity to highlight their unique value and contribution to the town:

“Every month there is a collection of councillors down there which actually it treats in a responsible way, can listen and take those things on board – so I think there is wonderful access. ...I think it's also given the fishing industry a little bit of an opportunity to say 'this is what we contribute to the town.... We bring a different dimension which is something of value and is deeply ingrained in the town and makes Hastings, and makes us proud' ... The FLAG gives us that reason to pull together.” [Regional governance/ enforcement – 16.10.13]

This enabling governance infrastructure and the cultural/educational activities emerging from both the FLAG and the Stade project are important for embedding the fishing community as a physical and cultural centre point within the town's identity. This cultural development process (especially through the Classroom on the Coast) is key to efforts to secure the cultural sustainability of the community. The economic uncertainty of the fleet make efforts to embed the fishing community into other aspects of the town essential for keeping the potential social/community and environmental cost of the closure of the fleet front of mind for both politicians and townspeople. The Classroom on the Coast enables increased sustainability through offering a training venue for the current and future fisherman that is their own. The dwindling number of new fishermen joining the fleet means that efforts to extend and secure the fleet's skills are integral to its future. The classroom also offers a public education space to demonstrate the fishermen's skills and knowledge to local people and visitors (extending the cultural and social reach of the fishing community knowledge, traditions and values).

“Local success is actually raising the profile of the fishing community and the work of FLAG promoting locally caught fish and making it a more [understood] ... you know there are kids in Broomsgrove (a particularly deprived area of Hastings) who have not been down to the seaside ... they have never eaten fish unless it is inside a fish finger ... so we involve education in this, we involve school kids in this.” [Local economic governance - 12.4.12]

This connectivity between the fleet and the different sectors in the supply chain raises consumer awareness about the importance of the provenance of the fish they are eating and the value of sustainability caught fresh local fish. The FLAG has focussed upon raising this awareness through fish festivals and fisher led education as well as reinforcing that structural connectivity in the 'boat to plate' journey in order to foster that raised consciousness in the local community and visitors to the town. That general public understanding shapes the value of the market for sustainable fish products and so contributes to the social and economic value of the fleet to the town:

“There are some very good connections in Hastings between the catching sector, the leisure and the tourism sector and the processing sector and the retail sector. I can't overstate how important I think that is because I have seen other fishing communities... where the consumer is completely disconnected from the catching sector. I think then it's very difficult to get buy in and understanding and realising the importance of the catching sector.” [Regional fisheries enforcement – 16.10.13]

For example, the private sector now use the Classroom on the Coast for cookery school demonstrations further diversifying the reach and impact of the fishing community in Hastings and in doing so raising its profile, and creating alternative revenue streams and important routes to engagement:

“We saw the classroom as not only being like a teaching classroom but about aspects of sustainability for the profession. And that giving the fisherman a voice because then they would be taken more seriously if they were seen as the voice of sustainability.” [Private sector – 13.4.12]

This sense of cultural and economic identity emerging from the work on the Stade open space, Stade Hall, Classroom on the Coast and the FLAG more generally are key to planning for the future of the fishing community:

“... everything we do that links the industry, not just in isolation, but to something else to the town, to the classroom, to the schools, it strengthens their hold. ... we can become more than just a fishing fleet, more of the community.” [Fisherman – 10.4.12]

One interviewee describes the structural capacity and partnership working illustrated by securing the FLAG project as an important feature of the resilience of the Hastings fishing community and key to their future ability to adapt and survive.

1.4. Active political profile and collective local voice

Unlike observations in a number of the other case studies participants noted the presence and subsequent influence of a single collective voice from the Hastings fleet. Despite some internal differences the strength and professionalism of the HFPS (led by a politically active community leader) means that to the outside world the fleet present a collective voice around common agendas. Overcoming internal conflict and the natural individualism of fishers may be accounted for by the small and geographically bound nature of the fleet, they are all under ten metres and there is limited difference in gear used. In this context cohesion and commonality of needs and challenges appears to be more readily secured than in ports where the diversity of the fleet is its dominant character:

“[O]n the whole – and there is a little bit of division – but I think outside Hastings they are seen to be acting as pretty much a single voice. I think there are some internal difficulties and I think fisherman are always independent people. [But] I think there is a recognition in this day and age that actually the whole is stronger than the sum of the parts. Certainly in Hastings that is evident.” [Regional governance/ enforcement – 16.10.13]

It is this geographical focus of the Hastings FLAG that has eased engagement in terms of the industry being able to see the immediate impact of FLAG projects and so the benefit of their investment of time and effort in this partnership and

collective approach. In other FLAGS making the benefits to each community visible has been more difficult given the large number of very different communities spread over a large distances:

"It's different from other FLAGS in that the other FLAGS cover generally larger areas and Hastings FLAG is very particular to Hastings. ... So they can in some ways, those involved in it can see the immediate benefits which derive from it. That's really good." [Regional governance/ enforcement – 16.10.13]

The active political nature of the fleet, aside from the FLAG work, is well known at all scales of government and was a repeated theme within the interviews. One regulator noted that they are *"proportionally small and politically high and therefore demand a lot of resources"*. The disproportionate scale of the Hastings fleet voice is repeated throughout the interviews, with reference to the absence of similar political profiles of larger fleets such as at Eastbourne and Rye. The Hastings fleet is repeatedly noted by interviewees as being even better known in European fishing governance circles than it is at a national level in this respect.

"... he [community leader] acts as one of the key diplomats in engaging with the government and with the European people on promoting the under 10 metre fleet." [Local Council – 1.9.4.12]

"I think the biggest success is actually getting the under ten metre boat voice heard. I think that is by far the greatest success. It has never been on political agendas, except for the local agenda." [Local economic governance – 12.4.12]

This political lobbying is spearheaded by Participant A but also by the HFPS and NUTFA. The Hastings fleet profile raising includes working with the media (including celebrity chef programmes) and national (ministerial) and international (EC) lobbying:

"We [NUTFA] now have an increasingly national and European voice and so we have been able to carry the fight to the over ten sector, to the government, and to Europe to make sure we are at least at the table." [National lobbyist – 10.4.12]

In addition they have acted to secure the support of highly influential NGOs (including Greenpeace and Oceans 2012) to endorse their sustainable fishing fleet agenda. Working with global environmental NGOs like Greenpeace to advocate sustainable fishing practices raises their lobbying capacity at national and European Parliament level (See: <http://www.greenpeace.org.uk/> last-fishermen-film). The importance of such strategic alliances was evident in every interview:

"NUTFA are members of Oceans 2012. Again that is to give us voice at an international level because there is the Confederation of Small Fisheries ... and we are a member of that group also. So when we have Damanaki [EC fisheries minister] talking to an inshore forum with all her top aides ... we are a part of that. So we are recognised on an international forum probably more than we are on a national forum. And NUTFA is quite well recognised in Europe in Brussels." [Fisherman – 10.4.12]

The political lobbying at the international level is also shaped by the core sustainability agenda:

"We've got sustainable fishery stocks but we're not allowed to catch it. We've got to balance this out where if you have got a sustainable fishery, fishing in an environmentally sustainable way and you're working in good practice, why can't you fish? So it's a simple equation and once this goes over continually to the Commission, the Commission will begin to take it on board." [Fisherman – 10.4.12]

Active engagement with and representation of the Hastings story is key to the wider identity of the town as having a history of community political activism. This has been further emboldened by the local 'Save our Fleet' campaign that lobbies to bring the Cod quota issues to the attention of local and national private and public sector interests. The FLAG partnership also acts as part of an important cross-European network that means continually raising the profile and voice of the Hastings fleet at the international scale. While the formation of NUTFA to represent the U10M fleet at the national and international table has enabled high profile political engagement (from government ministers to the EC Fisheries minister) and is partly led out of Hastings by Participant A. Through NUTFA the historically 'politically disenfranchised' and highly fragmented U10M fleet now have a strategic representative body at the very senior political tables. They are working hard at securing a national mandate from the whole U10 fleet to develop an inshore PO that could act as a more powerful economic and political voice for the fleet within the national context. This inshore Producer Organisation (PO) of course creates a legitimate challenge to powerful interests in existing over 10M sector POs and as such has generated a considerable degree of political interest:

"The danger but also the prize really is that [NUTFA] it's got the producer organisations very jumpy and jittery because they're not use to being challenged on an equal footing at the table of the minister." [Local council – 11.4.12]

"... the PO is a very powerful tool for lobbying. And if you had an inshore PO which represented the whole of the English inshore fleet you would have a very powerful lobby. You would have a group which would give you enough flexibility to do swaps, international swaps and safeguard the inshore fleet." [Fisherman – 10.4.12]

While the level of support for NUTFA is challenged by another of the interviewees who highlights a competing South East NFFO structure emerging that argue NUTFA is too much *"challenging government and not enough working with it"* [Regional governance – 12.4.12]. Though in contrast another view presented was: *"I think if we hadn't got NUTFA, we'd have been boxed up and finished by now."* [Fisherman – 10.4.12]

The Hastings fleet leadership have driven a political agenda around securing a collective voice for small-scale sustainable fisheries so that they are better placed to influence policy at the highest level. This voice and influence has

been amplified in 2013 by the NUTFA membership of and drive to help form 'LIFE' (Low Impact Fishers of Europe). LIFE is the first pan-European platform representing small-scale fishermen with currently over 1000 fishers represented from 10 EU countries. LIFE has committed to represent, support and develop low-impact and environmentally responsible fishing operations.

1.5. Engaging and participating in science to leverage the Hastings fleet voice

The fleet led by both HFPS and now also through the FLAG have been progressive in their engagement with science and education to advance their voice. Firstly through the MSC accreditation for Herring and Sole that gives them a stronger voice through the political and popular purchase of the 'sustainability agenda' with NGOs, different levels of governance and media:

"It is the ultimate irony that it is Hastings that has done more than any other small boat fleet to let people know about the 'good' fish and the Marine Stewardship Council. And I mean publicity wise where is the first place that Jamie Oliver, Hugh Fearnley-Whittingstall, Bill Grainger and any of those stars go ... Gordon Ramsay, Heston they have all been to Hastings ... and it is an irony it is now the fishery with the least quota in England. ... [In the MSC anniversary book by a famous Dutch Chef] Hastings was included as one of nine of the most sustainable fisheries in the world, you know almost a perfect example of a sustainable fishery." [Private sector – 13.4.12]

"It is a perverse situation - where some of the most sustainable fishing fleets and some of the most coherent communities who should have a very strong say in what fish they have access to when they are demonstrably sustainable in their nature in many instances – are going out of business." [Scientific/conservation governance – 11.4.12]

They have also engaged in a proactive fashion working collaboratively with IFCA to develop greater fisherman input into the conservation science and policy on Marine Conservation Zones:

"There [MCZ] is a brilliant example of how the Hastings fisherman and that community has influenced the decision making to the extent that there has been more conservation." [Scientific/conservation governance – 11.4.12]

The progressive nature of the Hastings fleet relationship with IFCA in continuing to develop a sustainable fishery is made clear in this comment from an IFCA representative:

"This is a community that we don't work against, we work with them to solve problems. We don't go in and deliver solutions we come in and identify issues collectively and we solve issues in that way as the MSC certification signifies, as the MCZ process illustrates." [Scientific/conservation governance – 11.4.12]

This level of engagement with the conservation and science sector is also directed at a senior governance level with the Chair of NUTFA on the Fisheries Science Partnership board and Chair of the HFPS on the board of IFCA:

"From a science perspective we are a lot further down the field than we were a few years ago and small guys are recognised as doing the work with CEFAS ... this is evolving and I am on a number of science projects not least to say 'hey we're NUTFA, we are keen to be involved'." [National lobbyist – 10.4.12]

This is in addition to the previously outlined FLAG work developing the Classroom on the Coast to raise the training of both the fishing community, but also schools and local Hastings community to try to advance the link between a healthy locally sourced fish diet, sustainable fisheries and the Hastings fleet identity. This has helped with engaging the private sector (a local fish restaurant and cookery school) with chefs travelling from across the country to be taught about buying, filleting, processing and cooking seasonal fish stocks. This generates another aspect of sustainability for the fleet as it interacts with another sector of the local community generating new sources of income, raising the profile of the fleet and its sustainable fishing agenda, in addition to educating multiple audiences regarding the environmental, social and economic contribution made by the fleet.

1.6. Inclusion of fishing industry in strategic economic regeneration planning

The sustainability/ local produce narrative described above is key to the market positioning of the Hastings catch (and so increasing the economic power of the fishers) in the 'boat-plate' supply chain. This in turn is integral to securing higher value for their product and has a direct link into their economic value/contribution as a community. Given the small numbers employed directly by the fleet that economic contribution to date has largely relied on the relationship between the fishing industry and tourism given the boats and fishers on the beach remain a dominant draw to visitors and are seen as central to the unique identity of Hastings:

"[T]he relationship [with the economic planning of the town] has been more on the links between the town's tourism image, the tourism industry, the value to the visitor." [Senior council member – 16.10.13]

The Hastings FLAG structure has targeted a number of projects at raising both the catch value and the tourism value for the fleet. If the value of the catch is increased then fishers don't need to increase their effort and as such can fully contribute to a more sustainable stock management policy while secure in their livelihood.

"The FLAG is a useful start in that [building partnerships in the supply chain]. But there's bags more potential... to be generating really high value business. For a fishing fleet like this one, which is small and fishes in a sustainable way, it needs a more focussed brand if it is going to be selling at high value. It needs to be having discussions with people involved further up the line [supply chain]." [Senior council member – 16.10.13]

Recognising the value of the sustainable fisheries and tourism branding through this approach has led to more strategic conversations about how the industry must be involved in the wider economic regeneration planning and place marketing in the town: *“it’s not just a case of branding the boats, it’s a case of branding the town”* [Senior council member – 16.10.13]. One councillor stressed that going forward he will be connecting the fisherman’s interests into the wider structures of regeneration in the town and broadening out the links and so acknowledging the influence/voice of the fleet. This shift to include - even make central - the fishing industry in economic development policy and planning for the town is an indication of the political capital the fleet have secured in recent years through the processes described above. Further this illustrates that the FLAG experience of partnership with a wide diversity of economic and political stakeholders within the town has raised the profile of the industry locally and advanced such regeneration ambitions towards looking at Hastings as a sustainable food and tourism hub. While many feel the current FLAG structure would not be the right governance mechanism for such a strategic ambition – as in a number of UK case studies the quasi-regional LEP (Local Enterprise Partnership) was mentioned as a possible target for such plans – the FLAG has clearly acted as a catalyst for this debate which in turn has shifted the focus of regeneration governance to where the fleet are beginning to participate and influence. This shift is in part due to the purposeful partnership approach of the Hastings FLAG that had made wider fishing community regeneration part of its objective:

“[C]ertainly I think the FLAG has enabled dialogue between them in that there is a chance for a collective, shared common purpose, which has got mutual benefit both for the town as a whole and for the fleet. I really do genuinely believe that has probably been very important and something to build on.” [FLAG member – 09/10/13]

Yet such ambitions are not without risk to the integrity of the fishing sector engagement and the age-old challenge of how to avoid ‘done to’ regeneration as this senior council member makes clear:

“Where we need to be going now is engaging some discussions about how something that’s already valuable [the fleet] can be made more valuable. But I think the risk in all that for a small business like the fleet, is that people in it can feel they’ve somehow been taken over. ... If we are going to go in the future towards much bigger approaches to the maritime and to the fishing then the starting point has got to be in where’s the benefit for the people and the families in the fishing industries now as well as what could potentially benefit the rest of Hastings.” [Senior council member – 16.10.13]

In contrast participants felt the FLAG governance mechanism has worked hard as a legitimate example of community-led local development: *“I feel like there is a sense of things get ‘done to’ the fleet rather than ‘done with’. I really think the FLAG has tried to address that... trying to listen to what their requirements are ... trying to enable a dissipation of that mistrust at a local level, I don’t think they will dissipate that mistrust at a national level.”* [FLAG member – 09.10.13]. The challenge for the fleet and town now is how to replicate some of the strengths of the FLAG community led partnership approach at a more strategic level of regeneration planning around the fisheries. Evidently the experience of the FLAG has led to more ambitious long-term fisheries related regeneration that capitalises on the FLAG wider holistic representation of fishers and communities connected to fisheries:

“Once we have started up the projects and got the programmes then I think the FLAG can evolve into something more powerful. ... that it does start looking at wider governance issues, a wider role, growing into itself, knowing ‘yes we have managed to deliver a £2m regeneration programme for the benefit of the fisheries’. That to me gives it a platform on which to build ... that would give some space for some genuine dialogue about some of the bigger issues. ... we would start looking at Hastings being a sustainable hub. ... That would bring in potential from the LEP where I think we need a stronger voice. You start seeing it as part of a wider regeneration of the whole town – reconnecting the fleet to the town.” [FLAG member 09.10.13]

2. PART B - governance barriers to IF voice and a sustainable fishing community

2.1. Depth of community representation and reliance on community leader

The multiplicity of the views of the fisherman is perhaps less evident given the influence and dominant voice of the lead community representative. This can lead to problems in developing a coherent voice: *“there are a lot of unheard voices in the U10 fleet...”* [Regional governance – 12.4.12] *“the thing about the fishing community is that they are not ‘one’ community”* [Local economic governance – 12.4.12] *“HFPS is seen as being the main voice of the fleet ... I think that has meant there is definitely a filter to try and get to speak to all of the fishers.”* [FLAG member – 09.10.13]. Like the U10M fleet nationally the Hastings fleet is a complex community and representation does not fully reflect that. This is in part remedied by the purposeful broader fisherman engagement within the FLAG partnership structure. The issue of over-reliance on a dominant community leader also acts as a limit to the wider resilience of the community’s governance and social sustainability given the absence of any obvious succession. That over-reliance on a single, though very successful and respected voice, limits the broader sets of views raised. This in turn can limit the opportunity for different services and agendas to better reflect the full spectrum of needs and creates an inherent vulnerability in the community engagement process. The complexity of providing different often competing views is made clear by this comment:

“I suppose if you are a fisherman it depends where you put your horizon, If you’re talking about how you are going to pay the mortgage this month you don’t want xx sounding off in Fishing News. But if you’re thinking ‘actually I might want my son to still be able to fish in 10 years down the line’ then you do. And for the bits in between you need him exposing what isn’t right really. But it’s difficult.” [Local council – 11.4.12]

Concern regarding the succession of the incumbent community leader and representative was raised by fisherman and wider stakeholders alike in the interviews as can be seen in the quotations below:

“That’s one of the problems because there is no obvious successor; the others are mostly people who just want to fish because it’s their job. The others aren’t the politician that xx [Community Leader] is. ... but that is a problem anywhere of course [as] there aren’t many young people coming into fishing.” [Councillor – 13.4.12]

“xx [community leader] has a very important voice in terms of he speaks very articulately, he knows exactly what he is doing, he has the knowledge, and others are happy for him to do it. Perhaps in other ports they don’t have the same xxx [community leader]. And that makes us vulnerable and also strong. So it’s a double edged sword.” [Community governance – 10.4.12]

The absence of ‘next generation voices’ to represent the community is made more difficult by the reducing number of young fisherman in the fleet with many sons choosing not to continue the family work. The complexity of the quotas and enforcement legislation further obstructs the ease of engagement or representation for new leaders. While the formal nature of the politics and governance can alienate members of the community who are happier talking in more informal environments: *“they want to go to sea and fish, they don’t want to be involved in the politics.” [Fisherman – 10.4.12]* The research findings made clear that the level of political capital and knowledge required to operate at national and European forums can be a barrier to overcoming such over-reliance upon community stars in local governance and requires long-term capacity development within the local structures as this observation illustrates:

“I think the representation of the fishing industry in Hastings is very dependent on very few people. That’s a weakness for the longer term. Although the FLAG has involved the fishers’ leadership and brought new people into that, the level of expertise that’s required to participate at national and European level is very high. ... There clearly is an issue. I think in future [we need to think] about how we continue to broaden out that level of expertise in the industry.” [Local council – 16.10.13]

2.2. Fragmented national voice and the ‘wicked’ challenges of fisheries management

The fragmented nature of the U10M fleet nationally means generating a coherent voice at senior governance tables is problematic. This fragmentation led to the cancellation of the quarterly South East meeting chaired by DEFRA because *“they were a disaster ... fisherman shouting over each other and others walking out ... with others just using them for grandstanding” [Regional governance/ enforcement – 12.4.12]*. The development of NUTFA and their agenda to establish an inshore PO is also made more difficult by the inherently individualistic nature of fishers generally and the fragmented nature of the U10M sector: *“they are always fighting amongst themselves – that is the nature of the inshore fleet.” [Regional governance/ enforcement – 12.4.12]*

The historical national political engagement of the U10M fleet is described by one senior sector member as disenfranchised and naïve: *“the U10M fleet have been sleep walking into oblivion, they have never had any political awareness or understood the importance of having a seat at the table” [National lobbyist – 10.4.12]*. This was made worse in the view of a number of interviewees by the failure of the NFFO to represent their needs: *“a lot of us under ten metre boats thought that they sort of left us behind and they were dealing with the POs” [Fisherman – 10.4.12]*; *“they [NFFO] are driven by the interests of the over ten metre fleet” [National lobbyist – 10.4.12]*. This has left the fleet without the experience or governance culture of coming together to act as one voice politically: *“we have been disenfranchised economically as well as morally and culturally because we never had a central organisation like the POs act for the over 10M fleet so we have never had any representation” [National lobbyist – 10.4.12]*:

“We’re getting down to some fairly big historical and fundamental issues around fisheries management in terms of inshore fishers the extent to which they are recognised in policy development. ... if you go back through the decades of development of fisheries management certainly since coming into CFP the focus has been on the bigger fisheries or the more industrialised component of the fleet. As a consequence those interests have been catered for politically, perhaps as a priority.” [Regional conversation/ enforcement – 2.10.13]

This lack of experience makes developing the inshore PO problematic in terms of their capacity to challenge the better resourced, more established and politically powerful vested interests of the over 10M boat PO’s. Observers note that this lack of experience in the inshore fleet coupled with the absence of adequate national impact assessment around the introduction of new regulatory mechanisms has meant European fisheries management has struggled to address the complex and ‘wicked’ challenges of both strategic fish stock management and the socio-economic sustainability of small fishing communities:

“Just a simple statement, such as the allocation of resources should be applied or made towards the most sustainable type of fisheries – which is a virtuous circle; you would have thought that would have been a completely rational approach to have. It doesn’t really happen: there is no mechanism which does that effectively. It is just a horrendous complexity of issues and a mass of vested interests in all of that. ... The development of NUTFA is the direct response to the inability of other fisherman’s organisations to represent the views of the inshore fishers effectively. ... There is a history of groups being so well-embedded into the political dialogue over decisions about rights, allocations and policy decisions on fish that it becomes difficult for the civil service to break free from that process. Sometimes it takes the path of least resistance unfortunately [this] isn’t always the one that is going to get us in the best place ... in terms of use of public resources, sustainability and protection of the marine environment.” [Regional conversation/ enforcement – 2.10.13]

2.3. Challenge of over-coming local conflicts and mis-trust of enforcement authorities

The ‘infamous’ reputation (myth or reality?) of the Hastings fleet continues to be a feature of engagement and interaction with this political space. These stories extend to historical conflicts between old fishing families in Hastings. While the

long running scores between some members of the Rye/Kent/Hastings fleets are highlighted as just another example of a very fragmented sector with phrases like: *“you didn’t mess with the Hastings fishers”* [Local economic governance – 12.4.12]; or *“it’s a cultural thing they have always been fighters and they are known for it along the coast”* [Regional governance – 12.4.12]; *“fighters for their cause; or just generally being sort of, you know, not accepting the rules.”* [Councillor – 13.4.12]

Today conflict is most evident between the fishing community and ‘the enforcement establishment’. The personal animosities between key individuals (within the community and enforcement body) also obstructs engagement and leads the Hastings fleet to believe they are being victimised (and over-policed) for being politically active and “upsetting the applecart” with their publicity and ministerial and European Commissioner level lobbying:

“... some whispers on the beach are that we are being penalised for being outspoken ... we don’t get on with him and he doesn’t get on with us and we really feel that he doesn’t like us because we make a lot of noise and that’s not doing him any good.” [Fisherman – 10.4.12]

This leads to some parts of the fleet being defensive and having an obstructive relationship with some of the enforcement structures. Several enforcement body participants, however, maintain the policing of Hastings is proportional though they acknowledge the balance of working on both enforcement and enabling funding is a challenge:

“In fact I would say Hastings has less of a focus on it than we place on the high risk bigger vessels coming into Poole or Shoreham and in fact it is down the lower end of inspections. The figures show there is no over-enforcement in Hastings.” [Regional governance/ enforcement – 12.4.12]

“It is not the easiest of lines to tow (enabler and enforcer). ... We’re very tempered in how often we inspect vessels, about making sure fisherman do feel they’ve got a bit of space, but understanding they come under the regulatory regime ... I think we are aware of the sensitivities ... and I have to say we’ve got some excellent relationships with many people in Hastings. I think the evidence is we are very supportive of the industry. I want to see – the MMO wants to see - the industry do really well in Hastings.” [Regional governance/ enforcement – 16.10.13]

Evidently, both this element of opposing views coupled with the fragmented nature of the wider industry voice creates barriers to the success of a more co-management or partnership approach to fisheries management that would bring all parties round the table to work in a more holistic fashion to address the very complex social, economic and environmental challenges the industry faces. Yet there was an ambition expressed from both within the fleet and enforcement bodies for that relationship to evolve, particularly with the next generation of fishers, and for the relationship with the national governance body to be more of a supportive role that looks to enable and up-skill the industry:

“xxx and his generation look at regulators with suspicion. ... I want a new relationship starting with the new fisherman about saying “Do you know what we are all in this together. There are scientists, there are policymakers, there are regulators, there is the industry. ... I know you need to make your livelihood but you have to think about how you use that (access to fish stock) ... We have to take a longer responsibility.” [Regional governance/ enforcement – 16.10.13]

There is an understanding within both the fleet and in enforcement bodies that securing a collective voice that includes all interests in sustainable fisheries would be a better approach to fisheries management. Securing that collective voice continues to be a challenge despite progress made at a local level by the FLAG:

“I think a more collective responsibility for what’s going on about the part they play going forward [is needed]. ... I think there is a recognition in government that small vessel operators will have more of a say in the reformed CFP. I think certainly we’ve got to get those voices in there. It’s not all about big business, it’s about communities, it’s about sustainable fishing. After all, inshore fisherman are the greatest advocates and best examples of sustainable fishing. I don’t think we’ve quite found the way to get [that collective voice and approach] but somehow it has to be a bit of the key to it all.” [Regional governance/ enforcement – 16.10.13]

2.4. FLAG specific challenges for industry engagement

As with all the UK case studies the challenge of the MMO (Marine Management Organisation) occupying both a traditional fisheries enforcement role and enabler role (i.e. the management and funding of FLAG) created questions of trust that make a co-management approach problematic. On a very practical level stakeholders from all the case studies made clear they felt that project delivery in a community development style project like FLAG should be handled by a local accountable body with annual audit/oversight by the MMO. The direct control of sign off of each project by the MMO (an organisation recently relocated with loss of expert personnel and under pressure from extreme resource cuts) appears counter-productive to the purpose of CLLD (community-led local development) like the FLAGS and the local ownership and local project specificity that this should enable.

“There has been a lot of problems around that in FLAGS (understanding the relationship with the MMO) and that’s not restricted to our local FLAG, having conversations with other FLAG members. Being given the autonomy, really, or given the freedom to generate ideas and opportunities, and realise the potential of the FLAGS ... I think that requires the MMO to have the trust there to allow them to develop as they see fit within the constraints, obviously, of the programme.” [Regional conversation/ enforcement – 2.10.13]

Further, this local management approach may have reduced communication and project processing delays, while also minimising the levels of bureaucracy faced by the fishers that have acted as a barrier to engagement and delivery for the

FLAG. Evidently the norms of public sector governance (e.g. bureaucracy, complex form-filling, attending extended formal meetings during the day) have acted as a barrier to engagement for the community:

“... I think they [MMO] would like to see themselves as enablers, but I think their bureaucratic role negates against enablement. ... Once you start realising you have to match fund everything and you have to cash-flow everything, ... then that will inevitably mean some organisations are just not going to be in that position. The application form is very complicated, the business case is complicated and the collection of quotes is complicated.” [FLAG member – 09/10/13]

This burden of paperwork is in addition to the growing levels of fisheries management forms the fleet have to manage - much of it sent by email now to a non-ICT receptive community - that further creates a barrier to engagement and increasing the depth of representation:

“They have done a lot of stuff by e-mail now for the quota figures ... so fisherman have to be quite computer literate to deal with the way the fisheries now work and I think that's hard when you have got an ageing workforce. ... So where it was meant to improve communication [it doesn't] and I would like to know how it works in other ports who have an ageing population.” [Community governance – 10.4.12]

Many of the bureaucracy based challenges have been/ are being resolved by the role of the animator to ensure the documents are completed accurately and to help the applicants with their completion. Also efforts have been made by the MMO to address the bid processing delays which has eased paper-work and timescale based barriers to engagement. Lessons learnt from FLAG (1) in partly over-coming these programme delivery specific barriers need to be taken into future funding programmes to avoid industry disengagement.

2.5. Rick of extinction, diversification and ‘disney-fication’?

Restrictive quotas and subsequent economic sustainability dominates the views of interviewees in terms of the core challenge to the future of the fleet: *“you can't have a fishing fleet if they can't land fish” [Local economic governance – 12.4.12]*; *“the bottom dollar is the quota, the quota is wrong and it's badly wrong and that is the problem” [Fisherman – 10.4.12]*. They argue the power of POs at a national level in addition to the member state quota control from the EC places a serious question over the future of the Hastings fishing community and inshore fleet nationally:

“If we don't do something about this [the existing quota system and inshore fleet representation] there won't be an inshore fleet. The cultural, social and environmental costs will be huge.” [National lobbyist – 10.4.12]

This community and fleet is presented elsewhere by a number of parties as a socially, culturally and environmentally sustainable ‘model’ fleet. Others suggested that some fleets have successfully diversified and as such are economically viable, while Hastings refuses to change. This reluctance to diversify is presented by some participants as the community being:

“Set in their ways and not prepared to move on from some of their traditional ways of fishing, and traditional catches and that is a barrier ... it really makes it difficult to sustain any project about diversification down there.” [Local council – 19.4.12]

Through the FLAG it is hoped by some interviewees that:

“If we can get the disparate families on the board in a cohesive manner, we may be able to persuade them that there are ways of diversifying and ways of making it more sustainable there into the future. But they have to accept that change is part of that process and that they can't carry on as they have done historically in the future.” [Local council – 19.4.12]

One research participant argued the alleged ‘decimation of the U10M fleet’ owing to the quota system is an overstatement with in fact evidence of a re-structuring of the sector with new bigger boats and a rationalisation of licences. He acknowledged *“there is of course a loss to the community which is very disappointing, but that is progress, though it is not always very palatable” [Regional governance – 12.4.12]*. The chilling reality of an ever-reducing fleet in Hastings brings this concern regarding diversification into focus and leads one participant to fear the boats, fishing museum, and Classroom on the Coast will all become like Disneyland if they stop functioning as a fishing fleet:

“I'm quite consciously worried that because of the ridiculous situation with quotas that it's going to end up like Disneyland and the fisherman are going to earn the few hundred quid for, you know giving a talk on rope making or how they used to fish.” [Private sector – 13.4.12]

3. PART C - Conclusions and key sustainability issues

The table below offers a summary of the key ways in which the existing infrastructure and governance processes engage with economic, environmental and socio-cultural sustainability issues. The core over-arching themes for the research demonstrate that community members, allies and stakeholders are attempting to secure the future of the fleet by capitalising on and maintaining an intensive political profile, securing strategic alliances and partnerships (multi-scale) and embedding the fishing community into the cultural identity of the town (as described above). As the table below makes clear, a sustainability agenda is a central narrative running through this political profile, cultural identity and the evolving strategic networks (with the private sector, NGOs, and government conservation bodies). The FLAG process has also importantly advanced the dialogue between the industry and local council that has led to the prospect of fishing and maritime issues to be more central in the town's long term economic and regeneration planning. This inclusion in

strategic planning has been facilitated by the FLAG experience of multi-sector collaboration and raises the fleet's potential socio-economic value contribution to the community and their political capital in future policy and planning.

The findings highlight the mechanisms, structures and agendas that are used by the fishing community and stakeholders to advance their voice and influence at different scales of government and different sectors. Further, it makes clear the key issues, structures and governance features that are acting to obstruct that voice and agenda. The report outlines the importance of an increasingly professionalised Hastings Fisherman Protection Society (HFPS) in embedding the role of the fleet into the cultural and economic identity of the town. While the Stade project and FLAG partnership are acting as a catalyst to a more progressive relationship with the local council, the private sector and scientific agencies by enabling the development of allies and political resilience. The high profile active political engagement (at national and European level) of key community stakeholders is central to the influence of the community, but also a feature of its vulnerability given the over reliance on 'community stars'. In addition to this concern over the depth of representation are barriers to engagement generated by the fragmented voice and conflict-prone nature of the fleet locally, nationally, and with elements of the enforcement sector. However, the greatest risk to the sustainability of the fishing community lies in the challenges to the economic viability of their livelihoods generated by national and European politics and fishing policy. These themes and how they relate to the social sustainability and governance of the fleet are discussed below.

Environmental sustainability issues
Marine Stewardship Council (MSC) accreditation for Mackerel, Herring and Dover Sole.
Hastings is informally perceived as an MSC flagship model (i.e. for other fleets to learn best practice from when working towards accreditation).
Collaboration with Sussex IFCA (Inshore Fisheries and Conservation Authority) on the data collection for the development of Marine Conservation Zone (MCZ) evidence.
Ongoing debates regarding Cod quota allocation shows how tensions and inconsistencies can exist within fisheries management between regional scientific fish stock management objectives, historical allocation of national quota and securing the economic viability of small scale inshore fishing communities.
Social sustainability issues
Development of 'good governance' in the multi-sector local partnership through FLAG to help protect the fleet and develop the political organisation and unity within the community.
Social and political infrastructure resilience is being developed (led by HFPS and FLAG) through multiple contacts and representation of the fisher voices and agendas in community and economic structures.
Classroom on the Coast provides a skills development and training venue for the fishing community.
Classroom on the Coast provides public education around the value and practices of a sustainable fishery; as well as local ecological knowledge around fish identification, the marine environment and sourcing and preparing sustainable seasonal fish.
Increased interaction between different communities within the town (through the Stade public space cultural/ education activities programme including the Stade Hall gallery) which enables increased social cohesion, sharing of cultural values and customs and in doing so helps build upon the central fisheries component to the town's sense of identity.
Collaboration and leadership in the generation of the small-scale fleet representative bodies in the UK (NUTFA) and Europe wide (LIFE) help the fleet engage meaningfully in the political process at national and European level where previously the sector has been largely disenfranchised. While working with global environmental NGOs like Greenpeace to advocate sustainable fishing practices raises their lobbying capacity at national and European Parliament level (See: http://www.greenpeace.org.uk/last-fishermen-film).
Despite the increased organisation of the fishing community and industry the current rate of reduction of the fleet means the social and community infrastructure, economic wealth and cultural traditions may be lost due to the eventual dissolution of this small community.
Economic sustainability issues
The FLAG partnership acts as a catalyst for inclusion of the fleet and maritime issues in the town's more strategic economic development and regeneration planning.
Generation of self-funding charity arm of HFPS improves the economic resilience of local governance.
Application for funding bids via the FLAG structure to enable the development/ resolve obstacles to economic sustainability (e.g. replacing bulldozers).
Creation of new revenue streams for the community from fisher led alternative education provision and media fees.
Working with local restaurants and cookery school to help develop markets for more sustainable species and by-catch.
Participation in lobbying at national level to facilitate a more equitable and sustainable division of quota currently concentrated in the comparably environmentally unsustainable larger boat sector.

3.6 Northern Devon FLAG (England) Case Study

Introduction

1. Part A - features of governance enabling IF voice and a sustainable fishing community
 - 1.1. Building on the FLAG experience
 - 1.2. Vanguard examples of voluntary co-management with the conservation sector
 - 1.3. New industry connections with local councils
 - 1.4. Existing mature regional governance structures
2. Part B - governance barriers to IF voice and a sustainable fishing community
 - 2.1. Challenge of securing and maintaining fisher community engagement
 - 2.2. Absence of regional fishing identity upon which to focus collaboration and re-structuring of the supply chain to a higher value and sustainable local catch
 - 2.3. Limited inclusion in wider economic regeneration/ tourism/ place-making planning by local government
 - 2.4. Industry facing multiple threats creates a challenging context for collaboration
 - 2.5. FLAG specific challenges for industry engagement and co-management
3. Part C – conclusions and key sustainability issues

Introduction

The FLAG area in North Devon, southwest England (See Figure 11) is focused upon the fishing communities of Appledore (eight vessels: twelve fishermen), Ilfracombe (ten vessels: twenty fishermen, including two over fifteen metre trawlers and eight potters), Clovelly (three vessels: six fishermen) and Bideford (sixteen vessels: twenty four fishermen) (Northern Devon FLAG, 2011). In total the Northern Devon FLAG covers an area of 1,903 km² and creates employment in fisheries for approximately sixty people (FARNET, 2014). The area is remote from major urban centres, extremely rural, with highly valuable natural environment assets (specifically: North Devon Coast Areas of Outstanding Natural Beauty, Exmoor National Park, North Devon UNESCO Biosphere Reserve, Lundy Marine Conservation Zone). The fishery is a year round demersal fishery catching a variety of flat fish. Ray is the main catch in North Devon, accounting for 70% of all landings (Northern Devon FLAG, 2011).

While the area is strongly linked to the agriculture sector it is also a popular UK tourism destination. However, the economic profile of the area more broadly is highly vulnerable with few major employers, low wages and skills, coupled with areas of high deprivation. Although now reduced in scale, fishing still plays an important role within this economy directly (through income and employment), and indirectly (in terms of community identity and tourist visitor spend) (Northern Devon FLAG, 2011). Responding to real challenges facing this declining fisheries (including rising costs such as fuel and licences, reduced number of new entrants, ageing demographic, increasing displacement of fishing grounds for conservation and commercial factors, climate change and poor market/supply chain conditions) the area secured FLAG status. FLAGs are funded by Axis 4 of the European Fisheries Fund (EFF) and are intended to support the sustainable local development of fishing industries and their related communities without increasing fishing effort. EFF is managed in the UK by the Marine Management Organisation (MMO), a non-departmental public body under the government Department for the Environment, Food and Rural Affairs (Defra). Northern Devon is one of six English FLAGs. This funding programme has been developed in part owing to the acknowledgement at European Commission level that fisheries in smaller communities often make a considerable contribution to direct and indirect tourism, cultural and social value (DGMARE, 2013). Thus many of the FLAG projects focus on capitalising on these contributions through encouraging tourism and cultural fisheries related projects for example through fish festivals. This is in addition to securing a higher value for catch landed through marketing and supply chain innovation. Making fishing a more secure profession to attract the next generation of fishers has also been central to a lot of the FLAGs with investment in fisher training, port/ beach infrastructure and other health and safety elements on the boats. EFF will be replaced with the EMFF (European Maritime and Fisheries Fund) in 2015 with a particular focus on Integrated Marine Policy (IMP).

In terms of governance North Devon+ is the accountable authority for the FLAG and it reports to the MMO. The FLAG has a mixture of fishing industry (fishers, fishmongers, fisherman's association and Harbour Masters), private (tourism representatives) and public sector stakeholders (including local authorities and national environment and conservation bodies). In terms of industry representation at a national level the fishers have the option of membership through the NFFO (National Federation of Fishermen's Organisations); the inshore specific national association NUTFA (New Under Ten Fishermen's Association); and where relevant the Shellfish Association of Great Britain (SAGB). At a regional level some of the fleet are represented by the North Devon Fishermen's Association (NDFA); while at a local level (to varying degrees of activity) smaller fleet and harbour associations exist to provide local fisher representation and organisation.

English inshore fisheries management (operating within six nautical miles) is policed and managed by the IFCAs (Inshore Fisheries and Conservation Authorities). The Northern Devon fleet work with the Devon & Severn IFCA. The IFCAs co-operate with the MMO on several areas including fisheries enforcement and marine protected area management. IFCAs are funded through local authorities, but report to Defra. IFCAs replaced sea fisheries committees in April 2011, with an important expanded socio-economic remit to *"lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry"* (Defra, 2010). The MMO is responsible for regulation and licensing of fishing in England. The duties and powers of the IFCAs and the MMO are set out in the Marine and Coastal Access Act 2009 (UK) and this takes account of the European Union instrument for fisheries management the recently amended Common Fisheries Policy or CFP (EC COM, 2013).

The Marine and Coastal Access Act, 2009 (UK) establishes the marine planning regime for the UK including underlying ICZM principles and the designation of a network of Marine Protected Areas (MPAs) (and in England Marine Conservation Zones (MCZs). Natural England (an Executive Non-departmental Public Body that is responsible for advising the UK Government on the natural environment) works with relevant stakeholders in helping inform Defra on their planning for these sites. UK fisheries management and marine planning is informed by Cefas (Centre for Environmental, Fisheries and Aquaculture Science), who are the executive agency responsible for carrying out research and monitoring of fish and shellfish stocks.

The following section highlights the key themes that emerged from the research based on detailed manual thematic analysis of the interview transcripts. The dominant themes identified in the data make explicit that this is a community under pressure with distinct sustainability challenges, but also opportunities to better secure the future of fishing communities in Northern Devon and their contribution to the wider coastal economy. The absence of a mature local fish market, the absence of a regional fishing identity, and an externally focussed- large volume- low value supply chain are all highlighted in this research as major barriers to the sustainability of these fishing communities. The findings are divided into three sections. Part A highlights the mechanisms, structures and agendas that are used by the fishing community and stakeholders to advance their voice and influence in different scales of government (e.g. local to EU) and through different sectors (e.g. public and private). Part B highlights the key issues, structures and governance features that are acting to obstruct that voice and agenda advancement for fishing. While Part C offers a summary table of the manner in which these findings engage directly with the environmental, social and economic sustainability of the fleet.

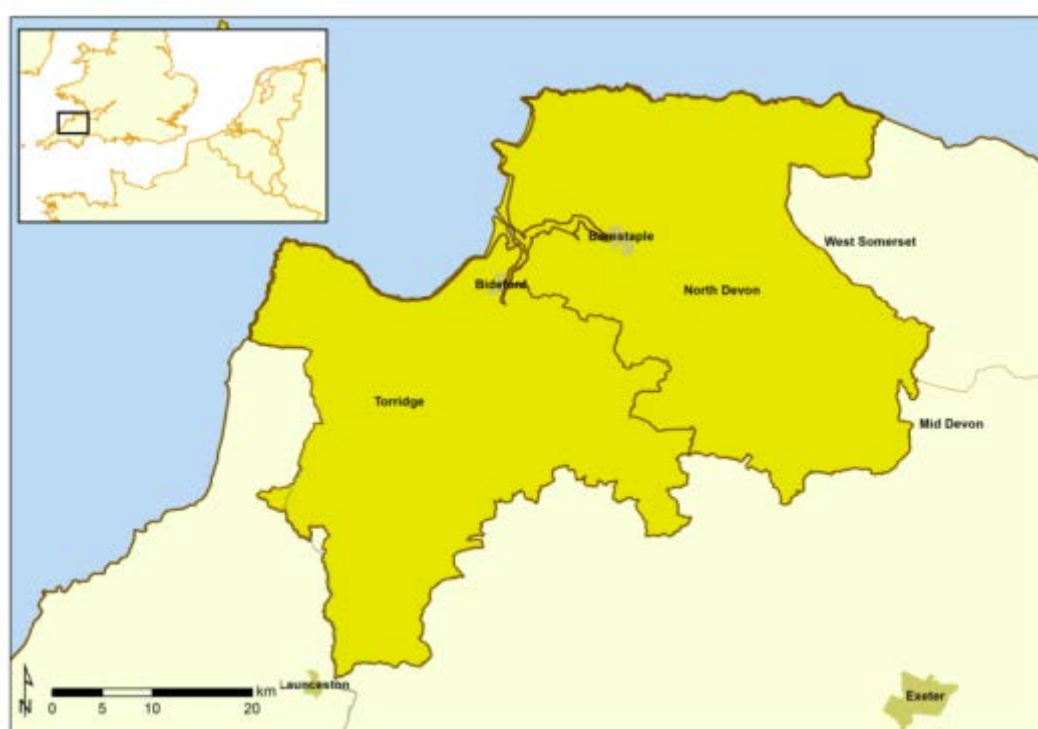


Figure 11. Northern Devon FLAG, southwest England (Source: VLIZ, 2014)

Table 11. Northern Devon Case Study Participants

Interviewee	Sector/Role	Date	Length
1. Participant A	FLAG member A	28.10.2013	42 mins
2. Participant B	FLAG member B	28.10.2013	91 mins
3. Participant C	Local Councillor	30.10.2013	32 mins
4. Participant D	Conservation body	4.11.2013	44 mins
5. Participant E	Fishing industry	28.10.2013	56 mins
6. Participant F	Fisherman	31.10.2013	58 mins
7. Participant G	Harbour master	30.10.2013	56 mins
8. Participant H	Local Council Officer	30.10.2013	43 mins
9. Participant I	FLAG member C	29.10.2013	88 mins
10. Participant J	Tourism sector	29.10.2013	54 mins

1. Part A - features of governance enabling IF voice and pathways to sustainable fishing communities

1.1. Building on the FLAG experience - Emerging aspiration for a more transformative partnership structure to address some of the challenges identified through the FLAG experience

Despite the challenges faced by the FLAG outlined in Part B (below) there is an aspiration from members from across different sectors to build on recent hard won successes in terms of representative capacity and relationships forged, to consider more transformative and strategic projects in future industry and community planning. An emerging appetite to consider a more holistic regeneration approach to fisheries and sustainable communities would build on the opportunities identified through feasibility work done by the FLAG and existing efforts to raise the voice and understanding of the industry in local governance mechanisms and policy making. For the first time in the region the FLAG has established a diverse network of stakeholders around fisheries and fishing communities and they are bringing to bear their expertise and support to projects that include re-skilling the next generation of fishers, building a regional fishing/fish identity, helping develop a local market for fresh North Devon fish, and re-connecting the wider community and visitors to its fishing heritage (e.g. through the fish trail in Ilfracombe and a contemporary oral histories project). The value of this diversity of membership and new relationships is clear from this FLAG member's comments. The depth of knowledge now held in this regional governance structure is key to the connectivity and shared working between the fishing industry and wider communities:

"It's a fantastic group. I think it's very interesting that it has brought together a disparate group of people. I mean the fisherman and the marine related operations are pretty close anyway. ... That wasn't necessarily new. But certainly bringing in other elements, such as the training and tourism people in particular, that has certainly broadened the experience of everybody on the FLAG." [Harbour master – 30.10.13]

The hope is that the FLAG will leave an infrastructure and experience of coordination that the industry can build upon on in future projects to better secure the sustainability of small fishing communities in Northern Devon as this local council member observes:

"I think that's why I am so keen on FLAG 2. I think that's going to be building on that [FLAG 1 network development]. I mean I think FLAG 1 took a lot of time getting everybody round the table, getting people to trust each other ... [So FLAG 2] would not just be looking necessarily for bids for FLAG but looking at how we can improve the fishing industry for the communities around." [Local council officer- 30.10.13]

The new focus and impetus FLAG provided for all parties to seriously consider the fishing industry economics and absence of co-ordination along the local supply chain is described by this FLAG member:

"The FLAG programme did focus our minds. ... So the opportunity arose and we thought 'Right let's ask the question.' Then when we asked the question the more we realised there were both needs and opportunities to support the fishing industry and fishing communities. In particular, to work on the supply chain between fisherman and their customers. ... So we launched with probably very low knowledge base in terms of administration of fisheries. ... The players were pretty well known to us even though we had not had any direct engagement with the business they were about ... There had been very little coordination or engagement across the supply chain. So we [the FLAG] engage with those." [FLAG member C – 29.10.13]

This effort to remedy holes in the local supply chain and improve the value secured by all participants is key to securing a sustainable local economy.

1.2. Vanguard examples of voluntary co-management

Through the Marine Protected Area around the Island of Lundy which forms part of a UNESCO Biosphere Reserve the North Devon fishers have been at the vanguard of engaging voluntarily with the conservation sector to co-manage and protect marine environments since 1971. That experience was felt to be a positive foundation upon which to engage the industry again to discuss and collaborate through the FLAG:

"The NDFA have had experience of managing the fishery in a sustainable way through its members. You know the Ray Box for instance just off Lundy which they avoid fishing ... the MCA around Lundy which pre-dated Marine Conservation by some years ... they had a track record of engagement and collaboration. ... They [Biosphere Reserve Partnership] were able to bring people together if you like on neutral ground and do some enabling, some facilitation of that process of MCZ. So we are fortunate in having had that capacity from a partner organisation to do that work and give the fisherman their experience of engaging and negotiating." [FLAG member C – 29.10.13]

As an industry they are represented in a working group that supports and guides the action of the Biosphere and many of the fishers actively support various no take zones and scientific data collection in contrast to the popular perception of fishers acting in direct competition with the interests of marine conservation.

"If they [the public] could sit in on one of these meetings they would realise that the fisherman are actually quite conservation minded. ... there's a minimum landings size one of our local byelaws which we put in place three years ago now ... I do voluntary tagging for protection of female lobsters ... if we feel that a certain area should be closed off they [IFCA] will help us ... like the Travsoe Box ... that was the whole of North Devon fisherman agreed that the whole area should be closed for three months of the year when the skate are in spawn. That

was done voluntarily by the fisherman. ... we have the no-take zone here which is on the east of Lundy ... I do lobster tagging where I am involved in the Padstow Hatchery ... we track them for about three years ... all that information is recorded. So yes fisherman are conservation minded.” [Fisherman – 31.10.13]

Yet there is less engagement with increasing conservation demands upon the industry that are now being imposed through the Marine Conservation Zones (excluding intensive NDFA input into the data provided to DEFRA to inform this process). One observer felt that rather than emerging organically and voluntarily as demonstrated so successfully in Lundy the industry are less inclined to support a process that is imposed from above:

“Certainly shellfish and white fish they’ve been at the forefront of preserving their own stocks up here well before the government got involved in conservation zones. ...Because [that process] has been steamrollered in so heavy-handedly I think they don’t necessarily get involved as much as they used to anymore because it’s at a level they just can’t reach and don’t want to really.” [Harbour master – 30-10.13]

However, there is also a sense that the FLAG structure offers an opportunity for the potential for greater collaboration with the conservation industry at a local and more meaningful level in future if the FLAG can secure greater dialogue and engagement from both parties:

“I think it is helped [the fisher/conservationist relationship] because in FLAG they’ve got them on the group. But I do think there needs to be a bit more both parties coming together, realising each other’s problems and talking practically about what can be done and how FLAG perhaps could enable that to happen ... also are there new markets that environmentalists could help with? Is there an opportunity here that we are not doing?” [Local council officer – 30.10.13]

The value of taking part in scientific data collection for one participant is to ensure the economic contribution of the small scale fishing industry is better understood. The wider stakeholder lack of understanding of the value of the industry in the region is underlined by a number of participants as discussed in Section B and limits the likelihood of the industry being invited to inform local economic development planning (due to their perceived lack of significance) and also means without that data planning lacks a robust evidence base. In contrast a few fishers are seeking to remedy industry level of influence in informing decision-making by being involved in the NDFA and/or the NFFO and through those forums requesting to take part in marine science research:

“Why do you feel it is important for the small inshore fleet to be involved in this sort of data collection? [Researcher] Because a lot of people are unaware of the financial benefit it is to them. They see small boats and don’t see very much money, but actually if you are prepared to put in the effort you can make a very good living in a very small boat.” [Fisherman – 31.10.13]

While another industry member reflects upon the emerging sense of understanding within the industry that there is a need to work together through the governance mechanisms to take collective responsibility for the future of the industry and for the wider community that was less explicit in prior generations. Harnessing this shifting approach to industry responsibility and collective governance could be key to the future sustainability of fishing in this region:

“Not just being entrepreneurial ... but looking to have some corporate responsibility and looking to the future a little bit more, acknowledging you can’t do what you want when you want in terms of fishing. Therefore how are we going to do it? ... I think that everyone used to plough their own furrow and go away ... but now we have [think] how are we going to deal with that [common threat] then? ... even 10 years ago we didn’t do it. We were members of one organisation. They met four times a year, I’d maybe go once. You kept your cards close to your chest and we just didn’t do it [collaborate].” [Fishing Industry – 28.19.13]

1.3. New and embryonic industry connections with local councils facilitated by the FLAG and the possibility of being more meaningfully included in local socio-economic planning

Through the diverse FLAG board representation for the first time local council officers and councillors are connected to the fishing industry and are building relationships. Where previously there was limited contact and very little accurate council understanding of the industry (see Section B below) this FLAG enabled connectivity has resulted in raising the understanding of the industry needs, opportunities and challenges, and in turn the possibility of the council and other local economic mechanisms might be involved in helping build socio-economic resilience into the industry at a very local level:

“Well right from the beginning it was an opportunity. In fact it is the first opportunity we [North Devon authorities] have had to engage with the fishing community in North Devon in any meaningful way.” [FLAG member C – 29.10.13]

Through the FLAG governance mechanism there is a new connection forged between the two sectors that means the fishing industry is now more likely to be considered in policy and planning around education, tourism (place/ identity) and economic development. Given the historically disengaged nature of the industry and limited understanding or interest in fishing on the part of the councils this connection is a great success of the FLAG partnership.

“I don’t think generally that most elected representatives have a very good understanding of the fishing industry issues and the challenges they face. ...There are places in the UK where there is better understanding I think of the value of the fishing industry to the local population. I think through the North Devon FLAG process we’ve actually taken people [councillors and council officers] on a journey in terms of helping them to understand what their fishing industry brings. ... There’s lots more to it than landing the fish, bringing it ashore and sending it off

to market. There's all that and the strong link with a sense of history of North Devon, and cultural heritage and then there's the strong link with our tourism offer." [Conservation body – 4.11.13]

1.4. Existing mature regional governance structures

The fishers in the region benefit from representation through the established governance structure of the North Devon Fishermen's Association (NDFA), which has been responsible for raising issues faced by the industry directly at ministerial level, or through the national structure of the NFFO or NSFA. All the participants named it as the dominant (and in many cases the only) structure the fishers belong to and rely on to raise their voice in national debates:

"The [NDFA] is the biggest [structure] that we have. All the FLAG areas such as Clovelly, Bideford, Appledore and Ilfracombe, all the fisherman, they're all members of that group. The guy who runs that is very good as what he does. He has contacts at the highest level, so he talks right down to the new crew member, all the way up to people in government. ... I think he's important and that association is important, although some fisherman don't always see eye to eye with him I think [because] he's very much the bigger picture." [Harbour master – 30.10.13]

The NDFA, for example, has actively lobbied for compensation for the fishers in terms of loss of fishing ground and earnings owing to plans (since cancelled) for development of a wind farm off the Devon coast. Further, they were heavily involved with working with the Biosphere reserve when securing a consensus with regional conservation bodies over the government consultation around allocation of MCZs. This structure was felt by all the participants to represent the key (and perhaps only) collective voice engaging at a senior level for the industry on such strategic issues. Clearly the importance of engaging at this national level of governance is key to making sure the challenges being faced by North Devon fishers is informing national lobbying by the NFFO and indeed ministerial planning and policy at DEFRA or the MMO. Without this voice the specificity of the needs and opportunities of this relatively small-scale fishing industry will be ignored and the future of the fishing communities of North Devon are at risk:

"My understanding is that primarily they were an information and lobbying group as an association representing the interests of the fishers. The Chief Executive sits on the IFCA and various other organisations. He is very well connected nationally with ministers and the structures of the fishing world. ... So as well as lobbying on the new fisheries policies and the marine protected zones and things like that, they spent an enormous amount of time and money dealing with the wind farm." [FLAG member A – 28.10.13]

The only other active local governance structure in the Northern Devon case study appeared to be the Harbour Boards (for example at Ilfracombe) where the Harbour Master brings together the broad mixture of stakeholders that use and need the harbour and quay (including fishers, local councillors, restaurants, museums etc.) creating an interesting micro-experience of co-management (with participants describing experiences of both the challenges and benefits of this approach) that could provide a useful foundation for more regionally based co-operation and voice in the future. The Harbour Master is often relied upon to then attend other structures or take issues raised to the more regional forum as has been the case with their membership of the FLAG. While this is a valuable membership for the FLAG given their connection to and expertise in the industry this is not a replacement for direct fisher engagement.

"There are about 12-15 groups represented on that [harbour] forum. The boatman have a seat, the fisherman have got a seat, leisure boatman have got a seat, the yacht club have got a seat, the RNLI also have one, the dive club have one. Every group with an interest or linkage with the harbour has a seat on that forum. ... We get everything from all angles about issues we might not necessarily see from a hoteliers point of view about things in the harbour. Those building blocks are in place now and are working well." [Harbour master – 30.10.13]

2. Part B - Governance barriers to IF voice and a sustainable fishing community

2.1. Challenge of securing and maintaining fisher community engagement

Aside from this regional structure dominated by just a few 'community stars' the local governance infrastructure (such as the co-operatives or fisherman's' associations in each of the four priority communities) are characterised as either being entirely redundant, only meeting once or twice a year and/or struggling to get members to attend and engage at key meetings. With the limited exception of the Harbour forums described above there appears to be very little grass roots community representation and a distinct reluctance on the part of most of the industry to engage in local governance. The potential result of this disengagement is limited resilience in the Nth Devon fisheries governance and absence of security of routes to representation of their agendas:

"There are just some fishermen who work on the assumption 'well if I don't do it [attend] someone else will. ...you think 'why is no one in North Devon area involved in this?' Our AGM is coming up and I guarantee – we only have 30 members – but I'll guarantee you the only people who will turn up will be myself and the four directors." [Fisherman - 31.10.13]

"We've got the xx [local] Fisherman's Association which is only there is name to be honest. Because fisherman are a difficult breed ... To sit them down around a table together would be an exciting event and difficult to achieve." [Harbour Master – 30.10.13]

The result of this lack of engagement by the wider fisher community means that the same single representative from each community becomes their only active connection into the NDFA and more recently the FLAG. Further, many of the participants were concerned that the processes of democratic consultation or collection of views between the representative and the respective community were absent or ad hoc at best. The result of these shallow levels of

engagement risk a democratic deficit with a resulting risk of a narrow representation of community issues that doesn't reflect the diversity of the community needs. The high levels of disengagement are partly explained by participants by poor social and political capital in the fisher community where low levels of formal education and limited experience of representation in large or official forums makes fishers often less likely to want to take part or raise their voice:

"[B]y their nature their very nature they are the last of the hunter gatherers. They are fearless men who go and work alone against the elements, and banding together is not a comfortable position for many of them to be in. There is an innate suspicion that there is an ulterior motive." [Conservation body – 4.11.13]

As with all the case studies, with the exception of a few 'community stars' fishers are characterised by Northern Devon participants as being excluded from formal representation by their lack of comfort with the governance norms of such forums. These norms act as a distinct barrier to engagement with use of unfamiliar technocratic language by some participants and an alienating requirement to read and to complete large complex documents. What is more given that the weather limits the number of available fishing/ crabbing days at sea, these long bureaucratic meetings held during the office working day will understandably often not be prioritised over the day-to-day demands of a fishers' livelihood.

"[A] lot of these guys same as me left school with no qualifications and they are not very word-minded ... There are a lot of people who just completely 100% shy away from that sort of thing ... [but] if they don't like the decisions that are being made for them, [then] stand up and be counted. ... I think a lot of people are nervous they are frightened of making a fool of themselves by standing up and not being able to put their case across properly." [Fisherman – 31.10.13]

The low levels of industry engagement observed by the full range of participants was also linked to the absence of a notable collective voice for the region beyond the NDFA. This lack of cohesion (and even community rivalry) is aggravated by the geography of the region that means the four main fishing communities are many hours apart and really quite isolated from each other.

"I know he [community leader] has expressed his frustration that the fisherman up here don't work together. There is incredible hostility between the four different communities ... [it] is extraordinary for such a small community and maybe it is aggravated because they are so small, they just don't seem to work together very well." [FLAG member B – 28.10.13]

"Trying to find a way to link them all together and get them to work together has been difficult ... because they are separate, they really are. It's a geographical distance between them." [FLAG member A – 28.10.13]

Clearly proximity creates more chances for and so experience of co-working and generating consensus (e.g. at a very local scale in Harbour Boards above). Instead the geographical isolation of Northern Devon communities, the natural individualism of the fishers (they are after all small businesses used to being in direct competition), coupled with an explicit long-standing mistrust (or at best cynicism) of authorities is acting as a large barrier to their participation in and shaping of the dominant agendas in partnership governance structures:

"I certainly don't think there is much of that [fishing industry collaboration in regeneration structures], maybe the FLAG helps that a little indirectly but I wouldn't say there is much formalised. ... There's a certain amount of infighting maybe can go on. I think people are a little protective of their turf. I think they are more focussed on that than the communities that they exist and operate within." [Industry member – 28.10.13]

This limited positive experience of the benefits of collaboration and partnership makes for a challenging context to encourage the industry to engage through the FLAG:

"At the moment I don't think the fisherman – because the Co-op doesn't work very effectively and there are associations they don't use – because they don't have a good experience of working together I am a bit frustrated that we may get to the end of this programme and still not have moved them forward at all on that." [FLAG member B – 28.10.13]

2.2. Absence of regional fishing identity upon which to focus collaboration and re-structuring of the supply chain to a higher value and sustainable local catch

Unique to this FLAG case study was an absence of regional place-based fishing identity upon which to focus and build a cohesive voice and community collaboration:

"We are definitely not as organised as the French or the Belgians ... here we have little clusters of fisherman and they are very separate and don't want to work together ... they [French and Belgians] know how to band together and work together to lobby and get the voice - that hasn't happened here." [Local council officer – 30.10.13]

The disjointed nature of the industry and absence of collective working to build and invest in a common identity and market is a direct barrier to the economic sustainability of these small fishing communities:

"I think North Devon [market] is more fragmented and even more difficult. It's the most fragmented market I know and I have seen a few." [Conservation body – 4.11.13]

By being tied to a supply chain that guarantees to buy everything landed but largely markets outside of the region and even outside the country for a lower unit value undermines the power of the fishers in the supply chain. This will often ironically result in the North Devon catch being sold back into the local community having been first sold and processed elsewhere. There is a need to improve the maturity of the local supply chain infrastructure and develop that local market

identity in Northern Devon to enable local catch to be consumed locally for a greater value and so increase the economic and social sustainability of small-scale fishing in the region. One council officer explained their interest in the FLAG as a result of recognising this lack of identity:

"[W]e realised when we did the fish stock that one of the biggest problems with fishing is that people didn't associate North Devon with fishing. ... A lot of the fish [landed here] is very valuable fish, it's bass, it's flatfish, it's skate, things like that, very valuable fish but it is hidden. So we also thought FLAG would be an opportunity to sell what we do and people would know more about – I mean they knew there was fishing communities, but it was sort of in the past rather than still going and it was still active, hopefully vibrant." [Local council – 30.10.13]

That lack of fishing identity combined with an immature local market infrastructure for a sustainable 'local boat to plate' story limits the ability of structures like the FLAG to reconnect the wider Northern Devon community to the local fishing industry:

"I think if you looked at North Devon and I imagine if you asked 100 people 'How do you interact with the fisherman?' they'd go 'Who are they?' and 'Why do we want to do that?'" [Industry member – 28.19.13]

"I would like to see the fishing communities or the fishing sector become more part of the local communities. ... I would like the heritage and the current practices of the fisherman to be more apparent to visitors. ... It would be nice to see the locals celebrating it as well." [FLAG member A – 28.10.13]

It is hoped that through the FLAG education and cultural projects outlined in Section A that this current disconnect is slowly being eroded. This broader cultural challenge of re-connecting to and generating understanding of the local fishers and the local catch within the wider communities will help generate the demand in the retail and hospitality industry for North Devon catch. The FLAG has faced challenges in connecting the fishing and hospitality industry (another fairly diverse and fragmented industry) and in convincing them of the opportunities generated through supporting seasonal local catch. Further the FLAG members have had to work really hard to unearth examples of the cultural heritage of the communities connected to the fishing industry and make them explicit to wider communities. This almost reclusive nature of the industry culturally, socially and economically (as indicated by this absence of regional identity, minimal active local community structures, sparse displays of cultural heritage and an as yet small local market) is reflected (and perhaps compounds) the industry's lack of prominence in local government socio-economic planning. Though FLAG members note that where the fleet are very physically visible in the harbour or on the beach it seems the fleet are more front of mind and integral to the local community sense of identity and as a consequence are slightly better integrated into local regeneration and tourism planning (e.g. in Ilfracombe). This is less the case where the fleet are out of sight of the main town as we discuss in the next section:

"If you have the town surrounding the harbour, which you have in Clovelly and Ilfracombe, and the focal point of the town is the harbour then yes they have good connection with the community." [FLAG member A – 28.10.13]

2.3. Limited inclusion in wider economic regeneration/ tourism/ place-making planning by local government

This low-profile industry voice and lack of identity has perhaps contributed to a perception in local government that this is an industry in decline with small-scale economic value that is largely shaped by national and European level governance. The result is that the fishing industry has historically had minimal contact with local government beyond health and safety and harbour infrastructure. As a consequence until recent years - with the introduction of structures like the FLAG - the industry has not featured prominently in regional socio-economic planning and development and this industry member indicates he would never consider approaching the council to support the industry:

"Well it would never occur to me to talk to the local council about a fishing issue ... because I would imagine it is not in their remit to be able to help. I would imagine they know nothing about it." [Fishing industry – 28.10.13]

In the context of reducing and limited local government funds it seems understandable that an industry that has been reluctant to engage with any form of authority, or present a coherent collective agenda has received less attention than say more organised industries like agriculture or tourism. Representation through industry governance structures is directly linked in this way to the focus of local government economic planning and regeneration projects:

"If I was NDFA I would have been knocking on our door ages ago and saying, 'The quay is a dump, look at the state of the buildings, why aren't you doing something? Why aren't you promoting us? Which the farming organisation probably would have done, but not necessarily the fisherman. But perhaps that is because they are a bit wary of authority and councils ... you have to break down a lot of barriers.'" [Local council officer – 30.10.13]

This mutual lack of engagement by both local government and the industry has also resulted in a lack of fisheries expertise in civil servants at this local government level and is described by this council officer:

"I think it's because they don't like too much interference anyway. Also they are very independent bunch and they saw themselves as keeping themselves to themselves. I also think we didn't make much of an effort really to be honest. We didn't know until we did the economic analysis bit, I don't think anybody in the council knew how important they were even though they're a small bunch." [Local council officer – 30.10.13]

The low local government profile and fragmented nature of the industry limits its' ability to play a more central role in regional development planning through the LEP [regional development body] where a more traditional urban economic model is being prioritised. This was presented in contrast to development planning in Cornwall where a more established

political voice and the visible scale of the industry mean that maritime/fishing is being made part of LEP economic planning: *“To be honest the LEP has no track record on fisheries, we are going to be such a minor blip on their radar they won’t pay it sufficient attention.”* [FLAG member C – 29.10.13]

As a result of collaborating with the industry through participation on the FLAG for the first time council officers and councillors are beginning to remedy this lack of insight into the industry, to increase local government awareness of the challenges they face, and begin to plan to secure the opportunities that support at local government level could provide (see Section A above):

“I think as far as I can remember this is probably quite a new situation [the fisherman/council collaboration enabled by the FLAG], one I think which is obviously a challenge because I wouldn’t think there is a lot of expertise within the local district council, not from a straight fishing perspective.” [Local Councillor – 30.10.13]

2.4. Industry facing multiple threats creates a challenging context for collaboration

Nearly all the participants made clear that this is an industry facing multiple threats and as such in need of support, a stronger voice, increased leadership and scale of political representation. As an industry like all the English case studies they face an ageing population with concerns over the recruitment of the next generation of fishers; increasingly restrictive management with complex quota regulations owing to conservation and stock management action (e.g. through MCZs); potential loss of fishing grounds due to alternative energy development (e.g. wind farm); and finally a common observation by participants that unlike farmers fishers are less highly regarded in the English popular consciousness than they are in other European countries (such as France and Spain where notably there is strong political representation through the industry co-operatives). With the fishing industry in Northern Devon facing so many challenges this creates a difficult context for encouraging multi-sector collaboration or even trying to encourage the different fishing communities to work together through a governance structure such as the FLAG despite their need of support:

“I think they [fishers] feel massively persecuted and that they have a definite, definite need for somebody to help them and try to stand the overwhelming tide of stuff that comes their way that doesn’t help them. Stuff from the EU in terms of licensing regulations and so forth; stuff from the government, and PR attacks [in reference to Hugh’s Fish Fight]. I think fisherman feel massively put upon most of the time.” [Industry member – 28.10.13]

In other case studies where there appears to be greater partnership experience and strong leadership these threats have resulted in collective action, increased engagement with these competing interests and intensive political lobbying. In Northern Devon (again with the exception of the NDFA activities that have recently been focussed on the threat posed to the industry by the wind farm) this appears to have resulted in many cases in an increased mistrust of authorities, further disengagement, or a short-termism approach rather than an appetite for collective action and collective responsibility:

“They have never been an easy group to work with and partly that’s their history and the nature of the beast. But partly it’s the fact that they have been sort of under attack for the last 40 years, because of the nature of the structure of the all too terrible CFP. ... There has been a sort of ongoing siege mentality and that fragments relationships and challenges trust.” [Conservation body – 4.11.13]

2.5. FLAG specific challenges for industry engagement and co-management

The engagement deficit, absence of collective voice or identity, and an under-developed local supply chain described above, have all proven to be challenging features of this economic and governance landscape for the delivery of the Northern Devon FLAG objectives of trying to secure the sustainability of small local fishing communities. This backdrop has meant that the FLAG has had to spend a considerable amount of time investing in supporting and encouraging community representatives, building cross sector relations, and eroding mistrust of authorities. Unlike other case studies where the community governance is more established and outward looking, in Northern Devon a good deal of time has been spent just getting people round the table, engaging the industry, understanding the industry and trying to secure a consensus for cross-sector objectives against a challenging timetable:

“Our strategy was very fisheries focused, was all about the fishermen, the fishing co-op, and we weren’t getting the bids in. We couldn’t get any co-operation from the fisherman ... they weren’t keen on bidding for grants in the first place.” [FLAG member B – 28.10.13]

“We didn’t really have time to do the proper development. It would be nice to have done some grassroots stuff first.” [FLAG member A – 28.10.13]

As a community development project the FLAG is only now - nearly two years in - beginning to see the fruits of their labour in terms of raised industry awareness and industry understanding at local council level, and in the success of cultural and education/skills based projects (see Section A above). However, this learning curve has been aggravated by obstructive programme delivery processes and regulations that have acted as a distinct barrier to FLAG engagement (both in terms of representation and applications submitted). NOTE: Towards the latter stages of the programme some of these barriers have been resolved with process timescales reduced and a greater clarity over the rules and regulations of the programme. Other barriers are more difficult to overcome and include the level of upfront private match funding required in a cash poor industry: *“in a known deprived region where a majority of capital assets are public sector”* [FLAG member B – 28.10.13]. The extensive and highly technocratic bureaucratic form-filling common to many funding programmes has proven to be off-putting to many applicants (though here as in all the FLAG case studies the role of the FLAG animateur has been essential in partly overcoming this barrier by helping to complete the forms for applicants – essentially acting as a translator for these complex documents):

"I think there is a lot of acronyms, you know the whole language of all these things. It is really hard for the general public to engage with on the FLAG. So I think that is a real barrier for them – just the weight of paper. ... For some people you know committee meetings are very outside their comfort zones." [FLAG member B – 28.10.13]

The lack of clarity on regulations (until later stages in the English FLAG experience) of what is and is not eligible in Axis 4 led to protracted dialogue between the applicants, the FLAG, the responsible authority, the MMO and European Commission. This over-administration and the extended timescales this involved acted as explicit barrier to private sector engagement. In this way there appeared to be a disconnect between the pace of the funding programme (with processing and payment of claims taking several months) and the time sensitive needs of the fishing industry:

"That's been so frustrating for all of us on the FLAG board because the time it takes to do some of these things can affect some of the guys. It these things don't come through in time then the chance for them could be lost. That has been a great shame." [Harbour master – 30.10.13]

This FLAG member describes the negative impact on engagement caused by these procedural barriers:

"It has been a major, major issue. It turned an awful lot of our applicants off. Some of them have walked. Some of them have pulled their projects which is a great shame." [FLAG member C – 29.10.13]

Perhaps more important than the day to day delivery of the programme was the sense of disappointment expressed by participants that a community programme like FLAG should be so directly controlled by a national QUANGO, based hundreds of miles away from the communities that they are trying to support without any knowledge of local industry specificity or the socio-economic challenges they are facing. Some participants felt this resulted in a negative cycle of an impression given of MMO lack of trust in the industry to be their own decision-makers and so a resulting lack of engagement and ownership by the industry at the local level. This high level management of the FLAG programme doesn't enable a sense of empowerment within the fishing communities making the engagement needed for successful co-management needed even more elusive.

"If MMO cannot deliver it [owing to lack of capacity or experience], then it should be run by DEFRA who are used to delivering community-led programmes with a high degree of delegation. I will say this again and again till I am blue in the face and somebody listens. There really does need to be this level of delegation and trust from the national agency." [FLAG member C – 30.10.13]

Some FLAG members (particularly those in the fishing industry) articulated a resistance to the wider community purpose of the FLAG where they felt the projects were not directly linked to the improvement of the industry (for example with regard to tourism or cultural projects), and yet as a sector they have presented very few fisher-led applications (though again some of the reasons for that lack of engagement have been discussed above). Generating an understanding of wider interdependency between the different sectors is clearly a challenge for this form of collaboration:

"Personally I think the majority of the FLAG's money is going into the wrong areas, that's more concentrating on the leisure side of it." [Fisherman – 31.10.13]

Further a number of FLAG members felt there should be a higher level of industry input into the FLAG to better balance the public sector representation, improve the industry expertise at the table and increase the level of leadership and ownership from the industry, however, they recognise that requires more industry members to turn up and engage in the process which as yet has been difficult to secure in a consistent and meaningful way.

3. PART C - Conclusions and key sustainability issues

The table below offers a summary of the key ways in which the existing infrastructure and governance processes engage with economic, environmental and socio-cultural sustainability issues. One of the dominant challenges in any co-management approach is securing a consensus with such diverse partners with often competing or conflicting interests and nowhere is this more evident than in the highly interdependent and increasingly complex interests involved in fisheries. The barriers outlined in Section B above will naturally make achieving this consensus even harder. For example, the engagement deficit, absence of collective voice or identity, and an under-developed local supply chain, have all proven to be challenging features of this economic and governance landscape for the delivery of the Northern Devon FLAG. The almost reclusive nature of the industry culturally, socially and economically (as indicated by this absence of regional identity, minimal active local community structures, sparse displays of cultural heritage and an as yet small local market) is reflected (and perhaps compounds) the industry's lack of prominence in local government socio-economic planning. Yet as outlined in Section A despite the at times frustrating experience of FLAG 1 the area has seen progress around collaboration (just getting this disparate group around one table has been a success) and an understanding of collective responsibility for the future of these communities and the fishing industry is emerging from some sectors. The industry has a strong history of working with the conservation sector for example and so does have the skills and experience to develop this collaboration to a broader set of stakeholders and sectors. Progress has been hard won in the Northern Devon FLAG and in a second tranche of funding the community development foundation work and industry feasibility research of this FLAG could be capitalised upon to secure more transformative socio-economic objectives around the supply chain and regional identity and market.

Environmental sustainability issues
Industry collaboration (led by the NDFA) with IFCA and the North Devon Biosphere Partnership on the data collection for the development of Marine Conservation Zones and the establishment of a consensus between diverse stakeholders.
Through the Marine Protected Area around the Island of Lundy, which forms part of a UNESCO Biosphere Reserve, the North Devon fishers have been at the vanguard of engaging voluntarily with the conservation sector to co-manage and protect marine environments since 1971.
Examples of fishers working in the region on conservation projects and marine science research in order to increase the understanding of the impact of the industry to help ensure any loss of fishing ground is based on locally accurate and up to date evidence.
Social sustainability issues
Despite the challenges faced by this FLAG there is an aspiration across different sectors to build on the hard won successes in terms of representative capacity and relationships forged. An emerging appetite to consider a more holistic regeneration approach to fisheries and sustainable communities would build on the opportunities identified through FLAG feasibility work and existing efforts to raise the voice and understanding of the industry in local governance mechanisms and policy making.
Mature regional governance structure (NDFA), which has been responsible for raising issues faced by the industry directly at ministerial level, or through the national industry structures (e.g. NFFO or SAGB). This is the dominant (and in many cases the only) structure the fishers belong to and rely on to raise their voice in national debates (such as wind farm compensation and MCZ consultation).
With the exception of a few Harbour associations and semi-active Fishermen's Associations there appears to be very little grass roots community representation and a distinct reluctance on the part of most of the industry to engage in local governance. This disengagement limits the security of routes to representation of regional fisher agendas.
Limited fisher engagement at a local level is variously described as being caused by individualism, low levels of social capital, geographic isolation, mistrust of authorities, and community rivalry. The result of these shallow levels of engagement risk reliance on community stars and a democratic deficit resulting in a narrow representation of community issues that does not reflect the diversity of the community needs.
As an industry facing multiple threats (ageing population, restricted fishing grounds and increased regulation, and concerns over a negative popular perception of parts of the industry) this creates a very challenging context to encourage collaboration and consensus.
This FLAG has found the national level management of the FLAG programme (rather than devolution of power to the local level) creates a perception of mistrust within the industry rather than enabling a sense of empowerment within the local fishing communities. This makes the fisher engagement needed for more successful co-management even more elusive.
Economic sustainability issues
This low-profile industry voice and lack of regional fishing identity has perhaps contributed to a perception in local government that this is an industry in decline with small-scale economic value that is largely shaped by national and European level governance. The result is that the fishing industry has historically had minimal contact with local government beyond health and safety and harbour infrastructure. As a consequence until recent years - with the introduction of structures like the FLAG - the industry has not featured prominently or benefited from regional socio-economic planning and development. The absence of a more holistic regional planning approach that takes account of the value and interconnectedness of the fishing industry with local communities is a direct barrier to their economic sustainability.
The disjointed nature of the fishing industry in North Devon and absence (with the exception of recent FLAG efforts) of collective working to build and invest in a common fishing identity and market is a direct barrier to the economic sustainability of these small fishing communities. There is a need to improve the maturity of the local supply chain infrastructure and develop that local market identity in North Devon to enable local catch to be consumed locally for a greater value and so increase the economic and social sustainability of small-scale fishing in the region.

3.7 North Norfolk (England) Case Study

Introduction

1. Part A - features of governance enabling IF voice and a sustainable fishing community
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 - 1.2. Working with the IFCA (Inshore Fisheries and Conservation Authorities) for voluntary or fisher led-conservation
 - 1.3. FLAG catalyst for co-management approach that enables a collective fisher voice and multi-sector connectivity and understanding
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 - 2.1. Traditional barriers to small-scale fishing industry engagement including: geographic isolation, lack of community political capital or culture of activism, individualism and reliance on community stars
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Introduction

The North Norfolk FLAG area has been home to a traditional small boat (largely) shellfish industry along this North Sea coastline of Eastern England (See Figure 12) for hundreds of years. North Norfolk is a sparsely populated area of Eastern England famed for its beautiful natural coastal environment. The coast is scattered with isolated picturesque fishing towns and villages that rely on a tourism sector underpinned by their coastal and fishing identity (North Norfolk FLAG, 2011). The fishing industry today employs over one hundred and forty people in the FLAG area (FARNET, 2014). The North Norfolk coastal economy is made vulnerable by a strong dependence on (seasonal, low-wage) tourism and the close inter-linkages with the future of the fishing industry on this coast (both the risks and opportunities this presents) is well understood within the FLAG strategy (North Norfolk FLAG, 2011). There were 44 shellfish boats registered in the case study area in 2011 with the main species landed including brown crab, lobster, whelk and mussels (North Norfolk FLAG, 2011). The industry now also co-habits in this marine environment with major offshore energy developments with challenging local marine spatial planning and fisheries management implications.

Responding to the challenges facing this declining fisheries (including rising costs such as fuel and licences, reduced number of new entrants, ageing demographic, increasing displacement of fishing grounds for conservation and commercial factors, climate change and poor market/supply chain conditions) the area secured FLAG status in 2011. FLAGs are funded by Axis 4 of the European Fisheries Fund (EFF) and are intended to support the sustainable local development of fishing industries and their related communities without increasing fishing effort. EFF is managed in the UK by the Marine Management Organisation (MMO), a non-departmental public body under the government Department for the Environment, Food and Rural Affairs (Defra). North Norfolk is one of six English FLAGs. This funding programme has been developed in part owing to the acknowledgement at European Commission level that fisheries in smaller communities often make a considerable contribution to direct and indirect tourism, and cultural and social value (DGMARE, 2013). Thus many of the FLAG projects focus on capitalising on these contributions through encouraging tourism and cultural fisheries related projects for example through fish festivals and heritage centres. In addition to securing a higher value for catch landed through marketing and supply chain innovation. Making fishing a more secure profession to attract the next generation of fishers has also been central to a lot of the FLAGs with investment in fisher training, in port/ beach infrastructure and other health and safety elements on the boats. EFF will be replaced with the EMFF (European Maritime and Fisheries Fund) in 2015 with a particular focus on Integrated Marine Policy (IMP).

In terms of governance North Norfolk District Council is the accountable authority for the FLAG and it reports to the MMO. The FLAG has a mixture of fishing industry (fisher/ fisherman's association chairs), private and public sector stakeholders (including local authorities and national environment and conservation bodies). In terms of industry representation at a national level the fishers have the option of membership through the NFFO (National Federation of Fishermen's Organisations); the inshore specific national association NUTFA (New Under Ten Fishermen's Association); and the Shellfish Association of Great Britain (SAGB). At a local level six smaller fishing associations exist along this FLAG coast to provide local fisher representation and organisation.

English inshore fisheries management (operating within six nautical miles) is policed and managed by the IFCAs (Inshore Fisheries and Conservation Authorities). The North Norfolk fleet work with the Eastern IFCA. The IFCAs co-operate with the MMO on several areas including fisheries enforcement and marine protected area management. IFCAs are funded through local authorities, but report to Defra. IFCAs replaced sea fisheries committees in April 2011, with an important expanded socio-economic remit to *"lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry"* (Defra, 2010). The MMO is responsible for regulation and licensing of fishing in England. The duties and powers of the IFCAs and the MMO are set out in the Marine and Coastal Access Act 2009 (UK) and this takes account of the European Union instrument for fisheries management the recently reformed Common Fisheries Policy or CFP (EC COM, 2013). The Marine and Coastal Access Act, 2009 (UK)

establishes the marine planning regime for the UK including underlying ICZM principles and the designation of a network of Marine Protected Areas (MPAs) (and in England Marine Conservation Zones (MCZs)). Natural England (an Executive Non-departmental Public Body that is responsible for advising the UK Government on the natural environment) works with relevant stakeholders in helping inform Defra on their planning for these sites. UK fisheries management and marine planning is further informed by Cefas (Centre for Environmental, Fisheries and Aquaculture Science), who are the executive agency responsible for carrying out research and monitoring of fish and shellfish stocks.

The following section highlights the key themes that emerged from the research based on detailed manual thematic analysis of the interview transcripts. The dominant themes identified in the data make explicit that this is a community under pressure with distinct sustainability challenges but also opportunities to better secure the future for fishing communities in North Norfolk and their contribution to the wider coastal economy. Central to the future of the fishing industry in North Norfolk is overcoming the historical lack of collective voice at a national or European level and absence of strategic political engagement. Now through the FLAG the community are learning the value of a collective voice and the need to work in collaboration with other sectors (local council, education, tourism and conservation) to secure a sustainable future for Norfolk fishing communities. The growing numbers of competing (and sometimes conflicting) interests in the marine and coastal environment off the North Norfolk coast has meant for many participants the FLAG is a timely mechanism to develop dialogue and consensus on how to secure both the marine environment and fisher livelihoods. The findings are divided into three sections. Part A highlights the mechanisms, structures and agendas that are used by the fishing community and stakeholders to advance their voice and influence in different scales of government (e.g. local to EU) and through different sectors (e.g. public and private). Part B highlights the key issues, structures and governance features that are acting to obstruct that voice and agenda advancement for fishing. While Part C offers a summary table of the manner in which these findings engage directly with the environmental, social and economic sustainability of the fleet.

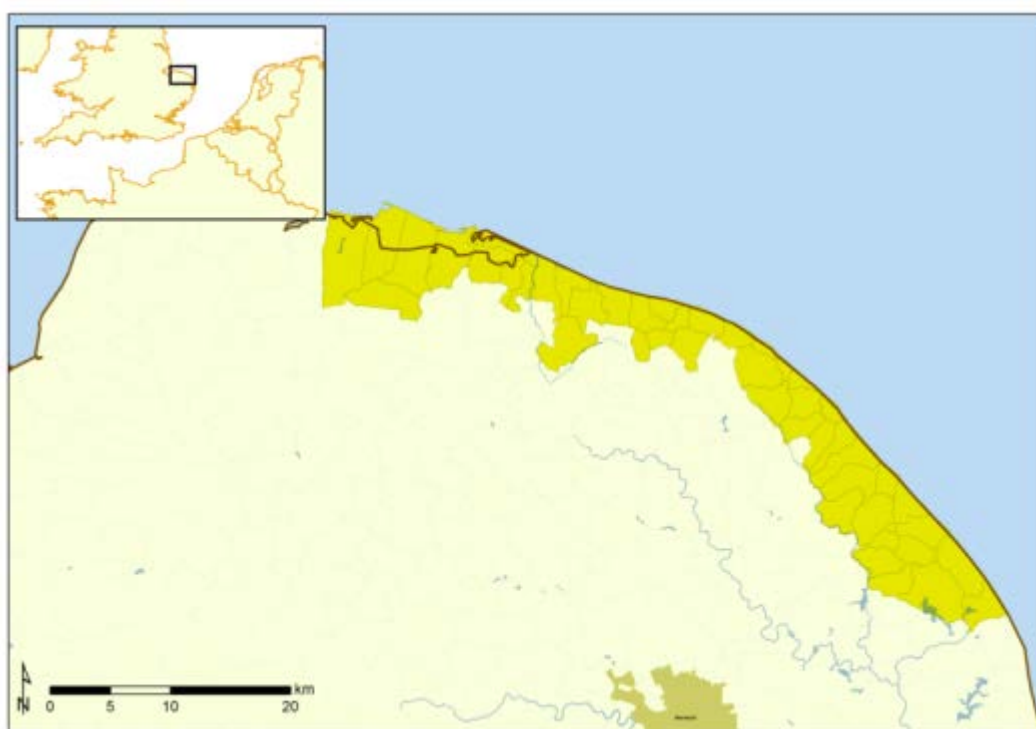


Figure 12. North Norfolk FLAG in England (Source: VLIZ, 2014)

Table 12. North Norfolk Case Study Participants

Interviewee	Sector/Role	Date	Length
1. Participant A	FLAG member A	22.10.2013	46 mins
2. Participant B	FLAG member B	22.10.2013	49 mins
3. Participant C	Fisherman	22.10.2013	41 mins
4. Participant D	Local council	23.10.2013	91 mins
5. Participant E	Fisherman	23.10.2013	25 mins
6. Participant F	Councillor	25.10.2013	29 mins
7. Participant G	National fisheries authority	15.11.2013	51 mins
8. Participant H	Regional conservation / management body	16.12.2013	29 mins

1. Part A - features of governance enabling IF voice and pathways to sustainable fishing communities

1.1. Established local level governance infrastructure and routes to participation

There is in North Norfolk a very local level fishing industry governance infrastructure based around six fisherman's associations along the coast. These continue to be the foundation for securing fisher voice and participation in the region. These fisherman's associations are typically linked to a specific community and area of coast. So for example the North Norfolk Fisherman's Association is largely based out of and represents the fishers/crabbers of Cromer. The associations are the main site of local fishing industry engagement and their key vehicle (prior to the FLAG) for securing a collective voice. The associations typically meet once a month to discuss issues affecting individual fishers or the industry more broadly (e.g. offshore wind farm development or MCZs). FLAG members describe them as being central to securing fisher engagement for the FLAG and they were all invited to participate and represent their wider members in this larger scale and multi-sector forum. With the exception of one association they have all regularly attend the FLAG meetings and the process of feeding back and gaining a mandate from members at their respective associations has been noted by a range of case study participants as an important part of the good governance of the FLAG:

"They [the Fishing Associations] have a Chair, they have regular meetings, or regular-ish, and everyone's voice is heard at those meetings at that level. Essentially the FLAG exists on a monthly basis for any information to be brought to and from those associations to us and vice-versa. There is representation from five of associations on the FLAG ... there is good representation." [FLAG member – 22.10.13]

Yet these associations can face challenges to democratic deficit and collective working with their discussion forums often being dominated by community stars. A number of fishers noted that getting all the members to actively engage in their local meetings (rather than just attend) and securing a consensus within each group does prove challenging. This is discussed further in Part B as a common barrier to community engagement. Regardless of these challenges one participant notes how key a part the associations play in the social fabric for these often quite isolated and disengaged communities. The centrality of the associations to a sense of community identity and sense of cohesion makes them a key part of the social sustainability of these communities:

"Each community is a separate community in terms of its values and the way they interact with each other and they are particularly important for local fisherman to be involved in. [If they did not exist] would be as much damage to the culture and history of these communities ... like removing as Margaret Thatcher did, 250,000 mine workers, we saw the closure of mines associations, bands, and what we've got left are desert areas still to be recovered. ... [the associations] are a collective group where local people can talk about the sea, talk about issues, talk about how they are going to respond to the government's decommissioning of the U10M boats. Yes they can do that singularly but in that collective sense they belong to something." [Local council – 23.10.13]

As well as proving to be an excellent point of engagement and link to local level community governance for the FLAG, the FAs are also used by the Eastern IFCA officers as a useful touch point at which to share information and capture views on new byelaws and other fisheries management issues. In addition it is through the chair of the associations that local MPs and MEPs are engaged if an issue needs to be escalated. The fleet have experienced strong support from their local politicians at both national and European level yet their personal sense of participation or influence at these levels is limited to these requests for support / lobbying rather than through participation of the national scale fisherman's associations. With one community leader explaining very few fisher on the coast are members of the NFFO as they felt that didn't support their distinct interests, but rather those of the large off-shore boats:

"The NFFO nationally are more trawlers ... I don't think they represent the inshore fleet, no, certainly not beach launched boats like us." [Fisher – 10.11.13]

This absence of an industry regional or national voice for the Norfolk fisher's might explain why industry participants described how the FLAG and its network of fellow FLAGs (across Europe) acts as an increasingly valuable mechanism to raise the profile at regional and national level the challenges the fishers face in order to secure a sustainable future:

"[Researcher: Is the FLAG the first example of the politicians, the fishing industry and the conservation industry coming together?] Yes definitely. That has probably come at the right time with the conservation lobby pushing different aspects of the North Sea. I think that has come along at the right time and individual fisherman feel that FLAG, leaving money aside, has been fighting our corner all the way along and that they are becoming a stronger body as time goes on and people listen to them. The wind farm guys, Scira, take on board what the FLAG says, as such. It is becoming a strong body and I think it will get stronger. ... [and] there is a network in place now between different fishing communities and different FLAGs, and you can start to see a progression of good schemes coming through." [Fisher – 22.10.13]

1.2. Working with the Eastern IFCA (Inshore Fisheries and Conservation Authorities) for voluntary or fisher led-conservation

The fishers, FLAG members and IFCA representatives all commented on a positive and established relationship between the inshore fishers and the IFCA officers with regular contact around any issues affecting the fleets raised in

fisherman's association meetings escalated to the IFCA, or with IFCA officers attending those meetings to share information (e.g. around the MCZ process or new byelaws). This open and constructive dialogue means the fishers have worked with the IFCA on voluntary codes of practice (e.g. an existing 'gentleman's agreement' with the offshore boats around not entering inshore waters) and also in establishing fisher led voluntary conservation practices:

"We have put forward proposals regarding pot limitation and having an area over to six miles, the limit of IFCA, for just inshore boats only." [Did that initiative come from the IFCA or the fishers] "I have been looking into it personally for a while. I have studied other IFCAs around the coast and seen what they have been up to. I think for conservation purposes to keep the conservation lobby happy as well as protection our own stock levels for the future that is the way forward. A lot of the fisherman have agreed with me. With xxx [IFCA Officer] we set up a questionnaire which we sent to all our members. There was a good response to that. ... I think the fisherman can see the writing on the wall regarding these [conservation] issues." [Fisherman – 22.10.13]

The inshore fleet are supportive of these conservation practices not least to help sustainably manage their crab stock levels, however there were concerns raised by fishers about the scale of pots worked by the offshore fleet further up the coast which they have escalated to the IFCA given the threat to this fishing community from the scale of offshore fleet catch:

"[I]n my opinion, for the inshore fleet, the biggest problem is the amount of pots that are worked offshore. That is something we have raised with the IFCA, but of course they only go up to six miles. So they then have to raise that with DEFRA. ... There needs to be pot limitations put on. There needs to be a closed season during the winter. We quite happily do that ourselves on this part of the coast, but just us doing that is no good." [Fisherman – 23.10.13]

Yet a challenge for fisher-led conservation in a mixed fleet area is the difference in fishing practices and geography between the inshore and offshore fleet (a geography clearly not observed by marine life) which can create a barrier to local co-management as observed by this fisher:

"It goes through the IFCA first. That's not really something that FLAG can influence greatly, to be honest. ... [FLAG] is for everybody. Within our FLAG area we also incorporate Wells, so you have the bigger boats working out of Wells ... So it would be wrong of me to try and get the FLAG to say we have to do something about this because as a FLAG we're covering both inshore and offshore fleets." [Fisherman – 23.10.13]

If fisheries co-management is to be successful then clearly a way forward of working collaboratively with both sets of boats needs to be identified if the environmental and social sustainability of fishing in this region is to be secured.

1.3. FLAG catalyst for co-management approach that enables a collective fisher voice and multi-sector connectivity and understanding

The novel nature of a collective approach to working with the fishing industry through the FLAG is described below by a local council officer as being part of a process of increasing the sense of industry ownership for solutions to the challenges they face:

"This is the first time when we [the council] have looked at collaborative approaches and passing ownership of solutions as much to the fishing industry. Getting them to recognise their future was in their hands rather than the hands of DEFRA or the Marine Management Organisation." [Local council – 23.10.13]

Empowering a sense of influence through this approach is in contrast to the pre-existing rather passive local industry political culture of preferring to 'just getting on with going fishing' as this fisher describes:

"I think we have got more voice now than we ever had because we were always - just stuck our head in the sand, to be perfectly honest and just let life pass by. Because basically, all we want to do is go to sea and catch crabs. We are happy when people leave us alone just to get on with that. But it doesn't work like that anymore. ... I think we've just become more aware we have to be involved in these things." [Fisherman - 23.10.13]

The FLAG has been successful in securing strong fisher representation from the start of the programme despite the sector's traditional mistrust of the national management authority. That fisher representation and support in North Norfolk has been consistent throughout the programme where other FLAGs have struggled to avoid a turnover of representatives and dwindling support. Despite the early challenges in terms of national level programme management clarity and pace of processing (see Part B), the North Norfolk FLAG is now reflected upon by all case study participants as being a valuable mechanism to enable a collective voice for the industry at a scale where it had previously lacked any cohesion or strategic approach:

"One thing I have witnessed, which is moving really, ... is that they [the fishing industry] have begun to sometimes think strategically. Any strategic work requires collaboration and partnership and they have begun to see the value of working with all their members." [Local council – 23.10.13]

Secondly, the FLAG has provided a new experience of multi-sector co-operation that brings mutual insight and respect between a largely politically disengaged fishing industry, the conservation sector they have historically opposed and a local government that had had limited strategic engagement with the fishers until very recently. This new found capacity to co-operate and work in partnership is a large result of the FLAG experience:

"No contact at all really [regarding the fisher historical relationship with the council]. For me personally, going and sitting at these FLAG meetings, I have learnt a great deal about local officers. That has been a bit of an

eye-opener. You can see they are only too happy to try and help you if possible, which is a good thing. I wouldn't say [before] it was them and us – there was just no contact as such.” [Fisherman – 8.11.13]

The collective voice of the industry that is now emerging enables greater lobbying capacity, while the experience of partnership with the different sectors appears to be increasing the industry sense of collective responsibility for a sustainable future for their community and livelihoods that has a greater chance of success if determined through a collaborative/ co-management approach:

“So all these individuals are recognising that there is a position to put forward singularly as the organisation but collectively in an endorsed sense. So that's a new strength which really is emerging. ... I certainly see we've moved from an initiating stage through a pilot stage testing the fisherman. Trying to ensure that the after burn [from FLAG] fundamentally is their collective sense of need that they must stay together if they are to survive.” [Local council – 23.10.13]

The growing connectivity with all the FLAG members has like all aspects of the co-management approach been based upon building trust and relationships over time. The emergence of that confidence to speak out and raise the industry voice in that forum has taken time. The importance of building time for capacity development into a community led programme like the FLAG is apparent:

“I think there is much better dialogue around the table [now]. I think half of it is the Norfolk side of people, they don't start shouting or making comments until they feel comfortable and they know who's around them. I think it has definitely settled down ... There are common issues amongst them all and nowadays nobody will hold back.” [Councillor – 25.10.13]

One of the relationships that has been developing over recent years and has been decidedly improved by the FLAG collaborative approach has been that between the fishers and conservationists (e.g. Natural England). Their often conflicting positions is beginning to move towards mutual understanding, which is an essential foundation for any hope for future co-management of marine resources:

“We have had several heated [FLAG] meetings with the conservation bodies regarding this [MCZs] ... We know we have got to try to conserve as much of the planet as we possibly can ... In general we are getting on quite well with Natural England and any of the [conservation] organisations in place ... [“Do you think that is a shifting relationship?”] Dare I say it? Certain fisherman are more enlightened as time goes on!” [Fisherman – 8.11.13]

“I mean one of the things, perhaps, there [at the FLAG] that's not a natural bedfellow, is Natural England and the fisherman. Now the fisherman are beginning to understand what Natural England have to do by statute. They might not agree with it but at least they understand it. Also Natural England are beginning to understand where the fisherman are coming from. That has to help and is going to prevent any punch up in the future.” [Councillor – 25.10.13]

1.4. Facilitating the greater inclusion of the fishing industry into wider economic regeneration planning

Through the FLAG the council - for the first time in any meaningful way - has greater insight into the needs and economic potential of the fishing industry. Through that insight and establishment of dialogue the fishing industry is being included in wider socio-economic planning and development at a local government level:

“I think the FLAG has helped us as a district council to be more aware and have a better dialogue with them [the fishers]. Obviously that is good from our point of view because fishing is one of few industries left in North Norfolk and our particular priority is administration of business and the economy. It's good that we have much closer liaison with them. ... I think that everybody in the council understands the importance of the fishing industry and not just from the business point of view. It is a huge draw for tourism. ... I think it has raised the issue [of the industry challenges] and made us all think about it a bit more.” [Councillor – 25.10.13]

FLAG has made possible a shift in economic development planning that for the first time at local government level takes seriously the value added by the fishing industry to a much wider set of economic stakeholders and drivers in the area. Previously the industry has been seen as separate and something that was dealt with by national ministerial departments. A community led collaborative approach like FLAG for the first time brings the fisheries within the local regeneration and economic development policy portfolio:

“The radical shift is knowing that the fishing community is operating within the broader public policy on economic development and they're valued because they are identified now as a component [of that economic landscape].” [Local council – 23.10.13]

This shift in thinking has led to more ambitious objectives for the FLAG as it evolves beyond just project delivery to a community owned structure that develops its own strategy for activities that underpin their position in the supply chain and as is discussed in the next section their value to the wellbeing of the wider community. Central to that structure must be the ownership and leadership from the industry:

“To a point we have tested the ground and convened a group which has, for the most part, reached consensus on multiple areas of decision-making ... [going forward] the FLAG itself now [needs to] write its own sustainability strategy. As a co-operatively based approach, signs it off as the solid common purpose around which they will bring their influence to bear. ... it is on that strategy that they will renew their ownership.” [Local council – 23.10.13]

1.5. FLAG framework of 'whole community' planning and sustainability underpinned by centrality of regional fishing identity

The sort of strategic planning for and by the industry described above is in part triggered by the local council understanding of the national and European policy context of community led local development (CLLD) based on principles of subsidiarity of decision-making and communities working together in partnership to secure their own solutions to threats to their sustainability. Within this context the North Norfolk FLAG has not only focussed on acting as a catalyst for re-prioritising the industry within wider economic planning, it has also adopted a holistic approach to the FLAG projects in order to bring together all sectors within the wider community affected by and working in connection with the fisheries, for example this includes the tourism, conservation, hospitality, education and manufacturing. This is the purpose of the Axis 4 FLAG funding as this national management/ authority officer describes:

"They're a theme that couldn't be funded before [like] the billboards and the information placards ... things in restaurants saying this fish was caught by this boat ... they are getting into schools [and] doing that sort of outreach ... so yes it is around the education of not just children, but adults as well. There is the food side, the eating side of it, there's also the scientific educational piece about what's actually out in your water close by." [National management/ authority -15.11.13]

These sort of schemes are encouraged and enabled in the North Norfolk FLAG through an objective stream they characterise as 'virtual fishing' (in contrast to the direct work of fishing and landing their catch). Via 'virtual fishing' projects the FLAG seeks to re-connect the industry (socially, culturally and economically) to the wider community to which it belongs and to which it contributes so much. For example, by making the local provenance and value of the catch explicit and known in the supply chain this raises the profile of the industry contribution to the economy (through manufacturers, tourism, hospitality and heritage) and in doing so hopefully improves the security of the industry:

"At that point they'll have an understanding of the wider economy associated with the fishing industry. The actual effect they have on other people's lives in the value added chain. And for that value added chain to recognise where and who is providing the product for them to sell which gives them their niche." [Local council – 23.10.13]

The whole community development/ planning approach (i.e. all stakeholders impacted/ contributing from boat/pot to plate) is in part underpinned by the fishing industry being so central to the identity of the region. That contribution to identity and sense of place is in turn a major driver for the tourism industry that employs approximately twenty percent of the population in North Norfolk. FLAG has worked to reinforce that link through cultural, education and heritage projects where both local community members and tourists can learn about both the history and current practices of the industry. These efforts to re-connect the industry with the wider community and visitors is key to reinforcing the value of the fisheries in terms of visual imagery and cultural practices that are so integral to the North Norfolk coast identity:

"Very much built into that [tourism] sector is the cultural imagery of a district with a forty five mile coastline dotted with fishing boats. That feeling you could go gillying in Wells or off Cromer Pier and you can actually see the fisherman landing their crab and their lobster and Morston mussels. It has that feel, it's part of the character of our district that the fisherman are seen on the foreshore. So the fishing industry is inextricably linked to our tourism industry." [Local council – 23.10.13]

"We like to think that one of the mainstays of the tourism industry is the amount of people that come on that beach just to see you unloading your catch. I was in Blackpool the other weekend and I mentioned I was from Cromer and they just said 'Oh Cromer Crabs!' ... The fishing industry is part of the tourism industry." [Fisherman – 22.10.13]

The fishers are so central to the wider community in terms of the economic value chain they trigger and in terms of the identity to the region that this FLAG member reflects that they act as an indicator for the state of wellbeing of the wider community and as such their centrality necessitates a whole community (or more holistic) approach to planning and management:

"[Tourists] don't understand how deeply involved they are in the societies of those communities and that their wellbeing actually has an absolute reflection on how well those communities are doing. To lose the presence of the fisherman would almost lose the character of the settlement. ... But for radical thinking for the first time ... the thought of saying 'well hang on a second lets now integrate the fisheries into general public policy on economic development and see how it stands.'" [Local council – 23.10.13]

2. Part B - governance barriers to IF voice and a sustainable fishing community

2.1. Traditional barriers to small-scale fishing industry engagement including: geographic isolation, lack of community political capital, individualism and reliance on community stars

The FLAG is working to overcome a historical apathy for collective action and the natural individualism of the fishers that has acted as a barrier to engagement in local governance. As this fisher makes clear there is definite progress in support for the FLAG but they still struggle to secure a collective voice and engagement in the local governance structures beyond the few committed community stars:

"The fisherman are getting more engaged in asking for things now: whereas before they would just say, "I don't want anything to do with it. [Why weren't they initially interested?] The fishing industry in this area has been in the doldrums a long time. I would describe them as 'lacksadaisical' about everything. They just plod along at

their own pace and do their own thing. They are all independent. We may have a society ... we are the voice for all these independent-minded fisherman, as best as possible. It is a job keeping them all happy to tell you the truth.” [Fisherman – 22.10.13]

The innate individualism of fishers is a common trend in all the case studies and is repeatedly raised by fishers and non-fishers alike as a challenge to industry engagement as there is absence of any inclination or experience of collaboration, or specifically the skills required to make that successful. This is a challenge for those within the industry who see the greater benefits of lobbying with a collective and unified voice rather than acting as individuals as their day to day practice has demanded for many generations: “Everything about them is independent” [Regional conservation body – 16.12.13]. This individualism is in part exaggerated where small numbers of boats are spread over a large coastline resulting in physical as well as socio-political isolation. This reluctance to engage also makes the wider community less likely to connect with them. For example this local council member explains how the local government have not engaged much historically with the fishers in part due to the industry reluctance to be drawn into local community planning:

“So they have been considered for a long time a very important part of our society but a very difficult part to hold a conversation, to engage with. Very disparate across the whole face of the coast, very introverted. Appearing only to be interested in their own affairs and quite rightly so because they survive despite European and National policy not because of it. So why the hell would they want to talk to another sector body?” [Local council – 23.10.13]

Yet the multiple threats the industry faces – with loss of fishing ground due to offshore developments, or fishing restrictions with the introduction of MCZs, or the loss of critical mass with the dwindling number of new entrants to the industry - has led some fishers to understand that this apathetic approach to activism or collective action must be overcome if they are to survive and secure a sustainable future for their community and livelihood:

“[B]asically, all we want to do is go to sea and catch crabs. We are happy when people leave us alone just to get on with that. But it doesn't work like that anymore. ... I think we've just become more aware we have to be involved in these things.” [Fisherman - 23.10.13]

The security and resilience of fisher voice and influence in local and regional planning – be it around economic regeneration or marine conservation - is undermined by a reliance on a few ‘community stars’ who do the majority of work in attending meetings, lobbying politicians, responding to consultations and taking part in the relevant governance structures. This lack of depth of representation and engagement raises questions over absence of succession of community leaders and perhaps more importantly any form of collective responsibility beyond a few dedicated individuals:

“It's not particularly problematic, but there are three or four of us who just do all the work, basically. We had an association meeting last night [with] somewhere between fifteen and twenty of us in the room. If four different people spoke out of those twenty, that's it. Yet, you'll go down the beach this morning and they are all nattering about what we were talking about last night. So to get them to voice an opinion, never mind get involved, is nigh on impossible.” [Fisherman – 23.10.13]

Again as noted in all the case studies the complex norms of formal governance and government are both alienating and obstructive in terms of fisher engagement. Many fishers feel they aren't able to use the right formal or technical language to participate in these forums unless they have someone to facilitate that access:

“[FLAG members] know now to contact these people [those at national level governance] and how to speak to them. It is how to put the words forward. I left school at 15, I know what is in [my mind] but it is putting into words or putting a letter forward that [they] can do. ... We are not stupid people, fisherman, but it is hard for us to put in words what we are thinking at times. With people like xx [FLAG member] and xx [FLAG member] in place they can voice our concerns and they can voice them more quickly than we can.” [Fisherman – 22.10.13]

2.2. Low levels of new industry entrants and risk of loss of critical mass

As with many inshore fleets one of the greatest barriers to a sustainable future is the high levels of attrition as fishers leave the industry and the low levels of new entrants as the threats to this livelihood mount and entrance becomes prohibitively expensive and high risk. Without securing the numbers of new entrants to the industry there will be no inshore fleet and the cultural practices, regional fishing identity, fresh local catch and the wider economic value chain that relies on this sustainable fishing industry risks being lost to these communities:

“There just isn't the next generation ... there is just a handful of under thirty year olds.” [Regional conservation and management – 16.12.13]

“I am sixty now. I have seen such a change in the industry in that time. When I first started going to sea with my father at fifteen, boys my age had fathers who were fisherman, but now their sons have drifted away from it. There is a void there and myself and a lot of fisherman would like to see that void filled through the apprenticeship schemes. ... It will die out if we don't encourage youngsters to come into it. FLAG is there to help in any way it can to encourage that you see.” [Fisherman – 22.10.13]

Given the serious threat to the social and economic sustainability of the fleets FLAG has focussed its efforts on new fisher training, apprenticeships and making the industry a safer and more economically productive one in order to try to secure succession and the next generation. Making the sustainable fishing practices off this coast an economically viable option for the next generation is central to this FLAG and as described above they are seeking to do that by raising their

collective voice and influence in regional economic planning, and lifting their value in the supply chain and in future plans to secure micro-finance for a high-risk industry with limited access to traditional credit:

"[S]ustainable income generation based on them having the ability to survive. So costal survival budgets, access to finance where they're inhibited in growth, doing more in their industry ... not catching more ... but more efficiently fishing and marketing ... we've got one of the most sustainable small boat fisheries in the country ... so I think if our industry if it is managed and bring forward the youngsters who are going to show some interest in it for employment, either processing or being part of the value added chain [then] I think there is life in the industry." [Local council – 23.10.13]

2.3. FLAG specific challenges for industry engagement and co-management

The same obstructive governance norms described above also sadly apply to the FLAG projects where the administrative burden is a direct barrier to engagement:

"One of the key issues, and you will probably find this in every FLAG, is that there is a disconnect between the fisherman who have to go about their day-to-day business and the quite heavy administrative burden of filling in the paperwork and trying to apply for projects. To be perfectly frank they are forms that have been tailored to the public sector way of talking, with objectives, indicators and the like." [FLAG member – 22.10.13]

In this respect the FLAG animateur has been an essential 'translator' and enabler to help the fishers gain access and secure a voice in these forums.

As in all the case studies the programme management level complexity of processes and eligibility regulations, and slow pace of project and claim processing has tested the fishers trust in the programme. This was particularly detrimental to the developmental stage of this collaborative approach:

"[Regarding the many levels of sign off required for the projects] it shows a huge lack of trust in us ... But you know if the people further up the line knew us, then you would hope that they would be little more trusting." [Fisherman – 23.10.13]

"I think there is now beginning to get a lot of distrust from the fisherman on the ground. I think [the FLAG board] are concerned there is reputational risk there." [Councillor – 25.10.13]

"As regards the FLAG they [the other fisherman] didn't have a lot of time for. One chap said to me 'We will be lucky if we get a tap for the beach!' And for a year and half I tended to agree with him." [Fisherman – 22.10.13]

Towards the end of 2013 improved clarity on these regulation issues, greater understanding of the programme by all parties, building of good relations with the national level officers and with the money arriving for the first successful projects the FLAGs are slowly re-building wider industry trust that is so central to securing diverse sector support and participation:

"It has taken us [FLAG board] all this time to get their trust back. Now they are applying. ... You can see them softening, and it is really good, but it has taken all this time for that to happen." [FLAG member – 22.10.13]

"They [MMO] have held back a lot of things we have put forward. Bureaucracy you could blame. I don't know. [However] they were actually finding their feet and setting up in a different mode compared to how they were and perhaps that was down to lack of communication on our part with FLAG. Now you can see the wheels turning in our favour. There are a lot of fisherman coming forward now towards FLAG with projects." [Fisherman 22.10.13]

MMO participants acknowledge the initial frustration from FLAGs owing to their pace of processing which was aggravated by efficiency cuts, a small team and limited experience at the beginning of the community style projects being submitted for approval. They also highlight the efforts they have made to overcome the mistrust described above that is in part aggravated by having both an enforcement role at local coastal level and the funding role at national level. Further, as the programme progressed they make clear that there was greater understanding on the part of the FLAGs regarding quality of the applications required and so this in turn increased the processing speed at national level:

"I think certainly at the start of the process there was a bit of frustration at our turnaround timeframe. I think there's now a much better appreciation in terms of the quality of the applications [needed] ... also that we are a small team." [National fisheries management – 15.11.13]

3. PART C - Conclusions and key sustainability issues

The table below offers a summary of the key ways in which the existing infrastructure and governance processes engage with economic, environmental and socio-cultural sustainability issues. The research demonstrates that the combination of an existing fisher local governance infrastructure and the strong sense of fishing identity in the region have both played a key role in underpinning the fisheries focus of the FLAG and ensuring strong fisher support and engagement despite having to overcome early bureaucratic barriers that initially knocked the reputation of the FLAG within the fishing community. The case study shows that although the fishers contribute so fundamentally to the sense of visual and cultural identity and socio-economic wellbeing along this stretch of coast, they have historically lacked as an industry any real collective voice at a national or European level and have demonstrated an apathy for activism or strategic political engagement. Now through the FLAG they are learning the value of a collective voice and the need to work strategically in collaboration with other sectors (local council, education, tourism and conservation) to secure a sustainable future for Norfolk fishing communities. The growing numbers of competing (and sometimes conflicting) interests in the marine and

coastal environment has meant for many participants the FLAG is a timely mechanism to develop dialogue and consensus on how to secure both the marine environment and fisher livelihoods. The whole community approach adopted by this FLAG makes explicit the interdependency of the different stakeholders involved, and seeks to encourage community ownership of solutions to threats to their sustainability. This has included taking steps to integrate the fishers into wider local government economic development planning for the first time.

Environmental sustainability issues
Working with the IFCA (Inshore Fisheries and Conservation Authorities) to develop voluntary and fisher led-conservation helps establish the experience and principles of co-management that offer a possible route to improved fisheries governability.
FLAG has facilitated multi-sector connectivity that has enabled representatives from the conservation bodies and the fishing industry to develop a mutual respect and understanding of their sometimes conflicting interests. This new insight and improved relations between the two sectors paves the way for finding fisheries management solutions that both protect the marine environment and the livelihood of these fishing communities.
Social sustainability issues
An established local level governance infrastructure through the Fishing Associations (FA) and their consistent support of the FLAG underpins the grass-roots good governance of this FLAG structure and secures a stronger route for fisher voice to the sub-regional scale.
Yet the FLAG has to work hard to overcome an historical apathy for collective action and the natural individualism of the fishers that has acted as a barrier to engagement in local governance.
Even with the noted barriers to active participation (i.e. a large number of fishers just attend and listen at FA meetings) these local structures provide a catalyst for community identity and belonging. They play their part in nurturing the social fabric of their respective communities.
While there is limited fisher engagement or sense of influence at national or European level this has resulted in their growing commitment to the FLAG as a mechanism for advancing their collective voice and industry interests at national level (through Defra and the MMO).
The security and resilience of fisher voice and influence in local and regional planning is undermined by a reliance on a few 'community stars' and a need to overcome some of the social capital deficit of members of the fleet who don't feel able to engage in formal forums and find the governance norms alienating and obstructive.
One of the greatest barriers to a sustainable future for this region are the high levels of attrition as fishers leave the industry and are not replaced by the necessary number of new entrants.
FLAG has worked to reinforce the powerful link between the fishers and regional identity through cultural, education and heritage projects where both local community members and tourists can learn about the history and current practices of the industry. These efforts are key to reinforcing the value of the fisheries in terms of visual imagery and cultural practices that are so integral to the North Norfolk coast identity and as such are tied to the social sustainability of their communities.
Economic sustainability issues
The FLAG, as a community led collaborative model, has for the first time brought the fisheries within the local regeneration and economic development policy portfolio and as a result has focused political attention on the economic sustainability of this industry.
Making the sustainable fishing practices of this fleet economically viable for the next generation is central to the FLAG and includes trying to increase the catch value, and ensure any value added is received by the fishers.
Future plans to develop an industry focused micro-finance vehicle would also help them overcome the barriers they face as an industry in accessing secure credit.
The FLAG whole community planning approach is in part underpinned by their understanding that the fishing industry is so central to the socio-economic well-being of the region (particularly in terms of tourism spend and employment). For example, by making the local provenance and value of the catch more explicit in the supply chain this raises the profile of the industry contribution to the economy (through manufacturers, tourism, hospitality and heritage) and in doing so will hopefully improve the economic resilience of the industry.

3.8 Cornwall and Scilly Isles FLAG (England) Case Study

Introduction

1. Part A - features of governance enabling IF voice and a sustainable fishing community
 - 1.1. Mature regional level governance infrastructure engaged in strategic national and European agendas
 - 1.2. Established network of key individuals leading industry political lobbying and efforts to increase fisheries participation in strategic economic development
 - 1.3. Fishers and conservation: sharing fisher local ecological knowledge, growing experience of working with conservation bodies and the key role of the IFCA in helping bridge the historical divide between protecting the marine environment and supporting viable local fishing communities
 - 1.4. FLAG structure focus on a pragmatic approach to securing greater community resilience through improved social and economic sustainability
2. Part B - governance barriers to IF voice and a sustainable fishing community
 - 2.1. Barriers to securing the scale of fisher engagement needed at a local grass roots level: including issues of isolation, individualism, reliance on community stars, negative perception of fishing industry, lack of experience of the processes involved and investment required for representation
 - 2.2. FLAG specific challenges and lessons for future CLLD
3. Part C – conclusions and key sustainability issues

Introduction

Covering the largest coastal area in any of the English FLAGs the Cornwall and Scilly Isles FLAG is 3,563 square kilometres in size (See Figure 13), and as an industry fishing employs directly over 1000 people in the region. The Cornish fishing industry is one of the most varied in the UK with over fifty different species landed and fishing practices ranging from otter trawling to crab/lobster potting, to hand lining (FARNET, 2014). The large mixture of gear, size of boat, catch and vast distances within and between different ports is an important consideration in developing a more inclusive management approach in this region. Fishing is an important part of the Cornish economy and as in the other case studies it makes a substantial indirect contribution to the coastal economy through the draw of the fishing boats, fresh fish to buy and eat, and the picturesque fishing villages that are so central to the identity of the region and the tourism offer.

Responding to challenges facing the industry in the region (including rising costs such as fuel and licences, reduced number of new entrants, ageing demographic, increasing displacement of fishing grounds for conservation and other commercial factors, climate change, declining port/harbour infrastructure and poor market/supply chain conditions) the area secured FLAG status. FLAGs are funded by Axis 4 of the European Fisheries Fund (EFF) and are intended to support the sustainable local development of fishing industries and their related communities without increasing fishing effort. EFF is managed in the UK by the Marine Management Organisation (MMO), a non-departmental public body under the government Department for the Environment, Food and Rural Affairs (Defra). Cornwall and Scilly Isles is one of six English FLAGs. This funding programme has been developed in part owing to the acknowledgement at European Commission level that fisheries in smaller communities often make a considerable contribution to direct and indirect tourism, cultural and social value (DGMARE, 2013). Thus many of the FLAG projects focus on capitalising on these contributions through encouraging tourism and cultural fisheries related projects for example through fish festivals, heritage centres and art installations. In addition to securing a higher value for catch landed through marketing and supply chain innovation. Making fishing a more secure profession to attract the next generation of fishers has also been central to a lot of the FLAGs with investment in fisher training, in port/ beach infrastructure and other health and safety elements on the boats. EFF will be replaced by the EMFF (European Maritime and Fisheries Fund) in 2015 with a particular focus on Integrated Marine Policy (IMP).

In terms of governance Cornwall Development Company is the accountable authority for the FLAG and it reports to the MMO. The FLAG has a mixture of fishing industry (fisher, fisherman's association chairs and Harbour Masters), private and public sector stakeholders (including local authorities and national environment and conservation bodies). In terms of industry representation at a national level the fishers have the option of membership through the NFFO (National Federation of Fishermen's Organisations); the inshore specific national association NUTFA (New Under Ten Fishermen's Association); and the Shellfish Association of Great Britain (SAGB). At a regional level many of the fleet are represented by the Cornwall Fish Producers Organisation (CFPO) or the South West Handline Fishermen's Association (SWHFA); while at a local level (to varying degrees of activity) smaller fishing and harbour associations exist to provide local fisher representation and organisation.

English inshore fisheries management (operating within six nautical miles) is policed and managed by the IFCA's (Inshore Fisheries and Conservation Authorities). The Cornish fleet work with the Cornwall IFCA and Isles of Scilly IFCA. The IFCA's co-operate with the MMO on several areas including fisheries enforcement and marine protected area management. IFCA's are funded through local authorities, but report to Defra. IFCA's replaced sea fisheries committees in April 2011, with an important expanded socio-economic remit to *"lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry"* (Defra, 2010). The MMO is responsible for regulation and licensing of fishing in England. The duties and powers of the IFCA's and the MMO are set out in the Marine and Coastal Access Act 2009 (UK) and this takes account of European Union instrument for fisheries management the recently reformed Common Fisheries Policy or CFP (EC COM, 2013). The Marine and Coastal Access

Act, 2009 (UK) establishes the marine planning regime for the UK including underlying ICZM principles and the designation of a network of Marine Protected Areas (MPAs) (and in England Marine Conservation Zones (MCZs). Natural England (an Executive Non-departmental Public Body that is responsible for advising the UK Government on the natural environment) works with relevant stakeholders in helping inform Defra on their planning for these sites. UK fisheries management and marine planning is informed by Cefas (Centre for Environmental, Fisheries and Aquaculture Science), who are the executive agency responsible for carrying out research and monitoring of fish and shellfish stocks.

The following section highlights the key themes that emerged from the research based on detailed manual thematic analysis of the interview transcripts. The dominant themes identified in the data make explicit that this is a community under pressure with distinct sustainability challenges but also opportunities to better secure the future of fishing communities in Cornwall and their contribution to the coastal economy. Central to the future of the inshore fishing industry in Cornwall is securing the scale of fisher engagement needed at a local grass roots level by working to overcome issues of isolation, individualism, reliance on community stars, and a lack of experience of the governance processes involved that are required for meaningful representation.

The findings are divided into three sections. Part A highlights the mechanisms, structures and agendas that are used by the fishing community and stakeholders to advance their voice and influence in different scales of government (e.g. local to EU) and through different sectors (e.g. public and private). Part B highlights the key issues, structures and governance features that are acting to obstruct that voice and agenda advancement for fishing. While Part C offers a summary table of the manner in which these findings engage directly with the environmental, social and economic sustainability of the fleet.

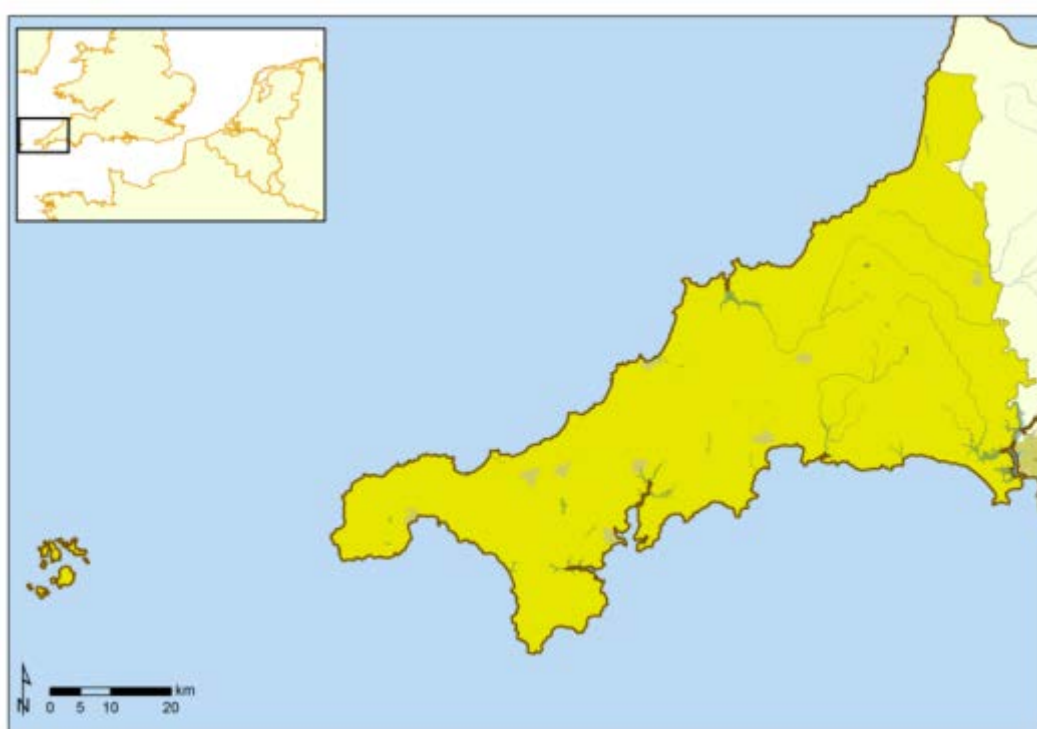


Figure 13. Cornwall and Scilly Isles FLAG in England (Source: VLIZ, 2014)

Table 13. Cornwall Case Study Participants

	Interviewee	Sector/Role	Date	Length
1.	Participant A	FLAG A	05.11.2013	60 mins
2.	Participant B	FLAG board	07.11.2013	41 mins
3.	Participant C	Harbour master	07.11.2013	63 mins
4.	Participant D	Industry training	05.11.2013	13 mins
5.	Participant E	Regional fisheries governance/ conservation	04.11.2013	42 mins
6.	Participant F	Community harbour organisation	07.11.2013	32 mins
7.	Participant G	FLAG B	02.12.2013	35 mins
8.	Participant H	Fisherman's association chair	05.11.2013	56 mins
9.	Participant I	Fisherman A	08.11.2013	60 mins
10.	Participant J	Fisherman B	08.11.2013	60 mins

1. Part A - features of governance enabling IF voice and pathways to sustainable fishing communities

1.1. Mature regional level governance infrastructure engaged in strategic national and European agendas

Participants from all sectors noted the importance for the Cornish fishing industry of the CFPO (Cornish Fish Producers Organisation) in engaging with national and European level issues such as CFP reform around discards and regionalisation. The CFPO is presented as a mature and established structure with high levels of membership in the region not just in the over ten metre fleets but also unusually for UK POs a sizeable portion of the full-time under ten metre fleet:

“As far as I know it is the only PO out of the 19 in the country that has more than about a handful of under ten metre members. It's got however many now over a 100. Probably somewhere about 120 I think. ... I sit on the PO board, as do at least 3 other under ten metre fisherman, which again is pretty unique for any PO in the country to have that level of U10M representation.” [Fisherman's association chair– 5.11.13]

“[I]n Cornwall we've got a very mature CFPO, Cornwall Fish Producers Organisation. By mature, it's been going for 30 years. It's well established, has good reserves and is quite stable. ... Then that has got a really wide range of boats. All the over ten metre and significant amounts of the under ten metre. They are then related to 16 local fishermen's associations all around the coast. So there is quite a good framework established.” [FLAG B – 2.12.13]

This structure provides a valuable and significant collective voice for industry representation at senior forum, for example, with ministers, DEFRA and MMO either directly from the PO or via the NFFO if it is a national issue:

“We talk about it at the PO board. It gets taken from the PO either directly to DEFRA or the MMO. Sometimes via the local MP. ... If it is agreed at PO level [it] will definitely get up somewhere onto the DEFRA radar. Things will get pushed upwards and I think the voice gets generally heard.” [Fisherman's association chair– 5.11.13]

Participants noted the key individuals involved as central to the security of the Cornish industry voice and participation in national fisheries policy debates. The policy and industry expertise of these community stars was observed as being a considerable asset to the sector – a point we develop in the next section.

Outside of the CFPO there is the SWHFA (South West Handline Fishermen's Association) which represents over one hundred and fifty handline fishermen in the South West region. This is noted as a key organisation for supporting the smaller boats in the region and promoting their sustainable fishing practices. Between these two organisations there is a very professional and organised representation of fisher voice at the regional and national scale that is key to their ability to raise issues, respond to threats and secure a future for the industry:

“It's difficult for individual fisherman to have a voice, but obviously if there is an organisation that they can go to, that's for their interest then that is going to help. ... Everyone can have a voice if they choose to join somewhere.” [Industry training - 5.11.13]

While CFPO and SWHFA indicate a more democratic structure of representation the industry in Cornwall has also benefited from regional marketing structures such as Seafood Cornwall and also from regional quota management via the Duchy Fish Quota Company - to ensure quota from boats being sold remains in the region for future generations of fishers rather than be sold on and lost forever. Seafood Cornwall has previously worked to help develop the market and value for Cornish fish in order protect the future interests of the industry. Both contribute to an infrastructure that acts to improve the resilience of Cornish fishing communities and their way of life. This FLAG member describes the role of these regional structures in shaping the strategic direction of the industry:

“[T]hat's where others of us who do have the time and expertise like the CFPO, ourselves [FLAG], board members of the Duchy Fish Quota, need to put time in. ... The strategic thinkers need to think strategically where we want to go and we need to interpret how we take the Europe 2020 agenda and make it relevant and deliverable for local industries.” [FLAG B – 2.12.13]

1.2. Established network of key individuals leading industry political lobbying and efforts to increase fisheries participation in strategic economic development

As the discussion above indicates the region benefits from the strategic level experience and knowledge of a pool of key individuals (largely involved in the above structures) with valuable and established industry networks and relationships at regional and national level. For example, network connections to the LEP (Local Enterprise Partnership) - the English regional economic development planning mechanisms - results in marine and fisheries playing a more vocal part of conversations at this scale. Fisheries representation by these key individuals ensures the industry is part of that regional dialogue in Cornwall, where in other FLAG regions they play a much less prominent role:

“We're lucky with Seafood Cornwall in that our chair is also chair of the LEP, so there's quite a good connection there. ... Hopefully post 2013 because the LEP are quite interested in what's happening with fisheries and quite like that fisheries are actively involved, then I think there will be a strategic element to it which will then engage the sector again. FLAG would be part of that, but I don't think it would happen because of the FLAG.” [FLAG board – 7.11.13]

The importance of the industry being involved in economic planning structures (like the LEP) to achieve greater socio-economic security was widely acknowledged by participants. However, it was observed as being a challenge for the broader industry given its history of not engaging at in regional economic development (i.e. as separate from their regional / national fisheries management engagement). This is also interestingly presented in contrast to the experience of the French industry where a number of case study participants feel there is greater political significance placed on fisheries and greater cultural value attributed to fishers:

"I think yes fishing should be there [at the LEP]. [But] it is not very good at engaging with these wider things. ... It is the right idea to be involved and plugged into a wider economic development. That's something the fishing industry doesn't do very well. Seems to be do better in France ... Maybe that's because of the political significance of the fisherman. [But] yes the LEP's the way to go." [Fisherman's association chair – 5.11.13]

The knowledge held by the industry and related stakeholders following the previous Objective One project secures infrastructural capacity in the region that has been key to facilitating the setup of the FLAG in Cornwall. This established network and the social capital it engenders enables the industry to overcome some of the traditional barriers to multi-sector strategic engagement, where other fleets struggle to secure this connectivity owing to a lack of experience, conflict and social capital deficit:

"I think they have a bit of skeleton framework from that (PESCA), that held together. ... There was obviously knowledge of that, and think that is probably why it didn't take so long and it's gone off to quite a good start. A very good start because there was an understanding of the structure and how it works, and a really good representation around the table of people who knew what they were talking about. Knew how to get projects moving and the strategy well written. There was no hanging around." [FLAG A – 5.11.13]

"I mean my original contact with them, if you go back before the FLAG, I was on the priority management group, the Objective One for six years, so I found that very useful. Because not only is it very useful to make useful contact anyway. But if there is anybody trying to do projects around the harbour, very often you know who they need to contact then to get the projects up and running." [Harbour master – 7.11.13]

Not only does this previous experience and knowledge facilitate the establishment of new governance and mechanisms for collaboration it also means there are existing strong relationships with the industry that have built up over time and helped secure trust between external stakeholders (for example in the CRRC, Seafood Cornwall Training and Duchy Quota Company) and fishing industry representatives. Developing trust, knowledge and strong relationships in this network has been important for the success of current collaboration through the FLAG and also in terms of the potential of future co-management structures on a larger scale: *"It comes down to trust and there is a lot to be said for building a relationship over time."* [FLAG B – 2.12.13]

Having established these networks and having had the experience of collaborative governance mechanisms (e.g. through the FLAG) there was a hope noted by a number of participants that future iterations of these structures would evolve to take on more strategic industry agendas and be more transformative in terms of securing the economic development of Cornish fishing communities. This would involve a shift from a project processing agenda to one that reflects more on fulfilling the industry potential and taking time to consider the major challenges facing the industry and how these might be overcome:

"The opportunity is immense now, because we've had people sitting round a table for a year. We need to shape the meetings more ... what we need to do is say 'right- wind farms. Marine zones.' Whatever the IFCA priority is. We actually [need] to take a bit more of a holistic approach and look at that. [For example] the benefits of tourism. 75% of visitors to Cornwall put as their top thing they came to Cornwall to see (and what they remember about Cornwall) is the small coves and harbours. The economic power of the inshore fisherman in St Ives is worth millions to that economy. ... if we go forward with community led local development I think there is a real opportunity." [FLAG B – 2.12.13]

There is also an appetite noted within this group future fisheries structures to work more closely with the LAGs (Local Action Groups) in Cornwall - again ensuring that fisheries is more integrated into the wider development planning in land. The result would be a more whole system (and whole community) approach to planning that acknowledges how the inland and coastal/marine economy interact; the explicit interconnectivity between the different ecosystem services; and of course the relationships and cultural identities shared by their respective communities:

"Obviously in terms of sustainability that will have a much bigger impact, because fishing is not just fishermen it's trying to integrate loads of different groups of people. That's the whole idea to get everyone working together in the community ... The applicants for the project would be talking to each other all the time. They'd form new partnerships. ... They'd get everyone's voices working together ..." [FLAG A – 5.11.13]

1.3. Fishers and conservation: sharing fisher local ecological knowledge, growing experience of working with conservation bodies and the key role of the IFCA in helping bridge the historical divide between protecting the marine environment and supporting viable local fishing communities

The twin responsibility of the IFCA for inshore marine conservation and supporting the socio-economic wellbeing of local fishing fleets means it plays a unique role in helping bridge the historical divide between protecting the marine environment and supporting viable local fishing communities.

"We have to try and maintain local fishermen's interest ... balanced against the conservation needs. Hopefully the two can work together. Without fish you haven't got any fishing so there has to be that slant on conservation. But it is really critical that we look to maintain the inshore fisheries and we try to do that through our bye-laws ... such that we do have viable fishing communities." [Regional fisheries governance/ conservation – 4.11.13]

The relationship between fishers and marine conservation is often presented in popular media as a grossly simplified polemic argument reinforcing a misconception that all fishers and all fishing practices have a detrimental impact on the marine environment. Participants argue the fishers are in fact minded to consider the long-term management of the seas not least to protect the livelihood of future generations of fishers:

"You'd like to think that everyone thinks if I had a son and he wants to go fishing I've left something for him. I think most fishermen do have that view, whether or not they have a family coming behind. They do see the need to leave something there, have conservation in mind." [Regional fisheries governance/ conservation – 4.11.13]

By the IFCAs engaging and working with the fishers in survey work this informs all parties as to both the marine science behind these decisions and the fishing practice implications of that science. This shared knowledge in turn informs the process of co-operation. While the industry support and participation in education projects like Fishing for Litter and Surfers Against Sewage that show the benefits of sustainable fishing practices and the importance of marine conservation all help overcome traditional barriers between the two sectors and the negative perception of fishers in this overly polarized debate.

"Particularly in recent years we've gone out and done research work of our own and we've engaged the fishermen using their boats, their gear, their knowledge to get the best results. ... They are the people who know more about the fishery than anyone else. ... It makes them [fishers] understand what it is we've got to see and evidence and therefore they can understand the logic of why we've arrived at a particular decision. Yes it should work both ways. They help us but we also help them understand what it is we're supposed to be doing here [in terms of conservation needs]." [Regional fisheries governance/ conservation – 4.11.13]

1.4. FLAG structure focus on a pragmatic approach to securing greater community resilience through improved social and economic sustainability

The diversity of representation in terms of sector and geography was noted by a number of participants as key to the whole community approach of the FLAG. For example by having democratically elected councillors on the board from local coastal communities the democratic mandate of the structure is enhanced and members of fishing communities have a direct route into the FLAG board. It also provides an important mix of expertise and knowledge across different sectors that allows for projects that better connect or integrate the fishing industry and wider community for social, economic or environmental outcomes. This rare mixture of fishing industry representation, conservation agencies, local council, regional industry training, regional tourism and harbour masters (with their detailed knowledge of the multiple port stakeholders) provides shared insight and respect, and so a very embryonic example of co-working that may prove valuable for future governability of sustainable fishing communities. Certainly, the diversity of the FLAG representation makes it easier to develop projects that extend the reach and connectivity of the fishers into different parts of the community, for example, the inclusion of the tourism sector in FLAG board representation is evidently important given the contribution of the fishing industry and fishing identity to Cornish tourism as this board member notes:

"I think it's really good to have the tourism element involved. xxx [previous project with fisheries] was supposed to be looking at diversification of other products and we really struggled because we weren't so closely linked to the tourism sector. So that's been really useful and obviously FLAG is about [fishing] communities." [FLAG board – 7.11.13]

The observation below reminds us of the importance of this fishing/tourism link and the need to better articulate and recognise the value the industry contributes to destination tourism and the identity of Cornwall more generally. Given this valuable link it is understandable that a number of the FLAG projects have sought to further develop the mutual economic benefits to each industry and the socio-cultural benefits to the wider community and visitors:

"We know from some of the work that Cornwall council have done, it's up there in the top one or two visitor experiences. Cornwall relies on tourism, people want to come and see fishing harbours, quaint fishing ports. It is massive. Its importance from that perspective is so understated, it's unbelievable. That needs to be much higher." [Fisherman's association chair – 5.11.13]

Despite this strong element of diversity in the FLAG structure helping ensure multi sector representation there was a feeling from some participants that there needed to be even greater fisher input and also greater fishing industry (e.g. fish merchants) representation involved in order to bring forward more economic development focussed projects (e.g. supply chain projects to improve the value and premium for locally caught fish) that would help reduce or maintain fishing effort and increase value added. The implications of this gap in representation and the barriers to deeper industry representation are addressed in more detail in section B below. One of the central elements of overcoming some of the barriers to fisher and fishing industry representation in Cornwall has been the instrumental role of the FLAG animateur. Nearly every participant noted the value of this role and approach adopted by the person in post as being key to building trust with the industry representatives and working hard in their outreach across this large FLAG area to try to secure the input and support for as many of the fishing communities in the region as possible. This was particularly important for the very isolated and small fishing communities that have historically had very little formal contact with regional structures or support from European grant funding:

"[H]aving a good animateur who just seems to get on with everyone, which is brilliant. ... I think he have been pretty key in making it work and trying to strip through the bureaucracy ... the fact that he is based in Seafood Cornwall Training and people can just pop in and see him and he's very accessible, is really good. So I would say it's hugely down to the people on the ground because the fishing industry are generally a bit sceptical of funding ... They are more used to it now but it still takes a while for them to trust people [and] I think he's managed to do that really well." [FLAG board – 7.11.13]

"[W]ith our fisherman we have significant issues over language experience. They don't know the complex language and their spelling and reading can be well below an 11 year olds. We get round that by sitting there and [the animateur] writing for them." [FLAG B – 2.12.13]

One participant noted that the work through FLAG and other grant funding is concerned with *"empower[ing] those complex coastal communities"* and that this holistic multi-sector FLAG approach is part of efforts *"trying to make a more resilient Cornish community"* [FLAG B – 2.12.13]. In this respect the Cornish FLAG has had numerous examples of very successful practical projects that improve the viability of fishing as a livelihood, for example, in terms of saving hours worked, improving safety, and securing improved freshness and so value for catch. Through straightforward projects like those in Coverack Harbour which includes an ice store, and a harbour side winch and David the fishers' work is more efficient, is overwhelmingly safer, and involves shorter working days and less fuel consumption through not having to travel further up the coast for the necessary facilities. In Coverack this has attracted new boats, the fishers have volunteered higher investment in the harbour company and perhaps most importantly it has raised expectations for future generations that authorities care enough about the fisherman and their families in small fishing coves to invest in them and make it a more economically and socially viable livelihood. Without that new infrastructure the fishers faced financial challenges and risked serious injury. In short without this project the boats may have been lost from Coverack and their central role in the cultural identity and socio-economic security of the community (the fishing boats are a key tourist attraction) would be undermined or lost:

"It has made a tremendous difference because fishermen were concerned that fishing was going to die out here because we did not have modern facilities. ... Fishing is now in the 21st Century as far as this harbour is concerned. We are fully modernised even though the harbour itself is 300 years old, built by our ancestors. ... That means that not only do the fishermen see their livelihood continuing, but they see prospects for the future for their children, and their children's children. ... So it just enhances it all and makes it even more viable to stay here." [Community harbour organisation - 7.11.13]

The FLAG have also supported the Seafood Cornwall Training professional training hub based on the port side in Newlyn at the centre of the industry activity in this busy fishing port. The presence of a training centre for the industry not only creates a place that the fishers can feel comfortable training in (as it is tailored to their needs), it is also easier and cheaper to access for fishers and also acts a community centre for exchange of knowledge and support on form filling and developments of grants. The training centre is a hive of activity and a trusted touchpoint for the fishers with team members in the training centre that will signpost the fishers to advice and support that facilitates the wellbeing of the industry. In addition the centre acts as a space for fisher/ industry led education for primary schools in a project called 'Net to Plate' and becomes a focal point for where the fishers can share their knowledge about marine life, fishing practices and the workings of the harbour – knowledge that is so central to the identity of the region and the many fishing communities in Cornwall. Further, the room is available for community use thus enabling future industry meetings and events in space that is familiar and convenient for fishers which may help with improving levels of participation:

"The most successful FLAGs do want to leave a legacy, if you like. For example, again it's in Cornwall, one of the high-performance FLAGs. They've got a classroom that has been fully restored and renovated. The fisherman's training can take place in there with ongoing support." [National fisheries governance – 15.11.13]

The FLAG have also focussed on the value of catch in the supply chain for example through their support of innovative fisher projects where they are now selling to customers directly through online auctions and in turn are able to secure a greater financial return:

"It is a changing market and some of the little projects [the FLAG] has done where [you] have got fisherman moving higher through the food chain have really made a small difference to that micro business." [FLAG B – 2.12.13]

"This is another thing with our set up is to not over fish, if you will. Not increase our fishing effort but to increase our earning effort. Which is what we are doing." [Fisherman B – 8.11.13]

This vanguard project shows innovation in the approach to the supply chain and presents a boat to plate story that secures a premium for their catch through promoting fresh, sustainable, high quality catch with clear traceability and Cornish provenance. The economic value attributed to clear traceability to inshore fishers and Cornish provenance underlines the importance of identity and sense of place in the sustainability of fishing communities:

"There has been project promoting the fish and actually marketing the fish from small rather than larger processors, from small harbours ... then you are marketing probably prime fish to London restaurants ... and where that succeeds probably is the value added is much closer to the catching sector than if you are going through the big processors." [Harbour master – 7.11.13]

Despite some resistance from participants to the wider community brief and sector diversity of stakeholders on the FLAG board this contributes to a whole community approach to fishing and sustainable fishing communities that acknowledges their intense inter-connectivity as reflected in the arts and tourism projects that the FLAG have supported. This stream of projects are included within the FLAG strategy with the understanding that the marine environment, fishing and artists

have a long history in Cornwall of shared space and artists documenting and interpreting that marine/fishing identity. These projects and the cultural and education outcomes are key to sharing the practices and social history of this industry to new generations in a way that may lead to improved healthy eating, an understanding of sustainably sourced local fish, and supporting this local industry as this participant notes:

"There is stuff [FLAG projects] that's been used for community – which focuses the community on fishing. It's difficult to quantify how people see that. But it must have made a difference to people's perceptions and perhaps their use of local seafood products and appreciation of local fishermen. If you can persuade local people to eat local produce, persuade local business people to develop the product in Cornwall instead of sending it away to be processed elsewhere, that's all good stuff. If you can keep the value here that's a fantastic thing. There's so many things you can do to assist that and knowledge of the industry is one of them. If you like even empathy with the difficulties of fishing, it's a hard job. The benefits of supporting fishermen and the local communities, the socioeconomic type things." [Regional fisheries governance / conservation – 4.11.13]

2. Part B - governance barriers to IF voice and a sustainable fishing community

2.1. Barriers to securing the scale of fisher engagement needed at a local grass roots level: including issues of isolation, individualism, reliance on community stars, negative perception of fishing industry, lack of experience of the processes involved and investment required for representation

Despite the governance strengths of the industry in terms of a regional voice and organisation, political capital and leadership, the valuable co-management experience of now both strategic and local level fisheries projects the industry still faces barriers to its future sustainability centred around fisheries governance and governability. These barriers issue in part from the difficulty of securing the scale of fisher engagement needed at a local level, and also significantly the high levels of diversity in the Cornish fleet (for example in terms of volume of landings, gear used, days at sea, route to market, economic productivity and boat size).

At the very local level participants felt there were just a handful of very active fishing associations or Harbour/Port organisations (for example in Mevagissey) that get involved in grant applications and effectively representing local fisher views, where other ports or coves are simply too small or aren't interested in forming an association. This reliance on the few active associations highlights a potential vulnerability in terms of engagement from grass-roots level infrastructure that would ideally underpin and inform strong regional representation via CFPO and SWHA:

"Well it varies enormously around the coast. Of course the single man on his beach alone doesn't have a port association. There are some very good ones around in some of the ports, but many of the ports are unrepresented at the very basic level. ... The smaller U10M vessels ... have found it difficult to be represented if they don't have a good port association." [Regional fisheries conservation/ enforcement - 4.11.13]

It was also observed that where there are active local fishing associations these routes to representation are heavily reliant on one or two particularly active members (often the Chairperson), who unlike the other members will have the social capital, experience, or networks to confidently raise member issues at more senior forum and know where to seek and secure grant funding. Evidently, such reliance makes this local level governance and routes to fisher participation more vulnerable. Where they don't exist that gap in representation is explicit and the deficit in social capital in some members of the fleet creates a barrier to their engagement:

"[Some] maybe are not so well represented. I've met most of them round Cornwall ... [some] don't have the capacity to look into applying for funding or whatever it is. Representation at certain meetings with the whole change of CFP [so] going to meetings like we've got today at the mission - it's the meeting on discards - ideally you'd have every head of fisherman's association in that room, then they'd go back and talk [to their members]. [But] every single one of them might not be able to. They might not have the ability to go into that room and talk and communicate, or feel they're worthy enough. Not have the right information to talk about. Obviously that is a real shame because they're the people that you need there even more." [FLAG A - 5.11.13]

Historical under-representation of the U10M fleet at a national level is a familiar observation in the English case studies and similarly most participants felt the CFPO only really represents the interests of the over ten metre boats in Cornwall leaving the voice of smaller boats less well represented:

"I'm sure you're aware of the CFPO who [they] could belong to but they tend not to represent the smaller boatmen; they've traditionally been involved with much larger boats where there are big quota issues. ... The trouble is at ministerial level it's just the POs that get the ear of the minister. If the POs flag up issues then they will be heard. But if they don't, and I'm not sure that POs are always aware of some of the intricacies of what goes on around say the Cornish coast at a local level, it may not seem significant to them and therefore doesn't get raised. ... There isn't enough representation at local level. I've always felt everyone should belong to an organisation. The POs are strong and they've done a good job for their members, I have to say, but their members are largely the larger boats." [Regional fisheries conservation/ enforcement - 4.11.13]

In contrast other participants stressed there are over one hundred under ten metre CFPO members and also under ten metre representation on their board. However, this point was qualified around needing to understand the diversity of economic productivity within the under ten metre fleet ranging from part-time to full-time commitments and the subsequent need for this to inform consultation within the industry. This economic productivity variance is just one

variable contributing to the high levels of diversity within the under ten metre sector that makes agreement and so management of the sector even more complex:

“There’s distinct class, or different classes, actually grades of fisherman. You’ve got full time, part time, then you’ve got proper part time, then you’ve got people who like sitting around in cafes and missions talking about ‘Back in my day ...’ So it’s trying to decipher which ones are the economic drivers, which ones are really supporting the community.... Inshore fishing differs widely from area to area. So in fact there aren’t as many common themes as you might think from a management perspective.” [Fisherman’s association Chair – 5.11.13]

A further challenge for securing fisher engagement in the biggest English FLAG area is the sheer scale of the Cornish coastline and therefore the time needed to make collaboration happen for a group of people who are used - and in many cases prefer - the isolation this distinctive geography brings. Each of the case studies has raised the issue of the individualism of fishers – explained by the long periods of time alone in solitary conditions, operating as sole traders in direct competition with each other – and how this is an inherent barrier to their interest in or chance of experience of engagement and collaboration with other industry members, authorities, or other sectors:

“Fisherman, it doesn’t matter what size they are fiercely competitive and they need to be that. ... You can’t expect a fisherman who goes all week from telling lies to other fishermen at sea to come in and then suddenly put his arm around his mate and go ‘Oh come on we should work together and be co-operative. It is very rare. They are independent, often not very communicative people who are very good at what they do, but they come ashore and they don’t suddenly change.” [Fisherman’s association chair – 5.11.13]

“Where the inshore fisherman need to be smarter is getting themselves further up that food chain. Fishermen would rather die than collaborate! That’s not meant to be negative, they are strong, independent, free wills, and it’s very hard to get them to agree on anything.” [FLAG B – 2.12.13]

The mistrust of authorities was also raised as further exaggerating this barrier to a more collective approach to working. A vicious cycle of resistance to working collectively and therefore limited positive experience to encourage further collaborative approaches is evident. Securing consensus or a collective voice that is representative of the whole industry is made more difficult by the diversity of gear, boat size and fishing practices in Cornwall. The highly diverse needs of this fleet make challenging the threats to their livelihood through a co-management approach more complex. Further, a challenge for participants of these multi-sector collaborative governance structures is the shift in mindset from an individual or own sector outlook to one of collective interest and consensus. This is a challenge in the development of co-management or collaborative models such as the FLAG as noted by this participant: *“[I] think everyone comes with their own agenda, in their own box and wants to support projects that sit with their view.” [FLAG B – 2.12.13]*

Some participants felt that the necessary investment of time and resources to secure engagement and representation is off-putting for some in the industry particularly in the U10M fleet where on the whole smaller incomes and long hours demanded of a micro business mean attending meetings is not a priority:

“[F]ishermen have to recognise they need to pay for quality representation and that’s always bit of an issue. ... I think the reason why they haven’t been represented in the past is they haven’t needed to be. ... Fishermen come together when there is a common threat. Unless you have that no one is interested ...[so] yes they have been underrepresented, they probably have, but have they wanted to be represented? Often probably not. Also there is a history of not really understanding that you get what you pay for.” [Fisherman’s association chair – 5.11.13]

“But it costs quite a bit to be a member [of the PO] so cost is a thing, is a barrier. ... It’s cost and I guess an unwillingness for people to lead local groups, people don’t find time to do it. ... it’s a hassle which they don’t need. It’s not what they joined their business for.” [Regional fisheries conservation/ enforcement - 4.11.13]

Prior to the introduction of quota allocations in 2005 the U10M fleet were less regulated and did not require the same political representation as the larger fleets who through the POs (Producer Organisations) have established powerful and professional representation that dominate at national and international political forums. This concentration of political lobbying experience, and the finances to support that lobbying in the larger POs means the interests and voices of the U10M fleet can be less powerful at a national or European level of governance as this inshore fisher observes:

“So the actual power doesn’t lie with the under tens. It lies with the ones over. The biggest power lies with less than 3% of the fishing fleet. They have the money because they have the bigger boats, which catch all the fish, millions of pounds worth. So they can employ someone to go and make sure the policies that come out into the fishing industry reflect on them not on the 86% (small scale fishers). [Researcher: What do the 86% do to shift that power dynamic?] What can we do? ... [we’re] spending no end of time just standing still (financially). There is no one helping them. Unlike farmers where they’re getting subsidies and stuff like that. So how can you expect people like that to start standing up going ‘Hang on a minute why isn’t anybody doing anything about this?’ You can’t expect them to because they haven’t got time.” [Fisherman A – 8.1.13]

For large parts of the U10M fleet with the exception of a few community stars they have limited experience, or in some cases the appetite, for the processes of representation at a senior (national or European) level. This lack of experience and resistance to, or inability to invest the time and resources required risks parts of the industry remaining outside structures of representation meaning they will fail to take part in, understand or influence debates about their livelihood and so future survival:

"[Y]ou can understand though that if they can't even belong to local shore groups, how on earth can they go even higher? [meaning national/ EU level] You start at the grass roots and build up. The grass roots aren't right in many places." [Regional fisheries conservation/ enforcement - 4.11.13]

By not engaging in representative forums (for example not even attending local IFCA port meetings) means their views and knowledge (LEK) has less chance of informing local fisheries management decisions. A number of participants were concerned that given the scale and pace of change for IF with CFP reform around quota allocation, discard bans, the introduction of the enforcement of contentious MCZs, and increasing offshore developments they need to be involved in these debates if their stake in this marine environment is not to be further marginalised:

"You have some good port organisations ... but many others there is an issue with fishermen, they're poor at attending meetings. Their micro business is usually one man maybe two together at the bottom end of the industry. Going to meetings isn't their bag. Which is disappointing when some of the things being discussed are highly relevant to their future business. It's a shame. It's just the nature of the beast with small boat fishermen - they tend not to engage unless they're in a big port community." [Regional fisheries conservation/ enforcement - 4.11.13]

In Cornwall as in the other English case studies a number of fishers described a negative popular perception of their industry as being linked to fishers occupying a low political priority at national level often presented in contrast to the support of the farming industry and in contrast to the perceived greater value of the industry on continental Europe. If this perception remains it can only act as a barrier to their effective representation:

"It will be interesting to see whether the dedicated small boat voices like NUTFA whether they're successful in steering some of that [CFP] discussion. ... It comes down to ... every member state has its fishing sit somewhere in its priority from 1 to 100 ... let me tell you Spain it's like top 5, in France its top 10. Not in any measurable economic terms, but just in the psyche of their nation, of their person. ... It is almost the opposite in this country, 'you're destroying the seabed, you're overfishing, you're discarding' whatever it is the view of fishermen is largely negative. ... so in the political pecking order in this country we are quite low." [Fisherman's association chair – 5.11.13]

"That was the perception taken by politicians. A very, very low opinion of fishermen and the fishing industry generally. ... [W]e haven't counted for bugger all ... the political side of things especially." [Fisherman B – 8.1.13]

Recognising this relationship between the perception of the industry and political influence has become particularly important during the CFP reform process and the lobbying by the inshore fishing fleet in particular. Overcoming this perception through projects like those described above (Section A) - working with conservation bodies and NGOs to share LEK, increasing the market value of sustainable Cornish fish, and via local tourism projects like fish festivals - their political capital might increase. That said, despite the under engagement of fishers at the local scale, and a relative negative popular perception there has been a shift at national level in recent years away from a very marginal political consideration to increased profile and attention in part due to the SAIF (Sustainable Access to Inshore Fisheries) consultation and the CFP reform process associated lobbying by the under ten metre fleet: *"[I]n more recent years ministers have been quite accessible ... especially since the whole SAIF thing. Small boat fishing is now on the map where it never really was before." [Fisherman's association chair – 5.11.13]*

2.2. FLAG specific challenges and lessons for future CLLD

The FLAG project participants and board members all noted their concern (particularly for the first part of FLAG programme) regarding the issue of early confusion over the regulations around applicant or project eligibility; the complexity of forms needed to be completed; and the slow pace of processing from application to sign off (via the FLAG board, the responsible authority and then the MMO). The bureaucracy that many European projects struggle with is particularly challenging with a sector that has limited experience or inclination to apply for grants, and can often be put off by over-administration and technocratic forms as the observations below illustrate:

"Well, I've never done this previously, about getting involved with trying to raise a grant via the FLAG. Absolute nightmare. [Researcher: Why is that?] Bureaucracy, delay. The number of forms ... the proposal which was 13 pages don't forget, some fishermen can't even read and write. Okay? So this is what you are up against. ... it took me two and half days to put that together and it was a lot of detail ... it went in and I thought 'That'll be it we'll hear quickly.' It took six months! ... We have fishermen here who started at the same time on the FLAG project and dropped out." [Fisherman A – 8.11.13]

"From xx [FLAG member] point of view he's going out to meet new people and all he hears is 'Oh well, I've heard it takes months to get approval and then months to get your money, and actually is it worth it? Actually maybe I won't do what I am trying to do with this business.' It's quite frustrating." [FLAG board – 7.11.13]

In this case - as in all the English case studies – the role of the animator was essential in overcoming barriers around the alienating norms of this process (as discussed in Part A above). The slow sign off and release of monies (the money is paid retrospectively to applicants) is often not economically viable for small businesses or community organisations with limited capital reserve or access to credit. It also is inconsistent (even damaging) with the necessary pace of the private sector (particularly one so tied to the weather and seasons):

"Obviously the harbour can afford it but if you are just a single fisherman then you might find it difficult. It really depends [on] different times of year. Because over the last month they've probably had quite a lean time ... because the weather has been poor there hasn't been much fish landed. So if you are doing a project at this time of year then obviously they have got to pay out and then get it back and if that's going to take them eight

weeks to get back it could be a problem. So sometimes that would affect some project they might want to try and do.” [Harbour master – 7.11.13]

“Every time we have put in a grant application it has taken a long time to pay the grant through, up to 14 weeks at a time. ... We have had to borrow a lot of money because we have to wait each time for the cash from the MMO. It has really horrified not only me but all the fishermen who just do not understand it. ... In the meantime we are not able to proceed with the rest of it [the harbour improvements] because we had run out of money. ... [T]he bureaucracy is weighing heavily on us.” [Harbour community organisation – 7.11.13]

Despite the valuable diversity of stakeholders on the FLAG board described above as being central to emerging practices of collaborative approaches, some members felt this has meant the FLAG needs greater fishing industry representation and it lacks (partly owing to some inconsistent attendance by the industry) the private/ public sector balance needed for more strategic market and supply chain type projects that would make an impact on the added value and economic sustainability of the industry:

“There’s not many private sector people on there. I think because it’s community based there have been some projects that could have come out of the FLAG but might not have happened because the private sector won’t have engaged strategically.” [FLAG board – 7.11.13]

This aspiration for the FLAG, or for future structures, to be more fishing industry focussed and focussed at a more strategic level was echoed by other participants: *“It should be more strategic I guess is what I’m trying to say. More strategic in how it deploys funding to join up the dots.” [Fisherman’s association chair – 5.11.13]*. Though again the challenge of engaging the industry in order to achieve this approach was raised as a barrier to such an approach. Securing that engagement required an increase in size of the funding pot for the larger sections of the industry to be interested, and the need to over-recruit industry representatives given a high percentage of non-attendance/ drop out. However, it was also understood that this was not the intended role of a community programme like the FLAG, and that its broad church of stakeholders was needed to connect the industry more effectively at a local level to other sectors for their mutual benefit.

Even at a community programme level the strategic (or bigger picture) approach demanded for successful co-management appears challenging for parts of the inshore fleet. Participants described their focus as that of day-to-day fishing commitments rather than the long view. There is a risk that the levels of local disengagement and the assumption that the strategic view as a result must come from outside the industry proper, or from just a few industry representatives means that the strategic view lacks a democratic mandate and so will struggle to secure buy-in from the wider inshore fishing community:

“I don’t think many of our inshore fisherman are thinking further than Friday. They go out, they fish, and they come home. ... You need to be outside it to want to look into it.” [FLAG B – 2.12.13]

All the FLAG case studies noted that this shift of approach took time, the development of trust in the relationships between participants and importantly a greater understanding of each sector’s experience and challenges faced for the more holistic and collective focus to emerge.

Finally, while looking to the future iterations or evolution of such community led local development structures a number of participants felt their administration and management would be greatly improved – in terms of efficiency of governance and understanding of the specificity of local community needs and challenges – if authority was fully devolved to the local level. A recurring observation was that national level arm’s length administration doesn’t allow for detailed understanding of the projects, local socio-economic conditions, and makes for an overly bureaucratic and risk averse approach. In addition more devolved governance would allow for the FLAGs (or FLAG equivalents) to better determine the agendas they strategically target rather than these be led by national authorities. This would improve their autonomy and ability for fishing communities to be self-determining - a key feature of improved resilience and social sustainability:

“[The FLAG programme] doesn’t have a management structure that has empowered the industry. We have clearly put a line, a Chinese wall, between the bean counters in the back office and the man or woman on the street.” [FLAG B – 2.12.13]

“I just think it is an over-complicated system [with reference to the layers of FLAG programme governance]. ... I feel it is a very corporate way of doing it. ... The MMO are never going to let go of the purse strings or the administration. ... In an ideal world, xxx (Cornwall regional development structure), the proposal was that they would take on all the administration. It hasn’t happened.” [FLAG board – 7.11.13]

Despite the challenges described above, (note: these were particularly acute early in the programme and have lessened or been overcome to some degree as the programme has advanced) there was clearly an aspiration amongst participants to learn from the FLAG experiences, both positive and negative, and as such for future CLLD to take a more strategic role in securing the resilience of the Cornish fishing industry in a fast changing political and fisheries policy context:

“I think FLAGs and community led local development have a role going forward. I think changes in quota and fishing policy will be influential. In the next few years that is going to change more and more. ... The second thing I would say is to keep building on FLAGs so that they have an exchange of good practise, good ideas and sharing each other’s viewpoints. ... We need a national learning event shaped by the practitioners not the accountable bodies. ... [P]ractitioners like us and Cumbria and places who say this is what it’s like on the ground.” [FLAG B – 2.12.13]

3. PART C - Conclusions and key sustainability issues

The table below offers a summary of the key ways in which the existing infrastructure and governance processes engage with economic, environmental and socio-cultural sustainability issues. The research demonstrates that while the Cornish industry (larger boats in particular) have a strong and established regional governance presence - dealing with strategic agendas at national and even European level - the more local governance is uneven in its reach across the region. There are concerns regarding underrepresentation of the smaller boats in the more isolated and politically disconnected communities. As with all the English case studies the research highlights the known barriers to engaging the majority of fishers in industry governance let alone multi-sector governance. However, in the Cornish example there is a well-established and experienced network of key individuals (direct and indirect industry representatives) operating at a strategic level to secure the economic sustainability of the fleet and ensure their integration into regional planning. At a more local community level the FLAG has provided an unusual mixture of stakeholders working in partnership to achieve wider fishing community sustainability with successes in education, tourism and cultural projects that reconnect the industry and maritime issues to the community and visitors. In addition some of the smaller ports have received investment through the FLAG into practical resources to help secure their livelihood, where previously health and safety risks, supply chain challenges and increasing overheads had brought that future into question. Yet structures like the FLAG are not without challenges in terms of programme processing, consistency and depth of industry engagement and barriers induced by high levels of bureaucracy and alienating governance norms. These act as a serious disincentive to a very fragile culture of fisher engagement, and as such, make securing their participation in future community led local development all the more challenging. Yet participants in this research show considerable appetite to build on lessons learnt through the FLAG governance process to better integrate the fishing industry and identity into the rural, coastal and marine planning with improved stakeholder co-operation, supply chain innovation and a strategic vision that seeks to improve the socio-economic and environmental resilience of such complex coastal communities.

Environmental sustainability issues
Examples of collaboration with the IFCA on data collection and marine surveys for the development of evidence to inform conservation related fisheries management.
Fisher participation in and support for conservation based education projects led by Surfers Against Sewage and Fishing for Litter.
Examples of members of the fleet participating in the Seafish 'Responsible Fishing Scheme.' As the market value of sustainably sourced fish with clear traceability and provenance increases this makes reduced fishing effort possible.
SWHFA membership demands commitment to sustainable fishing practices and promotes sustainable fish products.
Social sustainability issues
Development of multi-sector partnership through the FLAG helps protect the future of the fleet by developing the connections between the fleet and the wider community (e.g. through education, tourism and cultural projects). This in turn protects industry cultural practices and sense of identity for future generations.
The development of a professional training hub in Newlyn for the fishers in the region is essential for securing necessary skills as the industry evolves, but also acts as a centre for community activity and sharing of knowledge and so is a valuable asset in the social fabric of the community.
Where there are gaps in the local level grass-roots governance network in individual ports and coves there is a risk of further isolating those parts of the industry. This in turn raises issues of democratic deficit and community star reliance in the regional governance structures. Disengagement at the local level risks increased marginalisation of the local fisher voice and detrimental implications for the future of less connected and politically active fishing communities. Barriers to fisher engagement (e.g. isolation, individualism, mistrust of authorities, lack of social/political capital, lack of positive experience of engagement and partnership, and alienating governance norms) undermine the security of the routes to participation and ability to influence fishing and wider development policy for all but the community stars/ industry leaders.
Developing models of co-management and co-operation in such a complex and highly diverse fleet (geographically, boat size, gear type, type of catch) is challenging. They often have differing needs and face different threats. They also contribute to, or detract from, the sustainability of the industry and communities around them in differing ways. Understanding how these might work together to achieve improved sustainable fishing communities raises real concerns for governability and fisheries management.
Economic sustainability issues
A strong network of community leaders working to develop the representation and inclusion of the fleet and maritime issues in more strategic economic development planning ensures the industry maintains its economic and political stake in regional and even national policy debates.

Case Studies – Cornwall and Scilly Isles FLAG

Mature industry regional governance works to protect the economic viability of the fleet through securing quota and efforts to limit the impact of competing interests and increased regulation.
The economic future of the small-scale industry in particular appears fragile as it becomes more regulated, access and running costs increase and fishing grounds are restricted. Yet in examples of FLAG investment in the port side infrastructure used by small-scale fishing boats there has been an unexpected benefit of increased belief within the community that the industry holds a safer and economically viable future for the next generation of fishers.
Innovative examples of reconfiguring the supply chain to ensure the financial return/ added value remains closer to the fishers provides both increased economic security and reduced fishing effort (owing to the increased market value for sustainably sourced fish).

4. Discussion of Core Findings

4.1 Introduction

The eight case studies provide a uniquely detailed exploration of inshore fisheries (IF) governance documenting existing successful practices, opportunities, and challenges involved in securing more integrated co-management and governance. Specifically, IF governance is explored in relation to the wider coastal economy (e.g. the integration and linkages between the fisheries sector and tourism and regeneration); social sustainability (e.g. in terms of social capital, community cohesion, cultural identity, and education/ training involved in coastal community development); and the conservation of the coastal and marine environment (e.g. via sustainable fishing practices, fisher links with marine science, fisher participation in the development of ICZM, MCZs and MPAs, and integration of local ecological knowledge).

One of the overwhelming findings from the research is a picture of considerable institutional diversity and complexity. Across the case study sites there is a range of differing infrastructure of formal and informal governance organizations; variance in the degree of engagement in the structures that do exist (both in terms of fisher/ fishing industry engagement and broader stakeholder engagement); and considerable variance of experience of collaborative co-management style approaches (from very limited experience or appetite, with the continued dominance of a top-down hierarchical and narrow governance model, through to mature and established inclusive multi-stakeholder and participatory models). This institutional diversity reinforces the widely held view that fisheries management create real governability challenges partly owing to the specific manifestation of policy and governance infrastructure in each locality (Jentoft and Chuenpagdee, 2009). This specificity of context extends to the competition for use of the same marine resources from differing sectors (e.g. renewable energy, conservation bodies or recreation-leisure users), which in turn has resulted in a diversity of governance related responses by each inshore fishing fleet/ community to this risk of displacement. The varying adaptive strategies reflect differing internal and external fleet/ community capacity to respond to these challenges and are often framed in terms of fishing industry and coastal community resilience. The findings thus show us that the governance arrangements in each locality can be understood in terms of both their function as an element of community capacity and also as a feature of an adaptive strategy response to improve resilience to new challenges faced by IF.

The research provides the reader with a very nuanced insight into where, why and how some IF are able to develop and participate in collaborative and inclusive structures that are securing a much wider breadth of stakeholder views (e.g. from conservation bodies, tourism, regeneration, local authorities, education, hospitality and restaurateurs), providing varied routes to engagement and influence for local fishers, taking better account of their LEK, and moving towards securing a EAFM. Equally, the research shows a number of worrying examples of multiple cultural, economic and socio-political barriers to such open and inclusive models of governance.

The following more detailed discussion of common and exceptional themes in the research findings will reflect on the main research question - ***“If and how coastal governance structures (such as those relating to ICZM and regeneration) can support Inshore Fisheries in securing their economic, environmental and social sustainability goals”***- and specifically highlight examples from the eight case studies of:

1. fisher influence and participation in governance at different scales – including reflection on the barriers to, and opportunities for a participatory and collaborative co-management approach to governance ...
2. what this means in terms of the role of governance in enabling routes to sustainable fishing communities i.e.
 - a. economic elements of sustainability (a particular focus on inclusion in regeneration and tourism);
 - b. social elements of sustainability (with a particular focus on cultural identity, social capital, participation in decision making);
 - c. environmental elements of sustainability (with a particular focus on industry role in marine/ coastal planning through engagement in consultation, sharing of LEK, voluntary sustainability practices, and joint projects with science and conservation bodies).

4.2 Building a collaborative and co-management approach in IF governance

The case studies show that **developing new industry connections with local councils, or building on existing formal partnerships act as a key mechanism for including IF within wider economic planning in a strategic manner at a local and regional level.** In some case studies this is a new relationship triggered by the presence of governance structures like the FLAG (e.g. North Norfolk), while in others the local governance structures are building on established and mature relationships that have placed fisheries at the centre of regeneration and tourism in recent years (e.g. Saint Brieuc, Nieuwpoort and Hastings). All the case studies show this is an evolving relationship with the local council and can be key to developing local allies and structural resilience. In places where that relationship is embryonic (e.g. Northern Devon) there is much to do to break down barriers to engagement and mutual understanding (for example remedying lack of fisheries expertise in local government and developing a collective voice to ease access to the fleets for local councils). In North Norfolk we see for the first time a ‘radical ‘shift’ in the inclusion of fishing in the economic development planning that is being enabled by the FLAG experience and good governance processes associated with

this. In this case study the FLAG is an explicit catalyst for planning for a future co-management approach that enables a collective fisher voice and multi-sector connectivity and understanding.

One of the key barriers to IF engagement can be the absence of a collective political voice from the IF sector at senior levels of governance, and we discuss the reasons for this below. However, where it exists or is emerging we see the effective use of traditional and non-traditional routes to political influence by: fisheries governance structures (such as the Fishing Associations, the FLAGS, and the co-operatives) including securing support from their local, national and European politicians (e.g. Cornwall and Saint Brieuc); industry media (e.g. Northern Devon use of Fishing News); and even global NGOs to lobby at a national and EU level (e.g. Hastings fleet collaboration with Greenpeace). **Despite being a traditionally politically disenfranchised sector with limited experience of community activism, we are witnessing in the case studies increased examples of their inclusion in local, regional and even international collaborative governance** approaches where they have either developed an active political profile and collective voice (e.g. Hastings) and/or through securing local or regional political advocacy of their behalf from local authorities/ general councils (e.g. Nieuwpoort and Saint Brieuc). This increased political profile, and the political capital that accrues in fishing communities through this experience is key to increasing IF voice and participation in key debates around marine and coastal management going forward.

In some examples there is a purposeful **engagement by the fleet and other fisheries stakeholders in activities across a number of policy areas (such as cultural planning, economic regeneration, education, renewable energy, science/conservation, community forums and tourism groups)**. Introducing the interests and LEK of IF in forums beyond the traditional strict understanding of fisheries management is part of a growing trend in the expansion of the remit of IF governance. This expansion of governance reach is a feature in case studies adopting a more collaborative and strategic approach to fisheries governance that seeks to integrate the fishing community more within local and regional policy planning (e.g. in the Cornwall FLAG, Saint Brieuc Scallop fishery, and Hastings FLAG). Through this research we have argued **this approach to governance improves their adaptive capacity** (i.e. ability to respond to challenges and opportunities) and is often accompanied by a mature and active infrastructure of fishing associations (FA). Time and again the presence of active and professional local and/or regional FAs increases the likelihood of engagement of the fleets in economic, social and environmental planning (at their respective scale) (e.g. as observed in Saint Brieuc). The FAs provide a legitimate collective voice for other sectors to engage with the fishing industry, and practically they can often act as a translator between the contrasting cultural norms that exist between policymakers and IF. **These expanded connections create the opportunity for community leaders to help match the needs and aspirations of a fleet with policy planning objectives.** For example in the North Norfolk case study we see an established local level governance infrastructure and routes to participation as a key foundation for the FLAG's capacity to develop a legitimate collective industry voice and better integrate the industry with the local authorities and conservation bodies. The findings show that a collective IF voice is more likely where there is experience of/ or a history of collective management (as seen in Saint Brieuc and in the Bay of Granville) where professional and organized local and regional governance structures integrate fishermen and their ideas into decision-making. For example, in Normandy we see a governance approach based on co-management with the local administration creating a working environment where multiple stakeholders are involved and valued. This experience of co-management fuels the industry appetite for further partnerships, with examples in Normandy of unusual trans-border positive relations between industry stakeholders (via the Joint Advisory Committee of the Bay of Granville), while in Saint Brieuc this approach to increased multi-sector collaboration and connectivity manifests in joint scientific projects between the Scallop fishermen and the CRPMEM.

The findings show that where there is **close involvement of the fleet in joint science or data collection projects this increases receptiveness and likelihood of co-management as barriers to co-working are eroded (such as issues of mistrust, obstructive technical/technocratic language, lack of empathy, and differing knowledge cultures)**. This facilitates an increased common understanding of the relevant local issues and helps ensure local ecological knowledge informs marine and coastal planning decision-making, thus increasing the likelihood of industry compliance.

There are a number of examples in our case studies where some members of the fleet are working in **collaboration with conservation authorities or NGOs to develop voluntary or fisher led-conservation agreements** to establish voluntary marine protected areas, no take zones during migration and breeding, minimum fish/shellfish size landings, tagging for improved shellfish stock data collection and sea-bed mapping for improved whole ecosystem based approach to planning. In Nieuwpoort these new roles for fishermen in terms of data collection and cooperation with scientists were highlighted as key to how the fishers view the evolution of IF going forward. While in the English FLAG case studies the findings often show a close working relationship with the IFCAs (Inshore Fisheries and Conservation Authorities), which has established a formal route for increased collaboration around conservation for the inshore fleet. A number of the case studies have a strong history of joint projects with scientific and conservation bodies as witnessed in their in-depth participation in the MPA/ MCZ consultation and debate; in the implementation of no take zones (e.g. Normandy lobster box); the establishment of the Marine Stewardship Council accreditation (e.g. Hastings and Normandy); and collaboration on data collection (e.g. Normandy with IFREMER and SMEL; and Hastings, Cornwall, Northern Devon, North Norfolk with CFAS and the IFCAs).

Building on these relationships, and overcoming the barriers experienced in collaborative projects between the different sectors (see below) are central to mainstreaming what is at the moment a more ad hoc approach to IF participation in marine conservation and planning.

Where it is understood by local governance stakeholders that their inshore fishing industry is integral to the sense of identity of their town and region there is often increased integration of the fisheries into the economic, social and environmental planning and associated forums (e.g. this is particularly the case in Nieuwpoort where there is now an established collaborative approach between policy makers, traders, fishers and restaurateurs). Increased

policy integration and governance linkages are often most explicit in terms of place marketing, tourism and regeneration policy and planning (as seen in Hastings, Nieuwpoort, Arnemuiden and Normandy). Alternatively, where the research participants noted the fisheries are less wedded to the region or town's sense of identity this policy integration and the necessary governance inter-linkages are less explicit.

4.3 Barriers to building a collaborative and co-management approach to IF governance

The case studies indicated varying degrees of fisher engagement or participation in collaborative governance with other sectors or even within their own local industry associations. **Common barriers to securing the scale of fisher engagement needed at a local grass roots level include issues of geographical isolation of fleets, a sector prone to individualism, a reliance on community stars to represent them, a lack of experience of the processes involved and investment required for representation and a lack of community political capital or a culture of activism.** While in some of the case studies a clear expression of frustration that the established governance organisations in place often fail to adequately represent the smaller boats and rather are dominated by the issues and concerns of the larger off-shore fleet. These barriers are not evenly experienced, or present in every case study, but they are worth highlighting in the discussion below so they might be overcome or avoided by other IF communities seeking to adopt a co-management or more integrated fisheries governance approach. A checklist table of these barriers is provided in Chapter 5 for use in fisheries governance planning and evaluation.

The need for capacity development for industry stakeholders was repeated in a number of the case studies where participants felt this was needed in order to overcome the alienating nature of bureaucratic and technocratic governance norms that are so often off-putting to members of the fleet. Alternatively, participants suggested these norms should evolve to take account of differing knowledge cultures and approaches to governance that might in turn help secure a broader consensus and respect amongst such diverse stakeholders and values. The case studies highlighted **alienating governance norms that policy makers and stakeholders should try to design out of their approaches to governance** including:

- obstructive meeting processes (like detailed technical minutes and long documents to read in advance in a community with examples of low levels of literacy);
- the slow pace and frustrating idiosyncrasies of bureaucracy that are inconsistent with a rapid-response and agility needed in the fishing sector in order to survive;
- excessive loss of productive fishing time (a board meeting can be half a day a month away from fishing);
- the absence of support needed to enable the industry to take a more strategic broader community view that is both inter and intra-generational (i.e. the need to compromise short term benefits for a long term vision can be unfamiliar and unpalatable in an industry group often trying to survive financially from month to month).

Even with efforts to design out these barriers participants noted that in current efforts at collaboration there is often a common underestimation of the time required to build trust between stakeholders to secure the relationships needed for a more positive exchange of views (this is particularly the case where they are more familiar with isolation or positions of conflict with each other).

The **limited presence of a collective voice for the inshore industry** has made some local authorities less inclined to engage with IF as they often don't have a common point of contact to access the fleet's/community views. This absence of a collective voice (to differing degrees in each site) is explained by research participants in terms of:

- the remarkable diversity of its members (in terms of gear used, boat size, geography, fish landed);
- the limited regulation until recent years of IF which has meant less motivation to engage and influence policy;
- as a function of embedded rivalries and conflicts that corrupt a whole community approach.

Where the local fisher governance is divided and there is an absence of a single collective voice this is viewed as detrimental to the fleets' lobbying influence (e.g. Arnemuiden). However, this is not a universal experience and as discussed above where the reverse is true collaboration and partnership is proving productive. Yet the process of disenfranchisement can of course be self reinforcing – the more you do not have the capacity, experience and benefit from representation the more likely you are as a sector to disengage or be apathetic in your approach to formal governance. A limited collective voice on wider structures of regional or national governance risks marginalising IF interests as an industry in this space and the continuing dominance of the interests of the larger fleets. Further, where there is leadership and presence within these structures there is a risk of over-reliance on such 'community stars', resulting in democratic deficit and a question over succession of representation (e.g. in Normandy there is a concern over the lack of involvement of young fishermen; and in Hastings and North Norfolk FLAGS there is a concern around the over-reliance on their community leaders). This uneven picture of IF collective voice dilutes the effectiveness of political lobbying and influence, notwithstanding examples emerging of both regional and pan-European structures attempting to overcome the leadership and collective voice deficit (e.g. NUTFA - New Under Ten Fishermen's Association and LIFE – Low Impact Fishers of Europe).

Where the governance structures issue from national level or even European Union level there is an inherent suspicion within the IF sector that the structures exist for greater monitoring purposes. This is compounded by a widely held perception (e.g. in Arnemuiden, Normandy and Saint Briec) that the IF fleet (and their respective local governance forums) have limited routes to influence legislation and quota at European level. This **disconnect between the local level fishing fleet day-to-day fishing practices and European level decision-making is a considerable barrier to fisher empowerment.** Building trust and overcoming this sense of disempowerment is important in the shift from hierarchical top down science led fisheries management to a governance approach that is more collaborative and

inclusive of fisher voice and LEK (Carter, 2014). There is a sense in some areas of fishers wanting greater control over their own destiny and the future of the fishery more broadly, thus recognising the need to engage in politics and governance to have any chance of self-determination (e.g. in North Norfolk). While at the local level, the researchers observed different industry views over the role or purpose of FLAGS (multi-stakeholder local fisheries governance structures) that range from simply being funding or grant provision structures that bring different groups together, to valuable pan-European networks, and even in one case a potential transformative route to the industry empowerment they seek. **This perceived variety of purposes for the FLAGS was dependent on a number of variables (as outlined in the case studies proper above), but was heavily determined by the existing governance infrastructure legacy and associated cultures and experiences.** In the English context the case studies repeatedly highlighted lessons at both national programme management level and also local action group level in terms of how to improve upon the leadership and delivery of such community led local development programmes; while all acknowledged the socio-political context of swingeing public sector cuts has made this programme all the more challenging. Governance structures like the FLAGS are not without challenges in terms of consistency and depth of industry engagement and barriers induced by high levels of bureaucracy and alienating governance norms. These act as a serious disincentive to a very fragile culture of fisher engagement, and as such, make securing their participation in future community led local development all the more challenging. With this in mind the dominant lesson taken away from the FLAG experience from participants was a need to devolve decision-making in CLLDs to a more local level that can make those decisions informed by the specificity of the local context as well as an understanding of the relevant delivery timescales to ensure increased impact, but also importantly secure an increased sense of local ownership. **Despite the challenges experienced, the findings certainly show that the FLAGS have also provided a catalyst for thinking around co-management and community-led local development that was less prominent in local political agendas and narratives prior to the FLAG delivery.** One of the key challenges in any co-management governance approach is securing consensus with such diverse partners with often competing or conflicting interests and this is particularly evident in the highly interdependent and increasingly complex interests involved in fisheries (Symes, 2014). The growing numbers of interests in the marine and coastal environment has meant for participants in some of the case studies (e.g. North Norfolk) the local FLAG is a timely mechanism to develop dialogue and consensus on how to secure both the marine environment and fisher livelihoods. Indeed, the 'whole community approach' adopted by this FLAG makes explicit the interdependency of the different stakeholders involved, and seeks to encourage community ownership of solutions to threats to their sustainability.

Finally, we note that in all the case studies **the wider global and local socio-economic and policy context is resulting in an industry facing multiple threats.** There is a sadly familiar narrative of declining inshore fisheries with low levels of new entrants - situated within deprived coastal towns with economic sustainability challenges amplified by the 2008-12 global recession - facing increasing regulation and displacement from traditional fishing grounds by growing numbers of maritime stakeholders (leisure users, renewable energy, conservation and tourism). This is a difficult and pressurised context to build collaboration and an inclusive approach to governance. Yet recognising that fisheries governance is shaped within a wider political economy and socio-cultural context is essential for achieving a more locally relevant, interactive and so resilient set of governance principles, practices and organisational infrastructure.

4.4 Role of governance in shaping a fishery's economic sustainability

A prominent feature of the case studies in terms of economic sustainability is **how inshore marine fishing is incorporated (or not) into programmes of urban regeneration.** As explained above a number of the case studies show an emerging (if cautiously adopted) trend for re-framing local economic development strategy to include the fishing industry within regeneration and tourism planning (e.g. North Norfolk FLAG). For example in Hastings and Nieuwpoort the local government has made a concerted effort to put fishing/the fishers at the core of their cultural offer and place based branding. In the case of Nieuwpoort this extends to their ownership of the fish market, and in Hastings the fishing beach (the Stade) is at the centre of their cultural regeneration planning. In the English case studies the participants often noted that historically (even until recent years) the inshore fishing industry had been rarely included in economic development policy planning at the local scale based on the view that as an industry it was controlled at national or European level with limited possible local authority involvement or impact. **This lack of involvement at the local level** has in part been exaggerated in some cases by a feeling that the fleet are less receptive to engagement than other industries that the local authority has experience of working with (e.g. tourism and agriculture sectors). Further, where there is a low-profile fishing industry voice we found this can be linked to a perception in parts of local government that small-scale fishing is an industry in decline with limited contribution to the local economy and therefore not a development priority. **This historical lack of engagement has in turn resulted in a deficit of fisheries expertise in civil servants at this local government level** and this makes helping secure their integration into the wider economic sustainability of the coastal community all the more challenging. While in Normandy the concern over lack of officer fisheries expertise is as a result of the high turnover of staff and an absence of political leadership on maritime issues.

Through **local governance structures** (e.g. local authorities, FLAGS, FAs), research has been carried out to try to remedy this lack of knowledge to gain a more accurate understanding of fisheries total economic value contribution to the coastal economy and weaknesses in the supply chain in order to better inform local government policy-makers (e.g. in Northern Devon and Hastings). While in other examples this barrier to inclusion in economic development planning is overcome by an established **network of senior individuals** (with long-term experience of working with and knowledge of the industry) acting as an effective bridge between the fleet and local, regional and even national government to lobby for the inclusion of fisheries and maritime issues in strategic local and regional economic development planning (e.g. Cornwall).

Re-shaping the supply chain to secure shorter boat to plate journeys, a larger market and greater value for local and seasonal catch via increased consumer knowledge and interest in sustainable fishing practices was viewed by research

participants as an important route to secure the sustainability of inshore fishing communities. The research shows efforts enabled or driven by local governance to achieve connectivity amongst stakeholders along the boat to plate journey in order to build a premium market for locally caught fish. In these examples local governance structures are involved in, or facilitate, supply chain innovation that involves restructuring and diversifying routes to market (e.g. ideas for fisher/trader co-operation structures emerging in Nieuwpoort). Other examples include:

- promotion of a network of local fishmongers;
- chefs and restaurateurs that source local catch to enhance the regional brand value (e.g. a FLAG focus in Northern Devon);
- restructuring the supply chain entirely through direct sales (e.g. as observed in Normandy and Cornwall);
- through financial support of the local fish market (e.g. Nieuwpoort);
- development of cooperation with local restaurants (e.g. in Hastings);
- regional branding/promotion of a premium product (e.g. in Saint Brieuc they have developed a premium brand 'Label Rouge' for local scallops to try to achieve a higher price for local fishermen).

Enhancing consumer education around fresh seasonal catch (in terms of understanding catch quality, sourcing, preparation and cooking) was repeated throughout the research. Moreover the central role of the fishers in this education process was underlined. In developing the supply chain in this way these fishing communities are countering globalisation trends that have meant their catch is often sold at low prices to foreign markets with very little contribution to the economic, social or environmental sustainability of the local area. Where they shorten the supply chain to ensure a reduced boat to plate journey they enable local catch to be consumed at a higher market value and the fishers engage in a business model of reduced effort and higher value that is more conducive to sustainability. In some cases this model is further enabled through dedicated not for profit regional fish marketing organizations (such as Seafish in England or Promofish in Nieuwpoort).

While alternative routes to market are emerging, for example with the introduction of fish box schemes in Nieuwpoort, local fishers would prefer for these to be fresh premium fish rather than cheaper frozen fish fillets so there is still room for further evolution of these markets. Despite innovations around the supply chain large elements of the inshore fleet continue to suffer from low market values for their catch and a lack of control over this price owing to supply chain and regulatory inflexibility that drives down the price (e.g. the Saint Brieuc scallop). A number of case studies highlight **immature markets for fresh fish owing to poor consumer knowledge of sourcing, preparation, and cooking of local seasonal catch that they feel needs to be remedied through effective industry education and communication** (e.g. Nieuwpoort). This in turn raises questions for fishers over their future livelihoods, makes a reduced fishing effort economically non-viable, and acts as a disincentive for new entrants to the industry. It was clear from the research findings that industry stakeholders recognise that for such structural barriers to sustainable fishing to be overcome these issues need to be raised at regional, national and European governance forums and by involving the full breadth of sectors affected.

As well as supply chain innovation and market development the research shows increasing economic diversification by the fishers that involves improved integration and **inter-linkages between the fishing fleet and other coastal economy sectors (such as the tourism, renewable energy, education, cultural and creative sectors)**. For example, the research highlights varying examples of responsible tourism mechanisms that re-connect and educate consumers about seasonal local catch including fish festivals, chef demonstrations, guided tours of the fish markets and fish auctions, and fish preparation and cooking classes (e.g. Northern Devon, Hastings, Nieuwpoort, Saint Brieuc and Normandy). In Arnemuiden the local authority has focussed upon promoting fish and fisheries in their place marketing of the town by re-establishing this identity using innovative approaches towards tourism activities (e.g. such as a clothing range and fisheries related art). Developing the tourist association and awareness of the fisheries identity (both past and present) in Arnemuiden has involved increased collective working between the local women's think tank, the local museum, the municipality authority and local entrepreneurs. However, the research shows that the fishers in Arnemuiden would not seek to lead these initiatives themselves, and don't feel they secure a direct economic benefit for the fishing community. This fisher reluctance to engage in tourism was evident in a number of other case studies with participants explaining they just want to be left alone to fish just as their family have done for generations. **Participating in tourism activities appeared to disturb their sense of identity, purpose and tradition. So building the connectivity between the two sectors is a delicate balance that the fishers in a number of the case studies stressed must involve the fishing community in decision-making and deliver benefits to them not just to the tourism sector more broadly.** Further, striking a balance between diversification into tourism, cultural and education activities, and taking action to maintain a sustainable fishing livelihood was also raised by research participants. Participants in Hastings, Cornwall and Normandy raised concerns that too much focus on the heritage and tourism offer risked diverting focus from maintaining an active fishing fleet and could result in the 'disney-fication' of these communities and their cultural practices. Both these latter points underline the key principle of meaningful fisher participation and influence in decision making in these emerging networks and governance forums to ensure their voice is not lost in the drive to improve multiple sector inter-linkages in a congested maritime environment.

4.5 How governance contributes to or marginalizes the social sustainability of a fishing community

The research illustrates how in a number of examples the local fishing governance structures (e.g. FAs) are often seen to be central to the social fabric of fishing communities and their sense of identity and cohesion, as well as an essential source of support (financial, emotional and administrative) (e.g. Hastings and Saint Brieuc). Their potential to contribute

to the social sustainability of the fleet centres around enabling collective action, representation, social network support, a sense of common identity and focus point for cultural traditions. This social value is lost where these structures are dormant with limited active fisher engagement or leadership (e.g. as noted by participants in parts of Northern Devon). Where they are dormant or closed and not replaced by other governance forums the participants indicate what we have described in this research as a fisher engagement deficit in local and regional governance. Disengagement at the local level risks increased marginalisation of the fisher voice and political (and so potentially economic) isolation of less connected and engaged active fishing communities. Barriers to fisher engagement (e.g. geographical isolation, individualism, mistrust of authorities, lack of social/political capital, lack of positive experience of engagement and partnership, and alienating governance norms) undermine the security of the routes to participation and ability to influence fishing and wider development policy for all but the community stars or industry leaders. This deficit is aggravated by the common barriers to fisher engagement described above and can result in a lack of 'governance literacy' (i.e. an understanding of the processes, practices and language used in these structures). This lack of experience of representation in strategic forums, formal collaboration, and influence in policy decision-making is detrimental to the fishing community's capacity to secure a sustainable future in their own vision (i.e. there is a risk that initiatives developed outside of the IF community will be imposed rather than projects emerging from the community itself). **Securing self-determination through democratic representation in relevant development and policy decision-making forums is central to the role of governance in enabling social sustainability.**

A number of the case studies showed how the fleet through its local governance forums focused on **reconnecting the industry with their broader local or regional community**. This re-connection was being established through a variety of methods:

- sharing fishing community traditions and current industry practices through digital and oral histories (e.g. Northern Devon and North Norfolk);
- fisher-led teaching of local ecological knowledge (e.g. Hastings);
- experience of local catch and fish preparation through developing wet fish shops;
- guided tours for schoolchildren of the fish market and working beach (e.g. Hastings);
- fish festivals (e.g. Northern Devon, Nieuwpoort and Saint Brieuc);
- the findings also show this reconnection through encouraging the sale of local catch in local restaurants;
- increased collaboration between local chefs and the fishers through fish cooking and preparation demonstrations (e.g. in Hastings).

These efforts all contribute to the social sustainability of the fishing community through protecting and highlighting the fisher contribution to the cultural and social fabric of the community that in turn underpins its sense of identity. We note that in some examples this re-embedding of the cultural and social practices and customs of the fleet into the wider town identity (through the education, responsible tourism and the cultural offer of the area) extends the resilience of the fleet by ensuring their issues and values are considered more seriously in a 'whole community' approach to regeneration and development activity (e.g. North Norfolk and Hastings).

As well as the customs and practices of the fishing community being shared and integrated into community planning, the **contribution of the fleet/fishing to the physical aesthetic of an area** was also made clear in the research. For example, a number of the cultural and tourism activities in Hastings are concentrated on this visual contribution to a sense of place. Across the case studies the presence of boats on the beach or harbour, the net sheds, the fish market, the historic ship yard, and fisherman's storage huts on the quayside have in differing ways been made explicit cultural assets that are a focus of tourism association and local authority place marketing and regional branding. As a consequence these fisheries related cultural assets are also often a focus of the restoration of the public space around them to make them accessible and useable for the town's fisheries or maritime cultural programme (e.g. festivals in the Hastings Stade open space). All these activities reinforce the contribution of the fisheries to the community sense of identity. Where these assets are less evident or the customs less explicit there are challenges in re-connecting the local community to a fishing heritage or contemporary fishing industry identity (e.g. as observed in parts of Northern Devon and in Arnemuiden).

One of the main challenges for the social sustainability of small scale or inshore fishing in many of the case studies is the loss of industry critical mass with reducing numbers of new industry entrants and an ageing demographic of current fishers. The research shows specific projects in a number of the case studies (e.g. Cornwall, North Norfolk, Hastings and Normandy) trying to **attract new entrants and build their personal resilience** through:

- increased training and skills development;
- introducing the industry to the next generation through fisheries led education field trips;
- increasing the physical safety and economic viability of small scale fishing

The development of fisheries focussed training schools and classrooms were viewed as an important investment in the future of fishing communities that in turn become part of the social infrastructure of these communities where fishers can gather and share knowledge, network and build their skill base (e.g. Seafood Cornwall Training). This social asset is particularly valuable for a sector that has often suffered from lack of access to, or engagement with education resulting in low levels of literacy. Low literacy levels compounds other barriers to engagement with policy makers, fisheries management authorities and science/conservation stakeholders who use complicated technical documents that alienate those fishers less comfortable with reading.

4.6 The role of governance in determining the contribution of a fishery to environmental sustainability

Despite a representation in the media for not being environmentally minded this research shows that a number of the fishers in these case studies have since the 1970s **voluntarily participated in, and even introduced on occasions, research and management mechanisms to monitor and protect fish stocks** (e.g. the licence system used by the Scallop fishery in Saint Brieuc). While in Northern Devon the fishers have been at the vanguard of examples of voluntary co-management with the conservation sector in their work on the UNESCO Biosphere and MPA.

Despite these examples of IF direct contribution to marine environmental sustainability there are still examples of a **tense relationship with the conservation sector** (e.g. described by Arnhemuiden participants) and a sense of being under siege from negative lobbying from this sector in the media (e.g. described by participants in Northern Devon). The research shows that the fishers continue to feel (with some notable exceptions), that they are not listened to by the scientists and the NGO's, despite their extensive knowledge about the local marine environment and fish stocks. Across the case studies the fishers have been involved in consultation with the relevant management authorities over the introduction of MPAs yet this process has proven challenging given the threats to fishing grounds and IF economic viability the implementation of MPAs presents (e.g. in Saint Brieuc). In examples in England the consultation process over the MCZs ('Balanced Seas') did ask for fisher LEK to inform this process, but the fishers still felt the outcomes were driven by traditional science and knowledge cultures rather than a serious inclusion of LEK in marine and coastal planning. While in Nieuwpoort the fishermen felt unable to influence the outcome and are concerned the process failed to take proper account of the interests of the coastal fisheries.

This process of engaging fishers in marine conservation also proves challenging owing to the technical knowledge requirements of the science involved. Yet in some case studies there are **positive examples of the fleet collaborating with the conservation authorities and marine scientists to share their respective knowledge and skills to help improve marine conservation and monitoring of sustainable stock levels** (e.g. established joint projects between the sectors in Saint Brieuc, Normandy and Hastings). While in Cornwall the fishers are working on education projects with schools around environmentally sustainable and responsible fishing practices. In other examples there is an obvious absence of structured collaboration between scientists and fishers that makes co-management challenging (e.g. Arnhemuiden). Both Normandy and Hastings have secured Marine Stewardship Council (MSC) accreditation owing to use of sustainable fishing practices. Though sadly neither community feel that this label generates any financial return for them within the existing supply chain and this creates difficulties with maintaining the fishers motivation to retain this expensive accreditation process in future. Where the MSC label does generate a benefit is in the media coverage it triggers and in the political value for the fishers of a sustainable fisheries narrative to be deployed to good effect in senior level governance forums.

5. Policy and Practice Recommendations

In Part A of this section of the report we have taken the findings from the detailed in-depth case studies discussed above and extracted the key guiding principles mechanisms and tools for developing collaborative and inclusive interactive governance models in inshore fisheries management. This succinct guide has been developed for policy makers and governance stakeholders to be used in their efforts through IF governance to secure more sustainable fishing communities in terms of economic viability (delivering direct and indirect contributions to the coastal economy), social sustainability, and marine ecosystem integrity. In Part B we have drawn out from the different case studies the dominant barriers to collaborative and integrated governance that they may inform governance design and practice by being accounted for and designed out or at the very least their impact mitigated against. In combination these two short tables provide a practical and widely applicable toolkit for small-scale fisheries and their communities working to secure a sustainable future.

5.1 Guiding principles, mechanisms and tools for developing collaborative and inclusive interactive governance models in inshore fisheries management (Part A)

Acknowledge local IF diversity and the importance of cultural, economic and social specificity of place when developing fisheries governance policy and practice.

There is a need for **whole community planning** (360 degrees/ multi-scale) to re-connect the fishing fleet with the wider community planning to better secure fisher representation and improve their mutual resilience. This requires the integration of IF governance in its broader socio-economic, political and environmental policy context through developing multi-sector inter-linkages, networks or partnerships. For example multi-sector partnerships with local authorities can act as a catalyst for inclusion of the fleet and maritime issues in a town's more strategic economic development, tourism, and regeneration planning.

Understand the community barriers to fisher/ community engagement so these might be dismantled and overcome (see table below of common barriers identified in this study). In particular, take the time needed to invest in and develop institutional & stakeholder capacity for co-management.

Understand that **governance** is both a **feature** of a fishing community's adaptive capacity AND a **mechanism** to be deployed as part of an adaptive strategy in building sustainable fishing communities

Interactive governance (like EAFM) requires an **inclusive stakeholder and integrated learning approach** that is still foreign to many in FM, but finding ways to secure meaningful inclusion of IF representatives and their LEK is essential to the success of this shift in FM to collaborative, multi-sector, whole system governance models. This includes: valuing fisher cultural embeddedness in communities, their contribution to sense of identity and other indirect contributions to the coastal community economy and social fabric.

The generation and support of an active and integrated **infrastructure of IF representative bodies** at local, regional and national level are key to the community capacity to engage in and influence the political process at national and European level that has dramatic implications at the local level. Without that infrastructure fishing communities feel disenfranchised, powerless and apathetic towards fisheries governance which can lead to increased non-compliance and mistrust of authorities.

Innovative partnerships and projects working with the tourism sector (e.g. restaurants, cookery schools, fish festivals, fisher-led education) have proven successful in many of the case studies in terms of fishing led regional branding, developing premium markets for more sustainable species and by-catch, and alternative income streams for the fishing industry around a responsible tourism offer (i.e. Responsible Tourism is about making better places for people to live in and better places for people to visit by all stakeholders taking action to make tourism more sustainable (Cape Town Declaration, 2002.).

Working with the science and conservation sector to develop joint projects to improve the reliability and trust in the data that informs conservation planning. In this way LEK is valued, fishers are involved in the decision-making, they are more likely to comply with regulations that emerge from a process they helped shape, and this encourages exchange of knowledge between marine scientists, conservation NGOs and the fishing industry to work together to better protect the marine environment.

As more examples emerge of the **Community Led Local Development (CLLD)** model in coastal planning, controlling authorities should note that there needs to be greater local autonomy (political & economic), and an understanding of the stakeholder skills, time, experience and governance processes & connectivity needed to make this model successful. Maintaining the reality of a top down hierarchical 'expert' led model will only obstruct these efforts to develop a participatory and empowering model of governance.

5.2 Barriers to fishing community engagement in interactive multi-sector governance models. Issues for policy makers and governance stakeholders to overcome in marine, coastal and community planning (Part B)

Social/political capital deficit: Lack of IF community social/political capital or culture of activism. This manifests in either apathy for or fear of formal governance and management. For the most part fishers are not interested in the politics, or the too often alienating processes of fisheries governance as they are currently manifest. Alternative approaches to governance that are inclusive and meaningful to the industry are required.

Institutional vulnerability: Even where there is an IF representation and voice in key forums this can be undermined or made vulnerable by a reliance on 'community stars' and poor governance resulting in democratic deficit (i.e. a failure to represent and consult the full diversity of views from a fleet/ fishing community). This institutional vulnerability is made more apparent where there is an absence of succession of community leaders owing to a reduced critical mass as fewer new recruits join the industry.

Stakeholder individualism: The acknowledged individualist nature of fishers means achieving a change of business approach that is better attuned to shared future responsibility of marine resources and community sustainability can be a challenge. This individualism is amplified by the geographical isolation and distances between areas of inshore fishing activity. Efforts to bring communities together to build and participate in collaborative governance must overcome both these issues.

Conflict prone and fragmented IF industry voice: The often fragmented IF industry voice and history of disenfranchisement at European and national level governance (fisheries management at these levels have historically focussed on the offshore fleets) has created a legacy of uneven efforts to secure a collective voice. This makes engagement with the industry more challenging for other sectors and dilutes the effectiveness of their political lobbying and influence at all scales. This is aggravated by local conflicts within and between fishing communities.

Disempowerment of IF voice at national/ EC level: A wide spread perception (with noted exceptions) that the IF fleet have limited routes to influence at national or European level has created a feeling of disempowerment that has been propagated to date by the top down hierarchical science led governance of CFP that makes engaging this sector all the more problematic.

Mistrust of enforcement authorities: Issues of lack of trust in authorities and other sectors traditionally perceived as in opposition to fishers (such as conservation bodies) requires time to break down barriers of mistrust and rebuild new networks and relations around a common purpose based on greater transparency and understanding of different stakeholder needs. This rebuilding of relations and networks is time intensive and this time needs to be built into an integrated governance approach.

Alienating nature of bureaucratic and technocratic governance norms: Where the governance structures issue from national or EC level authority there is often an inherent suspicion that they exist for greater monitoring purposes. The scale of bureaucracy in these structures turns off the fishers and other private sector members who feel the slow pace and prescriptive nature of the processing of grants and policy change is incompatible with the pressing immediate needs of the fishing sector.

The extended time and increased local autonomy needed in models of community led/ collaborative governance: There is an underestimation of the time needed to build trust between stakeholders to secure the relationships needed for a more positive experience of collaboration. This approach also requires increased autonomy (political and financial) and sensitivity to the specific socio-political and economic context in which it is being developed. No one community will start from the same position or faces the same challenges.

Low political profile/priority and lack of fisheries knowledge in development policy-making: A low political profile can contribute to fisheries occupying a relatively low regional policy-making priority, which in some examples is amplified by limited fisheries expertise in strategic development authorities and so an underestimation of their direct and indirect contribution to coastal economies and communities.

6. Glossary of Terms

AMP	Aire Marine Protégée
BN	Basse Normandie
CAM	Commission Administrative Mixte
CCC	Comité Consultatif Conjoint
CCCBG	Comité Consultatif Conjoint de Gestion de la Baie de Granville
CDPMEM	Comité Départemental des Pêches Maritimes et des Elevages Marins
CFP	Common Fisheries Policy
CFPO	Cornish Fish Producers Organisation
CLLD	Community led local development
CNPMEM	Comité National des Pêches Maritimes et des Elevages Marins
CODOP	Comités Départementaux Opérationnels
CRPMEM	Comité Régional des Pêches Maritimes et des Elevages Marins
DDTM	Direction Départementale des Territoires et de la Mer
DEFRA	Department for Environment, Food and Rural Affairs
DIRM	Direction InterRégionales de la Mer
DML	Délégation à la Mer et au Littoral
EAF/EAFM	Ecosystems based approach to fisheries management
EC	European Commission
EFF	European Fisheries Fund
EMFF	European Maritime and Fisheries Fund
EPIC	Établissement Public à caractère Industriel et Commercial
EU	European Union
FA	Fishing association
FEAMP	Fonds européen pour les affaires maritimes et la pêche
FLAG	Fisheries Local Action Groups
GIFS	Geography of Inshore Fishing and Sustainability
HBC	Hastings Borough Council
HFPS	Hastings Fishermen's Protection Society
ICZM	Integrated Coastal Zone Management
IF	Inshore Fisheries
IFCA	Inshore Fisheries and Conservation Authority
Ifremer	Institut Français de Recherche pour l'Exploitation de la Mer
IMD	Indices of Multiple Deprivation

IMP	Integrated Marine Policy
LEK	Local Ecological Knowledge
LEP	Local Enterprise Partnership
LIFE	Low Impact Fishers of Europe
MCZ	Marine Conservation Zone
MMO	Marine Management Organisation
MNP	Marine Nature Parks
MPA	Marine Protected Area
MSC	Marine Stewardship Council
MSFD	Marine Strategy Framework Directive
MSP	Marine spatial planning
NDFA	North Devon Fishermen's Association
NFFO	National Federation of Fishermen's Organisations
NFM	Normandie Fraicheur Mer
NGOs	Non Governmental Organisations
NUTFA	New Under Ten Fishermen's Association
POs	Producer Organisations
RACs	Regional Advisory Councils
SAGB	Shellfish Association of Great Britain
SIH	Système d'Information Halieutique
SMEL	Syndicat Mixte pour l'Équipement du Littoral
SWHFA	South West Handline Fishermen's Association
TA	Thematic analysis approach
TACs	Total Allowable Catches
U10M Fleet	Under ten metre fleet sector
UBO	Université de Bretagne Occidentale
UK	United Kingdom
UoB	University of Brighton
UoG	University of Greenwich
VCS	Voluntary Community Sector
VLAM	Vlaams Centrum voor Agro en Visserijmarketing
VLIZ	Vlaams Instituut voor de Zee (Flanders Marine Institute)
WTO	World Trade Organisation
WWF	World Wildlife Fund

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Internet links and video

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Website of MSC: <http://www.msc.org/>

Website of NFM: <http://www.normandiefraicheurmer.fr/>

Website of Comité régional BN : <http://www.crpbm.fr/>

Website of SMEL: <http://www.smel.fr/>

Video of WWF : <http://www.youtube.com/watch?v=xMvFPsgejWo>

Greenpeace 'Be a Fisherman's Friend' video: <http://www.greenpeace.org.uk/> last-fishermen-film