Social Impacts of Fishing
(NE0108)

The Social Impacts of England's Inshore Fishing Industry: Final Report

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This research was commissioned and funded by Defra. The views expressed reflect the research findings and the authors' interpretation; they do not necessarily reflect Defra policy or opinions

July 2011

1. Introduction

The coast is an ending and a beginning, a zone where different things come together; this is as true of social and cultural processes as it is with physical and ecological ones. Fishing follows this pattern of being simultaneously ancient – hunting and gathering fish in ways that in some instances have not changed over hundreds of years. Yet modern, as alongside these old technologies can be the very latest electronics that provide insights into life below the water's surface in ways unimaginable a generation ago, whilst much of the marine ecosystems remains unseen. This encounter of the traditional and the contemporary can be seen throughout commercial fishing as science, economics and culture meet. The coast, the meeting place of land and sea, has become the area where people pursue their leisure interests; take their holidays, make their livings and where a substantial amount of the heritage of our island nation is found. The meeting of these flows means that there is tumult and tensions but also a huge amount of energy and possibility. Fishing is not a 'special case' rather it is woven into a set of ecological, economics and social processes that make it particular, these specificities mean that attention needs to be paid to those factors as well as what it has in common with other activities.

This research project has been concerned with a sub-section of the fishing industry - the inshore fishing sector. Defined as the fleet of boats under 10 meters in length, inshore fishing employs 3,000 fishermen across 2,599 boats, which have access to a pool of fishing quota administered by government. Inshore fishing is characterized by a wide diversity of vessel configuration, fishing gear used, the ecological areas they fish and the species sought. Many lack the ability to stay at sea for long periods, so are generally subject to the limitations and opportunities of the locality they operate within.

Quite what constitutes this sector in the industry is still debated, but as a rule of thumb the length of boats is commonly used and it is the one we have adopted for this report. For the inshore sector the distinction is made that the boats that constitute it are under 10 metres in length – but apart from that the sector is characterised by an enormous diversity. Fishermen use a wide range of equipment (*fishing gear*) to catch a wide range of finned fish, shellfish such as crabs and lobsters, as well as prawns (*nephrops*), and then have a set of business practices to get those to the end consumer. As well as a form of community within themselves, fishermen and their families are part of the social life of towns, villages and coves that are spread along England's coast. Although far from the industry it once was - in national economic terms it is a very small industry - it continues to have impacts of profound cultural and social importance in the coastal settlements it is based in as well as on communities beyond.

Fish stocks pose a classic problem of how to manage a common and fragile environmental resource. In the past, policy was focused on reducing conflict over access to this resource, still a feature in some circumstances, but increasingly the locus of debate and concern has been how to manage this valuable set of ecosystems. Commercial fishing is regulated under the EU Common Fisheries Policy (CFP), which is then managed at national and sub-national levels. The restrictions, and the form of those restrictions, have been the subject of sustained friction between fishermen and policy makers, as has the science on which they are based. At the same time conservationists and many consumers of fish are concerned about the state of the fish stocks with high profile campaigns and interventions designed to protect those populations. Fishing has become an activity and occupation that is socially contested. The recently published decade long *Census of Marine Life* notes that: "Historically, overfishing and habitat destruction lead the ranking of threats to marine life associated with human activities"[1](p.4). The report emphasizes that fish

[1] Census of Marine Life (2010) First census of marine life 2010: Highlights of a decade of discovery. in, (Washington: Census of Marine Life International Secretariat Consortium for Ocean Leadership):4

species have in the past become extinct and that others have recovered from sustained periods of over-exploitation.

In 2009 there were 570 fishing boats over 10m registered in England, with 2599 boats under 10m registered, of those 1746 were under 8m in length. Working on these vessels were 5358 people, a decline of 22% since 2000[2]. Figures from 2008[3] show that approximately 3000 people worked full time on these boats suggesting that the balance of employment in commercial fishing is provided by the inshore boats. These figures suggest that most boats are run on an owner-operator basis, with few crew employed in the inshore sector. Employment is obviously a profound social benefit to those people who make their livelihood in this way and to the communities that they are part of, but the form of those benefits, how they relate to the configuration of the industry, the communities and markets in which these fishing businesses are embedded is the substance of this report. Employment as a basic figure leaves aside much of the more subtle and ephemeral impacts that fishing has on those interwoven with it, or those who just come into contact with it. Most of those who go to sea define themselves as 'fishermen' drawing pride, identity and solidarity from that as well as an income. Those who live alongside fishermen are often proud to belong to a community or place that is, in at least part, defined by this relationship with the sea. The second part of this report then attempts to relate insights from our investigations into these interlinkages with how fishing might be managed in the future. From there the report suggests ways in which inshore fishing might be developed.

The report is based on research in six case study towns that we name, but the people we interviewed and talked with to inform this report we do not. In protecting their identities we were able to ask them to be more candid than they might otherwise be, about their own communities and the way they are making their

[2] Marine Management Organisation (2010) UK Sea Fisheries Statistics 2009. Pp. 120 in C. Irwin and B. Thomas eds., (Newport: marine management organisation and Office of National Statistics)

[3] Sustainable Access to Inshore Fisheries (SAIF) Advisory Group (2010) Steps towards sustainable inshore fisheries - proposition paper. Pp. 13 in, (London: Defra, SAIF project)p.3

livelihood. Without their generous contribution of time and attention this report would not have been possible. We quote extensively below from what people said to us, and relate examples, to illustrate what we found. The social and cultural picture is complex and intricate and to ignore that would be to oversimplify what we have been told. Similarly we have tried to avoid jargon and technical terms apart from where they lend precision and concision. Our goal has been to produce an analysis that whilst acknowledging the particular qualities of each case study also points to common themes and experiences.

Some communities have been able to make more money from fishing than others, and certainly where that takes place the impacts of fishing are greater. Yet direct earnings are not the whole or even perhaps the most important benefit, as fishing plays a role in a much larger and important industry – tourism. At the national scale inshore fishing is a small, fragile industry that rests in the hands of a group of people who tend to be older but who are using their skill and determination to sustain it. Despite its economic marginality and because of its social and cultural importance we believe that fishing could yet play an even more vivid role in the future of a range of communities. The challenges between those possible futures and the contested present are not, unfortunately, inconsiderable.

We have structured this report to focus on the findings of our research, which is based on a considerable body of qualitative research. The main body of the report sets out the aims of the project, the methods used to collect the data, and then moves to discuss the evidence and findings from the two stages of the research. It concludes with observations and suggestions as to how the inshore sector can be taken forward. To make the report more readable we have placed supporting documents into the appendices; the review of the academic literature that informed this research, the methods deployed, a technical discussion of some of the data analysis and the questionnaire tools used.

1.1 Project Aims

The project had five interconnected aims, two of which - a and c - are discussed in the first stage of the report (sections 4 and 5) with the other three aims in the second stage and the conclusions relate to all of the project's aims.

a. To establish the nature and scope of the social and cultural impacts of inshore fishing.
b. To relate the social and cultural impacts of the inshore fishing industry to broader policy objectives.
c. To understand how the social and cultural aspects of fishing interact with other constraints to impact differently on people.
d. To relate the understanding of specific locations and communities to policy and management measures.
e. To identify examples of best practice in developing positive social impacts of inshore fishing, which may be used as models.

1.2 Sustainable Access to Inshore Fisheries (SAIF) context and goals

The Sustainable Access to Inshore Fisheries (SAIF) project was set up in 2009 and is about long-term reform of the English inshore fishing fleet. Its specific aims are to:

- Achieve a greater understanding of the problems currently facing the English inshore fishing industry;
- Determine the economic, environmental and social impacts of inshore fishing and how associated benefits might be maximized in the future;
- Ensure that the inshore fishing industry can secure optimum economic benefits whilst operating in a way that is not damaging to the environment and safeguards stocks for future generations.

To achieve those ends SAIF has an advisory group comprising of stakeholders, who published a proposition in paper in January 2010, to create a debate about the future possibilities for inshore fishing. The SAIF advisory group's final report and an

initial Government response were published in September 2010[4]. The SAIF project is supported by several research projects, of which this is one, and a programme to engage with relevant stakeholders.

2. Literature review

2.1 Key points of the literature

We have reviewed the existing social science literature about the social impacts of inshore fishing, which is presented in appendix 1. The key points of the literature are:

- Inshore fishing is not yet precisely defined but is characterised by a complex diversity of fishing tackle, technical capacity, tactics and employment practices.

- Data about the social aspects of fishing is scarce, as it is not consistently collected, making it hard to define communities dependent on fishing.

- Studies of the social impact of fishing have highlighted the role of the family with crews often made up of kin and the identity of fishing passing across the generations. A study in southern England has emphasised non-familial social networks and the importance of first generation entrants into fishing (e.g., Just et al, 2005).

- Restructuring in the industry is challenging the traditional gender roles in fishing families.

- There is strong evidence to suggest that people's involvement is based on place, as well as, occupational identity. Loyalties are to particular places and traditions not just a shared occupation.

[4] http://www.defra.gov.uk/foodfarm/fisheries/policy/saif/pag.htm

- Fishing communities are often tightly knit, which is often reinforced by a sense that the community is stigmatised and little is known about relationships with other communities.

- A distinction is increasingly drawn between communities making their living from 'real' fishing and those based on 'virtual' fishing closely allied to the tourism industry.

- Some social scientists points to the role of the Common Fisheries Policy in undermining traditional communities, others point to problems in the management of common resources and others the effects of the market for fish.

- It is argued, by Symes in particular, that the social aspects of fishing policy have been generally sidelined in policy.

- Fishing as an economic activity that has considerable effects on the marine environment has a extensive evidence base; those aspects of fishing that are about social identity and the cultural importance of fishing are not so well underpinned with data.

The literature on the social impacts of inshore fishing is diffuse with little work specifically on social impacts; the studies have been dominated by ecological and economic approaches. Those that have been more qualitative have tended to focus on remote communities, where commercial fishing is the dominant form of enterprise and way of life. Therefore, although this literature has an important role in informing this study, it has significant limitations in terms of the data collected, assessing social impacts in more complex local economies or those not dominated by fishing, and the frictions caused by social and ecological change.

To address some of these gaps we have included in the literature review a discussion of the social impacts and the role of food products in fostering community development. This highlights the challenge of assessing social impacts of an activity that is deeply historically embedded and may now often be more culturally than economically important. Many rural and community development projects based around agriculture use food as a vehicle to not only add value to the product but keep as much of that value in the local community. This requires using food as a way of integrating a range of actors within a locality to their mutual benefit rather than developing the individual sectors found within a community in parallel. This is a very different set of ideas and practices, or 'paradigm', than the approach of developing the fishing industry that appears to be more common in discussions of commercial fishing. Throughout this report we refer to fish in different ways, as with all food products there is an increasing differentiation. By commodity we mean a fish that is sold on the basis of its weight, species and technical quality by has no provenance or 'story'. Counter posed to these fish is a much smaller range of fish that have a narrative that is attached to a certification scheme or its association with a place. Often these two different types of fish speak to the different paradigms, commodity fish to sectoral developments and those with provenance to the paradigm of integrated development.

2.2 The coastal tourism industry

Tourism is a complex industry, and not the central focus of this report, but as part of the later discussion it is worth reflecting on its scale and scope to provide context for the rest of the study. The form of tourism most immediately relevant to this report is 'seaside tourism' although gastro-tourism may be important for some towns. We do not have complete data for the case studies but for those where we have data we present in the case study sketches. In 2008 England and Wales seaside tourism employed approx 210,000 people, or as many people as the coal mining, steel, pharmaceutical and aerospace industries combined. In 2009 fishing both inshore

and deep water employed 6,209 people directly in England and Wales[5]. Tourism is not evenly distributed with approximately 61,000 jobs in the 2006/8 period in the South West, 46,000 in the South East, 29,000 in the North West but only 7,000 in the North East. In this it broadly mirrors the geographic distribution of the inshore fishing sector. At a county level, in 2007 estimates for the gross value added to county economies by seaside tourism ranged from £250 million for Cornwall, down to £20 million in Cumbria and £10 million in Northumberland[6]. Often in coastal towns and villages, after employment in the public sector, tourism is the pre-eminent economic activity.

3. Methods and Methodology

The project was divided into 2 phases, the first sought to understand the social impacts of inshore fishing on coastal communities in England and the second phase how these might inform policy scenarios and how stakeholders responded to those scenarios. In order to understand the way in which inshore fishing interacts with communities the research team decided on a case study approach to provide information on a selection of different communities on the coast of England. Case study methodology allows the research team to focus on developing an in-depth understanding of a community relatively quickly and to explore not just the economic but social and cultural links to fishing. To make the findings from case studies generalisable it is important that those selected are broadly representative, and that the number of case studies allows comparisons to be made. This process is discussed below.

The research team opted to use qualitative methods to lead the enquiry backing those up with a quantitative technique, providing flexibility and variation in gathering data from a diverse group of people. Through a semi-structured

[5] Marine Management Organisation (2010) UK sea fisheries statistics 2009. Pp. 120 in C. Irwin and B. Thomas eds., (Newport: marine management organisation and Office of National Statistics)

[6] all tourism figures in this paragraph Beatty, C., S. Fothergill, T. Gore and I. Wilson (2010) The Seaside Tourist Industry in England and Wales. Pp.68, (Sheffield: Centre for Regional Economic and Social Research)

questionnaire the research team looked to interview those who were obviously involved with inshore fishing as well as those people who lived in communities alongside those who fish for a living (see appendix). In each case study area as well as interviews with individuals the research team looked to convene a focus group to allow local people to discuss the issues around fishing in their community. The quantitative technique used was social network analysis to explore some of the networks around fishing businesses and their principals. Taken together these techniques would allow the research to form a picture of the interactions between inshore fishing and the wider community, considering not only business transactions but also the social connections.

The second phase of the project was to create a set of policy scenarios and through discussion with stakeholders discern how these might provide insights in how fisheries might be managed in the future. These scenarios needed to be based on the research in phase 1 and the analysis made of the results from that work. Discussion groups have a number of advantages as a research method as they bring together representatives of those groups who have a stake in the topic to discuss and if necessary debate a topic. Scenarios allow discussion of 'what if's' in a way that can, through analysis, allow the research team to discover not only pragmatic objections but also differences in outlook and philosophy. After this stage in the research we interviewed by telephone those with responsibility for tourism management at a regional or a large scale about the relationship between tourism and fishing.

To bring the various streams of data together the research team elected for an adjusted constant comparative method that is based on iterative rounds of analysis and through which the analysts search for emergent themes. Therefore the first round of analysis was based on the phase 1 data, with the next iteration being the data from phase 2 on its own, with the tourism interviews analysed on their own and then the final round all of the data collected. The adjustment to the classic constant comparative method was the presence of the quantitative data which was used to

triangulate the emergent themes and so helped guide the rounds of analysis rather than lead them.

3.1 Selection of Case Studies

The selection of the case study communities was an iterative process that aimed to capture the diversity of the inshore fleet and the communities it is intertwined with. Our analysis clearly showed that the inshore fleet was concentrated in the South West of England. In order to have wider policy relevance the sample was guided in order to ensure broader geographic coverage.

Stage 1:

Data was obtained for a total of 135 ports in England. Where available, the key variables compiled were:

- Resident population (all ports)
- 2003 Fishing income, all species (66 ports)
- 2009 Boats registered (74 ports)

Using this data, the followed variables were computed in order to try and identify ports where fishing was likely to be significant in socio-economic terms:

- Fishing income per capita
- Boats per capita

For each variable, the top two quartiles were initially shortlisted. It was suggested by the research team that contextual factors such as remoteness, geographical spread and population size could also be taken into account when selecting study areas. A further three ports highlighted as being potentially important inshore fishing ports by the Vivid Economics report were also added[7]. This was on the basis of median boat size and the significance of under 10m boats in their fleets. These were – Mevagissey, Portland and the Scilly Isles. To widen criteria that might suggest social relevance, the following two variables were added:

[7] Vivid Economics (2008) The economic benefits of fisheries management: Regulatory design for stock recovery, equity and an efficient fleet. Pp.74, (London).

- Indices of Multiple Deprivation (IMD) (Most deprived 10% for England falls below 3249, least deprived 10% falls above 29233)
- Percentage of registered boats that are under 10 metres in length

The resulting list of 17 potential candidates was then selected on the basis of needing to represent the 6 relevant regions of England; this produced two possible combinations.

Table 1 - Case study selection options

Case Study Selection 1	Case Study Selection 2
Newlyn, Cornwall	Newlyn, Cornwall
Padstow, Cornwall	Brancaster Staithe, Norfolk
Appledore, Devon	Amble, Northumberland
Whitby, Yorkshire	Southwold, Suffolk
Rye, East Sussex	Scarborough, Yorkshire
Portland, Dorset	Mevagissey, Cornwall

Overall, the final case studies selected in consultation with Defra represent a number of key factors in the inshore fishing industry and different types of communities (see Table 2 below). The six case studies cover the major regions of England; ranging from communities where fishing is economically important through to those where it is symbolically central, from small villages to larger towns, from the poor to the affluent, remote to accessible places and with a range of tourism offers. The research team interviewed a wide group of citizens in these communities along with both down and up-stream interests and the catching sector itself.

Table 2 – Case study selection figures

Port name	County	Pop'n	Fishing income /Income per capita 2003	Number of under 10m boats	Boats registered / Boats per capita (*100) 2009	Under 10m as % of all boats	IMD ranking 2007
Newlyn	S. Cornwall	2687	£17.7m / £6,570	88	140 / 5.21	63%	3709
Padstow	N. Cornwall	2449	£1.7m / £713	13	18 / 0.74	72%	12,267
Whitby	North Yorkshire	13594	£2.7m / £196	20	34 / 0.25	59%	8176
Amble	Northumberland	6044	£1.2m / £196	22	30 / 0.50	73%	22,349
Rye	East Sussex	4195	£0.7m / £170	25	27 / 0.64	93%	21,991
Whitehaven	Cumbria	24978	£2.17m / £87	15	15 / 0.06	100%	11,116

Table 3 - Number and categories of interviewees by case study

Case study	Fishermen	Fishing family	Allied Industry	Citizen
Amble	4	2	6	4
Newlyn	4	1	6	7
Padstow	4	1	3	2
Rye	4	1	2	10
Whitby	5	0	6	10
Whitehaven	3	0	3	2

3.2 Fieldwork and analysis

The fieldwork took place during the winter of 2009-10 and resulted in some revisions to the methodology initially envisaged. It became quickly apparent that 'gatekeepers' were important in contacting fishermen; these influential individuals

introduced the researchers to the fishermen and vouched for the value of the research being undertaken. Although not unusual as many social groups and networks have such individuals, it was an important finding and meant that researchers were tracking existing social networks in many instances. The researchers endeavoured to interview people outside of these networks to provide balance. The pilot and first case study saw some changes to the types of quantitative data collected, as interviewees were reluctant to answer some of the wide-ranging questions, as they could not relate them to the expressed goals of the research. This led to the adoption of attitudinal questions that were analysed through factor analysis (see appendix). Only in Padstow were a significant number of interviewees familiar with working with social researchers but the research team was welcomed and levels of co-operation were high. The goal of having focus groups in the case studies was only partly successful with groups taking place in Rye, Amble and Newlyn. Phase 1 also demonstrated that recruitment for participation in phase 2 would have to be more widely drawn than initially envisaged, as the range of stakeholders identified was diverse. Recruitment for phase 2 was greatly assisted by participants in the focus groups and at that stage expression of disappointment by community representatives that their town had not been chosen as a case study in the project.

The pilot and first case study provided guiding themes that informed the first round of analysis of the case studies and those themes in turn were revised in the light of that round of analysis. The research team then created a summary of their findings to date as well as the policy scenarios to inform the discussion in phase 2. Once the entirety of the data had been collected those initial themes that had informed phase 2 were re-scrutinised and all of the data analysed to discern common themes and findings.

4. Case studies

Those people who took part in the interviews for the case studies did so anonymously for the purposes of this research and the research team has ensured they cannot be identified in this report. Often local people provided us with estimates of activity in their community, although wherever possible we found a second source for these figures. Whenever we have been able we have found third party figures but these are not always available.

4.1 Amble, Northumberland

Amble is one of Northumberland's small traditional coastal communities that have seen traditional industries such as mining decline alongside fishing. There are around 100 people making their living from fishing now: 50 on the boats and 50 in support services[8]. As a result, tourism is becoming increasingly important in the town as other industries decline, with 100 people employed year round or 8% of total employment in the town[9]. Visitors are drawn to the harbour, the marina, the town's Site of Special Scientific Interest (SSSI) and views of Warkworth castle.

Amble remains a tight knit community where people have lived and worked alongside each other for generations and where the harbour remains the hub of community life. Fishermen play an important role in the town sponsoring events at local schools, crewing the local lifeboat and drawing in tourists. The harbour is the social meeting point for both residents and tourists alike and is characterised by fishing activity. As a result, fishing is central to Amble's sense of identity. Our interviewees, both working on land and in the fishing industry argued that the close-knit values held in Amble relate to the traditional working relationships of the fishermen and are supported by the fishing families that live there.

[8] Local estimate

[9] Beatty, C., S. Fothergill, T. Gore and I. Wilson (2010) The seaside tourist industry in England and Wales. Pp. 68, (Sheffield: Centre for Regional Economic and Social Research).

Fiercely proud of their community, our interviewees in Amble see fishing as playing a key role in the future of the town as it develops in new directions and creates new forms of employment and industry after the closure of the area's mines. The town has a thriving marina that is used by pleasure vessels as well as some of the fishing fleet. However, the fishing industry is conscious of being close to what it perceives as the better supported Scottish industry. Fishermen are restricted on their ability to fish for the finned fish generally eaten in the community and are reliant on distant markets. In a town where fishing has been passed down from generation to generation, prospects for the future of the fishing industry mean young people no longer want to go to sea and existing fishermen are discouraging their sons from entering the industry. The traditional way of life is beginning to break down.

4.2 Newlyn, Cornwall

Located at the extreme end of the South West peninsula, Newlyn is one of the largest fishing ports in England, with 140 under-10m registered boats. The town's identity, local services and socio-economic structures are all associated with fishing, although it is also known for its community of artists and galleries. Fishing not only dominates the physical infrastructure of the town and facilities but it permeates the identity of individuals and the community. The majority of community events, initiatives and interests in some way relate to fishing. A variety of upstream and downstream businesses exist in the town including the prominent fish market where the majority of catch is sold. Further services are indirectly supported by fishing, the number of which has diminished over recent years in line with the decline in the scale and value of the industry. Hospitality services primarily serve the fishing industry rather than tourism, although tourists are drawn to the art galleries, fish festival and to view fishing activities on the harbour side.

The most common social distinction is that between fishermen and artists, with some perceiving them as quite separate and others as integrated. The fishing community itself is close knit, with the principal meeting places being public houses and the Fisherman's Mission, a hub of the community in terms of knowledge exchange, networking and socialising. Although important and a highly valued

resource for the community, expressions of support for it are highly gendered. Women are more likely to acknowledge the role of the Mission, whilst men although the main users of the Mission's services are not so open about its role.

Many inshore fishermen supplement their income by crewing on larger trawlers or working outside the industry. The inshore sector plays an important role in providing skills, training and knowledge for the wider industry and is often seen as more aesthetically pleasing than the deep-sea sector. Trust and community support appears strong within the inshore fleet, both on and off shore; inshore boats often go out as a group and many of the lifeboat crew are inshore fishermen. High levels of cooperation and active networks exist between the various organisations present. A traditional view of the role of fishermen is apparent with relatively few fishermen capitalising on the marketing opportunities of the fish festival, which attracts thousands of visitors every year. From fishing regeneration projects through seafood initiatives to the producer organisations, networks are active and high levels of knowledge; trust and reciprocity are evident among those involved in addressing the industry's concerns. Because of its role in both Cornwall's and England's fishing industry, Newlyn hosts several initiatives to develop it. Project officers work closely with fishermen to take these initiatives forward. Some political tensions exist and power is an issue in Newlyn, with perceived shifts in the balance of power towards the wider community emerging.

4.3 Padstow, Cornwall

Padstow is a small town on the north coast of Cornwall, on the estuary of the river Camel. The town has become internationally famous in the last 20 years because of its association with the TV chef Rick Stein and as the base of his hospitality businesses. The town promotes itself as a historic fishing village, with 18 inshore boats registered in the port. Fish and fishing play a central role in the most important industry in the town - tourism. In the height of summer over 30,000 people visit a day, eating at more than 40 establishments and the harbour is at the

centre of town[10]. Tourism provides 1300 year round jobs, or 51% of employment in the town, contributing £17 million GVA to the town's economy[11]. To gain access to the town, visitors can park next to a boat builder's yard and the lobster hatchery and walk past the fishermen's sheds. Fishing is the lens through which the visitors' impression of the town is filtered. Fish caught by local boats and landed in Padstow does go directly into the town's restaurants but other fish is sold into the continental markets.

Many local people have been pushed away from the harbour side by second and holiday homes but still maintain their traditions and have pride in their community. Ancient annual festivals, local traditions, songs and the natural beauty around Padstow mean that in a town marked by the cosmopolitanism of tourism it remains a unique place and community. The remaining fishermen have found market and regulatory niches to allow them to continue, with support from the rest of the community. They face the challenges of uncertain continental markets, concerns about secure access to their fishing grounds and an ageing workforce. Although they have a significant market for fish on their doorstep, there remains the challenge to match that to the species available locally.

4.4 Rye, Sussex

Inshore fishing is historically an important part of the Rye community, and it remains so in terms of contemporary economy and culture. In economic terms the fishing industry contributes up to £1 million per annum into the local economy directly through income and related inputs[12]. It also contributes indirectly to the local economy through its connections with Rye's primary economic sector - tourism. Given that Rye, like many other small coastal communities, suffers poor economic indicators in term of employment and other factors, this is very significant. The fishing industry is also absolutely central to the community's collective identity and

[10] Figures from interviewees in the town
[11] Beatty, C., S. Fothergill, T. Gore and I. Wilson (2010) The seaside tourist industry in England and Wales. Pp. 68, (Sheffield: Centre for Regional Economic and Social Research).
[12] Arup and Environment Agency (2002) Harbour of Rye Review. Pp. 54

sense of place. Any decline in the industry at Rye would thus bring both cultural and economic negative impacts to the area. For most of the local residents it would be the cultural significance of fishing that would be most important with the economic impact largely being felt by those directly involved with fishing, partly because the fishermen are not linked into extensive local social or family networks. Half the 100 or so people who work in the industry live outside of Rye itself.

The Rye fishing fleet is flourishing with numbers of boats up (now at a total of 27) in the last decade and a waiting list to get into the harbour. This success is due to the recent upgrading of the fishing quay facilities and the apparently healthy state of fish stocks in Rye Bay. The harbour remains tidal and thus fishing times are restricted. This acts as a brake on the over exploitation of local stocks. Rye lands a very diverse catch but diversifying into new catches, particularly scallops, has contributed to this success. The final component in this recent success reflects collective efforts in wholesaling and distribution, which means that 80% of the catch now is exported to France.

The Rye fishing community has demonstrated a willingness and ability to co-operate and self-regulate - finding new markets, organising the Rye Scallop Festival and a voluntary closed season on scallop fishing to preserve the stock. There is plenty of room for new economic activity to develop particularly in relation to value added food markets and tourism. The scale of the industry in volume terms probably cannot increase markedly due to the restrictions on boat numbers and the tidal nature of the port. The main challenges it faces, in the opinion of those people we interviewed, comprised in dealing with quotas and regulations and an ageing workforce.

4.5 Whitby, Yorkshire

Whitby on the North Yorkshire coast was historically significant for shipbuilding, potash, and fishing. Today, there is still one company building small ships, mostly trawlers, but the inshore fleet of 34 under-10m boats is struggling to survive; the local industry is seen as "poised on a knife edge." Loss of more boats may result in

knock-on effects on other activities such as the fish market and fish processing. Despite the decline, fishing and fish processing continue to be important economic activities. Current local estimates of employment in fishing suggest that there are around 250 – 300 people making a living directly or indirectly from fishing.

Tourism is the most important economic activity and is based on the maritime, fishing and cultural heritage of the town (Whitby Abbey, Captain Cook); with a gradually expanding season that brings visitors year round. There are approximately 2,000 year round jobs in tourism, which is 24% of employment in the town, and tourism contributes £24 million GVA to the local economy[13]. Tourism also brings problems, particularly traffic congestion in the summer months. 'Whitby fish' are a significant draw for tourists many of whom come to eat in one of the fish restaurants or fish and chip shops.

Quality of life is viewed as high with a low crime rate and a good mix of people from different socio-economic classes. There is a 'lifestyle mindset' where people come to Whitby to enjoy life rather than to make a lot of money and to a certain extent the entrepreneurial spirit was seen as lacking by some interviewees. People have a strong sense of identity and perceive Whitby as being 'unique' with its links to the maritime past. There is a strong sense that the town is a fishing community among those inside and outside of the industry. Among the fishing community the sense of belonging to a long tradition is very strong with many of the currently active fishermen having descended through generations of fishing families. Levels of support and trust in the town are high, not just among the fishing community but also more widely. Families support each other in hard times and the fishing community is well integrated and involved in the wider community.

4.6 Whitehaven, Cumbria

Whitehaven is a historic port of ten thousand people on the Cumbrian coast. In the past it was a centre for heavy industry – coal, steel and chemical manufacturing but

[13] Beatty, C., S. Fothergill, T. Gore and I. Wilson (2010) The seaside tourist industry in England and Wales. Pp. 68, (Sheffield: Centre for Regional Economic and Social Research).

is now most influenced by nuclear power generation. In response to the industrial decline, the town has been through a prolonged period of renewal and re-orientation, the most obvious product of this process is the renovated harbour side. The residents are very proud of the built heritage of the town, with the harbour being the centre of the town's tourism industry and many of its community events.

Fishing in the town has declined sharply over the last 20 years, with only 15 under-10m boats remaining employing an estimated 40 people. Because of its location, it is a convenient harbour for many larger boats, particularly from Northern Ireland, to land their catch and this helps create a supportive infrastructure for the smaller vessels. Although traditionally a mixed fishery, it has become focused on prawns, as this is the most available species. The fishermen report problems of market access particularly because of the remote location of the town. Although a small group of fishermen, they have become increasingly organised to pursue their own interests and develop the facilities available to them, in this they are working closely with the harbour authorities. One of the central draws to the town is a festival generally organised in and around the harbour, which to date the fishermen have not be involved with. Residents of Whitehaven have a strong sense of its heritage, the value of its community and the potential the town has to develop tourism as a source of income further.

5 – Stage 1 Findings

Our findings are based on interviews with a wide range of people (see above), across the 6 case study towns. By comparing these interviews with the quantitative data collected, our observations and the contrasts between case studies we have drawn out the common themes in the evidence collected. The quotes used represent repeated points and themes; we have transcribed them as authentically as possible. At times the quotes come from only one case study but where a finding is specific to a community we have indicated that. Overall, we are making a series of general findings.

5.1 Survivors

Of those who we interviewed those who make their living directly from inshore fishing are predominantly older men, generally in their late 50s who have often spent their entire career in fishing. They are 'survivors' in a number of senses, not least because they have remained in fishing despite its decline. Their ability to survive these changes in the industry reflects a combination of their life stage; a shared culture and the opportunities open to them. Most of those fishermen we interviewed were either skippers or co-owners of the boats they worked on. Many of them admit that they had earned a relatively good living earlier in their careers and so are able to continue fishing because of that, whilst others have adjusted their expectations of what they can earn from fishing.

> You get hooked on it (fishing)…if the money was there people would do it, but you can't teach someone to be a fisherman in a classroom, if fishermen go you will lose that knowledge and never get it back (W1[14], fisherman).

The inshore sector as currently constituted appears to favour older men, who have had chance to gather resources to finance their boats but who are not looking to re-invest before retirement. They are less likely to face the demands of dependent children who tend to require a regular income rather than the intermittent or seasonal income that often typifies the income of the self-employed. Older men are also advantaged as they will have had opportunity to develop the most job knowledge and skills, not only at sea but also on land, meaning that they are the most 'competitive group' in the industry.

The reverse side of this is that succession into the industry appears very low; although some young, dynamic entrepreneurial fishermen do exist; young people in general are not choosing to enter the industry as they traditionally have done. Interviewees explained this was because the work is hard and dangerous, the conditions poor and, by contemporary standards, the financial return for this falls short. Not surprisingly therefore fishermen themselves do not always encourage their sons to enter the industry. For those familiar with the industry and its

[14] - Each anonymous interviewee has been given the initial of the case study (W=Whitby, Wh=Whitehaven), a number and in some cases the date of the interview.

complexities, the burdens of regulation clearly do not help, and for new entrants influenced more by the negative portrayal of fishing in the media and the often dis-approving perceptions of wider society, fishing is not the first choice of career. A counter narrative to that impression is that some fishermen view the reality TV shows – *Trawlermen* and *Deadliest Catch* as portraying aspects of the industry positively. They observed that dangerous occupations, such as the Army, do not struggle to recruit young men, but the package of risk and reward has to be balanced.

Although rarely possessing many educational qualifications those we interviewed were obviously able to adapt to a demanding regulatory environment, modern electronics and communications at sea and on land, and also are often eloquent in describing their situation. Generally they had found a niche or an opportunity to ensure that their catch could reach the market. Often these niches did not represent opportunity for the greatest profit but a route that was relatively stable, familiar to them and allowed them to focus on what they considered fishing to be about. This can be seen in the exporting of species caught in English waters but not generally eaten locally to the continental markets. More profit might be generated if a market could be established in the England, but the effort of doing this is beyond the traditional role of a fisherman and is uncertain. The established supply chains for the species taking it to the continent strip it of its story or provenance so it reaches a lower price than it might otherwise do but it is certain to be sold. It is the distribution of these opportunities that is one of the major influences on the impacts of inshore fishing on the rest of the community.

Part of what the fishermen bring to their businesses and way of life is a deep knowledge of not just the skills and methods of fishing but also of who is involved in fishing. It can be said that fishermen have a lot of 'know how' - tacit knowledge. They are also knowledgeable about those working in policy and regulation either locally or often nationally. Fishermen have made generally considerable investment in 'know who', knowing not just those in the catching sector but those involved in the management of the fisheries through to national policy levels. As one woman

involved in catching sector observed the dominance of men made that 'know who' easier, as it was a network of men who were familiar with one another and a shared culture of working.

The area of disagreements tended to be over 'know why' about the way in which they saw 'their' fisheries managed. These tensions appear to be about the knowledge that fishermen have about 'their' specific fishing grounds and what they see as generalised models used by marine scientists. This disagreement was not just over stock levels but the age distribution and so sustainability of the population.

> There are Cod dying of old age out there (P2).

Others pointed to examples of where scientists have revised or reversed their earlier opinions after accompanying fishermen to the specific grounds that they have been fishing. Questions were raised about the methodology of the surveys used to estimate stock levels and the role of a science, which they held to be often inaccurate, in policy making. These disagreements were expressed in terms that ranged from the highly informal through to those couched in the vocabulary of ecological science.

5.2 Male occupational culture

Women clearly play their role in the industry, either in terms of assisting with running the business and dealing with administration or through providing emotional support and holding together a household and a family which has to endure unconventional work life patterns and pressures. Those women we did interview were clear about the gender divisions in the industry:

> There is a clear gender divide as in nearly all fishing businesses. (N1 12/2/10)

This had not prevented women taking senior roles in the industry but often they felt isolated:

> I don't know any other wives involved in the industry directly (N2 13/2/10).

In part this was because as one woman explained:

> There isn't a strong network of women involved in fishing. There is a stigma attached to it as it is so male dominated, but women do have a big supportive role (N2 12/2/10).

The research team quickly found that the terminology of discussing gender is contested, as one woman in Whitby working in the industry said:

> A fisher (fissure) is a crack in a rock (W1).

Or as one fisherman said in Padstow:

> *Fisher* is that the politically correct term for us then? (P1).

In some cases we came across examples where the wives and families of fishermen were actually more proactive in supporting community events and initiatives than the fishermen themselves. This again reflects a common gender division, with women acting as 'social connectors' within families and linking men into wider society, whilst men are focused on their occupational identity.

We encountered no women who went to sea, and as such we saw a sector typified by a working class male occupational culture. This was a feature of their communities that some interviewees recognised:

> It's a working class community, if you are doing a working class job you would get accepted quickly (W2)

We interviewed fishermen not only engaged in a physically demanding job but also in everyday social routines and roles that are the domain of men. To have persisted in the face of the decline of the industry and to continue to fish is the affirmation of this identity, not only for the fishermen themselves but also for the rest of the community. Although these communities are coastal they also often have an ex-industrial heritage – Whitehaven, Amble and Cornwall as a whole – so reinforcing that identity. Even those areas without the legacy of heavy industry had a tradition of working class men finding a role through fishing, an industry that requires a relatively modest capital investment to enter. Unlike many of the studies in the literature we found no dominant pattern of fishing families, rather a diverse pattern of entering fishing as a young man with no family background, starting later in life sometimes after working part-time in fishing as well as through family ties.

It was clear in discussing fishing with fishermen that they found certain rewards because it focused on 'male' concerns and they enjoyed the association with other men. The focus on technicalities and on technical competence is an essential part of the performance of this masculine culture. This competence extends to a knowledge of the regulations around fishing, and includes being able to demonstrate what the fishermen argue is the perversity or failings of the rules. Fishermen would talk of the "crack" of being at sea together, the joking and ribbing that constituted many of the exchanges between the fishermen we observed was all part of the constant re-creation of the culture.

In communities increasingly dominated by the service sector, fishing remains the locally available link to traditional male roles. No interviewees talked of excluding women, most said quite the opposite, but they did not want the fundamentals of the job to change. By providing male working class employment, inshore fishing plays an important role in shaping the rest of the community.

5.3 Nature of the employment and family life

In discussion, most fishermen stressed how fishing, although it might only offer a part-time income, is a full time identity in that they need to be available to go to sea on the basis of the weather and tides. This limits their opportunity to take on other work and although this does happen through the necessity to supplement income, it is difficult to sustain an operational boat. It also makes it difficult, many of them argue, to engage in land-based meetings, whether related to policy or business. To this degree fishermen can often seem an elusive group.

It is important to acknowledge that compared with deep sea fishing, the inshore sector does offer fishermen a more conventional work-life pattern in that they are not usually at sea for days at a time, enabling potentially more involvement in community matters and fewer pressures on family life. This conventionality is

relative as most people are constantly aware of the risk and rigours of working at sea, as one interviewee reflected on her husband and son's work:

> As a fishing family you can get use to it and learn to respect the sea and the dangers of fishing then become norm[al] (N4 12/2/10).

Another informant reflected on how gender roles had changed and how their partner being at sea put particular pressures on the family:

> Years ago [women] used to do all the nets and do all sorts, they used to come in and gut the fish and help land the boats but that's all stopped now, the wives don't usually get involved in fishing as such, they've got to look after the family while their other half's at sea. It's a lonely life for them, it's a special sort of relationship I suppose, it's not an easy way of life (N6).

5.4 Nature of the business

Inshore fishermen are heavily dependent on the natural systems of the area immediately around their homeport for their business opportunities. Although we use the blanket term 'fishing', this covers a wide range of strategies regarding species sought, the gear used and the patterns of market opportunity. The fishermen focused on the importance of natural limitations to their ability to run a business and the restrictions it placed on their ability to hunt or gather fish.

For example, those fishermen who worked an area with shellfish found particular business opportunities those dependent on prawns or finned fish did not have. The turn to lobsters and crabs was in part driven by the status of these species within the regulatory environment and a ready, high value market for them. At the same time many fishermen recognised that they were on a treadmill, as ever more shellfish are needed to maintain a living, particularly for those supplying depressed continental markets. For many this was a symptom of a precarious position:

> The under 10 metre fleet is hanging by a thread on lobster and crab, there's nothing else to turn to (W3 – Whitby).

One highly experienced skipper who sold directly to the hospitality trade said that he was proud to "even pay tax" on his business but he did so by keeping his overheads very low. His business model was premised on only employing himself, keeping his overheads low and only servicing high value markets. Other fishermen reported that they were finding it hard to keep their businesses going. As we noted above many of

these enterprises had been capitalised at an early stage of the principal's life and they were generally not looking to re-invest before their retirement. This means that large parts of the inshore sector, unless new people enter, are vulnerable in the short to medium term.

> My son fishes with me but he will pack it in when I retire – it's too much like hard work for too little money – he only does it to help out his Dad (W4 – Whitby)

We describe many of these businesses as being in 'survival mode' in that, as discussed above, older men are advantaged and a particular mode of business operation appears to be in place. This is to minimise risks and maximise the returns to the business operator with the aim to survive in the short term. With the lowered expectations of the returns from the business it makes them very robust. It also means that as a group they are unlikely to embrace any opportunity that is deemed to be 'risky' and the tendency to focus on immediate problems lowers willingness to innovate.

5.5 Economic linkages

> Its not just the regeneration of a fishing port anymore, it's the regeneration of a fishing community with no economic hinterland. You've got a port with a flat area which is the harbour, everything else is on the hill and the only industry down here is fishing. So that's upstream or downstream from the catching sector so the fishing represents 482 jobs in this ward…. (N1 Newlyn]

Economic linkages are amongst the most obvious channels of influence with the rest of the community, yet often the routes to market obscure this relationship. Upstream services for the inshore fishermen include the provision of gear, electronic equipment, boats, fuel and ice. As the industry has grown smaller the business opportunities for those upstream have declined. For example, Newlyn still has a cluster of these services, but as a hub of the fishing industry in the UK it is unusual and even here the scale of the supporting industries has declined. Two of our case studies (Padstow and Whitehaven) have boat-building facilities currently without tenants. There was considerable concern that the technical services needed to support a fishing industry were dwindling.

The business strategies of individual fishermen outlined above have implications for the rest of the supply chain, with empty boat repair yards, electronics suppliers offering limited support and equipment becoming hard to source:

> It's really hard to get nets because there are so few of us – it needs good quality monofilament – now we have to look to Taiwan and Japan (W2 – Whitby).

The 'downstream' industries that process, sell, retail and cook the catch are the most tangible connection between the inshore fishermen and the rest of the community. In some cases the relationship was very direct; for example in Padstow some fish went directly from the quay into the town's restaurants. In others the linkage was far less direct; where fish are sold primarily as commodities into the international market. Where the domestic market for some species is very limited, for example spider crabs from the South West or hake from the North East or where the provenance of fish is less important as with prawns or langoustines from English waters, the majority are sold into the continental market. The economic efficiency of this system means that very little of the retail value of the fish is realised locally. Amble and Whitehaven have large fish processing factories, which only process a small amount of fish caught in British waters.

Because of the marginal economic impact of inshore fishing on the majority of the communities, talk of dependency was very limited. Newlyn is obviously heavily dependent on fishing, but equally, as many other ports in Cornwall have demonstrated, there could be what the fishing industry would consider a very painful transition to tourism. Generally economic dependency is not at the community level, in part because of the decline of fishing, but at that of families and individuals.

5.6 Place making

Interviewees were proud to live where they did and spoke highly of their town's virtues as a community and the physical beauty of where they lived. Discussions commonly revolved around what made their place unique and the good fortune of living in a community that was supportive. The way in which that support was organised and expressed varied widely with voluntary groups, not-for-profit

organisations, charities, a range of agencies and authorities as well private enterprises of various sizes playing a role. In Whitehaven, for example, the patronage of the nuclear power industry was important to the cultural life of the town but this was realised through not-for-profit organisations and in Amble, a development trust plays a central role. This complex array of local actors reinforces the distinctiveness of a place. The degree and type of support offered by the communities varied widely, but almost all of the interviewees felt that the infrastructure of a community was around them.

In some places you have to be born in the community to be a 'local', with fishermen often playing a particular role in that:

> Those in fishing are the locals; the true locals call themselves 'cod-heads'… (W5 – Whitby)

Many people who have lived in these communities for a long time felt that they were part of the community but not in quite the manner that 'true' locals were:

> I'm not an outsider but I'm stitched on – only lived here 12 years (W4 – Whitby)

What made each community distinctive was in part linked to the history and tradition of the town, which featured fishing and the relationship with the sea.

> Whitby people working here tend to come from fishing families, it provides a lot of social cohesion, gives people an identity (W3 – Whitby).

Therefore fishermen played a central role in enacting the link between the present and that heritage, the sea and the land. The rhythms of fishing and the presence of fishermen are part of how the community re-makes on a regular basis its sense of place. This can be through traditional festivals such as in Padstow, or the emerging one in Whitehaven, but these build to make each community consider itself distinct.

At times this can be posed as a question of local or rural values compared to supposed metropolitan ones, which are generally described as being from 'London'.

> it was on the radio the other day, and they said it doesn't matter whether you were born Cornish or not, its whether you believe yourself to be Cornish, and I suppose that means adopting the values…if you bring London values and you try to enforce them then you'll never fit in. It's the pace of life and the way you treat other people, don't get too excited about things, it'll happen! (N2 – Newlyn)

'London' therefore takes on the double burden as being the location from which the widely resented regulation of fishing is enacted and also the symbol of a

metropolitan culture different to the local one. Many of the interviewees would have disagreed that being a 'local' is a set of values, but there is a correspondence between the belief in a particular place's virtues and the community sharing a set of values or norms.

Another way of asserting the uniqueness of your community and building a sense of cohesion is local rivalry. As one interviewee said, after commenting on the polarisation of the Whitby community: "The only thing that unites Whitby is opposition to Scarborough" (W4 – Whitby). The use of Padstow as an example of a route that they would not like Newlyn to follow was frequent from interviewees there:

> for instance like Padstow, where it becomes a bit celebrity and then [fishing] slides down and takes a back row. And round here, because it is a working fishing port it has that slightly grubby air, which is no bad thing, a working place. If you could click your fingers and go to Padstow from here, both fishing ports on paper but you would think, what's happening here? Everything's upmarket, I mean a bag of chips costs you ten quid, [if you] buy it from Rick Stein's fish and chip shop, which is no bad thing, its brought a lot of prosperity to the area, but it's different to this. Padstow was originally a busy fish port, it had a railway line to take them straight up to London…now its just there's a lot of hobby fishermen (N1 – Newlyn).

Here the speaker bundles local rivalry, the decline of fishing, class differences and the influence of 'London' into a package, Padstow might be wealthier but Newlyn remains the centre for 'real' fishermen. This loyalty to the hometown as a primary source of identity was important in most of the case studies and coloured willingness to emulate local rivals/examples. The reverse of this is that more distant examples carry less local rivalry, so Cornish fishermen looked on Northumbrian conservation measures favourably, whilst Devonian merchants were considered better than local ones – in the north of England.

5.7 Tourism economies

For many of the case study communities, tourism has become the major source of income, and the most obvious route for improving their economic lot (see section 2.2 above). As discussed in the case study portrait, Padstow has a major tourism economy for a small town but other communities were aware of its importance:

> The Whitby brand, its more powerful than any other brand on the east side… it's got national recognition partly because of fish and chips but also because of the maritime heritage, fishing is part of that heritage so we should hang on to it (W6 - Whitby)

Into this mix fishing plays an important role in adding character and activity to the harbour side, as well as acting as an 'icon' of the traditions of the area. From this perspective, fishing is an asset that not only provides a physical product but also adds distinctiveness and character to the community in presenting itself as a resort.

A fisherman from a small fishing cove explained his experience of working directly with visitors:

> Fishing does attract [tourists] because they walk down the hill and some of them, most of them, are probably overwhelmed that there is actually fishing boats working, you see them going in an out with the tractor, the men walking round and the lorry comin' with the crabs going on it, and I take them for boat trips in the summer and I always ask them, I sort of do my own survey in my head. And they always say to me you just don't know what you've got, don't ever change it, don't ever let it be changed and of course that's what we're up against all the time. Not those sort of people changing it but fighting the government to keep it going as it is (N7 – Newlyn).

This is not uniform as certainly many in Newlyn thought the harbour ill-suited to tourism:

> Newlyn is a walk through or drive through place, where people have a look and maybe get some fish and chips for an afternoon, but it isn't a tourist destination (N1 Newlyn 12/2/10).

Others were not sure that fishing contributed to the tourist economy that they were engaged with, as one Whitby accommodation owner commented:

> Tourism in the area is not affected by the fishing industry; the decline has not had any bad impacts (W6 – Whitby)

One relative of a local fisherman in Padstow felt that the trajectory of the town's economy meant that fishing was no longer a necessary underpinning.

Many fishermen, together with those who are involved in running the harbour side, report the draw of fishing and its equipment for visitors to their communities.

> Tourists like to see the fish being landed and the fish market (W10 –Whitby).

Inshore fishing has a particularly important role because it is possible for people to gain access to the vessels without the dangers posed by the equipment for larger vessels. Inshore vessels are also more attractive and easier to valorise for tourism than the more commercial boats.

5.9 Emblematic role of fishing

For most people interviewed fishing was 'emblematic' of their community - it helped define what made their communities distinct or unique. They defined their town or village as a fishing or port town, and as part of that they view fishing and people using the sea as central to the function and character of the place. Whilst recreational users may be part of that process, fishermen, as the living emblems of local traditions, play an important role. We found widely that local people not directly connected to fishing, with very little knowledge of the realities or complexities of the industry, were very supportive of it and valued it on a number of levels. Therefore for visitors and locals, fishermen and fishing play a key role in defining the community. For local people, fishermen enact and create something that is essential to their shared sense of community, even if in some cases we found that, despite the strength of this shared identity, the fishing community was fairly isolated from the rest of the community.

5.10 Bonding and competition

As we have noted above, many small communities demonstrate high levels of bonding capital, what one of our interviewees described as 'clickyness' [cliqueyness].

> Newlyn is a clicky area, if the face don't fit there is little support in the community. (N2 Newlyn 12/2/10)

Many of our case study areas demonstrated high levels of bonding social capital, for example in Padstow, the description of how to be a local was 'to be born' there. Certainly we were able to quickly identify local leaders in the community and they were able to act as gatekeepers for us to gain access to the rest of the fishermen, suggesting individuals with high levels of bridging social capital (see appendix 1). In many instances the fishermen also provided the informal meeting places – e.g. the quayside in Amble – and the informal social structures that build social capital.

This indicates two apparently paradoxical aspects of social capital and fishermen; first - their competitive solidarity with one another, and second - the support they

gain from non-fishing local people. First, for those outside fishing the interactions between fishermen are paradoxical as whilst they are busy competing with one another at the same time they are a tight group. We term this 'competitive solidarity' as within their own groups fishermen are often pitched against one another as they seek fish, a better price or the status of being a successful fishermen. With inshore fishing, support and cohesion can arise in the interests of safety; for example, it is not uncommon for inshore boats to go out 'in company' or for them to assist one another when landing in difficult conditions.

Outside of their own group, partly because they feel they have been stigmatised, they also demonstrate a tight solidarity with one another. This can be seen in how inshore fishermen defend the interests of the wider fishing industry in the face of a lack of understanding by the general public, or champion the interests of the larger vessels. Several fishermen pointed out individuals in their harbour who 'broke the rules', not just the regulations but also the local norms of competition and conservation. Their motivations were ascribed to 'greed' and a personal cussedness but they were reluctant to name them because they felt the industry had already been negatively described.

The second aspect of this paradox is that they can be socially abrasive and yet respected by many of those who work with them or are in the community. In part this is a kind of 'defensive localism' whereby communities will rally to support a group that is felt to be under threat – for example saving 'our' fishermen and their families[15]. Fishermen were often seen to embody those values that 'authentically' express aspects of the local area. Often it stretched beyond this as in different case studies, two interviewees expressed similar sentiments:

> It isn't always easy to sympathise with them, but we need to find a way to deal [with] and protect fishermen at the bottom and bring the industry together to move forward (N1 12/2/10).

Part of this understanding is underpinned by a differentiation between inshore and deepwater boats but also an insight into the motivations of fishermen, with

[15] Winter, D.M. (2003) Embeddedness, the new food economy and defensive localism. *Journal of Rural Studies,* 19(1) pp. 23-32

sympathy towards the local and smaller inshore fishermen. This support of fishermen is part of the development of a local identity and in the case of these interviewees' regular, informal contacts that have allowed them to gain insight into fishermen's situation.

5.11 Overview stage 1 findings

The impacts of inshore fishing are very obvious in some communities and subtle in others but it is consistently highly valued by local residents, as well as fishermen and their families, in making a place distinctive. To untangle the web of mutually re-enforcing processes that are behind the different trajectories of the case study towns we will start with the physical products of fishing moving through to the less tangible but possibly more important social and cultural impacts.

For the fishermen the operation of their businesses is dependent on access to fish and getting those to a market place that allows them to sustain themselves, their crew and boat. We have characterised their mode of operation that of 'survival' as most of them are looking to maintain themselves rather than maximise profit or re-invest in their businesses. To that end they are likely to be risk averse in how they take their produce to market, particularly when their catch is limited by species and without an obvious local demand. In these circumstances the economic impacts on the local community are the employment provided by these businesses, and the value of the catch as spent by the fishermen and their families.

The second element of the physical aspects of inshore fishing is the boats, vessels and harbour side equipment associated with fishing. Our research found that this employed very few people directly but was widely recognised within the community and beyond to provide an important aesthetic component of the town and in turn its sense of uniqueness. Inshore fishing was distinct in this as it is of relatively small scale that allows it to be used with other users of the harbour present, and is more picturesque than the larger vessels. Many communities use this imagery as well as the ambience it creates in their tourism offer, a central part of many coastal

communities economy. Although using this imagery in the tourism 'offer' the efficiency, profitability and sustainability of the fishing sector is not generally directly connected to the visitor economy. Generally tourism trades off the presence of inshore fishing and not its activities. A few areas have established an economic synergy by selling the catch locally, and in this they have achieved a closer link between fishing and the wider community. Even where this is available it is often dependent on the species caught, so supply chains to distant markets operate alongside highly localised ones.

Fishing as a male occupation plays an important role in many communities, as it is a link with a group of occupations that are now largely absent from coastal areas. In those areas with a tradition of heavy industry or mining fishing remains the occupation that links with a tradition of men working physically in close contact with both nature and technologies. This working class male occupational culture plays an important role in defining the identity of fishermen and their activities within the community. Even in communities where the fishing industry has declined and plays a minor economic role most local people see fishing as part of the identity of the town. The qualities of endurance, competence and tradition that the fishermen strive to embody for themselves and others are considered important in the wider community. One of the common complaints was this form of employment was dwindling for younger men, representing a loss to those individuals and the community more widely.

Because the linkage between inshore fishing and the wider community has become based on social and cultural factors discussion of economic dependency needs to be reconsidered. As fishing has declined over many years few communities are dependent on the income derived from the physical products of fishing and the employment it creates. Rather the dependency is at the level of households who have either part or the entirety of their income drawn from fishing. Even in communities such as Newlyn in which fishing is the predominant industry there are significant other enterprises and commuting has diversified the sources of income to the town. Rather what we suggest is that communities are 'reliant' on fishing, in

that they require aspects of its operation – fish, earnings or the image of fishing – but also trust and believe broadly in it. Also whereas dependency is often associated with connotations of passivity, communities demonstrate a far more active engagement in the future of fishing.

This activism around fishing is represented at one level by the fishermen themselves who are noticeably more effective and influential in their communities where they are organised collectively. In Rye this is expressed around self-imposed limitations on fishing, in Newlyn by a multitude of projects to improve the status of fish in the food chain and in Padstow close connection to the tourism trade. This can also be reflected in the contestation of the regulations around fishing, which serves to demonstrate the competence of the fishermen in his occupational culture but also a point around which fishermen can unite even whilst competing with one another commercially. It could be that the investment made by fishermen in their occupational and place based identity has come at the cost of adjusting to wider developments. Lack of trust in the policy making process may have diverted their focus from developments in the supply chain such as local marketing or standards that provide access to wider markets. This at times reinforces the impression that fishermen can be insular and abrasive, although this does not prevent them from being held in high esteem by their neighbours.

At the level of the individual fisherman or boat inshore fishing can be highly differentiated, which confounds generalisations. Working out of the same harbour can be a fisherman using a boat of low capacity, using traditional gear and selling a single species into local markets, alongside boats of high technical capacity, using the latest equipment and selling into a global market place. The former by selling into the tourist trade via a local restaurant and hotel may have contributed directly to the local economy whilst the route for the latter boat is solely through the earnings they receive for their catch. Beyond their households the importance of fishing is through the creation of a harbour side sold, through images initially, to visitors as part of the tourism package the town offers. Yet for many local people fishing, the ambience it creates and the fishermen themselves signify what makes their community unique.

6. Stage 2 – Policy Scenarios

The second stage of the project involved presenting a set of scenarios to stakeholders drawn from five of the regions of England (see section 3 above). These scenarios were based in part on those in the SAIF Advisory Group's proposition paper from January 2010 and modified by our experience in the field; indeed one of the scenarios (c) was entirely based on our research. The purpose of the scenario analysis was to help us explore how different policy options might impact on the wider community (project aims b, d and e).

During stage 1 of the project it became clear that a wider range of people have a legitimate interest in the fortunes of inshore fishing than are typically involved in the fisheries policy process. Often commercial fishing is treated as an industry that is distinct from the wider food chain. Once we encountered projects and businesses that clearly integrated fishing into those wider processes of community development through food, the range of stakeholders expanded quickly. The linkages to tourism suggested another group of stakeholders who are reliant, in part, on fishing to create the harbour side that is central to the localities tourism offer. Finally, we identified those in the fish processing chain, who might not normally deal with the domestic catch but who are stakeholders in the broader fishing industry. We recruited such stakeholders through our fieldwork contacts, further research and the CCRI database. In total 41 people took part in the workshops representing a wide range of interests from fishermen's organisations through to community development trusts, fish processors and exporters, Sea Fisheries Committees, food development and promotion organisations, national and regional tourism agencies and those involved in various aspects of the hospitality trade.

We faced twin challenges in these groups. Because of its complexity and unfamiliarity to those outside the fishing industry, a discussion of policy is problematic. Alongside this is the difficulty of explicitly identifying the social benefits of fishing, as this was both a novel question for most participants and one

where complexity confounded any easy answers. Many of those inside the fishing industry were sceptical about this process or indeed whether the SAIF project would ultimately have influence on wider policy. They also suggested that they, or their organisations, were excluded from policy discussions and that this was their only chance to be heard. These perspectives inevitably coloured the discussions in the stakeholder groups, as people who work in the same region, or even at times in the same locality, met for the first time.

In order to focus the discussion in each group, we limited it to about three hours and began with a summary of the draft findings of our research to that date. It was important to demonstrate our independence and to reassure those who had taken part in, or knew of, the first stage that we were proceeding as we had promised. It also orientated many of those not familiar with fishing regarding how the industry interacts with the wider community and outlined the parameters of the discussion.

Scepticism about the scenarios, which started as soon as they were presented, tended to 'frame' the discussion, particularly scenario A. The scepticism came from those in the fishing industry and it started from a common assertion that 'Europe' was going to define inshore as under 12 metres. One well informed participant observed that "ITQs"[16]would be imposed from Europe in the end, whilst several participants from within the inshore sector hoped for at least an apology for the 'wrongs' of previous policy and doubted the capacity of policy to improve matters. These opening gambits in part set the tone of the discussion, signalled the range of possibilities that people were aware of, and limited those that would be discussed.

We then introduced the three scenarios. Two versions of the scenarios were used; the italics indicate text that was added for the final three groups.

6.1 Scenario A - Re-structuring the fishing industry

This scenario comprised;

[16] Individual Tradable Quotas (ITQ).

- Changing the size of the inshore fleet (through changing the definition from 'under-10m') and re-distributing quota.
- *More efficient boats move into the sector, inshore sector those remaining?*[17]
- Organised at Inshore Fisheries and Conservation Authority (IFCA[18])/(regional) level.
- Opportunities to set management arrangements in ways to maximise efficiency
- Goal – to help smaller boats operate more flexibly and profitably.

Generally the fishermen and their representatives were more enthusiastic about this scenario than any other group. This enthusiasm came with an important caveat, namely that they argued for 're-allocation' of quota rather than a re-distribution of it. By this we understand their argument to be that a total re-negotiation needs to take place at a European level, with the importance of England's fishing industry recognised. Confusingly 're-allocation' is often used to describe re-dividing the UK's existing allocation of quota.

Several of the stakeholders also noted the use of the words 'efficiency' and 'profitably'. They wanted to point out that their goal in fishing was to maintain themselves and their crew, which they thought was generally quite different from profit maximisation. This distinction had implications for the term 'efficiency', a term that they often related to ways of fishing that maximised catch at the expense of the long-term viability of the stock.

The question of changing the definition of the 'inshore boats' (i.e. changing the definition from under 10m in length to some other parameter) produced a regionally informed discussion. It was noted that in some areas there are traditional, open boats that lack the capacity to stay at sea for long periods or in poor weather but are none the less longer than 10 metres. Conversely most people were aware of very capable boats under 10 metres in length, this often being linked to the type of gear

[17] There were two iterations of the scenarios; the lines in italics were only presented at the later workshops (Hull, Truro and London).
[18] Inshore Fisheries Conservation Authorities

used and to technical measures used to manage what was caught in the area. The suggestion was that length alone was not an adequate metric of capability. As well as these technical measures, some fishermen suggested social definitions of 'inshore' fishing that were not about technical capacity but related to being based in, and accountable to, a local community. Such accountability might include being owned and crewed by family members, returning to the home port every day and fishing only local waters or grounds.

Representatives of the inshore sector in all of the meetings were concerned that this scenario would be divisive within the fishing industry, as it could be seen to punish the deep water fleet:

> We haven't been pushing to take away the deep sea quota as it's not their fault, so they shouldn't be punished (N1 – 02/03/10).

But also for instrumental reasons, as the larger part of the industry benefited the inshore sector:

> Without them [deep sea fleet] it will damage the infrastructure, they are needed for the inshore boats to make money (N1 – 02/03/10).

Others pointed to the legal hurdles to such a process of redistribution:

> You certainly can't do discriminatory things; there will be a high resistance (C1 – 03/03/10)

And that any such moves would require considerable compensation to those impacted:

> You can't take out effort without paying for it (C1 – 03/03/10).

The problems caused by previous policy, from this perspective, would be difficult to undo:

> The UK fleet is so unbalanced in the Common Fisheries Policy, this would be very hard to correct (C1 – 03/03/10).

Scenario A addressed the established fishing community in terms that it was conversant with. All those representing fishermen looked to a more profound process than a national redistribution or 're-allocation' of quota. Rather they appeared to be arguing that a re-negotiation of the entire Common Fisheries Policy should take place, whereby national entitlements would be 're-allocated'[19].

[19] This relates to the argument that the UK government is content to negotiate away England's opportunity to gain fish quotas in return for gains in other areas of EU activity. Scottish fishermen are

Solidarity between fishermen was seen not only as being through a shared identity but also instrumental because the fleets are interdependent. The inshore fishermen did not want to be responsible for, or be seen to be responsible for, losses to the deep water fleet. Quite which boats constituted the inshore sector was discussed in the context of regional variations, although most saw a combination of engine size and boat length as being important, with enforcement needed to control "rule breakers". Schemes that appeared to generate the possibilities of "slipper skippers", who gain an income through ownership of quota that they sell or lease, were raised only to be quickly dismissed, on the basis that the fishermen wanted policies that encouraged active fishing.

6.2 Scenario B - Separate Fishing Zones.

This scenario comprised;

- All boats fishing within 6 nautical miles of the shore being licensed with no 'industrial' vessels allowed or licensed in this zone.
- Restrictions on when they can fish, for how long, and/or the type and amount of equipment that they would be allowed to use.
- Management at a regional level *by a group made of fishers and their representatives working directly with national fishery managers.*
- Goal – to provide smaller vessels with a flexible opportunity to fish, maximizing income and sustainability.

That quota is not part of this scenario was quickly outweighed in most regions by the criterion of 6 nautical miles. After discussion it was apparent that this limit was recognised as the geographical scope of many regulations and therefore offered a 'legally' protected zone, where greater autonomy could be exercised. For participants from all regions, apart from the South East, even small boats were seen to travel more than six miles and for them to be restricted so close to shore would imply the loss of access to many grounds and waters that were important to the inshore fleet. In the North East this was clearly viewed as unacceptable:

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generally praised for being able to pressure their politicians more effectively than their English counterparts.

> You won't get people willing to trade that opportunity – big or small boats. I regularly go to 10 miles in a 7.3 m boat (N1 02/03/2010).

Yet the same person was able to concede that "75% of the year I spend within 6 miles". The anxiety was around being contained within an area, unable to take up seasonal or quota opportunities.

The idea of an exclusive zone was not necessarily unattractive but rather it was the extent of that area. In the South West it was suggested that 'industrial' vessels should be kept outside of 12 miles from the coast, which also found favour in the North West:

> 6 nautical miles is possibly too limiting so 12 miles would be far more practical (C4 03/03/10).

Although again in the discussion, solidarity for those who would find themselves excluded was raised, "Who subsidises the losers of scenario B?"(C1 03/03/10). Many saw pragmatism in the suggestion - "6 nautical miles is crucial as only this is in our control without going to the EU" (C4 03/03/10). An exclusive zone appeared to be an acceptable idea if it could extend far enough.

This caveat was reinforced by an anxiety that it was within this area that many of the new conservation zones are located, producing a fear that fishermen would be corralled within an area that they could not actively fish, leading this to be generally the least popular scenario. In the South East this was perceived differently as the six mile zone is the area they view as being their traditional waters and is an essential feature of the environmental claims made about their fishing.

It also drew forward a discussion about the mechanisms for controlling effort. In the South East it was argued that local regulation of gear, especially mesh size, would be sufficient. Another view at this stage from the Hull discussion was that it might provide a framework for fishermen to be rewarded "as custodians of the sea", whereby their work in protecting the marine environment could be recognised in a direct analogy to the role of farmers in agri-environmental schemes. This was tied to taking visitors out on fishing boats to educate them about fishing, to overcome

the ‘stigma’ they felt fishing currently carried and to engage with scientists in collecting more accurate data about the fisheries.

For those already involved in the catching of fish, the present Sea Fisheries Committees and the new IFCAs provided a model of organisation that they were comfortable with:

> IFCA’s haven’t been anywhere near as contentious as Defra; IFCAs have developed more organically (N1 – 02/03/10)

The speaker saw ‘Defra’ as being associated with top-down impositions rather than the dialogue he saw in IFCAs. In Hull this discussion developed to re-imagine IFCAs, beyond the scope of the proposals at the time, as a “one-stop shop” (see below). Generally, the regional level IFCA was seen as a model, although in the South West there was some disquiet about the fact that the body was trying to cover too large an area. Those outside the fishing industry often questioned this as they saw considerable opportunities to build on the county level initiatives and branding that was taking place with other foods.

The question of boundaries arose at this time, for example the borders of Wales and Scotland prompted questions about the clash between natural areas and administrative boundaries. Generally, devolution from the national level was regarded as desirable, based on what was broadly seen as the successful model of the Sea Fisheries Committees, whereby arrangements could be made to create bespoke local arrangements. It was also viewed as attractive as arrangements could be discussed and debated in a way that would be owned by the stakeholders. In most regions the members of the Sea Fisheries Committees were obviously close to, and trusted by, the fishermen and their representatives; hence the attraction of building from that base.

6.3 Scenario C - Marketing the Catch.

This scenario comprised:

- All under 10 metre boats allocated a number of days at sea or individual quotas.
- County level arrangements for management and monitoring systems.
- All of the catch landed being marketed through a county level marketing co-operative.
- *Marketing group to maximize diversity of income through licensing anglers, payments for data collection and chartering.*
- Goal – to provide fishermen with a better income by securing a higher return.

For those outside the catching sector of the fishing industry, including stakeholders from tourism and food promotion, this was the most attractive scenario, although it raised important points of discussion for the fishermen present.

Regulating the effort at sea by an annually allocated number of days was attractive to many fishermen and their representatives if it were to be calculated in terms of hours actually at sea and if they knew this allocation in advance. Using 'hours' rather than 'days' would allow greater flexibility and could be used to empower smaller inshore vessels, which tend to work extensively rather than intensively. Knowing in advance was important to allow a business to be planned, with days held over for times when the market was favourable or a particular species was present.

As noted above, there had been considerable discussion of the level at which the management should be organised but the question of a marketing co-operative stimulated debate. For many stakeholders outside the catching sector, fish auction markets appeared to be anachronistic, providing a poor return to fishermen and not providing the security in the supply chain that many retailers seek. As an alternative to harbour side auctions electronic auctions were mooted, possibly in combination with better integration into the supply chains of the multiple retailers or processors.

Landing all of the catch seemed to be generally accepted as an answer to the problem of discards, as food should not be wasted at sea. There was a suggestion that fish without a market be used for non-food purposes, but generally this was seen as an opportunity to take the catch, in all of its diversity, into the food chain. In some areas this was seen as a way of linking with ideas for co-operatives or intermediary bodies that had been discussed previously. Both scenarios B and C particularly raised the issue of how the inshore sector could link to these potentially important processes.

The discussion in Hull saw the participants re-imagine IFCAs as bodies that could take on the role of marketing and regulating fishing within their area as a "one stop shop". In the North East the discussion took a different direction, as participants who were involved in food promotion and rural development saw opportunities in marketing fish locally. This would need to be presaged by education:

> There's a whole education needed for the public to drive it (N3 – 02/03/2010).

But "From a food point of view, scenario C is plausible" (N3 – 02/03/2010) and it could be included in activities already underway in the region. The representative of the fishermen acknowledged that "It's not hard to get the buyer" (N1 – 02/03/10) and that with a realistic and flexible quota it could develop. This was in part based, they reported, on an aborted attempt to supply a national retailer that foundered on lack of access to sufficient quota. Another participant who worked in community development had an organisational vehicle in mind:

> this could be possible through community interest companies but they need the initial cash to buy additional quota (N2 -02/03/10).

The distance between those experienced in these matters and the other participants became apparent when the discussion moved to branding premium quality shellfish for tourists. Those involved in tourism and food promotion saw such branding starting with wealthy consumers as a central plank of creating a local brand, whilst the fishermen had not considered addressing such as well-heeled group of consumers.

The discussion took a different direction in the North West, where one of the fishermen's representatives described both the problem and the solution:

> the main problem at the moment is that the catch prices are [at] stalemate; they have not increased for 15 years. Someone needs to promote fish to increase profitability. The food industry could be the only way in (C1 – 03/02/2010).

Several participants thought that the multiple retailers would not be interested in fish that the inshore sector could offer, as imported fish dominates. However, one participant who works in the food supply chain responded:

> Supermarkets do understand the complexity and are willing to market seasonal catch (C7 – 03/02/2010).

This had a caveat in that the fish would have to conform to industry standards of traceability aimed at the integrity of the food chain rather than necessarily just the sustainability of the catch otherwise the fish would not be able to enter the food chain[20]:

> Retailers are interested in local produce, but there is no opportunity to offer this in a secure supply chain (C7 – 03/02/2010).

Such a development would require investment but might also open routes into the local hospitality industry, particularly in the Lake District. The fishermen's representative responded to this:

> We are willing to cooperate, if it is going to work, it will work here
>
> (C1 - 03/02/2010).

Another participant, experienced in community development, could see a route for the funding for that investment.

> If we can prove that there is a market for it, we can access tourism money (C3 - 03/02/2010).

Any discussion of the marketing of fish brought up the question of certification by the Marine Stewardship Council (MSC). The experience of the stakeholders ranged from the South East and South West where there are MSC fisheries through to those outside of the system and unsure if it would provide any return. This discussion of the marketing of fish also raised questions about the organisation and development of fishing through European funding with many questions, particularly in the East of England, about the role of the European Fisheries Fund (EFF) and its potential.

[20] Awareness of British Retail Consortium Standards (BRC) and the SALSA) Safe and Local Supplier Approval) schemes appeared to be very low.

7. Stage 2 - Findings

7.1 Developing arguments

In the discussion above, there is a trajectory to the arguments made across the scenarios that in part ties to the different paradigms being discussed, but also to the dynamics of the encounter. The fishermen and their representatives set out their claims to expertise over policy early in the discussions, in part defining 'the problem' to be discussed. Other participants were content to allow this scene setting to take place before making their own contributions and eventually beginning to contest aspects of 'the problem' with the fishermen. This came to its fullest development with scenario C, where the fishermen had already displayed their technical expertise but the other participants were confident to discuss and debate aspects about which they were knowledgeable. Often the discussion of what would benefit the rest of the community was tied up with a package of other considerations that were grouped together.

7.2 Working from different paradigms

Although not explicit, there was a clash of paradigms that relates directly to our discussion of integrated rural development in the literature review (see appendix 1). Implicitly the fishermen and their representatives were used to debating fishing policy as a *sectoral process,* only concerned with the industry and measures within it. Therefore they were comfortable discussing quota allocation, or in the case of scenario B, an exclusive zone. It is also part of the occupational culture of fishing to demonstrate competence in technical matters. Those participants from outside of the catching sector were more familiar with models of integrated rural development, with partnership arrangements and developing a territory, therefore scenario C was appealing.

As the meetings developed, participants were prepared to discuss different policy options. In the East of England meeting, the re-imagined IFCA became a body that could integrate with a wider set of regional initiatives. In the North East the

possibilities of local marketing developed, as did access to the food chain in the North West or tourism in the South East. This tendency was most pronounced when the participants included those with the position or authority to talk of these options. Rather than talking of abstract possibilities it became a discussion of practical actions that through the right policy regime might be realised. Whether the policy would be targeted at developing the sector or at a territory became an implicit fulcrum of the discussion.

7.3 Government and governance

The fishermen felt frequently that they had not been listened to and had at times been excluded from the policy making process. One fisherman who had been involved in many negotiations said that: **"**Fish is almost a taboo subject"(C2- Carlisle meeting 3/3/10), expressing his frustration at what he perceived to be a failure to discuss catching fish. Others felt that the whole industry had been ignored and underinvested in and that solutions needed to be developed from below rather than imposed from above:

> In theory all these scenarios are possible but not practical. They need to grow organically and have a huge cash injection but there is nobody willing to take it all on. (N1- 2/3/10)

Others were even more scathing, naming public officials who they said had targets for the size that they wanted to reduce the fleet to, and that the SAIF process was "too little, too late". One opinion was that fishermen are "up against the imposition of legislation" and that generally policy was a "catalogue of errors that goes on and on…"(L1 – 10/03/10). For some of the fishermen, representing themselves and other fishermen, some of these criticisms carried an emotional charge – they wanted "an apology" about the wrongs that they felt policy had inflicted on their industry.

The viewpoint expressed by many fishermen was that they wanted to return to an industry that allowed them to keep fishing and that was not sufficiently possible at present. One non-fisherman observed:

> I know a lot of fishermen who are on benefits just to keep their heads afloat (N2, 2/3/10).

Fishermen and others argued that in many ways, regarding conservation and regulation:

> Inshore fishermen seem to be taking the heat for the deep sea system (N1, 2/3/10).

The engagement of those who are outside of fishing resulted in a lot of discussion of 'discards'. One person not involved in fishing said:

> We wouldn't see dead lambs at the side of the road from farmers, so why is fish allowed to be discarded? - maybe it should be made more public (N2 – 2/3/10).

The fishermen resisted this idea because they thought that it would show their industry in a poor light. One person, at the Hull meeting, who worked with Defra in other areas of policy, was surprised at the lack of "working in partnership" which they felt characterised other areas of conservation management.

7.4 Capacity to engage – fishermen and other stakeholders

As noted above, we faced the twin phenomena of fishermen's frequent lack of trust in Defra and, amongst other stakeholders, a lack of knowledge of fisheries policy. One of the contrasts that became apparent in the stakeholder groups was a grip on the imagination that the status of existing policy has for those at the catching end of the fishing industry. Because of their perception of a constant effort to overcome regulatory hurdles to fish, this grip generally displaces concern about the market and other wider considerations.

Several fishermen had stories about high-value deals done with retailers, or marketing initiatives in place only for that effort to be undermined by inflexible regulations. The point of these stories was to place the emphasis back onto the centrality of policy in determining access to fish. In three of the stakeholder meetings (Newcastle, Carlisle and Hull) people representing aspects of the food industry challenged some of the perceptions of the catching sector. These challenges ranged from what one person saw as the archaic use of harbour side auctions to the belief that multiple retailers were governed solely by the continuity and uniformity of supply, arguing that there is room for seasonal and locality foods within the supermarkets. A third person presented the challenge of branding the catch and targeting a premium market explicitly for high-end tourists as a means of

developing a broader brand for regional seafood products. All of the challengers were in a position to substantiate their arguments and also questioned the fishermen's focus on regulation.

Understandably, it is hard for fishermen in these circumstances to imagine scenarios beyond the current policy regime. But those people outside the current policy structure generally embraced solutions that were more orientated towards the market, and wider local development issues. In part this was because they had first-hand knowledge of a market or a supply chain so could challenge commonly held perceptions of how it operated. They were also accustomed to working in an environment in which access to the resource was unquestioned and therefore struggled to imagine the restrictions the fishermen described to them. The fishermen and their representatives often had very little direct knowledge of the retailers or consumers of fish, in some instances regarding it as not being part of their role.

7.5 Maximising opportunities means linking to tourism

Many of those who worked in community and rural development argued that the only route whereby fishing might have any role in influencing the development of their area was through tourism. At the London meeting there was a discussion of how tourism has become a lynchpin of the economies of many coastal towns, with those blighted by closed or declining hotels particularly affected and in danger of a more general economic collapse. As fishing is seen by many as an 'icon' of the English coastline, it could and should play an important role in keeping a vibrant visitor economy. It was also challenged that although tourism jobs can be seasonal and low wage in nature, many of them are not and provide an important source of employment for local people.

In Hull and Carlisle there was a discussion of how European funding targeted at rural development excludes fishing, which several contributors thought was supposed to have its own funding to which they appeared to have no access. This problem was

attributed to Defra, although the Marine Management Organisation manages the European Fisheries Fund (EFF) grant scheme, including the Axis 4 programme facilitating community development projects[21]. This, from the perspective of the discussants, left the burden of development linked to fishing to be placed on tourism, because it was an active industry in the area that could draw in other funds and support mechanisms. With several programmes already in place, several contributors (in Newcastle and Carlisle) were able to report that local and regional initiatives were challenging preconceptions in the local hospitality industry about local food being more expensive, and that consumers demand continuity of supply and uniformity of products, as well as supplying recipes for local produce. Although falling within the remit of improving tourism economies, several of the participants working in food promotion noted how "food is cohesive"; it can serve to bring elements of the community and economy together. One participant at the London group argued for a food initiative that had a "holistic approach".

7.6 Working around policy

One of the clear attractions for many who favoured scenario C, and in the South East scenario B, was that it actually gave a high degree of control back to the community, in that the marketing of fish became an activity that a wider group of people could take part in. One of the attractions for those involved in the fishing industry was that it also created a clear distance from the centralised policy regime:

> It is down to the xxxxx [Fishermen's organisation] to do something about the situation and work with retailers (C2 - Carlisle meeting 3/3/10)

Once in discussion it became clear that just as bad examples resonated through the network of fishermen, positive examples could as well:

> Co-ops are very successful in Maryport (C1, Carlisle meeting 3/3/10).

Participants in the South East made it clear that they had accredited fisheries and community interest companies which were struggling because of a lack of fish to catch or process.

[21] http://www.marinemanagement.org.uk/fisheries/grants/eff_axis4.htm

8. National Tourism Interviews

The final element of our data collection was interviews with tourism managers, who have a strategic overview of a region or large area, to discover their plans and thinking with regard to inshore fishing. In part this reflects the remit of the project but also the importance placed on tourism by respondents in both phases of the research. Seven interviews were conducted in the second and third weeks of March 2010, using a semi-structured interview format (see appendix 3).

There was wide agreement on the importance of food in the tourism offer of an area and the potential of fishing to play a role in that:

> [The] Provenance of food is so very important - local food in B&Bs, local fish in restaurants; this is what people want (NT4).

> Food and drink tourism is also likely to become a more important sector (NT5).

Awareness of the most well known example of that synergy between fishing, the hospitality industry and tourism was high:

> Look at Rick Stein in Padstow. We don't have that, but if we could it would be great (NT4).

There was a regional difference in how fishing was viewed, with an interviewee in the South West being very clear:

> It is a major part of the economy (NT6).

Whilst the perspective in the North West of England was very different:

> Fishing is a minor part of the economy...tourism is very important (NT 5).

Another interviewee introduced a more nuanced position, arguing that:

> [Fishing]...purely as a contributor to the economy, no [it is not important/significant]. However, as a part of the...tourism industry...its intangible contribution...is important but is difficult to quantify (NT 7).

The contributor from the South West went further, seeing the contribution as being around heritage, “There is a huge heritage associated with the industry" (NT6), part of which, they said, was the influence it has on the infrastructure of an area:

> People like going to see fishing ports...[they are] very much an 'added value' part of the tourism industry (NT6).

The interviewee from the North West certainly encapsulated a perspective that contributors to the Carlisle focus group identified as being a focus on tourism in the Lake District. Whilst those contributors in the South West were confident in the role that fishing played in the total tourism offer in the region.

Stakeholders located where there was not a strong existing integration between fishing and tourism saw a number of problems, including issues with establishing contact and mutual understanding:

> It is a missed opportunity perhaps [integration between fishing and tourism], but there could be problems with incorporating them (NT7).

> [There is a] lack of contact between the two sectors. Perhaps there is no real interest in the fishing industry, although I suspect that fishermen do not want to engage with the tourism industry (NT7).

> We [tourism] are the 'candy floss' industry – whereas the fishing [industry] is the last of [the?] hunter gatherers (NT7).

Although this was couched in a number of premises, other interviewees identified more pragmatic problems:

> Agriculture is still subsidised. Fishing isn't – and therefore it is hard to get things to work as there isn't as much support (NT4).

Another interviewee was able to report a way in which fishing had become integrated with their tourism offer:

> when we have festivals this does happen [integration with tourism sector] as some fishermen get involved with presentations/exhibitions/demonstrations (NT 3).

Our findings suggest that the South West, a peninsula with a major tourism and food economy, is the most integrated in terms of bringing fishing and tourism together. The other respondents' answers also reflect the priorities for their region, which may be to focus landward – as in the North West. The other findings confirm many of the discussions in the stakeholder groups that while there is a widespread perception of the benefits of linking tourism with fishing, the mechanisms to achieve this are currently under developed. Obvious examples, such as Padstow, capture attention but do not provide an immediate pathway for emulation. Land based foods have benefited in the last decade from consistent and concerted efforts to develop branding, provenance and local distribution, which as one interviewee noted is not present in the fishing industry.

9. Stakeholder Conclusions

> For local communities, we need bits of all scenarios (C3- Carlisle meeting 3/3/10).

> Really we need bits of all scenarios - take quota rebalancing from A, zoning fisheries from B and regional management and marketing is key from C (C4 - Carlisle meeting 3/3/10).

At times the stakeholder discussions became in themselves a form of the very community development discussion that the participants highlighted as being important to the future of inshore fishing in their area. All participants stressed the importance of fishing to their area but because of the limited physical impacts of fishing on their localities, it became difficult to discuss the wider social impacts of fishing policy. The central role of policy in regulating the scope and extent of fishing became very clear. Yet these discussions did indicate, sometimes indirectly, routes through which management options might be re-imagined.

First, although there was a considerable resistance to, and disquiet about, aspects of existing policy, there was a willingness to discuss alternatives that developed through the discussion. There was challenge to the fishermen's focus on the centrality of policy and a wider discussion of the possibilities of using food as the fulcrum for change; the shift in paradigm from sectoral to territorial discussions. The frankness of some of these discussions was possible because nobody involved was historically responsible for the existing policies and there was very little discussion of the disputes around the science of fisheries management – the 'know why'. It also benefited from the long tradition of local agreements, generally to match local stock and ecological requirements, around the Sea Fisheries Committees. This form of debate implicitly empowered the fishermen and their representatives as the social and cultural importance of fishing was recognised, giving them a higher status in the discussion but in turn they were being asked to take on a role in the food chain and the responsibilities that it entails. This suggests that 'local' management and agreements may have considerable potential to play a major role in future policy.

Second, generally there was a widespread inability to identify any distinct social benefits tied to most of the options in the policy scenarios. For most participants this was because there was not a direct linkage between the fortunes of the inshore

fishing sector and their local area. Therefore measures to improve the performance and profitability of inshore fishing, whilst important to the fishermen, was not of significant importance to the wider community unless it was integrated with the rest of the economy. The processors, particularly those supplying the domestic market, are highly reliant on imported fish so domestic inshore fish could play a role in higher value, smaller volume outlets, including the hospitality trade. For those working in tourism, they make indirect use of the infrastructure and appearance of fishing, so the technical management has little direct impact on their businesses unless it ties to the physical product.

Third, within these discussions, those outside of fishing or the catching sector were very aware of the requirements of the multiple retailers' supply chains and third party certification that are more demanding in their requirements than those of the commodity markets. Several warned that without adequate investment in quality assurance schemes, domestic inshore fish could be excluded from these supply chains in the near future. Those looking to the various visitor economies looked to the sense of place and ambience created by fishing that could only be realised as financial return through a physical product with the appropriate provenance. Generally this was seen as fish delivered through the local hospitality industry, but there were a limited range of alternatives based on 'experiences'.

Fourth, as discussion of the potential role of IFCAs as intermediary bodies, community interest companies or certification bodies and the absence of LEADER[22] style groups made apparent, there was an awareness of a lack of intermediary bodies to carry out the role of developing the inshore fishing sector. The sharp contrast the tourism stakeholders made between agriculture and fishing was apparent, with the former being able to work with other actors because of the investment made in it. Many of the discussions considered ways to create such an intermediary body, as a vehicle for co-ordination and to engage with a wider range

[22] LEADER - Liaison Entre Actions de Développement de l'Economie Rurale (European Union initiative for rural development). No one mentioned the FLAG (Fisheries Local Action Groups) groups under the EFF directly.

of funding sources. These unspecified agencies would not be involved in the work of representing fishing in policy circles, or devolved administration of quota but with a broader remit.

It would be possible to see the discussions of the policy scenarios as very bleak – a marginal economic sector, regulated in a way that many do not understand or disagree with profoundly, and a societal asset often detached from its host community, whereby people could not identify direct social benefits. Yet, the emergent tone and options from these discussions was unstintingly positive, because potential ways forward were identified and even the groundwork for agreement established. Certainly some of this optimism was based on the possibility of changes in policy, some investment being obtained and a diminishment in controversy between the stakeholders. Yet many stakeholders were able to identify ways in which they could shape the future of their locality through inshore fishing.

10. Conclusions

Many of the people we interviewed during the course of this research were surprised that we did not ask about the environment or wildlife or the controversies about fishing in the press. Few people had ever asked them detailed questions about their lives and that of the community before. We have sought to redress that balance in some way through the process of this research and in doing so have found an industry that is held as an emblem by local people of their community and its uniqueness.

Our conclusions are set out here first in general terms; we then consider the county of Cornwall as an example of how fishing can be part of a broader based process of community development. We then reflect on what we have observed in our research and how that relates to the SAIF advisory group's proposition paper, the final document produced by the group and how long term options could be developed. As the example of Cornwall suggests, there is not a simple route to maximise the impacts of inshore fishing divorced from its locality, but there is a suite of well-tried options to consider.

What exists at present is an inshore fishing industry characterised by people finding a way to combine the opportunities open to them that are an admixture of local ecological factors, the regulations and the markets available for the catch. In some instances where there are local consumers, the 'right' species are caught locally and the infrastructure exists, the catch is able to become an engine for generating and keeping money in the local community by being sold into the local tourism industry. More often, fishermen have sought to earn a living by selling into Europe's commodity markets. The difference between these two strategies illustrates the variation in impacts that fishing has in the locality. Selling into the commodity markets often represents the most convenient and low risk strategy for fishermen and offers the best immediate returns, so securing their household. In other areas they are able to optimise the social benefits of their catch as well as securing their income through selling fish with a provenance, but in order to do so they have required considerable support and encouragement from those outside the catching sector.

In our initial thinking about this project we separated the 'tangible' – the physical products of fishing – from the 'intangible' – the cultural and social impacts of fishing. We met the constant paradox that whilst many people not directly involved in fishing pointed to its importance in their area but only in terms of its presence not the profitability or sustainability of its operations. Fishing and the ambience it creates plays a central role in the major industry of most coastal communities – tourism. All of those working in tourism recognise the iconic role that inshore fishing plays in the tourism offer of different localities, but finding a mechanism to reward this directly is difficult. This leaves tourism in the unfortunate position that while it is the most important industry in most coastal communities, the appeal of fishing is dependent on policy decisions over which those who manage tourism have little knowledge of or control.

It is not therefore surprising that when discussing the possible impacts of policy on the local community, most people favoured a scenario where local control was

increased and the 'burden' of regulation lessened. Most of all they wanted to be able to use a valuable asset to develop their community in ways that reflected their aspirations and needs. Ideally, fishing in the future could become part of the broader menu of community development options, with fish becoming part of an integrated strategy of rural development through maximising the social and economic returns from food.

10.1 Policy options

Broadly, our suggestion is that 'the Defra family' could, in partnership with other public sector and commercial bodies, begin a process of community development to create local intermediary bodies, which would build up the social return of fishing to match its cultural importance. To achieve that goal we advocate placing fishing within a wider policy context, including the recognition of it being an integral aspect of the food industry, which would also place it in a different commercial context. These new intermediary bodies need to be genuinely owned by the local communities, and be backed by a policy that views diversity as an opportunity. In this way a more integrated fishing policy could become a means to enable a more complex discussion between communities, fishermen, citizens and consumers about how the triple goals of environmental sustainability, social well being and economic viability may be realised. This would be a challenging process for many of those involved, which we believe if embedded in a community would be more successful as it could draw on resources of trust and reciprocity unavailable in larger scale arrangements.

Inshore fishing is a localised and often very specific sector that is deeply embedded in the social and cultural history of the area in which it is practised. This in part reflects the ecology of an area, which species are available and the pattern of tides or winds. But because it is tied to these resources in a way that is increasingly unusual in our society, it also provides a cultural and social emblem of a community's relationship with the natural systems with which it is interwoven. Perhaps unsurprisingly, this means that most people see the answers to the problems the sector faces as being a return to some form of 'local' control. The

most striking examples of success are when fishing is integrated with other assets in the community to create a circle of mutual benefit. Because of these specificities, the importance of local ownership and the attentiveness to what makes communities unique; policy options need to be tailored to those localities.

10.2 Cornwall – fishing, tourism and local development

Our suggestions on the role that fishing could play in the wider rural economy are captured well by references to some preceding texts on local food development in Cornwall.

The fishing industry in Cornwall, particularly the inshore fishing industry, is widely seen as a highly innovative sector with a number of experiments that suggest the sector could be more environmentally sustainable and economically robust. It continues to support or has supported the Duchy Quota Company, an MSC mackerel fishery, a lobster hatchery, a line caught tuna fishery, a handline fishermen's association, a fisheries resource centre and a producer organization, as well as some of the most prestigious seafood restaurants in the UK. Although not all of these initiatives are relevant to the inshore sector, they point to an energy and search for new business models in the county that influences the inshore sector[23].

This situation has not arisen, in our analysis, by fishing working in isolation, rather it is a question of it being integrated with, and influenced by, the development of the wider food sector within Cornwall. The University of Exeter estimates that the food industry is worth more than £1billion annually to the county[24]. At the same time seaside tourism alone was estimated to be worth £250 million to the county in 2008, supporting approximately 17,000 year round jobs[25]. Within this local context, fishing has a strategic importance to the county as a centre for food production and a

[23] Trewin, C. (2006) *Cornish fishing and seafood,* (Penzance: Alison Hodge)
[24] Lobley, M., M. Reed, R. Metcalf and J. Stephens (2006) A study of food production, distribution and processing in Cornwall and the isles of Scilly. (Exeter: Exeter University)
[25] Beatty, C., S. Fothergill, T. Gore and I. Wilson (2010) The seaside tourist industry in England and Wales. Pp. 68, (Sheffield: Centre for Regional Economic and Social Research)

tourism destination. Because Cornwall has received Objective One[26] status recently, reflecting the relative poor economic performance in the past, it has had the opportunity to reflect and develop a strategy and to invest in response to that plan.

Therefore, more widely, Cornwall has become a place where the relationship between community development, tourism, and the food industry in its widest sense is a paradigm that has become widely diffused. This has also meant that a number of synergies have been able to develop as people have seen experiments in another sector and realised how it could be replicated in their industry. This is not to deny the highly innovative work undertaken by many of those in the fishing and hospitality industries, but to observe that it happened within a context in which experimentation is fostered and the food industry, of which inshore fishing is a central part, is seen as vital to local prosperity.

Our research examples demonstrate that there can be synergies within this broad strategy. Padstow has specialized as a gastronomic destination and sources some but not all of its fish from its own harbour. Much of the fish it needs to fill the shortfall comes from Newlyn and is sold as 'Cornish' fish. In this way, although each town has its own trajectory and strategy for its development, they reinforce one another. Certainly fish is sold as a commodity from Cornwall, often being exported to Spain, but this is only one of a number of routes to the market place. The brand by Seafood Cornwall, often in association with product tracing, means that Cornish produce is recognized and used within the high-end hospitality trade far beyond the county. In terms of the organizations taking these initiatives, the local authorities provide support but they span the interests of stakeholders, with a focus on local needs and accountability, with private companies and the public sector making sustained strategic investment.

10.3 Measures to improve social benefits

[26] Objective One status relates to the EU structural funds, it acts to promote the development of areas that have a GDP of 75% or less of the EU average. The programme ran from 2000-2006 in Cornwall see http://ec.europa.eu/regional_policy/objective1/index_en.htm and http://www.objectiveone.com/

We have observed a common set of processes and opportunities that most of the communities we studied were either fully engaged with or were preparing to engage with. These are briefly:

1. Greater integration of fishing with tourism, particularly through festivals and events.
2. Local food branding to add value to fish caught locally and to boost the value kept in the community.
3. Third party accreditations to gain access to more markets and receive a greater return for that fish.

These are far from easy, as underpinning each one will require a considerable and concerted effort to achieve it within limited budgets and resources. They are generally aimed at re-valorising and re-connecting fishing to the rest of the community. They do so by making relatively low risk investments into the cultural and social 'offer' of fishing. Yet they are also mutually reinforcing, as sales can start around 'localness', then other values added through branding, and third party certification can also add value for catches that are not sold locally at premium prices. It also begins a process whereby the catching sector moves away from thinking that the primary quality of fish is 'freshness' onto other factors such as provenance and ecological sustainability. One of the most well documented sectors where the contribution of food businesses to the local economy has been studied is in certified organic production. Comparisons between fishing businesses and land based enterprises can only be analogous but a 2005 study by Exeter University found that organic farm businesses selling directly to the consumer earned £4,983 per hectare, compared to non-organic businesses selling directly to the consumer which earned £3,249 per hectare, as compared to an average of all farms in the survey without direct sales of £1,654 per hectare (Lobley, Reed and Butler 2005:120). Provenance, certification and keeping a larger part of the retail value of the product can make considerable impacts on the income of a business. Further research has demonstrated that many of the benefits of this activity appear to be captured in the locality around such businesses and that the concentration of such businesses in an area can amplify those effects (Lobley et al 2009).

Changing the scope of inshore fishing will require some fishermen to reconsider their businesses, from its goal of being the catching of fish through to the locus on being how to market it. The ends of this process should be to marry an increasing degree of responsibility on fishermen around these new aspects of their enterprise to securing of their economic return and an increased social status.

10.4 The SAIF proposition paper

The SAIF proposition paper was published mid-way through our research period, with only a few people in the catching sector and some in fisheries management who we interviewed being aware of its contents during our fieldwork. In part this is a question of timing as the paper was published during our fieldwork, with the policy engagement happening during and after the second phase of our research. As we noted above, the social implications of policy instruments are very difficult for lay people to engage with, but based on our observations where there was general agreement we have noted the areas of correspondence with the SAIF document (see table 5 below). This suggests to us a willingness to consider areas of change, and a belief that less contention over policy options would considerably improve the fortunes of the sector.

Table 5 - Areas of agreement and SAIF document compared

Area of general agreement	Section of SAIF proposition document
Devolved management of fishing (quota, technical measures, by-laws) to government regional or sub-regional level.	3.5 Use existing marine management structures where possible. 3.7 Include local management, utilising local knowledge, expertise and experience. 4.4.1 A localised management structure…
Re-allocation/re-distribution of quota to benefit the inshore fleet.	4.2 Step 2 ….right balance between the fleet segments and available fishing opportunities…
A re-definition of the inshore fleet on the basis of vessel length, engine capability and capacity perhaps related to regional definitions.	Fleet 4.1.1 composition
An exclusive zone for inshore vessels, with the proviso that they have access beyond that zone.	Option 2: wholly differentiate inshore fisheries from those off-shore
Management of effort on the basis of an annual allotment of hours at sea.	4.4.6 'menu' of management options

As we have noted, associating particular management measures with generalised social benefits is confounded by the economic marginality of inshore fishing, the role of local ecological factors and the importance of fishing as a cultural emblem that means its presence, rather than form of operation, is important. Management options were also seen as limited in the discussions because they were 'mid-level' or national level. Many participants saw policy change as needing to be at the EU level, the top level of government, and that the main areas of dynamism, as well as their opportunity for effective influence, were at a local level or lowest level. It would therefore seem that the most immediate way of improving the social benefits of

inshore fishing would be a management structure that enabled the local management of stocks.

As many in the second stage of the project argued, much of the fish eaten in the UK is not affected by the CFP policies because it is imported from outside the EU. However, its sustainability is underwritten by third party certification and this form of accreditation is becoming obligatory for the supply chains of some of the multiple retailers. This suggests to us a strategic opportunity to reconfigure the relationship between the inshore sector, Defra, local communities and the consumers of fish; as part of any devolution of powers to local bodies should be a requirement to achieve third party accreditation of the sustainability of the fisheries. The aim of this requirement is to ensure that consumers are given the opportunity to access domestic fish on the same terms as imported fish, with potentially a much lower carbon footprint for local fish. The debates about sustainability and stock levels are increasingly shifting towards the market, where rewards for high standards are available. Simultaneously this would change the relationship between fishermen and Defra. Finally, it would offer the opportunity for fishermen to overcome the stigma of being 'rule breakers' and take on the role of being custodians of the marine environment.

There was a constant, but marginal, thread of discussion throughout the research that pointed to a model of inshore fishing that was more restricted but in being so could offer greater local benefits. Several fishermen talked of territorial restrictions on who could use 'their' fishing grounds, arguing that they should have priority as they had an interest in maintaining them. Others argued that they would adopt third party certification if the link between it and better prices could be established. There was a willingness to discuss radical reforms, when tied to local management and demonstrable benefits.

The SAIF Advisory Group recommendations were published in August 2010[27]. The Advisory Group recommended a range of changes to current policy that in part relate to providing inshore fishermen with a greater opportunity to gain access to fish through changes to the quota system and their representation within the industry. They look to greater local management of fish stocks through the new IFCA bodies and call for those bodies to have responsibility for the area of up to 12 nautical miles from the shore. Alongside this they recommend a range of measures to enable fishermen to "catch less and earn more", such as third party certification and greater 'education' of the multiple retailers and the food service companies. The government response[28] ranged through acceptance for a number of ideas like greater regional management, to caution about others (for example, pilot projects for IFCAs with expanded responsibilities). It viewed the Advisory Group as an important step in re-building trust and committed to continue 'virtual' meetings of the group.

Many of the suggestions that we offer for consideration below show an obvious sympathy with these broad goals. Our observation of the SAIF recommendations are that they are predominantly focused on reform of the catching sector, its integration with a more balanced quota system within the fishing industry and a modernisation of linkages to the food chain. The difference in our suggestions, which is partly one of emphasis, is that we look to develop the role of inshore fishing by working in synergy with tourism, private businesses and local communities to improve the 'social return' from fishing. To do so we suggest that fish is placed within the food chain in parity with other products and that reform of the catching sector can only be a partial answer.

10.5 Beyond the SAIF advisory group proposition paper

The SAIF advisory group paper in its last section (4.5) sets out a broader range of ambitions and in that spirit we suggest five long term options that mix community

[27] Although before the publication of this report the Advisory group was provided with a draft report of the initial findings

[28] http://www.defra.gov.uk/foodfarm/fisheries/documents/policy/saif-recommendations.pdf

development with lessons from other parts of the food industry which could offer the inshore sector a range of new opportunities.

10.5.1 Collective Action and FLAG groups

Throughout the research it has been apparent that success has often been built on the collective efforts of fishermen working in their communities, pooling their expertise and efforts. We argued above there is an urgent need for intermediary bodies in order to develop the possibilities of inshore fishing, not only to discuss policy but to bring stakeholders together to act on creating change in the branding, marketing, distribution and consumption of fish. The form of these bodies – co-operatives, not-for-profit companies, charities, and whether they are time limited or long term – would seem to be less important to us than their activities. The central aspect is that the community they serve feels that it 'owns' the organisation and in turn it is accountable to that community. Certainly during our research it appeared that many people felt this way about the proposed IFCAs for their area, but there may be an issue that they are not localised enough.

In part it would also appear that these goals fall within the remit of the European Fisheries Fund Axis 4 provisions, which are looking to set up six Fisheries Local Action Groups in England[29]. Their land based counterparts – LEADER[30] groups – have met with considerable success in addressing the development of rural areas. These groups work to create sustainable change from the 'bottom up' and look to include as many people as possible in the local community within their activities. These groups may fulfil many of the goals and aspirations that have been identified in this research. Given that there will only be 6 groups throughout England they may play an important role but will be unlikely to be sufficient in themselves to address all of the needs and aspirations expressed during our research.

[29] http://www.marinemanagement.org.uk/fisheries/grants/eff_axis4.htm
[30] LEADER - Liaison Entre Actions de Développement de l'Economie Rurale (European Union initiative for rural development)

Private sector sponsored initiatives may have an important role in fostering new ways of creating networks and forms of collective organisation that may foster the aspirations for greater local control of fisheries and their products. In attempting to bring the inshore sector into the broader food chain, we are explicitly seeking to involve the local tourism businesses working together and multiple retailers in order to a degree to re-localise the supply of fish[31]. In order for that to be achieved inshore fishermen will have to make their businesses compliant with standards such as those of the British Retail Consortium. Multiple retailers have demonstrated a willingness to invest in developing links to producers and their collective efforts to raise quality in other food products, forming 'producer clubs'. A closer connection to the multiple retailers mediated by collective bodies may offer such opportunities to inshore fishermen[32]. Local tourism businesses may not be large enough alone but in co-operation in an area may be able to play an important role in fostering local branding, local quality marks and security of supply.

10.5.2 Brands

Although it has become something of a stock response that all goods and services ought to be branded, and certainly poor use of branding can be counter-productive, branding recognises that a product can have more associated with it than price alone. Currently outside of the major processors the branding is based on geographic provenance that is often quite broadly drawn – e.g. Scottish or Cornish fish. There are a few specific relationships between species and a specific place (e.g. Cromer Crabs) and some links being established with gear typed used (e.g. line-caught). It would appear that there is considerable opportunity for local areas to establish more of these brands, whereby products can be distinguished in the general marketplace. These brands can provide a story that integrates various

[31] The UK is a net importer of fish exporting fish such as Mackerel, Herring and Salmon whilst importing for example Cod, Tuna, Haddock and Prawns from countries as far away as China. In 2009 720,000 tonnes of fish were imported and 479,000 imported, a crude trade gap that suggest opportunities for domestic fish. Marine management organisation (2010) UK Sea Fisheries Statistics 2009. Pp. 120 in C. Irwin and B. Thomas eds., (Newport: marine management organisation and Office of National Statistics)

[32] Local acquaculture is already beginning to gain traction in this area see - http://wales.gov.uk/newsroom/environmentandcountryside/2010/100514waitrose/;jsessionid=wkyyMWnJnmXVhyXvfB4CywQ8DLcbKBnCJvJTThs044KjhsGJn3VJ!-42672990?lang=en

aspects of the local area, generating and keeping income in the area. Examples of this are the wine routes of Tuscany that link vineyards, restaurants and hotels throughout the region.

Within the hierarchy of brands and supply chains, traditionally the 'carriage trade' to restaurants and exclusive retailers has defined the highest prices and standards of quality. As we have argued, this continues to play an important role in the inshore sector but alongside this form of trade, new areas of high value food have been created. Of particular relevance to the inshore fishing sector would be fish that, alongside stock conservation, could also be traded 'ethically' and/or be 'low carbon'. Although these designations started as niche interventions they have become increasingly mainstream, often being delivered through not-for-profit or charitable foundations. Fairtrade has spread from coffee and tea through to cocoa, sugar, flowers and fruit, including adoption by major multinational companies. It could offer some fishermen - particularly those generating wider social and environmental benefits - a new market. Although only an emerging market, low carbon food products are developing rapidly. It would seem to be an immediate area of advantage to inshore boats fishing relatively closer to shore if they could demonstrate low carbon status and one that the deep water fleet would potentially struggle to emulate.

All of these branding exercises would involve investment but as many other communities marginalised in the global food industry have shown, it provides new ways to connect with consumers. At first these may be 'ethical' consumers but as Fairtrade beverages and confectionary have shown a combination of provenance, quality and ethical status can propel products to consumers far beyond that initial category.

10.5.3 Making markets

Frequently in the literature about fishing and in our research people approached markets as if they were akin to ecosystems. Rather we view markets as human made artefacts and are clear that powerful actors can create new markets. We regularly eat produce that would have been unfamiliar a decade ago either from another culture or a species or variety we previously did not consume – a pertinent example being the river cobbler. Given the ambitious goals of strategy documents such as Food 2030[33] plentiful species caught sustainably in domestic waters fulfil health, economic, environmental and social goals. Therefore creating a market for neglected domestic species and viewing this within the strategic policy goals of food security could provide a unifying focus for all of those involved with fish and fishing.

10.5.4 New entrants

Young people are obviously reluctant to enter fishing but as with agriculture there may be a role for mature new entrants. The capital barriers to setting up an inshore fishing business are relatively low and if training needs are addressed it could be an attractive option for a range of people looking for a new career. Although fishing is physically demanding it may be attractive to those with a background in working outdoors or looking for an opportunity to do so. The advantage of mature entrants is that they may bring previous business experience and new perspectives to the inshore fishing.

10.5.5 Working against stigma

The literature review (appendix 1) and our research make clear that fishermen feel that they attract a degree of stigma compared to other groups. In part this can help explain their unwillingness to contemplate sanctions or divisions within their industry. Although we believe that local management arrangements would contribute significantly to improving their status we argue that two other measures can be taken.

[33] http://www.defra.gov.uk/foodfarm/food/pdf/food2030strategy.pdf

Partners in science – fishermen and/or their groups could play a greater role in collecting scientific data. So rather than the impression that science is done on or around them, they are included as stakeholders and lay experts. Throughout the research fishermen were able to see themselves as having a broader role through taking children out for education trips, working alongside scientists to conduct more accurate surveys of their areas or taking part in species restoration projects. Others suggested that just as farmers receive payments for environmental work they could too, in return for their role in preserving the marine environment. There would appear to be opportunities for involving fishermen in more than the practical management of fishing grounds but also in scientific data collection and analysis. Given the role of 'amateurs' in scientific fields as diverse as ornithology to astronomy, projects involving fishermen would appear to have potential to be fruitful.

Enablers of other people's welfare – some fishermen feel that their businesses are divorced from the local economy and as such they are responsible only for, and to, themselves. Those fishermen who run businesses that contribute to the wider economy demonstrated great pride in that role – either through underpinning someone else's business or simply running a business profitable enough to pay tax. Fostering models of business that encourage the integration of fishing businesses into the local community will foster that pride and combat isolation.

Legibility – one of the aims behind all of these suggestions is to make inshore fishing more open to those not familiar with it, more easily 'read'. Not only is fishing regulated in a complex way and so carrying a heavy regulatory burden, as recognised in the SAIF advisory group recommendations, it is also contentious. To a degree this reflects the occupational culture of fishermen, which prizes autonomy and within which boisterous debate is a part of sociability, but it has to be recognised that this has a cost. Contention and complexity act as barriers to the wider community becoming involved; lowering them will let other people take part.

10.6 Concluding comments

Often the headlines about the fishing industry suggest that everything in fishing is difficult, in no small part because at times it appears that there is no agreement about anything - apart from the importance of fishing. Discussions with fishermen can reflect anger about the outcomes of policy measures, whilst conservationists can demand ever more restrictive measures to protect stocks. Public debate is often highly polarised and expressed in dramatic terms. We do not believe that society is faced with such stark choices.

As our research has demonstrated, there are significant areas where agreement could be forged, particularly around local management, although there remain areas that are likely to prove more difficult, particularly those around conservation. We would agree with Symes and Phillipson that:

> It is, however, important to remember that sustainable development is a three legged stool embodying environmental, economic and social sustainability: dangers arise when one of these legs is weakened by neglect. (Symes & Phillipson 2009:1)

Social measures may have been neglected, as they argue, in EU policy making but we have seen many local communities eager to take fuller control of fisheries and to revive the 'social leg' of sustainability. These measures cannot be solely local because lines of accountability need to be maintained and the needs of wider social groups addressed, as well as wider environmental and economic issues, but an increased degree of autonomy could be given to those who depend on these resources for their livelihoods.

Inshore fishing is highly valued by the communities in which it is embedded and there are routes through which the catch can be given value to allow it to initiate virtuous circles that build up the businesses of the fishermen and the community around them. Our research suggests that what are presently isolated experiments could be replicated and adapted to benefit more people. This is not necessarily an easy proposition but this research suggests that there are mechanisms and processes that could help achieve these goals. Certainly the goal of a sustainable

fishery that helps the wider community prosper is closer than the contention and public rhetoric would suggest.

Appendices

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Appendix 1: Literature Review

1.1 Introduction

A systematic literature review of the academic, policy and grey literature was undertaken relating to the social impacts of fisheries, as well as relevant policy. A variety of search methods, including online databases and other search engines, were used in order to compile a comprehensive as possible list of relevant documents. Documents identified included policy papers, journal articles, dissertations, books and grey literature[1].

The following section outlines fisheries policy and management systems using the existing social science literature and relates it to the social benefits of fishing. This starts with a review of how social scientists have viewed management measures and then onto the social processes underpinning some of this critical commentary. To the end we also include review of rural development measures related to food products as this informs a broader of how food can be used to improve the social returns to individuals and communities. Although we report this literature it is important to note the limitations of some of it, in that frequently it is discussing communities in other nations, communities which are geographically remote in a way that nowhere in England is and also it at times struggles to account for ecological concerns. We will return to these criticisms later.

1.1 Fisheries policy literature

Comprehensive fisheries policy and management systems were only established in the last 30 to 40 years, in response to growing concerns about the depletion of commercial fish stocks through overfishing (Symes and Phillipson 2009). The stated priority was to halt the depletion of fish stocks, allow recovery and create a sustainable resource. At the same time national governments, particularly those

[1] Policy orientated research that has not been peer-reviewed.

with a tradition of sea fishing or the use of fish in national cuisines, have an interest in a successful and robust commercial fishing industry. Aligning these objectives of conservation of fish stocks and economics imperatives add a particular dynamic to these policies. With these objectives in mind, most policy and research to date has unsurprisingly centred on biological and economic objectives. Measures that have been considered as necessary to combat overfishing and preserve a commercial fleet have come at a 'substantial social cost' (Symes and Phillipson 2009).

The European Common Fisheries Policy (CFP) was established in 1983 with the objectives of conserving threatened fish stocks and limiting fishing effort, while maintaining employment and income for fishermen. One of the fundamental issues for managing fisheries is that fisheries are a common pool resource. There has been the prevailing belief that open access common resources cannot be managed effectively as illustrated by Hardin's (1968) 'Tragedy of the Commons'. It is, thus, assumed that in order to solve this management problem, user rights of the common pool resource must be redefined either through forms of state ownership or privatised (Symes 1998). In fisheries policy, this has been achieved in the EU by fixing upper limits on the quantities of fish that may be caught per year - *Total Allowable Catch* (TAC)[2] - and associated national quotas - *Fixed Quota Allocations* (FQAs). This is a way of limiting access to the common resource, and are coupled with *technical measures* such as net mesh sizes, closed areas, closed seasons and decommissioning of the vessels to reduce the ability of the fleet to catch fish. Each Member State is allocated a TAC annually and is responsible for distributing them within the nation. In the UK the quota is mainly allocated to Producer Organisations, which is made up of individual vessel owners (Phillipson 1999). However, under 10m vessels are excluded from the main sectoral quota systems administered by the Producer Organisations, having their own quota allocation (Phillipson 1999).

Behind this apparently simple way of organising the access to the fishing resource lie a group of competing and often contentious processes. Although an ancient way of

[2] Fixed maximum quantities of fish that can be caught from a specific stock over a given period of time.

life many fishing vessels make use of the latest technology, even small vessels can have a substantial *capacity* to catch fish. Measures of vessel length do not account for equipment, engine capacity or technological devices (for example fish finders) all of which in combination have a role in determining the capacity of a vessel to catch fish. How to manage that capacity is an area of technical and political debate ranging from restricting access through to limiting the use of technologies or an array of combinations of these measures. The calculation of the TAC is based on sophisticated and rigorous ecological science but all science has limitations, for example areas that are not well understood, a problem that is exacerbated by the scale and problems of physical access to aquatic ecosystems. Then as with all EU processes there are political processes at play in determining allocations, and this is before individual member states determine how to implement these policies.

An alternative is to allocate individuals an *Individual Tradeable Quota* (ITQ), either as a privatisation of access to the fish stock or as part of a state management policy. The quota system of ITQs is favoured by economists and has the tacit support of biologists (Symes 1998). It is argued that it gives fishermen a stake in the resource, a sense of ownership that will encourage them to have a sense of stewardship and a long-term interest in its preservation. Some social scientists and small-scale fishermen oppose it as it can lead to job losses, changing social relations of production and changing social structures of communities (McCay 1995). Arguments in favour of ITQs have been argued against on conceptual grounds, by Symes in particular, as arising from a misinterpretation of the socio-political nature of common property resources and on moral grounds for allocating free shares in a common good (Symes 1998). Symes (2005) has suggested that quotas are 'crisis management' rather than a long-term sustainable approach. This speaks to a philosophical divide between those who believe that common goods are best managed by the communities closest to them (Ostrum 1999), those who argue that the most effective way to protect them is to make them into unlimited private property and those who argue for limited (by time and/or area) private property. Pragmatically these differences may also relate to the gaols of the governance of the fisheries, with community or local management associated with higher levels of

social capital (Hall 1999), whilst others have sought economic efficiency or fish population sustainability (Wilen 2000).

There is continued debate about the effectiveness of measures adopted under the CFP as many have argued that it has yielded poor results and many fish stocks are presently outside or almost outside safe biological limits (for example EC 2001). The EC's Green Paper suggested that TACs have a limited effect as the levels set are in some cases higher than indicated in scientific advice resulting in continued overfishing (Daw and Gray 2005). As an example, in 2002 the International Council for the Exploration of the Sea (ICES) recommended a complete moratorium on all catching of cod. The Commission opted to propose an 80% reduction in cod TAC. However, the Council of Ministers agreed on a 45% reduction with effort limitations (Daw and Gray 2005). Further, the requirement not to land certain sizes and species leads to *black fish landings*[3] and *discarding*[4] at sea (Symes 1998). A report for WWF Germany estimated that one million tonnes of fish is discarded every year in North Sea waters, accounting for a third of catches (Schacht and Bongert 2008). It is argued additionally that technical and structural measures are often stalled, with delays in implementing mesh-size regulations and closed areas rarely being implemented (Daw and Gray 2005). Fleet restructuring to reduce effort through Multi-Annual Guidance Policies (MAGPs) has also been slower and less severe than advised by scientists (Daw and Gray 2005). The landing of *black fish* and *discarding* have important consequences for the business activities of fishermen and their relationship with policy, as discussed below in relation to stigmatization.

Crean and Symes (1996) argue that overlooking the needs of fishermen results in non-compliance. As they do not support the regulations then illegal activities and infringements are common as the fishermen question the science on which the policy is based, the management of those policies pointing to the disparities within the EU. A study from North America echoes this; Woodrow looked at the effectiveness of fisheries reduction programmes in Newfoundland during the

[3] Selling of illegally landed catch (either illegal species or over quota) on the black market.
[4] Dumping of illegal/unwanted/over quota species or juveniles at sea that are caught as by-catch.

Northern Cod Moratorium and concluded that they were largely ineffective at reducing the number of fishers in part due to a lack of consideration of local needs (Woodrow 1998).

The literature on inshore or small-scale coastal fisheries in England is limited, so on occasion the broader offshore industry and other parts of the UK were considered, as it is inevitably difficult to assess the social impacts of this aspect of the industry in isolation. Different terminology has been used to describe 'inshore' including: small boat, small scale, artisanal and coastal. Based on a range of criteria with reference to vessel size, trip length, activity patterns, gears or species targeted (Symes 2001). In general, small-scale fisheries are viewed as being typified by their flexibility and different types of gear, with passive gear (fixed nets, lines and traps) and encircling gears (seines and lamparos) being most common (Symes 2001). A common element of the definition is that small-scale fisheries are located in inshore waters and vessels are under 10m.

While a fairly extensive policy literature exists at both the European and UK level, this is mainly couched in economic and biological terms, with generally little reference to social impacts. Where social objectives are acknowledged, these are often of a broad nature and in respect of employment, social inclusion and the economic sustainability of a community. The academic literature on the social impacts of fisheries is less widespread. What little literature exists is dispersed and fragmented, with research findings published in diffuse publications. A number of texts were published in the late 1990s and early 2000s in response to the growing 'fisheries crisis', most notably *Fisheries Management in Crisis* (Crean and Symes 1996), *Property Rights and Regulatory Systems in Fisheries* (Symes 1998), *Alternative Management Systems for Fisheries* (Symes 1999), *Fisheries Dependent Regions* (Symes 2000) and *Inshore Fisheries Management* (Symes and Phillipson 2001). Also of note is a book published in 1993 by Svein Jentoft, *Dangling Lines – The Fisheries Crisis and the Future of Coastal Communities: The Norwegian Experience*. Jentoft's text was written after the collapse of the Barents Sea codfish stocks and he focuses

on what sustainable development means for Norway's coastal fishing communities. There is little grey literature relating to the social impacts of fisheries. Of note is a partnership between WWF-UK, the National Federation of Fishermen's Organisations (NFFO) and Marks and Spencer, entitled *Fish South West*. The focus is on rebuilding and maintaining sustainable fish stocks through fisheries modelling and the involvement of a wide stakeholder community.

Other authors critique the developing fisheries policies as in this review, such as Toddi Steelman and Richard Wallace (2001), Tim Daw and Tim Gray (2005) and David Symes (2005). There is a small amount of literature that attempts to develop social impact assessments for fisheries, although these tend to be more biological and economic than social (Bradshaw, Wood et al. 2001; Pollnac, Abbott-Jamieson et al. 2006; McClanahan, Castilla et al. 2009). This highlights an important ontological difference that divides the literature about social impacts. Fisheries studies have been dominated by quantitative approaches that believe that behaviour can be understood and even predicted through modelling. This stems from the concept that behaviour can seen as a system, which is often a meeting point between different bodies of knowledge such as economics and ecology (Bradshaw, Wood et al. 2001). The emphasis is placed on data points that can be counted or measured with other processes that cannot be enumerated sidelined. Many social scientists do not accept that many aspects of human behaviour can be understood solely through quantification, so have not been engaged in many of the studies of fishing or have done so in a way that reflects their philosophical position.

1. 3 Gender

A significant number of authors have addressed gender roles in fisheries families, especially during times of change and difficulty. The emphasis is often on the role of women in fishing communities, as well as the impacts of the reduction in fishing on perceptions of masculinity. The main authors in this regard are Jane Nadel-Klein, who has investigated the impacts of the North Atlantic fisheries on the role of women in fishing communities in Scotland; Munro who explored the concept of 'self'

and 'community' in the context of work and family life in a North-East Scotland fishing village; Dona Davis, who has conducted studies of gendered cultures in Newfoundland; Ian Binkley, who has researched the changing role of women in fisheries communities in Nova Scotia; and Joan Marshall, who conducted a longitudinal study over 5 years observing changing gender relations in small fishing communities on Grand Manan Island in New Brunswick. A recently completed PhD thesis by Ruth Williams explored the impacts of a changing fishing industry on identity in fisher households in North East Scotland. We discuss the role of gendered images of fishing below, but it is also important to note at this stage that the locus of gender discussion has been around women.

1.4 Social goals in policy

In a recent paper by David Symes and Jeremy Phillipson, the authors argue that EU fisheries policy has increasingly become focused on goals of economic growth and sustainability, with current social issues considered a lower priority. They claim that the incompatibility between economic and social objectives and the focus on 'inter-generational' justice rather than 'intra-generational equity' has led to the social dimension in fisheries policy being downgraded and diluted (Symes and Phillipson 2009). They state:

> Rather than serving as an active influence in shaping fisheries policy, social issues are seen rather more as the irritating consequences of policy. At best they are considered late in the policy process and usually dealt with in an ad hoc manner (Symes and Phillipson 2009:3).

This, the authors claim, means that there are few yardsticks by which policy makers can measure the social relevance of proposed new regulations. In 1999 the European Commission commissioned a Europe-wide project to collate and examine data on socio-economic factors of dependency on fishing (SAC 1999), but the focus was narrowly defined to economic and employment data. Indeed, in the Commission's Green Paper on the CFP, social issues are considered only in terms of employment and safety at sea. Symes and Phillipson, therefore, assert that explicit and transparent social objectives need to be included early in the policy process. They argue that only broad social objectives are left such as the creation of strong

communities, fair incomes for fishing businesses and fairness towards consumers. The reason for the lack of specific measures derives from a series of factors:

> Allied to the scarcity of relevant social data on the fishing industry is a lack of awareness among fisheries administrators of the social ethos, context and relationships of the fishing industry and of the fishing community (Symes and Phillipson 2009:4). .

The same lack of focus on social objectives appears in UK policy also. While the Prime Minister's Strategy Group Report, *Net Benefits*, and its supplementary analytical paper *Fishing Communities and Regional Development*, published in 2004 recommended explicit social goals in fisheries policy aimed at assisting dependent and vulnerable communities, the devolved governments' response, *Securing the Benefits,* published in 2005 offered only a vague consideration of social objectives. *Net Benefits* acknowledged the contribution that active fishing communities make to the local social fabric, culture and the image of an area and its use for marketing (Cabinet Office 2004). In England, the social objectives, outlined in *Sharing the Benefits*, focus on tackling social exclusion and promoting long-term prosperity in fishing-dependent communities (Defra 2005). The more recent long-term vision for sustainable fisheries *Fisheries 2027* published in 2007 by Defra while highlighting the social benefits of achieving sustainable fisheries, also recognised that some social benefits might be lost from traditional fishing communities as access to most of the fisheries would be by the most economically efficient operators (Defra 2007). For example, some small boat owners, under the ITQ scheme, have sold their quota entitlements to larger vessels (Pettersen 1996). Indeed, in their analysis of four UK fishing ports, Brookfield et al (2005) found that only 10% of the catch landed at North Shields can be attributable to the local fleet.

Van Vliet (2000) argues that modernisation can often lead to the decline and disintegration of traditional fishing communities as rationalisation of the fleet and regulated access through licensing and quotas favours the large-scale sector. Symes (2000) agrees that EU policy has been responsible for many of the problems in fisheries communities, favouring large-scale, more economic enterprises. In 2001 Symes went as far as saying that EU regulators had virtually written off the inshore

sector (Symes 2001) and there were concerns among fishermen that their interests are not adequately represented in the fisheries policies in Britain. The sustainability of such policy can be questioned when discarding is seven times greater (Kelleher 2005) and oil consumption is eight times greater (Tyedmers, Watson et al. 2005) for large-scale fisheries than for small-scale fisheries.

Considering fishing in isolation may also neglect other factors putting pressure on fish populations, as climate change, aquaculture, recreational fishing, pollution and waste disposal, boating and other recreational activities, renewable energy installations and tourism also impact ecosystem structure and health.

1.5 The Social Impacts of Fishing

As outlined in the previous section, the main focus of the CFP is to promote the recovery to sustainable levels of fish stocks by limiting fishing effort. Social issues that may arise as a result are viewed as secondary (Crean 1998). Crean (1998) argues that a lack of consideration of the social impacts is counter-productive:

> the very success of attaining biological objectives will be threatened by the likely disenfranchised user groups who, in some instances, may feel obliged to act independently (and illegally) to safeguard their livelihoods and current income base (Crean 1998:38).

Jentoft (1999) agrees: “before we can even hope to rebuild stocks, we must start to rebuild communities” (p. 29). Symes and Phillipson (2009) argue that the sustainability of these fishing communities is closely linked to the future of the inshore fishing industry. As with other small remote rural settlements, they are suffering the loss of basic services, including schools, medical facilities and shops. Increased property prices and lack of employment is making it difficult for young people to stay in the community. The tighter regulations and increased costs to enter the fishing industry are also a strong disincentive for young people to pursue this career path (Symes and Phillipson 2009). Whereas communities were bound by a common interest and reliance upon the fishing industry, access to diverse occupational opportunities (for example, factories and oil rigs) is eroding the ties

leading to a reduction in social capital and shared knowledge. Symes and Phillipson argue that:

> fisheries dependent communities become vulnerable when their social cohesion is undermined and their cultural identity challenged – and when direction, leadership, organisation and sense of self-determination are missing (Symes and Phillipson 2009:4).

For many fishing communities fishing is more than a way of earning a living (Nuttall 2000; Jacob, Farmer et al. 2001; Brookfield, Gray et al. 2005). It defines their identity as individuals, households and communities. Indeed, the changes in the industry; "…poses a threat not just to the livelihood of each individual fisher and fisher household, but to the collective way of life and self-regard of an entire [region]" (Nadel-Klein 2000, p. 366). We know surprisingly little about the forms of social organisation and the processes of social representation of inshore fishing in the late twentieth century. Most of evidence is fragmentary and consists mainly of anthropological studies of pre-industrial forms of fishing on the Atlantic fringe (Symes and Frangoudes 2001).

Symes and Frangoudes (2001) suggest that it is often tempting to compare modern-day fishing communities with pre-industrial communities or to small-scale farming in Europe. They state that while small-scale farming and inshore fishing have certain similarities in that they are characterised by family enterprises, high levels of risk and uncertainty, seasonal impacts and often pluriactive economies, there are significant differences in the resource base and social regulation. The nature of property rights is cited as a primary distinction, with farming consisting of private ownership of an area of land that is inherited or sold on the market. Property rights within fishing are less defined with fisheries as a common resource, which is allocated through quotas, or licensing and often managed through closed areas and/or technical measures. Furthermore, in fishing there is a clear distinction between home and workplace and often the creation of "separate worlds" for the fisherman and his family (Symes and Frangoudes 2001). Thus, while comparisons between small-scale farming social representations (which has been extensively researched) and inshore fishing can be

a useful tool, the unique status of fishing must be borne in mind and research strategies developed that take this into account.

1.6 Dependency

Defining fisheries-dependent regions is difficult. There are no Europe-wide data sets and national data sets look at employment in a non-standardised form (Symes 2000). Data sets at the macro level are likely to conceal local dependence as fishing is often embedded in a pluriactive economy (Symes 2000). Such analyses will highlight small, remote, sparsely populated fisheries communities (with little alternative employment opportunities) and ignore important concentrations of fishing activity in more populated urban settings (Symes 2000). Symes (2000) argues that dependency on fisheries is often influenced by peripherality in geographic location. These less urbanised, rural fisheries dependent regions have characteristics such as a narrow-based employment structure based on fishing, supplemented by agriculture and tourism, high levels of self-employment in small-scale family enterprises, seasonal variations, seasonal unemployment and weak economic, social and institutional structures. The more strongly a region is characterised by these features the greater the economic and social impacts of a reduction in fishing activity (Symes 2000).

Net Benefits suggests that 'dependency' and 'vulnerability' are not the same. The report states that vulnerability increases as economic diversity and opportunities for alternative economic activity are limited (Office 2004). The communities most likely to be negatively affected by changes in the industry are small, remote communities, which are highly dependent on fishing as there are little other employment alternatives (Phillipson 2000). Also, medium dependency communities with ports may not be well equipped to develop as fishing centres as the sector contracts. It is likely that high dependency communities that have larger ports will suffer less as they will be able to attract vessels as the sector contracts and activity becomes concentrated on well placed ports.

Fisheries-dependency has largely been cast in economic terms, with a focus on employment levels and GDP of the community (Brookfield, Gray et al. 2005) and in terms of community impacts a central focus has been on the viability of fleets. With respect to small scale artisanal fishing, Just, Bowman and Ota's (2005) research showed fishing on the north east Kent coast to be a viable small scale industry with the potential to provide a living for those successfully engaged in it, largely due to the fishermen's ability to target non-endangered species and access to overseas markets. Unlike many of the studies in remote rural areas they studied an area with a diverse economy where the wider community was not dependent on fishing only those involved in fishing. There were few family based fishing boats rather those who had chosen to enter fishing and their study make clear the part-time and casual labour that allows many boats to operate. Foreign markets, in this case French, were very important to the fishermen's sales and business survival. Although the proximity of France to the Kent coast also suggests that within the EU 'foreign' markets may at times be more local than some national ones.

Mark Nuttall (2000, p. 108-109), on the other hand, refers to dependency in terms of social and cultural value. In this sense, fishing is a "way of life", whereby community bonds, values, knowledge, language and traditions are established, confirmed and passed on (van Ginkel 2001; Brookfield, Gray et al. 2005). Fishing provides social capital and as Brookfield et al (2005) claim, "for fisheries-dependent communities, fishing is the glue that holds the community together." Jacob et al (2001) concur, suggesting that fisheries-dependence relates to the "character of the community ... there is a dependence of an industry to support the sense of community and the history of that community" (p. 17-18). According to van Ginkel (2001), this is why fishers continue fishing even when it is no longer economic to do so: "their relation to fishing is expressive and existential ... Therefore, fishers often persist in working in a failed fishery" (p. 189). This explanation of the social and cultural importance of fishing is developed further below, but it is important to note that the fishermen are responding to non-economic cues and in a way that is not necessarily in line with economic rationalities.

1.7 Social Capital

> Bonding social capital constitutes a kind of sociological superglue, whereas bridging social capital provides a sociological WD-40 (Putnam 2000:23)

The literature suggests that family and community provide the essential keys to the social organisation of inshore fishing (Symes and Frangoudes 2001). The community is built on kinship ties and interactions with close neighbours which are important for generating enduring egalitarian and reciprocal economic and social relationships (Symes and Frangoudes 2001). Skippers often select crew based on *agnatic* (kin by birth) and *affinal* (kin by marriage) kinship ties in a fairly closed occupational community. The mobility of labour and capital is weakening the links between the fishing fleet, the homeport and local fishing grounds, diluting the sense of 'local dependence'. Kinship networks are being replaced with more formal contractual relations (Symes 2000). Just and Ota in a study in North Kent found that kinship ties were broadly unimportant with fishermen entering fishing through their enthusiasm for it rather than family ties and being informally brought into the network of fishermen (Just and Ota 2005?). This suggests that geography and the specific of place may be important, and that fisheries located in areas with a highly developed economy may be different to remote and rural ones.

Brookfield et al (2005) distinguishes between fishing-dependent communities with a 'real' fishing industry and those with a 'virtual' fishing industry. 'Real' dependency is product-based, reflected in communities such as Shetland, where fishing and its associated industries are important for direct employment. 'Virtual' dependency, on the other hand, is image-based and presents the idea of a fishing industry in a community. It serves as a branding mechanism for marketing tourism and niche markets for fish products. The authors observed that often the economic value of 'virtual' dependency might exceed that of 'real' dependency. Some argue that exploiting this touristic value of fishing destroys the identity of fishing communities. Jentoft (1993, p. 93) claims that:

many feel that it would ruin the special characteristics; that the authenticity would be lost. It has even been claimed that the tourism industry would reduce the coastal culture to a caricature of itself. There is a danger of devaluation through commercialisation.

While both are dependent on fishing, those with a 'virtual' fishing industry depend on fishing as a cultural icon.

1.8 Employment

Maintaining security of employment and the right to fish is of paramount importance to fishermen and their families (Symes and Phillipson 2009). The fishing industry is comprised of a broad range of industries associated with fishing, not just the catching sector, leading to widely differing estimates of its economic consequences. The Scottish Agricultural College (SAC 1999) estimated that the number of jobs directly dependent on fishing is three times the number employed in catching alone. Employment has fallen steadily over the past few decades, due to modernisation and economies of scale, and alternative employment options, together with policies to reduce fishing capacity.

Hansen and Højrup (2001) identified a number of macro-economic trends that are influencing the profitability of inshore fisheries*:*

- Globalisation of the food industry and pressure to reduce quayside prices due to increasing fish imports and competition from other foods.
- Shifts in costs of labour and capital – new technologies, grant aid, low-interest loan schemes. Capital costs are decreasing and labour costs are increasing, so more efficient to substitute capital for labour.
- Competition from recreational fishing (selling to shops and restaurants) and aquaculture.
- Environmental costs – introduction of Marine Protection Areas (MPAs) and banning of some gears.
- Privatisation of fishing rights – ITQs and licence fees.

There is evidence to suggest that inshore fisheries have a strong influence on the social values of local coastal communities, especially in terms of employment (Symes and Phillipson 2009). The European Commission recognises this and has proposed the possibility of financial aid packages to safeguard the inshore sector (CEC 2001). Other non-subsidy measures may also be appropriate it has been argued, such as granting preferential access to inshore waters for vessels under a certain size, limiting the transferability of fishing rights of local inshore vessels and relaxing some of the licensing regulations and quota restrictions (Symes and Phillipson 2009).

The cod crisis in Newfoundland in the 1980s cost 40,000 jobs (Harris 1998). Such changes in employment structure have impacts on a range of socio-demographic indicators such as migration, education, dependency and population age structures (Symes 2000; Hamilton 2007). The out-migration of young adults and women reduces the options for communities left behind. The population contracts, becomes older and more male (Hamilton and Otterstad 1998; Hamilton, Colocousis et al. 2004). There is a reduction in human-capital as more educated individuals leave, followed by those seeking an education and a decline in the capacities of the resident population (Hamilton 2007).

1.9 Identity and Place

Fishing is a way of life and fisherfolk are proud of their identity as fishers. Fishing provides a source of community and identity (van Ginkel 2001). Fishing is important in the social fabric of communities – social events such as parties, weddings and funerals reaffirm the identity of the fishing community. As with other groups that combine occupation, residential and familial identity, the occupational identity becomes an important source of the common bond.

Outside of the specific studies of fishing there is an extensive literature on the role of place in identity, such as Cresswell (2004), Holloway and Hubbard (2001) and Massey and Jess (1995). Understanding the links between identity and communities is bound up with the nature of social and economic relationships, especially during

periods of radical change (Marshall 2001). The identity of a community can be used strategically during times of change (Williams 2008). Members of the community have something in common, in this instance fishing, and this sets them apart as different from others. The past often plays a very important role in the construction of collective identities as it can help make sense of and confront future challenges (Dalby and Mackenzie 1997).

Fisherfolk have historically had a stigmatized occupational identity that has isolated them socially (Coull 1972; Nadel-Klein 2000). Smith (1977) referred to fishers as "a denigrated, if not despised, segment" of society (p. 8). More recently, fishers, as well as farmers, are often viewed by the media and policymakers as 'criminals' in the environmental crisis (Jedrej and Nuttall 1996; Nuttall 2000, p. 112). They feel under attack and this sense of alienation has resulted in strong ties within the community and a strong sense of identity, not unlike mining communities, in what Gerald Suttles (1972) has termed the 'defended community'. This perception of stigmatisation, or being marginalised has important consequences for solidarity within the group and also questions of compliance with regulations.

In her doctoral thesis Ruth Williams explored the changing constructions of identity in North-east Scotland fishing communities at a time of industry restructuring (Williams 2008). Williams conducted life history interviews in 19 fishing households. She looked at identity in terms of three domains of fishing: the sea, households and community. Most of the skippers came from fishing families and had always wanted to fish. Fishing enterprises are generally passed on from father to son and the crew often consists of male members of the family or friends. In close-knit fishing communities, the social activity is concentrated around the harbour and boat sheds, and in the kitchens of family and friends (Williams 2008). The presence of fishing is at the centre of social structures and occasions. Many villages depend on fisheries for their cultural identity even when it is not the main source of income. The reduction of fishing can change the status of the fishing community and socialising of the next fishing generation is lost.

1.10 Heritage and Culture

In fishing communities the construction of gender roles has traditional roots and relevance. Men and women have particular responsibilities and roles with men's domain being the sea and a woman's the household. There is a strong sense of masculinity and occupational identity associated with fishing and the sea (Davis 2000). Fishing is a very hard and dangerous job, with a UK commercial fishing vessel lost at sea on average every 12.5 days over the past 10 years (Cabinet Office 2004). Fishermen need particular skills in fishing techniques, using technology (such as electronic fish finders), reading the weather and understanding markets. In Ruth Williams' study in North-east Scotland she found that within a community, the skill, honesty and self-reliance of fishermen is recognised and highly prized (2008). Fishing is an identity created by doing and men experience a loss of identity and self-esteem when they can no longer fish. For those that are forced to leave fishing as an occupation they feel excluded from the social networks of fishing work. The fishermen see policy changes as undermining the autonomy and flexibility of skippers (Williams 2008).

In terms of fisher households, women are central. Fishwives are highly independent and multi-skilled. In her longitudinal study of coastal fishing communities in Newfoundland, Dona Davis (1988; 2000) proposed two categories of women's work in fishing communities, which she termed 'instrumental' and 'expressive'. Instrumental work involves their tangible contribution to the industry – preparing the boats and nets for sea, providing supplies for the crew, acting as ground crew, maintaining communication between skippers and with families of crew, and processing the catch onshore. Although since fishing has become more industrialised, women are less involved in processing, but they are still involved in ensuring the equipment and stores are ready and maintaining communication. Their work is often unpaid (Jentoft 1993; Gerrard 2005).

Expressive work is more symbolic and emotional. It is associated with maintaining social networks, caring for children and raising the next generation of fishers and

worrying about the fisherman's welfare. In Davis's account the late 1970s, when the fishery was at its peak, the major forms of social organisation were centred on households that were matricentric and involved extensive kinship networks. Since 1987 local catches from small inshore boats have been in decline and halted in the spring of 1989. By 1990 the community was facing high unemployment and many individuals were on state welfare (Davis 2000).

The restructuring of the fishing industry is challenging these traditional gender roles. Davis (2000) and Power (2005) investigated the changing gender roles in small fishing communities in Newfoundland. They found that men's masculinity was being compromised as they spent less time at sea and more time on shore, in the home, the stages or the bar. With men at home more, this encroaches on the women's domain as "shore captains" and there is a re-negotiation of roles and independence. There are some parallels between the changing family structures of fishing communities and small family farms and mining households (Ni Laoire 2001; Bennett 2004). Economic necessity means that more women are seeking paid work in order to support the family income, intensifying men's loss of self-esteem. Similarly, the pressure on small family farms often forces the woman to work outside of the farm to subsidise the household (Shortall 2002). This off-farm work allows the household to maintain its farming identity but continues to render the woman's contribution as invisible and there is generally no re-negotiation of domestic responsibilities (Shortall 2002).

1.11 New Representations

Representations of fishing in tourism and heritage are becoming more commonplace (Nadel-Klein 2003). Some small east coast Scottish communities depend on tourism and touristic representations of the fisher past as much, or more so, than fishing itself (Nadel-Klein 2000). The 'fishwife' image is often used as an icon for representing and marketing fishing communities. 'Fisher lassies' are emblems of cultural survival. They are often romanticised in paintings and novels, with images of young, beautiful fisher lassies with their long hair blowing in the wind. Women have,

thus, taken on a new iconic significance in sustaining a sense of communal pride for the "tourist gaze" (Urry 1990; Nadel-Klein 2000). While some argue that the focus on fishing heritage is a commodification of the culture of these communities, the heritage in tourism can also reflect local people's perceptions of themselves (Nadel-Klein 2000). In her study of three villages on the east coast of Scotland, Jane Nadel-Klein found that households that did not fish themselves, but were descended from fisherfolk, claimed a strong attachment to this identity.

Tourism and in-migration means fishing communities are forced to contend with 'outsiders' for the power to define how they are interpreted and represented argues Nadel-Klein (Nadel-Klein 2000). Their social and spatial boundaries as fishing communities have become blurred (Symes 2000; Symes and Frangoudes 2001). For communities historically isolated and stigmatized, this presents new challenges. Thus, the images of 'fisher lassies' and 'fishwives' are not just for the tourists. They are emblems of fishing communities heritage and knowledge and still forge identity and culture (Nadel-Klein 2000). Fisherfolk have used their social stigma to express and cherish their identity through these images they are able to keep hold of their sense of community and way of life (van Ginkel 2001).

1.12 Gaps in research/literature

Most fisheries research has tended to be biological rather than social, and what social research there is tends to be economic (Bradshaw, Wood et al. 2001). This is perhaps not surprising given the policy emphasis of bio-economic data. This has resulted in a lack of understanding of the socio-cultural impacts of fishing reforms (Symes 2000; Williams 2008) and a lack of influence over policy (ESSFiN 1999). Thus, research that investigates the social impacts of fisheries is required, in order to include explicit social objectives in future fisheries policy and management.

1.13 Conclusion

The existing literature suggests that policy measures that do not include explicit social objectives from the very early stages of policy development are likely to have,

at best, limited effect, often with adverse consequences. Fishermen are frequently unsupportive of policies that they perceive as ineffective and ungrounded in robust scientific evidence. When these policies have an adverse effect on their livelihoods and way of life they are likely to ignore them and act illegally. We would argue that this literature is often severely limited, in part because of under-investment but also there are questions about the pertinence of its findings to the English context.

The literature is based on fisheries that are or were important to many small, rural coastal communities, either directly through fishing or indirectly as representations of identity. Fishing often provides the socio-cultural backbone to these communities and that social fabric is being eroded by the loss of the fishing way of life. The literature argues that future research needs to assess the implications of future policy scenarios on the communities and to investigate what factors make a community resilient and adaptable to change. Alongside this, participatory methods involving fishermen and fishing communities need to be undertaken to develop future fisheries policies, as it is argued that fishers often know the resource intimately and have tacit knowledge of fish stocks and ecosystems.

In part because there has been so little social scientific enquiry over the past twenty years, the literature reviewed above has become isolated from the mainstream of social science. Some of the literature is coloured by romanticism towards small rural communities and the 'pre-modern' forms of social life that appear to be there, others put in place distinctions that are hard to sustain – the division between 'real' and 'virtual' fishing in particular. The separation from ecological evidence in the literature tends to downplay the significance of the viable fish stocks and undervalues some forms of scientific knowledge. Geographically it is difficult to sustain, without comparative studies, direct analogies between different communities. Often the literature needs to acknowledge the importance of complexity and uncertainty, to draw forward greater light and shade in its accounts.

In other areas it develops topics that need to be further explored, in particular the importance of social and cultural identity for fishermen and fishing communities.

This leads directly into considerations of masculine occupational identities and social solidarity. There is a tendency in the literature to view fishermen, their families and communities in isolation from groups that comparisons may be made, for example particular occupational groups, family businesses and those working in primary food production. A considerable body of work exists on the 'asset effect' that access to familial financial and social assets can have a considerable impact on the life chances of people, a key difference between most farming examples and fishing. Some of the social processes described in the literature are often more general rural community dynamics, others are common in family businesses and generally the academic literature underplays the business aspects of fishing.

To this end we have augmented this literature review with research that helps account for social impacts of fishing but has not been directly associated with fishing until now. We therefore consider social impact analysis, integrated rural development and the use of food products in that process, male occupational culture and knowledge systems.

1.14 Integrated Rural Development and social impacts

With regard to the actual and potential onshore impact of inshore fishing, there is a considerable relevant literature around the concepts and practice of 'integrated rural development' and 'community development.' Some of this literature is appraised in Moseley (2003); see also Carnegie UK Trust (2007), Nemes (2005) and OECD (2006). The thesis is that sustainable rural development – and inshore fishing ports may be seen be seen as essentially 'rural' albeit 'coastal' communities - should have a territorial rather than a sectoral focus with the various threads of investment and policy being woven together at the level of individual localities. This is based on the observation that small communities, and rural communities especially, have a limited amount of resources to draw on. The best route for community development is to assess what 'assets' – using the term very widely - are available and explore how they can be combined to maximise returns to the community.

Thus the various advocates of integrated rural development argue that all of the following need 'integrating' at the local level:

- Objectives - social, economic and environmental
- Agencies and actors, be they local, regional or national; state, commercial and 'third sector'
- Individual programmes and resources
- Top-down and bottom-up perspectives.

Therefore communities will look to develop the town or village as a whole looking to programmes that cut across different activities rather than develop one sector within the locality.

In parallel to this the role of food has become a central hub of many rural development products. This is because the most available 'assets' of many rural communities are food products, often in bulk form and being sold initially as an undifferentiated commodity. The process of concentration, of a small number of efficient and large scale operators providing the bulk of the product, with the majority of smaller business providing the bulk of employment is not unique to fishing but is apparent in agriculture and is has left large areas increasingly economically marginalised. Taking an asset based approach to food products has led communities to seeking ways of adding value to products through a number of routes, either separately or in combination. The first has been to link the product to a particular area, to create a provenance based on a locality and its qualities, often backed by EU designations (i.e. PDO, PGI). The second may be to associate the product with a third party certification that confirms that it adheres to environmental and/or social prescriptions (i.e. organic or fair trade). This may be connected to a degree of processing – smoking, wine making, cheese making - which either conforms to the certification or the provenance. In turn this may allow the product to become part of a broader offer linking the product from production to processing and onto consumption through the hospitality trade, to local people or more lucratively tourists.

This valorisation can be seen in economic terms, of using food products to generate local economic multiplier effects but it is also a social and cultural process allowing residents take pride in their community. Festivals and community events combine the promoting the process and reinforcing the community. The view is taken that community needs to be performed, to be enacted on a regular basis to build it. This can help with the feeling that an area or community is marginalised or excluded. Examples of these processes of community development through food are diverse but range from the wine routes in northern Italy, broader designations such as Welsh Lamb or narrower ones such as Pembroke potatoes[5].

1.15 Social Impact Analysis

Social Impact Assessment (SIA) includes the processes of analysing, monitoring and managing the social consequences of planned interventions and any social changes invoked by those interventions. The methodology of SIA can be applied to a range of planned interventions and can be undertaken on behalf of a wide range of actors. SIA can also utilise participatory processes to analyse the concerns of interested parties and involved stakeholders in the assessment of social impacts in the monitoring of the planned intervention (IAIA, 2003). Originally designed for environmental impacts the term has been broadened to include multi-factoral assessments bring the environmental, alongside the economic and the cultural. It has become a common feature of policy interventions, although the requirements can be quite distinct[6] between for example the methods and requirements that are covered under SIA.

However, the SIA approach implies that the method establishes a 'baseline' or 'community profile' from which future changes can be measured, as it is considering an intervention that is bounded to a degree in space and time (The Interorganisational Committee on Principles and Guidelines for Social Impact

[5] http://www.pembroke21c.org/farmersmarket.html

[6] http://ec.europa.eu/governance/impact/commission_guidelines/best_pract_lib_en.htm#_10

Assessment 2003). This means that it is often possible to talk of impacts being: direct, secondary or indirect, cumulative and synergistic, because causality can be related to the project that is being assessed (CAG Consultants 2009). As such SIA has two important limitations. First, open-ended processes do not provide a baseline against which comparison can be made; and second the approach often relies on quantitative data, which limits the range of factors that can be considered. SIA tools are therefore at their optimum when deployed before an intervention, and in the instance where the impacts are likely to be relatively discreet. It is also argued that SIA can have a role to play in monitoring the impacts of a policy intervention and for others that assessments should be peer-reviewed before publication. The research team have experience in forms of impact assessment and multi-criteria evaluation has set out in the methodology section

1.16 Male occupational culture.

The focus on gender in the existing literature on the social impacts of fishing has focused in general on the role of women, although the literature points to the importance of men working at sea. Several studies into *male occupational culture* in the police service, miners, firefighters and in the armed forces have emphasised the common features of a working class, masculine occupational identity that are directly relevant to the fishing industry. Thurnell-Read and Parker in their study of firefighters noted that:

> ideals surrounding notions of physicality, danger, aggression and competence have often been cited as prime factors in the construction of working class, masculine occupational identity (Thurnell-Read & Parker 2008:128).

That fishing is one of, if not the most, dangerous occupation in the UK underlines the importance of the physical challenges and danger of being a fisherman. Although aggression would not appear to be directly applicable, apart from perhaps a willingness to put to sea in adverse weather, competence is of direct importance to fishermen. It is also important to note the role of 'ideals' the aspiration to live up to these ideals, and to be seen to by others, is an important facet of this identity. That part of the job or identity of a fisherman is constructed around 'masculine' traits, not

least the physical rigors of fishing for a living:

> we are reminded that the ability to meet the physical challenges of particular types of work is central to the construction of certain occupational identities. (Thurnell-Read & Parker 2008:128)

Although in part this is a bodily bravery and hardiness, determination – mental strength is as important:

> the importance of psychological (as much as physical) strength in the face of dangerous circumstance can be seen here as integral to the construction of workplace competency. (Thurnell-Read & Parker 2008:128)

The literature of occupational identity places an importance on a shared class background, which in the case of fishing may be overlaid by a shared geographical one, and a set of masculine ideals. In some instances these occupational identities reinforce one another, Thurnell-Read and Parker observed the ex-armed forces personnel in the fire service. Fishermen would appear to confirm to the importance of physical strength and psychological determination, often the face of danger and adversity. This is matched by technical competence, which may be related to equipment but also other challenges. It is also the formation of bonds of solidarity, a sense of togetherness that forms close attachments between the men involved in the occupation. Although not well developed in the literature it can also be a source of pride for those associated with these cultures, that these occupations can provide 'ideal types' for younger men, the families of those involved and the wider community.

1.17 Forms of knowledge

At the centre of many of the controversies discussed in the fishing literature are those around knowledge, between the localised and practical knowledge of fishermen and the abstract and often generalised of scientists. How forms of knowledge compete, can be combined and understood has been a major topic of research in agriculture, particularly since the introduction of agri-environmental regulations in the early 1990s. Ingram in a review paper cites Lundvall and John in their analysis of being able to divide knowledge into three types 'know how' or tacit knowledge, 'know who' the knowledge of people required to achieve tasks and the

'know why' about causality. Farmers it is generally argued have a heavy investment in 'know how':

> Tacit knowledge is fundamentally linked to direct experience and the practical, sensuous and personal skill that develops with attention to a specific place (Ingram 2008:216).

This can be contrasted with 'know why' as being, "the knowledge of principles, rules and ideas of science and technology" (Ingram 2008:216), a form of knowledge that is more directly applicable to policy formation. In an occupation characterised by people sharing similar backgrounds 'know who' can often be rapidly achieved. Conflict can often appear over the individuals knowledge of a specific place and policies that are based on a more generalised 'know why'. It is possible to over emphasise these differences, as those with tacit knowledge begin to learn more of scientific concepts and those with abstract ways of knowing learn about informal knowledge systems. Broadly it remains a useful conceptualisation of different, occassionally competing, forms of knowledge.

Appendix 2: Methodology and analysis

The methodology employed centred on an exploratory approach involving two phases of qualitative research in six case study areas. The first phase aimed to identify and understand the social impacts of the contemporary fishing industry and the second aimed to assess the potential impacts of selected management options in the light of these findings. The package of methodologies selected was to combine a case study approach with semi-structured interviews that would contain a quantitative element for the first phase. Whilst in the second phase a series of discussion groups would focus would on a range of policy scenarios derived from the first phase of the project. The research team approached this project from the position of being able to deploy a wide range of research methodologies across a range of communities, business sectors and resource based industries. Each of the decisions informed the other to create a set of the research methods that locked into one another, although the introduction of quantitative methods was a departure from how these methods are often deployed.

The case study approach was adopted as it has the advantage of creating a defined area of study, in this instance a geographic space of a town or village. Another route to the study could have been to follow the food chain or to examine the various bodies that comprise the fishing industry. This presented practical problems as of how to create an accurate sampling frame to select interviewees from and also it would immediately circumscribe who was defined as having a stake in the fishing industry. A case study approach would be more open allowing people define their stake or interest in regards to inshore fishing, it would also allow the industry to be placed within a broader societal context. The second problem is that increasingly food supply chains operate across space in a way that 'flattens' the importance of place and which again might have significant impacts on the final findings of the research by reducing the ability to consider that factor (Marsden et al 1999). Individual case studies have the disadvantage of not being easily generalisable, but

multiple case studies mean that the results can be seen to be both more robust and widely applicable (Yin 1994,2003).

How to collect data in the case study areas was the next area of the methodology to be addressed. It would be possible to conduct questionnaire surveys within the area but these had a number of immediate disadvantages, in that many of those approached would have a limited contact with fishing whilst others would be deeply involved and a questionnaire instrument would have to be very wide ranging. This level of redundancy would be wasteful of resources in relation to the quality and quantity of information returned. At the other end of the spectrum of structure, ethnographic work as often used by anthropologists in the literature reviewed above can provide powerful insights but is resource intensive, requires long time periods and particularly so with larger communities. Semi-structured interviews therefore suggested themselves as appropriate in that they would collect a common body of data that would allow comparison but also enough latitude for the interviewers to respond to the interviewees role and experience (Saukko 2006, Rubin & Rubin 2005).

In order to facilitate being able to make comparisons between the case studies the research team thought it would be appropriate to collect data that could be related to national indicators of social well being and community development. These questions were integrated with an interview schedule that drew on elements of projects conducted by the research team and reviewed extensively. The aim was to produce an interview schedule that was flexible enough to capture the particular but facilitate comparisons. As discussed below this was found to be problematic during the fieldwork and so the quantitative element was revised. The factor analyses was adopted, as it would allow attitudinal questions to asked, and then provide the quantitative triangulation that the first set of questions was aimed at providing (Moran-Ellis 2006).

The analysis of these results was conducted by using the constant comparative approach, which requires the fieldwork team to collect data, and explore it for themes and constants in an iterative manner. The strength of this approach is that it

allows the team to explore the data with the minimum of preconceptions. Unlike classic 'grounded theory' methods, the team used questionnaires, recordings and field notes to create the body or corpus of data, which was then analysed systematically. The quantitative methods were used within the rounds of iteration to triangulate the findings, with the factor analysis and social networks being calculated separately and then introduced to the rounds of analysis. In this way although the research was broadly qualitative in the first phase it was informed by quantitative findings.

Phase 2 which sought to gather opinion as to policy scenarios raised some of the same problems as the first phase 1 in identifying those who might participate and the form of their role. Forecasting methods such as the Delphi methods tend to work with individuals and also tend to imply a narrow range of expertise, whilst the plan for and eventual experience of phase 1 was that a wide range of expertise would be engaged in the discussion. A group discussion had the same advantages as those held as part of phase 1 although they would need to be far more structured in order to consider the policy scenarios. The added factor was a report back of the draft initial findings from phase 1 as a confidence building exercise in preparation to the discussion. The research team has considerable experience in policy related discussion groups and so was prepared for the detail analysis as discussed below (Lobley et al 2005, Powell et al 2008). The only disadvantage of a group discussion in this form is that it is in effect a public forum and as such private opinions will be not expressed. On balance this is less important as the aim was not to create compromise or resolution but gauge likely public responses.

Phase 1 therefore comprised of background data collection, development of the questionnaire tools, identification of the case studies and the fieldwork. During the fieldwork the team aimed to interview a range of stakeholders in the community as well as inshore fishing and convene a discussion group in the community. Phase 2 comprised of identifying appropriate stakeholders, drawing up the scenarios, convening the groups and analysing the outcomes. Additional to the policy discussions at this stage we interviewed by telephone strategic tourism managers

who had not taken part in the scenario discussion. The data derived from this research then formed the body of evidence that we analysed as discussed below.

2.1 Fieldwork and analysis

The fieldwork was designed to integrate with the overall methodology of the project during which two very different forms of data had to be articulated. In stage 1 the fieldwork in the case study areas, required qualitative and quantitative data to be collected. Whilst in stage 2 the type of data would need to provide expressed opinions in a group setting, with a focus on policy outcomes. This was achieved through a process of 'over-lapping' field researchers with each researcher collecting data in more than one area: using quantitative findings to cross-examine qualitative ones and employing an iterative process of analysis.

2.2 Stage 1 fieldwork

Following selection of the case study areas (see section 3.1 in the main report) a profile of each case study was prepared using a standard template to include key organisations, individuals, press reports and maps of the area. This allowed the field researcher to familiarise themselves with the area(s), prepare interviews in advance and to identify other likely interviewees. On arrival at the case study community, the researcher would identify other interviewees through a process of 'snowballing'; from the interviews conducted, from additional information obtained in the locality and from introductions by 'gate keepers'. After the initial period of research another team member joined the researcher to help with interviews, assist in the discussion group and discuss the emergent findings.

After the initial interviews it became apparent that the aim of collecting data that would allow comparison with national data sets was not working. Interviewees found it hard to understand why they were being asked these questions and response rates were low. In its place we introduced a series of attitudinal questions, scored on a Likert scale (1-5) and this was used as the conclusion to all of the interviews (see factor analysis below). Together with the social network questions,

they allowed for a way of comparing the different case studies and of posing counterfactual evidence to the qualitative findings.

The limitations of the fieldwork formed a common pattern. Access to fishermen and other interviewees was often limited because of the prevailing weather, which kept fishermen at home. This was usually overcome through a 'gatekeeper' who vouched for the interviewer, suggested who was available for interview and, on occasion, organised the interview. Without such gatekeepers the fieldwork would not have been completed as quickly, although the role of the gatekeeper was always critically assessed. The importance of introductions was underlined, as where they succeeded – most notably in Amble and Rye - key local people played a role in encouraging and facilitating attendance. We also had to overcome unfamiliarity with social science research; while some case studies communities were well versed in it – Padstow and Newlyn for example - others were less so.

Once the individual case studies were completed these were written up using a pre-agreed framework, from which a meta-analysis was conducted using Nvivo 8 qualitative software. The results of the meta-analysis were then used to re-interrogate the source data to identify common themes and particularities of the case studies. This process also highlighted themes and regularities that were general across the case study areas. As noted above, these themes were triangulated with the factor analysis and the findings from the literature.

2.3 Analysis of the attitudinal data

As described above, the interview schedule was concluded by asking the interviewee to complete a set of attitudinal questions arranged on a 1-5 Likert scale from 'strongly disagree' through to 'strongly agree'. The advantage of these questions is that they cannot be 'second guessed' by those present at the interview.

This data was entered into a factor analysis to i) examine the extent to which there are inter-relationships within the set of variables; and ii) examine the extent to

which there are distinctions between different groups of inter-related variables in the set. In the first instance correlations between all variables in the set were examined, indicating a sufficient level of correlation between the attitudinal statements, although two variables with weaker correlations were dropped to allow a more robust analyses given the relatively small data set.

Results of the factor analyses are presented in Table 4, revealing five underlying dimensions of local perceptions of inshore fishing accounting for 67% of the variance in the data set[7].

Table 1 - *Summary dimensions of local perception identified through factor analyses*

Local perceptions of inshore fishing (67% of variance)	***% of Variance/ Coefficient***
Factor 1: Resilience People here have something in common Fishing helps make the community more resilient In difficult time people pull together	**25.8%** .802 .559 .727
Factor 2: Identity Fishing is important to the community Strong identity associated with fishing and the sea Community is known as a fishing community	**12.9%** .810 .820 .668
Factor 3: Determination I am satisfied with living in the area Fishing will continue despite economic difficulties Way that fishing is represented in tourism and heritage is true	**11.6%** .851 .669 .537
Factor 4: Disintegration Local people outside fishing don't understand the issues Fishers not integrated with other social groups	**8.9%** .712 .834
Factor 5: Sustainability Fishing policy helps to make the industry more sustainable Fishing in my community is not sustainable	**7.9%** .540 -.864

[7] Principal Component extraction was used along with an Equamax rotation method and Kaiser normalisation. The cut-off point for interpretation of loading scores was 0.50 and above.

The first factor (labelled 'Resilience') shows a distinct relationship between the bonding social capital within the community and the role that fishing plays in helping to make it more resilient in difficult times.

Factor two (labelled 'Identity') captures the identity of fishing associated with the local area, both in terms of how it is regarded by others and how important fishing is deemed to be in the community.

Factor three is labelled 'Determination' to portray not only the positive outlook on inshore fishing and its integrity beyond economic pressures, but also the inherent satisfaction with the area associated with this viewpoint.

Factor four (labelled 'Disintegration') captures the relationship between a lack of understanding about the issues by those outside industry and a perceived tendency of fishers not to integrate strongly with other social groups in the community.

Factor five (labelled 'Sustainability') is particularly interesting, as it identifies a relationship between the potential for fisheries policy to assist in the sustainability of the industry, and a perception that fishing in the local area is sustainable.

Although the main role of the above analysis is to augment the in-depth narrative yielded through the interviews, it is useful to examine the mean factor scores for each of the study areas. These scores indicate the relevance of each factor to the respective areas and are given in Table 2[8].

[8] Not only should the relatively small sample sizes[8] be borne in mind when interpreting the above findings, but it is also important to remember that the above scores will obviously be influenced by the nature of the sample and characteristics of those interviewed in each of the areas.

Table 2 - *Relevance of the factors to the study areas*

Local perceptions of inshore fishing				
F_1 Resilience	*F_2 Identity*	*F_3 Determination*	*F_4 Disintegration*	*F_5 Sustainability*
Higher Scores	Higher Scores	Higher Scores	Higher Scores	Higher Scores
W'haven .33	Rye .65	Whitby .47	Rye 1.23	W'haven .59
Padstow .26	Newlyn .28	Amble .24	Newlyn .27	Newlyn .23
Newlyn .21	Whitby .07	Rye .18	W'haven .02	Padstow -.00
Amble -.06	Padstow -.04	Newlyn -.28	Amble -.08	Rye -.06
Whitby -.23	Amble -.14	Padstow -.52	Padstow -.26	Whitby -.20
Rye -.28	W'haven -1.5	W'haven -1.12	Whitby -.52	Amble -.16
Lower Scores	Lower Scores	Lower Scores	Lower Scores	Lower Scores

The findings of the attitudinal analysis were subsequently discussed with the researchers who had worked each of the case study areas, to further interrogate and contextualise them. The following discussion reflects this depth of knowledge.

The relatively high scores for **Whitehaven** for the 'Resilience' and 'Sustainability' factors are likely to be a function of the type of respondent who were involved directly in the fishing industry or in providing facilities for the fleet. Whitehaven has a strong civic identity based on its heritage of heavy industry and a continued presence in power generation emphasises this solidarity. Those interviewed had a belief in the importance of regulation in maintaining the inshore fleet, which might not necessarily be the same as the current policy regime. Conversely, Whitehaven has the lowest scores for Identity and Determination, which more aligned with the interview narrative. In part, this again reflects the role that inshore fishing plays in the wider community, which although important to those engaged in it and the life of the harbour, is often only indirectly influential on the economic and social life of the town.

The relatively high scores achieved by **Newlyn** for all five factors apart from 'Determination' reflect well the interview findings. Whilst Newlyn could certainly be

described as a resilient community with a very strong fishing identity, there was a mixture of views surrounding the extent to which fishers are integrated socially with other groups in the community, most notably artists. A lack of understanding of the issues surrounding the industry by those not directly involved in it was also noted. Indeed, the relationship between this lack of understanding and the degree to which bridging social capital exists between fishermen and the rest of the community, albeit not clear-cut and uniform, is a notable finding across the six areas. The situation in **Rye** is an interesting case in point, whereby the analysis reveals a strong fishing identity to coincide with a lack of integration between the fishing community and the wider community. These results help to reinforce the qualitative findings, which indeed revealed that the location of the fishing quay away from the town combined with a fact that a number of fishermen in Rye reside elsewhere, means that the degree of integration is not strong.

The relatively high score for Newlyn under the 'Sustainability' factor fits well with the attitudes, perceptions and experience of fishing policy and sustainability revealed through the interviews. It is important to recognise that this factor very much represents an openness to the potential of policy to help secure sustainability, and a willingness to work in accordance, and engage, with appropriate polices that help support a sustainable inshore industry. The majority of interviewees felt strongly that inshore fishing was sustainable, providing that appropriate policies which recognised socio-economic factors in tandem with environmental factors were put in place, and that such policies were realistic, workable and not damaging to the industry. This not only reflects the active, entrepreneurial policy work that is undertaken in Newlyn, but also the awareness and motivation of the fishermen to address the current problems and work with the policy community towards effective, appropriate solutions.

It is also interesting to note that neither of the two variables in factor 5 correlate strongly with the community-orientated variables, thus the relationship between sustainability and policy appears to be a distinct dimension. This in turn reflects the

resilience, determination and capacity of these local communities to continue fishing and keep the industry alive in the face of adversity.

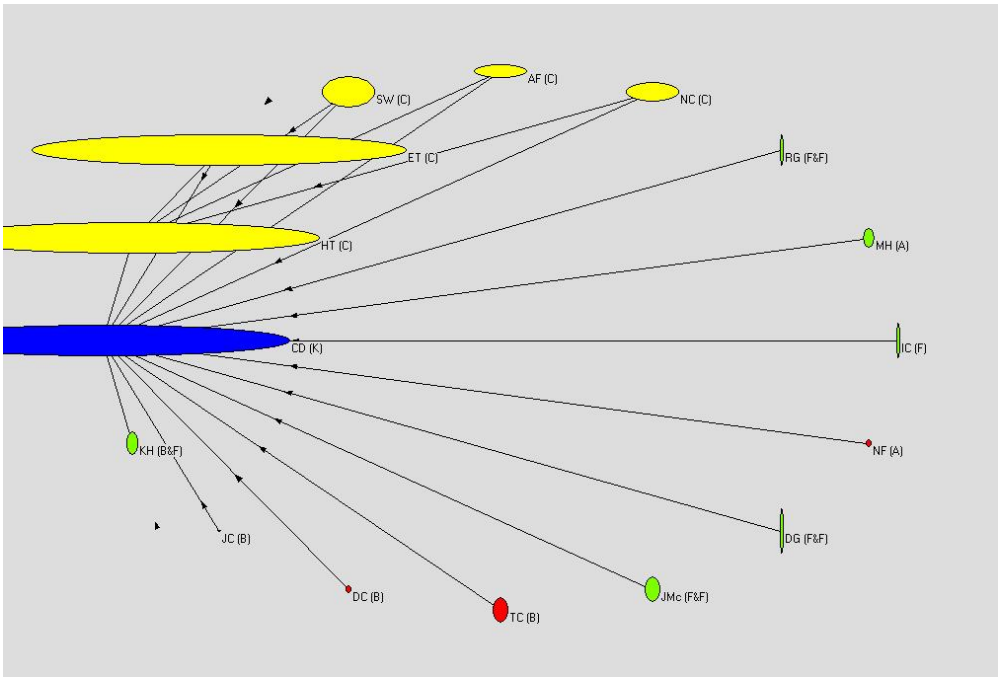
An interesting pattern is revealed by the data regarding the perceptions held by interviewees in **Whitby** and **Amble**. Both areas score highly for the 'Determination' factor and exhibit relatively low scores for the 'Identity' and 'Sustainability' factors. Beyond their shared geographic context of being North Sea ports, there are other notable reasons why these areas share a strong determination, with a relatively weak fishing identity combined with a less optimistic outlook on the sustainability of the industry.

2.4 Social network analysis

In two of the case study areas social network graphs were plotted. Social network questionnaires proved difficult to administer; but we had network data from Amble, Whitehaven and Whitby. These graphs were fed into the discussion of the findings, to illustrate the narrow networks that several case studies were revealing. As with the factor analysis, these graphs were used to help interpret the qualitative data.

We have graphed the networks below by adding data about how long the respondent has known the contacts in their network - the vertical axis of the nodes and how often they are in contact with that individual - the horizontal axis. This diagram show an individual who is involved in a group of friends and associates who they have known for a long time (on average 23 years) and with whom they are in contact with regularly. This suggests someone with a number of strong ties, but who is still making new contacts – 'KH', 'JC' and 'DC', who are the weaker ties in this network.

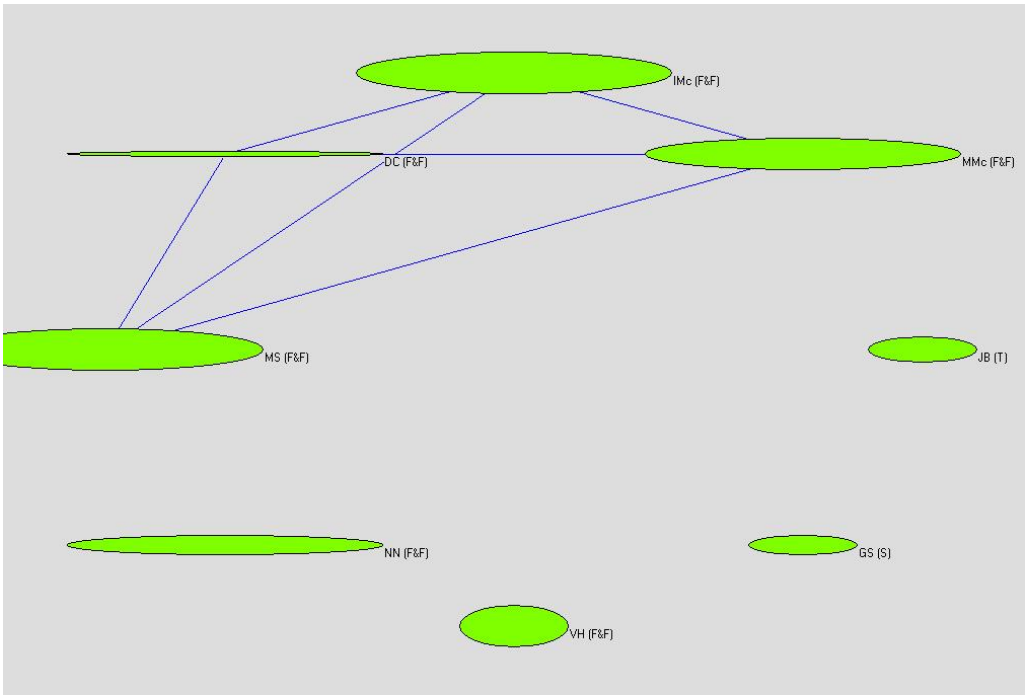
Diagram 1- Ego network of regulator working in the fishing industry, with length and frequency of association added.



Key:
Blue and/or (K) = kin member
Yellow and/or (C) = colleague
Green and/or (F&F) = friend and fisherman
Green and/or (F) = friend
Red and/or (B) = business contact
(A) = advisor
(S) = supplier
(T) = transport

The utility of these networks is in comparison. In diagram 2, using the same key as the diagram above, is that of a fisherman operating out of a cove. The average length of association is 27.5 years, everyone is described as a friend as well as having a functional role. As shown 'JB' provides transport, but is also a friend and 'IMC' is a friend and fishermen so nominally a competitor, friendship and business are closely woven together.

Diagram 2 - Ego network of fishermen working out of a cove with length and frequency of association added.



Analytically these networks reveal a close and narrow of network of people who work closely together and have done for a long period of time (diagram 2), with the first network being more open and varied. In the first diagram we can see the 'weak ties' that we might associate with new information or ideas (Granovetter 1985). Whilst in diagram 2 what we are see is a narrow 'reference group' against whom the respondent can compare themselves and gather new information, so change and innovation is less likely (Christakis & Fowler 2010).

2.5 Stage 2 data

The data collection and analysis for stage two of the project followed the same broad iterative approach but because of the short time frame and the highly structured format of the discussions the analysis was conducted from detailed notes taken during the meeting, with reference to the recordings rather than transcriptions. The notes were coded and categorised, to find the common themes as well as the issues specific to each meeting. Particular attention was given to the way in which the dynamics of group discussions – turn taking, order of speaking and claims to authority - can influence the shape the expression of opinions (Myers 2004, Munday 2006). The limitations on this stage of the research were time constraints and altering the scenarios between the groups. The first meant that the recruitment

time was limited, which left some stakeholders without opportunity to participate. The second limitation meant that the groups discussed subtly different scenarios, although this was not felt to be overly problematic as the groups themselves varied considerably.

2.6 Overview of stage 1 and 2 methods

This project gathered a great deal of data very quickly that allowed for systematic and detailed analysis of the features that were general to the inshore fishing sector. The use of quantitative data allowed the discussion of the findings to draw out what was specific to each case study. The Constant Comparative method proved useful as it allowed theory to be generated without too many preconceptions by the research team. By using some structural tools – questionnaires and schedules for the group discussions - we were able to ensure that the results were rigorously investigated. The main strength of the methodology is that it centred on a robust sample, with a solid cross-section of respondents and provided data that was subject to rigorous analysis.

Appendix 3 – Questionnaire tools

3.1 Social Impacts of Fishing Interview Schedule

Name	
Occupation	
Date	
Location	

Purpose of the interview

This project is interested in the way in which fishing influences the rest of the community and is a project that is funded by Defra. We are looking at how fishing influences not just the economy of a community but also the social and cultural life. That could be through the various industries and groups supplying the fishing industry, through tourism or via another route. The schedule also aims to explore the role that fishers have in the community, the experience of living in this community and the impact that fishing has on that. We are visiting 6 communities throughout England so that we can compare communities.

Confidentiality

We will not reveal your identity or anything that could allow other people to identify you as an individual without your explicit permission. The locations we are visiting will be identified, so that it will be known that your experience and information came from (name of place).

Interviewer notes

The following is a list of potential cues and questions rather than a script to be followed slavishly, use your judgement as what to ask and how. What we need is the experience of living in this community and the impact of fishing on that.

Questions with NI in italics are national indicator questions; please try to ask them if possible so we can build up a picture that reflects some national trends.

If someone if proving to be helpful try to get them to complete the social network questionnaire, we ideally need 4 or 5 of these per community not everyone need complete them.

Part 1: For Fishers and their families

Do you come from a fishing family?

Has fishing changed in the last few years?

Probe for - changes in employment, catch, policy and crewing

How do (did) you make your living in fishing?

Probe for - full/part-time/seasonal/casual work and combinations of employment)

Probe for - size of your boat - is this your only boat -what do you mostly fish for –

How/where do you sell your catch?

Complete sales distribution table

Do you use any local suppliers?

Probe for how suppliers known to them, use of kinship, informal or formal networks

Complete supplies distribution table

Do you have a crew, if so how do you recruit them?

Probe for use of local networks

Do you crew for other people, if so, how do you know that skipper(s)

In this community how many people do you think make their living from fishing?

Are fishers isolated at all in the community or would you say they are integrated with other social groups locally?

Do people outside fishing relate to this identity?

How do you think other people in the community view fishers?

What role do women and the wives of fishers play in the industry?

Has this changed at all over recent years?

Probe for - involvement in other economic activities; any decline of the supporting role

Where are the social activities of fishers concentrated in this community?

Probe for - harbour, boats, family homes and the role of festivals

Sales distribution table

Thinking about your fish sales in terms of their financial value, could you tell me the approximate proportion of sales that go to the following areas, and the main types of catch that go to each area?

Zone	**% sales (by value)**	**Main types of catch**
Example	*25%*	*Herring, prawns, cod*
In Brixham		
Within a 30 min drive of Brixham		
Elsewhere in Devon		
Elsewhere in the South West region		
Elsewhere in the UK		
Elsewhere in the EU		
Outside the EU		
Total	100%	

Part 2 (Fishers only) Supplies distribution table

In the same way, thinking about your supplies (purchases) in terms of their financial value, could you tell me the approximate proportion of supplies that come from suppliers in following areas, and the main types purchase in each one?

Zone	% purchases (by value)	Main types of catch
Example	*25%*	*Nets, net repair equipment, fuel*
In Brixham		
Within a 30 min drive of Brixham		
Elsewhere in Devon		
Elsewhere in the South West region		
Elsewhere in the UK		
Elsewhere in the EU		
Outside the EU		
Total	100%	

Part 1: Everyone

What do you enjoy most about living here?

How do (did) you make your living? (not fishers)

Probe for - full/part-time/seasonal/casual work and combinations of employment

Would you describe this as a supportive community?

Probe for extent to which close knit' levels of trust; resilience; interactions with neighbour

Do you who feel that you belong here?

Yes No *NI 2*

Why is that?

What makes someone a local person here?

Probe for - different groups, incomers, migrant workers, also a sense of heritage or belonging.

Is there anything that you would describe as unique or special to (name of community) ?

Do you think that people from different backgrounds get on well in this area?

Yes No *NI 1*

Why is that?

Would you say there is a strong sense of identity associated with finshing and the sea?

What role does fishing play in the sense of community and in the history of the community?

What impacts does fishing have on the social fabric community?

Probe for community binds; traditions, way of life, language, dialect, knowledge

Are fishers isolated at all in the community or would you say they are integrated with other social groups locally?

Have you been to an arts event recently?

(Theatre, exhibition, arts festival, music concert)(*NI 11)*

Probe for - What, how often, where and who with

Do you play any sport regularly?

Probe for - What, how often, where and who with (*NI I8)*

Do you do any volunteering?

Probe for informal as well as informal, organization/s, frequency

Do you think that you can influence decisions here? *(NI 4)*
Yes No

How would describe your overall health?
(NI 119)
1 – Very good 2 – Good 3 – Average

Part 3: Summary Questionnaire (Everyone to complete at end of interview)

To what extent do you agree with the following statements:

Please print the appropriate number in the box beside each of the following questions.

Strongly disagree **Strongly agree** **No opinion**
1 2 3 4 5 0

1. I am satisfied with living in the area	
2. Fishing is important to the community	
3. There is a strong identity associated with fishing and the sea	
4. Fishing will always continue despite economic difficulties	
5. People who live here have something in common	
6. Local people not involved in fishing don't understand the issues	
7. The idea of fishing is stronger than fishing itself	
8. Fishers are not integrated with other social groups in the community	
9. Fishing helps to make the community more resilient in difficult times	
10. The way that fishing is represented in tourism and heritage is a true reflection	
11. Tourism is not important to this community	
12. Fishing is dependent on the tourism industry here	
13. My community is known as a fishing community	
14. In difficult times people in this community pull together	
15. The fishing industry in my community is not sustainable	

Part 4: Social Networks (7-10 in each area, all categories of respondent)

Please name up to 20 people that are important to your
These may be friends, neighbours business associates, professional advisors, specialists, etc

They can be in any order

Personal?		01
Business?		02
Organisation?		03

Name	What is you relationship to them?	What role do they have in your farm/ business/place of employment?	How long have you known them?	How often do you talk to them?	Where are you most likely to meet or talk to them?	
Doris Grant	*Accountant*	*books and accounts*	*5 years*	*Twice a year*	*In office*	
John Smith	*Friend*	*Business ideas*	*6 months*	*Every few weeks*	*E-mail*	
						01
						02
						03
						04
						05
						06
						07
						08
						09

3.2 Telephone Questionnaire – County Councils and Regional Development Agencies

This project is interested in the way in which fishing influences the rest of the community and is a project that is funded by Defra. We are looking at how fishing influences not just the economy of a community but also the social and cultural life. That could be through the various industries and groups supplying the fishing industry, through tourism or via another route.

We are visiting 6 communities throughout England so that we can compare communities, one of which is within your county/RDA region.

The purpose of this interview is to get an idea of the tourism product/package within the area, and the extent to which fishing is a part of that – if at all.

This will enable us to identify the extent of integration of the fishing industry into the tourism sector, society and the economy.

General Questions – Ask All

- **How would you say the tourism market within your region has changed over the last 10 years?**
    - *Visitor types/numbers; Experiences sought; Length of season*

- **Do you have a specific tourism strategy? (We should have copy of if so)**
    - **IF YES – is there a specific 'coast' element within it? Details…**
        - *No – What are the principle features/components of it*

    - How is this strategy developed?
        - *Stats; Research; Inputs from whom?*

    - No – Why not?

- **How do you envisage the tourism strategy changing in the future? (ONLY if there is a strategy)**
    - *Structure; subject matter etc?*

- **What are the main sectors/targets of society with regards to particular attractions/activities**
    - *Younger people / Couples / Families / Pensioners*
    - *What are the most common forms of media for targeting these people?*
        - *Net / TV / etc*
    - *Do you have any plans for new marketing techniques?*
        - *Smartphones?*

- **Does the RDA/Council work with the Regional Food Group in any way?**
    - If so, how and in what context? Tourism / Farmers Market / Business Support?
    - If not why not?

<u>Fishing Questions – Ask All</u>

(**NB Interviewees are tourism people therefore may not be best placed to answer some questions**)

- **As an industry – does RDA/Council consider fishing to be an important/significant/major sector of the economy?**
    - *If NO - What is the most important sector of the economy within the county/region?*

- **What are the main fishing ports within the region?**
    - Do these have a tourist element/industry at all?
        - Extent of it if so?

- **Is fishing (INDUSTRY) something that is considered/'on the radar' with regards to tourism as far as the RDA/Council is concerned?**
    - If YES
        - Why is this so? (Heritage / Active Industry / Food)
        - Which towns? (likely to be same as previous question)

- If NO
    - Why is this so? (No interest / No market value / Other attractions more important?)

- **Is fishing (RECREATIONAL SEA) something that is considered/'on the radar' with regards to tourism as far as the RDA/Council is concerned?**
    - If YES
        - Why is this so?
        - What extent
        - Which towns?

    - If NO
        - Why is this so? (No interest / No market value / Other attractions more important?)

<u>YES TO INDUSTRIAL FISHING IN TOURISM – ASK ONLY IF FISHING *IS* ON THE RADAR</u>

- What do you consider to be the attraction for visitors regarding fishing?

- Are you aware as to whether visitors engage with the fishing community?

- Do have an idea/opinion as to what visitors think of fishermen?

<u>NO TO INDUSTRIAL FISHING IN TOURISM – ASK ONLY IF FISHING *IS NOT* ON THE RADAR</u>

- Has fishing EVER been part of the tourism package

    - If NO - Do you envisage it being so

    - If YES – How so, and why not now?

Thank you for assisting us with our research, do you have any other comments you would like to make, or any other questions regarding the work we are conducting?

Appendix 4: References

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