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THE REAL COST OF DIMINISHING FISHING EFFORT IN THE EUROPEAN UNION

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THE REAL COST OF DIMINISHING FISHING EFFORT IN THE EUROPEAN UNION^{1,2}

Abstract

Fishing is more than just a job; it is a way of life that has endured over the centuries, in coastal communities where the traditions, structures and culture have been handed down from generation to generation. Around the North Sea, many small towns and villages owe their existence to the industry and are still fishing-dependent for much of their economic and cultural resources. However, the industry has undergone major changes, and there are further uncertainties ahead, challenging the very foundations on which the culture of fishing is built in this geographical region.

This paper looks at how communities in Scotland have been affected by recent structural changes in the industry and at the mechanisms used to cope with those changes. It also cites an example of positive change in the Netherlands.

It draws on industry facts and figures to show how fleets, processing capacity and community structure have changed over the past decade, and on interviews and anecdotes to show how strong the resilience of such communities is.

Introduction

1. The traditions, structures and dynamics of fishing impact upon all aspects of everyday life for fishers and their households (Pettersen 2000). This is especially true in northeast Scotland, in Ireland and in traditional fishing ports in the Netherlands, where many of the settlements owe their existence to the fishing industry and are still fishing dependent for much of their economic and cultural resources.

2. However, the industry has undergone major changes in the past decade including reductions in fishing quotas, effort limitation and decommissioning, and there are further uncertainties ahead (Symes 2005).

3. Research undertaken by Williams (2005), examined a number of ethnographic studies on the dynamics of fishing communities and households, and the impacts of restructuring and crisis, particularly in the fishing dependent areas of Norway (Gerrard 2000, 1995; Pettersen 2000, 1996) and Atlantic Canada (Marshall 2001; Binkley 2000; Davis 2000). Their investigations looked at the importance of the socio-cultural fabric of fishing, how the ecological crisis of the early 1990s impacted upon those dependent on the industry, and how they utilised socio-cultural resources to respond. Cohen's (1987) ethnography of the fishing dependent island of Whalsay and the work of Nuttall (2000) and Nuttall and Burnett (1998)

¹ Written by Nicki Holmyard, Chair of the North Sea Women's Network, United Kingdom.

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highlight key issues relating to the restructuring of the fishing industry and its impacts on fishermen and communities in northeast Scotland.

4. Research conducted within these fishing communities highlights that their complementary objectives are dual in focus: on the one hand they wish to pursue sustainable development of the fishing industry and on the other, a key aim is to maintain their traditions. However, a key obstacle to social-cultural objectives is that while the notion of 'sustainable development' is rhetorically strong within the European context (Coffey 2000; Symes 2000a; Otterstad 1996), in practical terms the Common Fisheries Policy (CFP) has been shown to be an 'economic or sectoral policy largely unconcerned with, and relatively insensitive to, its social impacts.' (Symes 2000b:3)

5. The North Sea Women's Network (NSWN) was established in response to the social inadequacies of European fisheries policy. Its aims are to provide a voice for fishing communities at the EU and regional levels, and to work to ensure that the social impacts of fishing policy are taken into account by the Commission alongside biological and technical considerations.

6. The Network was formed during the 'Changing Role of Women in Fishing Communities' conference, held in Peterhead in June 2003 as part of a wider EU funded project, 'Women Working in Partnership in Europe.' The conference heard about the lives and initiatives of women from fishing dependent communities in many EU countries and looked for constructive ways to assist them. The NSWN was seen as a means to facilitate greater communication between women within such communities, and as a vehicle for facilitating mutual learning from examples of successful community initiatives.

7. One of the Network's key roles to date has been to take up a seat on the North Sea Regional Advisory Council (NSRAC), where the NSWN acts as a strong advocate for the inclusion of social and economic considerations in the RAC's advice to the Commission as well as in the RAC's own initiatives. The NSWN is also actively pursuing research to investigate strategies that will enable fishing communities to cope with the negative impacts of restructuring and to strengthen their resilience in the face of change. In doing so, the Network is acting as a voice for fishing communities and enabling them to influence future fisheries policy by focusing on solutions, rather than problems.

8. This endeavour requires that we look both within our own fishing communities for success stories and positive examples of adaptation to change – some of which are discussed in this paper – and further afield to the experiences of other communities which have experienced restructuring. For example, studies of "readjustment" policies implemented in the wake of the 1992 Northern Cod Moratorium demonstrate how they failed to reduce the number of fishers because of a failure to take into account the socio-cultural role of fishing (Binkley 2000; Woodrow 1998). Jentoft argues that not only do fishing communities need healthy stocks, but that the reverse is also true: 'viable fish stocks require viable fisheries communities' (2000, 53) and that when social structures break down the fishery can no longer be sustained. In order to achieve successful fisheries management and truly sustainable development, greater account therefore needs to be taken of the social and cultural functions of the fishery.

9. In order to highlight 'the real costs of fisheries policy', this paper outlines the socio-economic context of fishing and fishing communities in Northeast Scotland and discusses the impacts that restructuring has had in the wake of the decline of North Sea cod stocks. It then addresses the issue of how communities are struggling to maintain their working populations. A third section looks further afield to the rest of the North Sea rim to consider impacts of restructuring there. In particular, an example of a successful strategy adopted by a fishing community in Noord-Holland is discussed, where the local population had previously struggled to maintain its fishing identity and culture. Finally, other work the NSWN does to address the 'real costs of fishing' is described in section four. The paper concludes with some key discussion points.

Fishing in Northeast Scotland

10. The Scottish fishing industry has been heavily impacted by the deepening resource crisis and ongoing restructuring of the sector (Symes 2005). In the UK, the demersal sector, which predominantly targets cod and haddock, and for which the northeast of Scotland is the leading region by weight and value of landings, has faced the most radical restructuring in recent years. This is the result of significant reductions in the fishing opportunities of the fleet.

11. The sector has faced severe reductions in quota, and between 1994 and 2004, North Sea cod and whiting quotas fell by almost 82%, plaice by 55% and haddock by 50%. The Scottish demersal fleet is now subject to further cuts in line with the Commission's Cod Recovery Plan. As well as cuts in quota, limits on effort have been introduced over the past few years. These restrict the number of days at sea that fishermen can spend and so limit their access to the resource. This, together with rising fuel costs have resulted in a decline in vessel income – particularly affecting crew share – and an increase in expenditure.

12. The following tables give further indication of the scale of changes experienced by the Scottish demersal fleet in recent history. Changes which have not yet run their course – a fact which itself has precipitated social uncertainty within fishing communities. Table 1 shows a continuing decline in key demersal stocks between 2000 and 2004 but a stable situation for pelagic stocks. However, these are also predicted to be subject to reduced quotas in the Commission's December 2006 announcements.

Table 1. Combined UK quota for key demersal¹ and pelagic² stocks

Quota '000 tonnes	2000	2001	2002	2003	2004	%change '2000/2004
Combined key demersal stocks	210	159	186	128	141	-33%
Combined key pelagic stocks	285	290	282	276	277	-3%

1. Key demersal stocks are considered to be North Sea and West of Scotland stocks of cod, haddock, monkfish, whiting, saithe, plaice and Norway lobster.

2. Key pelagic stocks are considered to be North Sea and West of Scotland stocks of mackerel, herring and horse mackerel.

Source: SEERAD.

13. Table 2 shows that in the period 1994 – 2004, the number of fishing vessels declined by 42 in the <10m sector and by 559 in the >10m sector. This reduction was the direct result of two decommissioning schemes introduced in 1998 and 2002 to reduce overcapacity in the fleet.

Table 2. Scottish fishing vessels, 1994 - 2004

	<10m vessels	>10m vessels	<10m kW	>10m kW
1994	1 704	1 291	68 879	406 100
2004	1 662	732	85 343	342 889
Change '94 - 04	-42	-559	+16 464	-63 211

Source: Source SEERAD

14. These changes have wrought significant social impacts in the communities associated with the Scottish demersal fleet. A drop in the number of vessels, together with a trend for vessels to take fewer crew to sea, led to a 39% decline in onboard employment in Scotland between 1994 and 2004. In the same period, Northeast Scotland, the location of the most important fishing communities associated with the whitefish fleet, saw a reduction of 54%. The fleet is still considered to have excess capacity for the available resource, and restrictions on fishing are expected to stay in place until there is evidence that stocks have recovered in terms of spawning stock biomass and recruitment capability. Furthermore, a recent report from the UK Government's Prime Minister's Strategy Unit (PMSU 2004) suggests that a further 13% of the UK whitefish fleet's capacity needs to be removed.

15. Table 3 shows employment in the Northeast catching sector, Scotland as a whole, and the UK for comparison. It illustrates that the drop in fisheries employment in Northeast Scotland was most marked between 2002 and 2003, with a fall of 22%, as the full impact of vessel decommissioning and EU quota cuts took effect.

16. The decline in employment has slowed since that time and between 2003 and 2004 the number of Northeast fishermen dropped by just 3%, while the number of fishermen employed in Scotland as a whole remained almost constant. However, fishing remains vital to Northeast Scotland, which still accounts for 30% of the total fishermen employed in Scotland, and almost 14% of total fishermen employed in the UK.

Table 3. Employment in the catching sector, 1994-2004

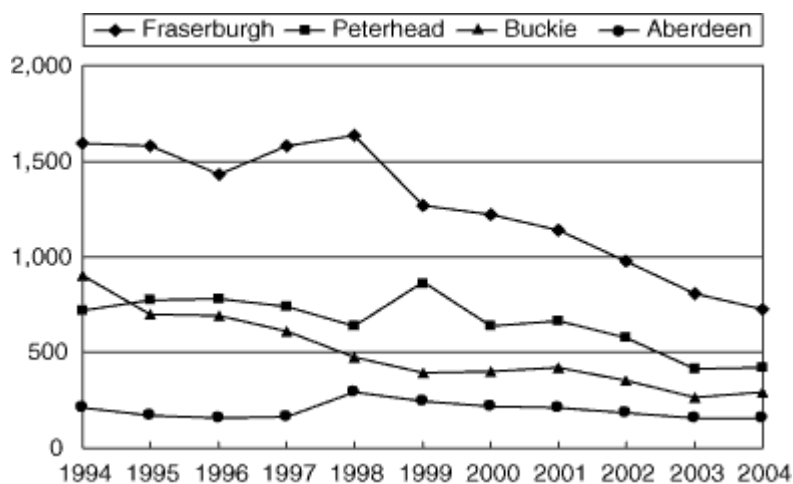
Year	Northeast Scotland	Scotland	UK	Northeast as % of Scotland	Northeast as % of UK
1994	3 420	8 610	20 703	39.7%	16.5%
1995	3 217	8 395	19 921	38.3%	16.1%
1996	3 060	8 084	19 044	37.9%	16.1%
1997	3 096	8 194	18 604	37.8%	16.6%
1998	3 043	7 771	17 889	39.2%	17.0%
1999	2 767	7 330	15 961	37.7%	17.3%
2000	2 474	6 902	15 121	35.8%	16.4%
2001	2 438	6 637	14 645	36.7%	16.6%
2002	2 091	5 707	12 746	36.6%	16.4%
2003	1 640	5 276	11 774	31.0%	13.9%
2004	1 590	5 275	11 559	30.1%	13.8%

Source: Scottish Executive (www.scotland.gov.uk) and DEFRA (www.defra.gov.uk)

17. The Northeast of Scotland includes major ports in Fraserburgh and Peterhead and smaller fishing communities in Buckie and Banff. According to Scottish Executive statistics, 29% of employment in the Fraserburgh area was directly dependent on catching, aquaculture and fish processing in 2004, making it the most fisheries-dependent area in Scotland. The figure for Peterhead was 14%, Buckie 11% and Banff 6%. If indirect jobs are taken into account, then Fraserburgh's dependency rises to 58%, Peterhead to 28%, Buckie to 22% and Banff to 12%.

18. Figure 1 illustrates the huge direct losses in employment suffered by these fragile communities between 1994 and 2004. Worst hit was Buckie with a 67% fall in fishing employment from 900 in 1994 to 293 in 2004. Fraserburgh suffered a 54% decline in fishermen employed, and Peterhead a 42% decline.

Figure 1. Employment by fishing district, 1994-2004



Source : Aberdeenshire Council

19. Of the indirect employment provided by the fishing industry, jobs in processing account for a sizeable proportion. A 2004 survey of the UK processing industry by the Seafish Industry Authority showed that the Northeast of Scotland (Grampian in Figure 2) experienced a 6.5% decline in the number of fish processing employees between 2000 and 2004, from 4,712 to 4,406 full time equivalents (FTE). This compares with a 10.4% fall in Scotland overall and an 18.3% decrease in the UK.

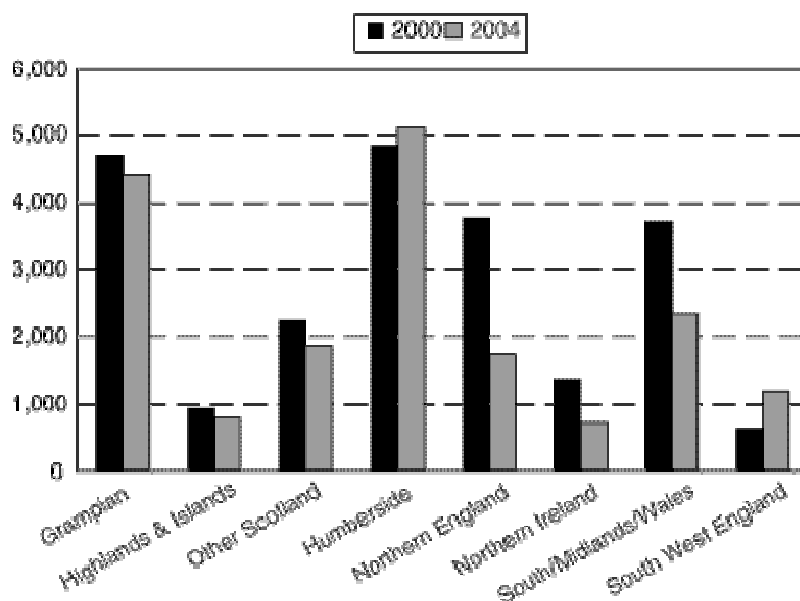
20. Despite this fall in employment, the area's share of the UK processing workforce rose from 21% in 2000 to 24.2% in 2004, making it the second largest UK contributor to full-time fish processing employment. However, this seemingly positive news has been accompanied by evidence of a weakening of the links between the fish processing sector in the UK and the domestic fishing fleet. What is missing from the survey is the nationalities of the employees, who are increasingly of Eastern European origin. This demographic change is inevitably having an impact on the social structures of the fishing industry and fishing communities in Northeast Scotland. The survey also fails to show the origin of much of the fish that is processed, an increasing proportion of which is imported. And, with imports brought in from sources that guarantee year round supply of a particular size, grade and quality, so the processors' interest in local supply diminishes further.

21. Such surveys also do not provide sufficient information about the diversity of impacts on employment of fisheries restructuring. A recent study by Aberdeen University found a general decline in the number of registered unemployed people, but it also found pockets of high levels of unemployment in some remote fishing dependent communities. In contrast, in the larger fishing ports such as Aberdeen and Fraserburgh, the downturn in employment previously offered by fishing and related activities had been 'mopped up' by opportunities in the oil and gas industries or by the population (particularly young people) moving away from the area to find alternative employment. However, the research also found that areas with higher levels of population density exhibited higher high levels of deprivation.

22. These figures all serve to illustrate an important and ongoing economic dependence on the fishing industry in the Northeast of Scotland, with a concentration of dependence in Fraserburgh and

Peterhead. However, even in these key ports the emphasis is becoming less concentrated on industry and this trend is more noted in the smaller ports that have suffered higher losses in employment. However it has been suggested that for any location, a long-term relationship with the fishing industry generates socio-cultural characteristics, identities and dependencies that remain when the industry changes or leaves. These can be used as resources to mediate change and affect future development of communities (Brookfield, Gray and Hatchard 2005; Nadel-Klein 2003; Nuttall 2000).

Figure 2. Employment in Fish Processing (FTE), 200-2004



Source: 2004 Survey of the UK Sea Fish Processing Industry, Sea Fish Industry

23. In Northeast Scotland people who earn their living from fishing have traditionally been seen as a ‘race apart’, and part of an industry in an apparent state of ‘perpetual crisis’ (Nadel-Klein 2003; 2000,363). However, Williams (2005) argues that traditional notions of community are being undermined by changes in industry. The evidence she provides for this was gathered during conversation with Northeastern Scotland fishermen and their families. Meanwhile, Nadel-Klein (2000:366), even before the most recent restructuring events, found that although fishers and their families have been used to dealing with constant insecurity, the problems facing industry now as a result of significantly reduced fishing opportunities, are qualitatively different and pose 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 stretch of coast.

Maintaining industry

24. One of the main hurdles to maintaining a viable industry and continuing community traditions - given sufficient quota to catch - is a lack of trained personnel. According to Mike Park, head of the Scottish White Fish Producers’ Association (SWFPA) the crew situation today compared with 20 years ago is significantly different. He explained that whilst the local college used to train 50-60 new crewmen every year, today the number of new entrants is in single figures and falling and this puts the viability of courses in jeopardy.

25. Children no longer follow their fathers and grandfathers to sea; instead they seek employment in the oil industry where wages are guaranteed and high, or move away from their fishing villages to seek

work in the towns and cities. It would seem that young people are no longer interested in jobs that offer long hours, tough conditions and danger, and skippers find that even their existing crew are frequently tempted by better pay and conditions on oil and gas rigs. This problem is not unique to Scotland; it is happening in an even bigger way in Atlantic Canada, where whole generations are leaving to seek their fortune in the oil boom state of Alberta.

26. According to Mr Park, whilst fishing was once a family based activity, with strong community ties and security, the young now choose not to prioritise those traditions and their places are filled with immigrant workers who have difficulty or are unwilling to integrate with the local community. He emphasises that this is no solution, as evidenced by the crumbling social structure of fishing communities and the increase in unemployment, disaffection and dissatisfaction, problems with drink and drugs and a general lack of discipline.

27. This problem is not unique to the fishing industry itself, but is mirrored in the seafood processing sector, which is also failing to attract sufficient young local recruits to fill vacancies. In Eyemouth in South East Scotland, Graham Sinclair, MD of crab processor Burgons of Eyemouth has been undertaking his own initiatives to encourage young people into the business by giving talks in local secondary schools and inviting visits to his factory to appreciate the nature of the processing industry. However, the main complaint is that the conditions are 'smelly' and cold and the work boring. Thus, a key challenge facing the fishing industry is one of how to make and sell itself as a viable attractive option for younger members of fishing communities at the very beginning of their working lives. These people would have a great deal to offer the industry in the future.

28. Williams (2005) found in conversations with fishermen that even where there was still willingness on the part of the younger generation to go into the industry, their parents were now inclined to dissuade them from such a career. She explains that whilst in the past going to sea was generally something to be looked forward to with anticipation and excitement, in recent times the enjoyment of the job has been severely undermined by rules and regulations. Fishermen have become anxious about the increase in regulations, the speed at which they change, and the added administrative burden placed on them. There is also pressure to 'get everything right', with no room for error in the logbook that could be construed as intentional rule breaking, with the result that criminal prosecutions could ensue. Breakdowns and gear problems are also increasing sources of anxiety, given the current restrictions on the number of days that can be spent at sea. Such increases in pressure are taking away job-satisfaction and leading to increasing problems of mental health amongst fishermen. Thus, the risks of entering fisheries as a career are perceived by many – both inside and outside of industry – as just too high.

29. The result of the regulatory, economic and demographic changes experienced by Northeast Scotland's fishing communities in recent years has been an increasing sense of despondency and low morale in fishing areas. There is also a great deal of uncertainty about how households are to move forward and make a future (Williams 2005). This uncertainty is reflected in a decline in investment in onshore businesses. In some coastal areas the conversion of harbours to marinas is undermining a tangible expression that places are or ever were fishing communities. Towns and villages that used to have a prosperous row of shops in the centre are now filled with boarded up businesses and an over supply of charity shops, mirroring the decline of the industry that built them. The decline also extends to ancillary businesses; to chandlers, engineers, boat building yards, fish sellers and transporters.

30. Thus, the general picture is that coastal regions are now facing a series of significant socio-economic pressures including unemployment, social instability, deprivation and economic competition. In an attempt to assess this situation, the University of Aberdeen's study investigated the broad socio-economic make-up of coastal communities, looked at the issues facing them, provided an overview of how

the coastal population is changing its relationship with the sea, and suggested possible future directions for those communities.

31. Researchers found that little work had previously been undertaken towards providing a social, cultural and economic overview of Scotland's coastal communities, nor to catalogue any decline in traditional coastal activities or the emergence of new activity. However, despite this lack of socio-economic research information on Scottish coastal areas *per se*, a number of general rural studies showed that coastal regions have been subjected to a variety of demographic, economic and social changes related to the declining significance of the primary sector (fishing), the growth of flexible labour markets, an increase in the age of the population, in-migration and peripherality. The research concluded that the ability of coastal areas to overcome social disadvantage will be dependent upon an ability to develop effective local partnerships geared towards both improved social capital and economic growth. Two key examples the study identified were sectoral responses to economic change in Shetland and sustainable community development in several coastal areas including the fishing port of Eyemouth.

The North Sea

32. This situation is not exclusive to Scotland, but is mirrored in small fishing villages all round the North Sea, where similar cuts in TACs and quotas and restrictions in days at sea have all taken effect. Traditional links to fishing are being eroded and there is an urgent need to investigate the full dynamics and implications of the changing social and cultural make-up of fishing dependent coastal communities. It is precisely this type of research that the NSWN is seeking funding to undertake, in order to better predict the future of fishing communities.

33. After all, there is a future for these communities, albeit one that differs from their heydays of the past. And, as one industry leader informed, "I am sick to death of people always having a doom and gloom attitude to industry. It may be down, but it is not out, and some sectors - particularly nephrops – are doing well, with quotas on the increase." In addition, whitefish prices are currently high, with fishermen achieving a very good return for their efforts. It would seem that those left in the industry are finding a reasonable living.

34. The NSWN has members in Norway, Denmark, Finland, Sweden, Netherlands, France, Scotland, Ireland and Wales and those members work as active fishers, fishermen's wives, researchers and scientists or in ancillary industries. In working together, members of the Network have benefited from sharing their experiences. One particular example of successful adaptation to changed circumstances stands out.

35. In the Netherlands, Esmeralda Loos-Dekker is part of a family fishing for shrimp with a 24m beam trawler. Her husband is away for 10 days at a time leaving her to look after a young family and to undertake the on-shore tasks and paperwork associated with the fishing business. She was active in setting up Dutch women in fisheries association called VinVis, which now works closely with the Dutch Fish Bureau, the Ministry, and with fishing organisations. It acts as a voice for fishing communities.

36. However, not content with merely talking about potential future solutions to the decline in local port activity, Esmeralda became part of a small group that investigated the viability of setting up weekend fresh fish market with the help of Leader+ funding. Taking their example from similar public markets in France, the group decided to sell fresh fish to the public, to educate them about how to cook and eat it, and to educate children about fisheries and the sea. The Netherlands as a net exporter of fish and fish products is not a traditional fish eating country and Esmeralda realised that in order to promote sales, much work was needed.

37. The market began with a summer run in 2004 and was so successful that it now operates year round and is a new source of local employment. It offers fish landed fresh by local boats, with skilled filleters on hand to prepare the fish exactly as required by customers. Cookery demonstrations are a regular feature and encourage the purchase of different species. A cookbook has been produced and the market has begun to encourage other local food producers to take stalls on the market. The public can see how eels are smoked, how shrimp are boiled, visit a fishing vessel and see how nets are mended. In short, they can experience the realities of fishing for a living.

38. One unexpected result of the fresh fish market is that visitors regularly make the trip from Amsterdam, an hour away by car, to purchase supplies. Their numbers are growing and this has had a positive knock-on effect on the local economy. The initiative is still a resounding success and even received a visit from the Queen last year.

The North Sea Women's Network

39. The Dutch example is not unique – much positive work has been undertaken in Shetland for example. However the scale of its success is something the NSWN would like to see mirrored in many other declining fishing communities around the North Sea. This will require government policy to be sympathetic to the setting up of such initiatives, the development of national and regional plans to facilitate and encourage new ideas, and funding assistance as a priority to get them off the ground.

40. The NSWN works to promote changes in policy and in particular, to ensure that policy decisions at EU level take socio economic effects into account alongside biological and environmental factors. To this end, it has developed strong links with the new EU Economic Analysis Unit, portrayed before its setting up as a 'socio-economic' unit, yet 'socio' failed to appear in the title when the unit was set up in the autumn of 2005.

41. This unit is currently preparing a framework to ensure that environmental, economic and social impact assessment and analysis are carried out in a coordinated and timely manner, in accordance with the latest Commission guidelines. The framework under development will facilitate the rapid initiation and funding of both short and long-term economic and socio-economic studies, depending on the policies under consideration. A test case has just been undertaken with the STECF assessment of the proposed Long-term Management Plan for North Sea Flatfish and the NSWN was able to provide both considerable information on the community effects of those plans and supply a socio-economic expert to attend the meeting.

42. NSWN has also been active in providing NSRAC with a protocol for including socio-economic considerations in all its recommendations to the Commission and in undertaking a scoping study of Socio-Economic Aspects of North Sea Fisheries and Fishing Communities. This study proposed a dynamic overview of social and economic aspects of fisheries in the North Sea, an identification of the vulnerabilities of the fishing industry to changes in short and long-term fishing policy, and an examination of the factors and combinations of factors that contribute to both reliance on fisheries and resilience to changes in fisheries.

43. Funding is currently being sought to undertake this major project, which will collect data from ports around the North Sea and their associated fisheries sectors and communities, and analyse this to assess the current state of regional fisheries reliance and resilience. It will include the influence of imports and quayside landings, examine economic, social, cultural and environmental factors, and include qualitative and quantitative dimensions. The scoping study identified appropriate data types and sources together with methods for gathering and analysing existing research studies and data, and it is hoped to undertake a pilot project to firm these up in advance of the main study. Such research is deemed vital in

light of the lack of coherent and cohesive socio-economic information found available when preparing a socio-economic assessment for the STECF flat fish management assessment.

Conclusions

44. In concluding this paper, whilst it is obvious from available data that the fisheries industry has been in decline over the past ten years, it would appear that this decline has now slowed and those remaining in industry are doing more than just surviving. However, the toll taken on fishing communities during this same period has had a devastating effect and resulted in the breakdown of their social structure. Various studies have looked at particular aspects of that breakdown in terms of the decline in employment or the number of fishing vessels, in the mobility of the population or at the mental health of population sectors. What is needed now is a comprehensive review of the 'real cost of diminishing fishing effort in the EU' and this is something that the NSWN has firmly in its sights.

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