

Ribble Consultants
and Associates

**North East England Fisheries
Community Interest Company
RMP5507**

Final Report

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Executive Summary

This report elaborates the concept of a North East England Sustainable Fisheries Community Interest Company (NEESF CIC).

The purpose of the report is to indicate, on the basis of research, the possible options for setting up a self sustaining structure (not necessarily a Community Interest Company) that if established would help address the barriers that business in the inshore fleet and related sectors faces in North East England together with the advantages and disadvantages of each option. These options are in addition analysed against a series of different scenarios related to the reform of the management of the inshore fleet.

Analysis based on interviews with fishermen and other stakeholders as well as data on current fisheries organisations and consideration of projects from elsewhere in the UK shows that there are three possible models for a new organisation: as a social enterprise run by fishermen; as a project management organisation running marketing and other support activities for fishermen; or as an organisation with obligatory membership which would assist in the form of management of quota for the inshore fleet. Our analysis suggests that the second of these options is not viable on its own, although some such functions (for example projects related to marketing) could be performed by organisations created under the other two models.

Two options were then created: a social enterprise model with voluntary membership and based around the idea of a quota trust, and a statutory model based around membership being given free to currently participating fishing enterprises and direct management of the pool quota. These two options were considered against four scenarios: that the current management system and environment continues; that by some means better balance is obtained across the inshore fleet; that there is a rigid demarcation between inshore and offshore fisheries; and that shellfish management measures may be introduced.

Our conclusions from this are

1. In the current environment it would be very difficult to establish a viable social enterprise along the lines of the model originally proposed. To be viable, even making the most optimistic assumptions, it would require raising in the region of £100,000 to establish a quota trust and this could be a struggle and would require Defra to consider the policy implications.
2. The principle of a quota trust would be viable in all scenarios apart from that of rigid demarcation of the inshore fleet. Shellfish management measures would in the long term make it more viable, although we would expect this to happen only over several years since controls are not likely to be very restrictive initially.
3. Nonetheless, we would highlight the fact that our work does show that there are options which, while they are not viable separately, could in the

right circumstances together form the basis of a viable organisation. So, for example, a quota trust based on leasing could prove possible. It would need to be combined with some pump-priming support from the public sector (local authorities and Defra) for new marketing initiatives (such as on sprats), It would also need to work with fishermen to generate money for infrastructure and marketing from the European Fisheries Fund (EFF) (for example looking at shellfish holding facilities). Reform of the inshore fleet should hopefully stimulate fishermen to cooperate more at the local level so that there are organisations to form a basis for other work, In the current circumstances such a plan is too risky for any likely source of finance, but this may not always be the case in the North East, and may not be the case at all in other parts of the country.

4. Operation of the pool quota via membership initially given free of a mini-Producer Organisation (PO) is attractive, although thought would need to be given to avoid this resulting in continued concentration of the fleet to the detriment of smaller boats and smaller ports. It may be possible to approach this by having a regional PO which coordinates smaller community-based organisations organised around individual ports.
5. In the case that reform of the inshore fleet creates a compulsory membership organisation for managing the pool quota at a regional (or similar) level, then there are a number of opportunities for using it to support the inshore fleet through hosting a quota trust, establishing marketing initiatives etc. Such an organisation should enjoy some public funding, if only for the reason that it would take over some of the management costs from MFA/MMO and Defra.
6. In all cases, there will be a need to find both a strong Board and appropriate individuals to run the new organisation. Our view is that, while finding a strong local Board should be possible, identification and recruitment of key individuals will be an important success factor.

Although it does not seem feasible to establish a Community Interest Company at present, we hope that this report gives appropriate information which can possibly be used in the future as the environment changes.

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Introduction

This report elaborates the concept of a North East England Sustainable Fisheries Community Interest Company (NEESF CIC).

The purpose of the report is to indicate, on the basis of research,

- The possible options for setting up a self sustaining structure (not necessarily a Community Interest Company) that if established would help address the barriers that business in the inshore catching sector face in North East England together with the advantages and disadvantages of each option. For ease of reading we refer to the proposed structure as the "new organisation" throughout this report.
- Analysis of the options under a series of different scenarios related to reform of management of the inshore fleet.

The report is structured into the following sections:

1. A brief review of the background to the project and the context in which any new organisation would be set up.
2. A statement of the possible objectives of a new organisation.
3. A review of the inshore fishing industry in the North East, highlighting issues in the market and the value chain, and the opinions of fishermen.
4. A discussion of possible actions which could be taken to address deficiencies in the industry in order to reach the stated objectives.
5. A statement of the possible organisational solutions and the advantages and disadvantages of each.
6. Analysis of two options for the way forward against four different scenarios for management of the inshore fleet
7. Conclusions and recommendations for the way forward.

In order to facilitate reading, the following information is contained in annexes:

- a. Details of sources of information and individuals interviewed
- b. Analysis of data on the inshore fleet
- c. Review of the value chain
- d. Summary of views of fishermen
- e. Discussion of issues related to the establishment of a quota trust or similar body
- f. Brief literature review regarding community management of fisheries
- g. Outline of the possible marketing of sprats
- h. Further details of the Duchy Fish Quota Company
- i. Analysis of possible legal structures for the new organisation.
- j. Analysis of different operating approaches and their consequences for viability
- k. Abbreviations

1. Background

The starting point of our work is the Business Case produced by Business in the Community and the review of this produced by Rodney Anderson.

While these documents were being produced (and subsequently), thinking has moved on and, in particular, there has been additional discussion regarding the possible future management options of the inshore fleet (the Sustainable Access to Inshore Fisheries (SAIF) Advisory Group's proposition paper¹, for example, indicates that significant reform of the current fleet system may be required to ensure sustainability of inshore fisheries, and sets out a number of options for reform). This possible change in the background needs to be taken into account, and any new organisation needs to be capable of adapting to future external changes.

The two pieces of work elaborate a concept and underline the issues which could be important in supporting the inshore fishing fleet. However, they need to be made more precise if we are to produce a business plan for a new organisation.

In general terms we would expect the new organisation to fit into one of the following two types:

- Addressing a very clear problem where there is market failure and where there is a consequent need for public subsidy and support
- Creating infrastructure through which additional policy interventions can be made (i.e. showing self-sufficiency)

Whilst the two are not necessarily contradictory, an assertion that a self-sustaining organisation will address market failure requires some analysis of why the market has not already addressed the point.

We would expect the new organisation to:

- provide an infrastructure through which the general market failure² which affects fisheries with common-pool resources can be addressed

1 The SAIF Advisory Group's proposition paper can be found under www.defra.gov.uk/foodfarm/fisheries/documents/fisheries/saif-proposition.pdf.

2 The market failure in common-pool fisheries such as that prosecuted by <10m vessels in the inshore fleet in the North East of England is that, whereas in a properly performing market profitability sends a signal to participants and would-be participants when the point of maximum return to society (known as the social or economic rent) has been reached, this point is obscured to fishing enterprises who, in the absence of barriers to entry, continue to invest until the profit is completely dissipated, over-fishing and depleting the stock and creating serious levels of overcapacity. This is not to be confused with market inefficiencies which prevent participants gaining the best return for themselves because of an imbalance of power in the market brought about by the presence of, for example, too few buyers or imperfect knowledge.

by policy interventions and support in so far as it affects the inshore fleet in the North East of England (and perhaps elsewhere);

- address market inefficiencies which reduce the bargaining power of the inshore fleet in selling its catch;
- encourage the participation of fishermen in the operation and management of the new organisation and especially in any quota management responsibilities;
- fit the requirement of fisheries management to contribute to an ecosystem approach; and
- be sufficiently flexible that it can continue to perform its function whatever changes in fishery management may be agreed in the 2012 reform of the CFP or otherwise.

We have therefore sought to

- identify how the market is working at present, the influence of the market failure and other inefficiencies (which despite not being part of the global problem are not necessarily trivial) and ways in which they could be addressed (including models from elsewhere)
- understand the motivations of fishermen, the reasons for their current behaviour, and their possible reactions to new institutional structures
- examine in outline the viability of different models
- synthesise these models into two options and analyse the viability of these options in the light of a number of different scenarios

2. The Objectives of a New Organisation

We note that Defra sees the inshore fleet as important, as can be seen in successive policy papers and the Sustainable Access to Inshore Fisheries project. Our analysis would be that the key issues which a new organisation could address would be as follows:

- if the market failure can be countered, then it is possible for the inshore fleet to work in a profitable way, although many of them do not³ - in part due to lack of management skills (in the broadest sense) and lack of cohesion and capacity to coordinate effort and maximise income
- there are segments of the inshore fleet seen as something to be supported for a number of reasons - regarding the product (better quality), the environment (better sustainability/less pollution) and social (interaction with fishing communities)

3 By profitable we mean operating in a way which provides fishermen with an adequate income on a sustainable basis. In the current circumstances this does not happen for many inshore fishermen both because of market issues (poor matching of opportunity and capacity) and management issues of individual fishermen (using the market which already exists).

- and finally, as a constraint, whilst there may be money for pump priming, any support mechanism should be self-sustaining, at least as far as national public money for establishment costs is concerned. It is acknowledged from economic theory that in the past subsidy has worsened the problem of overcapacity and that support should therefore be limited. It should be noted that it does not follow that fewer people would be employed if overcapacity were eliminated. One of the effects of the market failure can be to encourage over-investment in capital (in the sense of machinery and technology) at the expense of labour.

In the current circumstances of generally decreasing (or stable) quotas there has been a tendency for fishing to concentrate on a small number of larger vessels (or some well-equipped <10m vessels) meaning that some of the smaller vessels will become less economic and that smaller ports may not have the critical mass of vessels necessary to justify continued maintenance of infrastructure.⁴

This would have the following negative consequences

- decreasing quality of fish (since the inshore fleet can provide higher quality fresher fish)
- decreasing environmental sustainability of fishing (since the smaller boats are seen to be environmentally less damaging in many cases)
- tendency for fishing to concentrate in a few locations, causing negative effects on other smaller ports and the associated fishing communities
- difficulty in operating complementary activities which benefit the relevant communities (e.g. tourism)
- losing a route for young people to come into the industry (many fishermen learn their trade on the smaller boats)

The objectives of a new organisation would therefore be

- A To stabilise the inshore fleet at a viable size, with all participants engaged in profitable activity

⁴ This context and the consequences outlined are produced as a synthesis of thinking exhibited in Defra papers, notably Fisheries 2027 where it is stated as a constraint that "Access to fisheries continues to be available to small-scale fishing vessels, even if in some cases that is not the most economically efficient way of harvesting the resource. This is because the wider economic, social and environmental benefits of small-scale fishing can outweigh the comparative inefficiency in harvesting the resource and make a significant economic and social contribution to the lives of individuals and coastal communities, for example, by providing jobs, attracting tourists, providing high-quality fresh fish and maintaining the character and cultural identity of small ports throughout England." See also Impact Assessment for the Reduction in Fishing Capacity for the Inshore (under 10m) Fishing Fleet paras 90 and following. To some degree all these items are hypotheses which the SAIF project is funding research to further substantiate.

- B To consolidate an inshore fleet of profitable boats at the locations from which fishing currently takes place (subject to coherence with local and regional development plans including the Regional Economic and Spatial Strategies, Local Development Frameworks, and Sustainable Community Strategies)⁵. We note that this may be difficult to reconcile with A.
- C To maximise the contribution of the inshore fleet to local community development, through the creation of sustainable businesses
- D To improve the resilience of existing fishing communities (including those who do not fish) to changes in the regulatory and natural environment
- E To increase the environmental sustainability of inshore fisheries

3. The Industry in the North East

3.1 The Inshore Fleet

We note that there is no universal definition of the inshore fleet, although in many documents it is used synonymously with the <10m metre vessels. The SAIF Proposition paper (4.1.1) discusses a number of options for a better definition - although clearly a single definition is problematic. We realise that there are ongoing discussions about future management arrangements, but at present there is a need to consider the <10m metre fleet separately, purely because of the fact that they have different problems with regard to availability and management of quota. Where appropriate we also consider larger boats which fish inshore and subdivide the <10m fleet based on size and location.

If we take the boats which are administered by North Shields and have a home port in the North East we can see that the majority are under 8 metres registered length and even those over 10 metres are mostly under 12 metres

<8m	<10m	<12m	<15m	>15m
156	42	21	12	8
65%	18%	9%	5%	3%

Source: MFA statistics

The larger (>10m) boats are concentrated in a few ports (Amble, Blyth, Hartlepool, North Shields, Seaham, Seahouses and Sunderland) with only a few more containing 8m-10m vessels (Holy Island, Newbiggin, and a single vessel in Redcar). Many of the smaller ports consist purely of under 8 metre vessels (Beadnell, Berwick, Craster, Cullercoats, Newton, South Shields, and 31 out of 32 registered at Redcar).

⁵ Noting numbers of vessels and current infrastructure this probably means Berwick, Seahouses, Amble, Blyth, North Shields, Sunderland, Hartlepool and Redcar

If we consider the size and value of the catch landed by the <10m fleet⁶, it can be seen that they get a better price for their catch than the >10m fleet for most shellfish⁷ and for some less significant finfish, but a lower price for the most significant finfish stocks (Cod Haddock Lemon Sole, Monks, Plaice, Sole, Turbot, Whiting) and for *nephrops*. We should be cautious about making too many conclusions from this because for several of these (specifically flat fish and *nephrops*) we were told that the market pays a better price depending on size⁸, and the largest fish are not inshore. Nonetheless, some of the differences are significant, with a difference in price of 30% for whiting, for example.

From the point of view of the smaller fishermen this may not be so significant - the majority of the smaller ports landed almost entirely shellfish (including *nephrops*) - this would be true of Beadnell, Berwick, Boulmer, Craster, Cullercoats. Holy Island. Newbiggin, Redcar, Seaham, Seahouses, South Shields, and Sunderland. In Amble, Blyth, North Shields, and Hartlepool the situation is more mixed, although the position for <10ms is again dominated by shellfish.

£000	<10m				>10m			
	Lobsters	<i>nephrops</i>	other shellfish	Finfish	Lobsters	<i>nephrops</i>	other shellfish	Finfish
Amble	391	299	80	129	46	566	7	315
Blyth	35	230	23	123	27	86	9	117
N Shields	228	225	54	90	11	651	5	291
Hartlepool	123	102	10	71	1	134	0	82

Note: does not include ERF⁹ in Hartlepool. Source: MFA statistics.

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- 6 including <10ms who landed in the North East but have home ports outside the region
 - 7 The exception is lobsters where the overall average is higher for over 10s, although this is skewed by a single large boat based in Whitby which got a particularly good price for a large catch. Other than this, the <10ms got a better price for Lobsters than local over 10s in every port except Blyth
 - 8 A cursory glance at Fishing News, 5 February 2010, shows whiting at Brixham as fetching an average of £1,000 per tonne for size 1 (the largest), £800 for size 2, £500 for size 3, and £400 for size 4, For more formal evidence see Jorgensen H.P, P.E. Rodgers and J. Smit (1989) The Economic Impact of Fisheries Management in the North Sea: Cod, Haddock, Sole, and Plaice, Report for the EU Fisheries Directorate DGXIV, SFIA, Edinburgh, and Jorgensen H.P, P.E. Rodgers, J. Smit and G. Valatin (1991) The Economic Impact of Fisheries Management in the North Sea: Cod, Saithe, Whiting, and Plaice (Vol II), Report for EC Fisheries Directorate, SFIA, Edinburgh.
 - 9 ERF - Environmental Responsible Fisheries project, where groups of fishermen were allowed to land everything they caught (subject to some restrictions) as a pilot project. 6 Hartlepool fishermen were included in the project.

Examining the value of the catch per vessel, we can see that a large proportion are probably part-time or hobby fishermen. Of the 235 <10m vessels that landed in the North East, 136 landed less than £10k worth of fish, and 92 of these were from the North East. These are likely to be people who are not full-time commercial fishermen and are unlikely to be part of any new organisation¹⁰. Of the remaining 99, if we ignore 17 who are based outside the region, only 29 had landings worth more than £40k and a further 53 landed between £10k and £40k. Allowing for the six Hartlepool fishermen on ERF, this means we are probably looking at a population of less than 40 full time commercial fishermen who are making their living purely from fishing and perhaps another 50 who are part time or struggling. Those who are making a better living are concentrated in the bigger ports (Amble, Blyth, Hartlepool, North Shields, and Seahouses/Holy Island) and seem to correspond both to those who have the slightly bigger boats (8-10m) and to the "leaders" defined in research on fishermen¹¹.

The detailed situation varies between different ports.

Fishing at Redcar is qualitatively different from elsewhere, with a number of small boats which land on the beach, sell direct to the public during the summer, and operate part time. The nature of the industry in the area (heavy industry with shift working) has contributed to this part time working (giving people the income to buy boats and not need a full time income from fishing, and working patterns allowing part time fishing).

The inshore fishing fleet at Sunderland comprises only a few vessels with fishing entitlements and as such yields little to add to management data.

Blyth and Hartlepool have large regeneration schemes based around their ports and, in both cases, the fish quay and fishing play a lesser role in the regeneration plans compared to housing, tourism and general regeneration of the area¹².

In Amble, there are structural problems with the fish quay for which funding is currently being sought (justified on the basis of the contribution that the fishing industry has in relation to other economic aspects of the town such as tourism).

10 These figures are for turnover and profitability is therefore correspondingly less. 110 of the 136 landed £5k or less. Even if (as seems unlikely given the cost of owning a boat) this is the main source of income, it seems highly unlikely that owners in such a position would be able to pay towards joining any form of organisation.

11 Creative Research: A Fisherman's Tale: Being a Fisherman in England in 2009 elsewhere referred to as the "Typologies Report". See section 7.2.1 for a definition of "leaders".

12 Indeed, the publicity surrounding both schemes fails to mention fisheries at all, instead talking only about housing and business and generic tourism opportunities.

In the case of Blyth, Hartlepool and Amble, the continued maintenance of the current infrastructure will require investment, however, the source of this investment in the long term is unclear.

The only auction market is at North Shields, which deals almost exclusively with finfish. There was previously a market at Hartlepool but, despite attempts to revive it after Caley Fisheries withdrew, there seems no prospect that this will return. Only one local buyer has a presence on the fish quay with most other landings being sent elsewhere - a pattern repeated at other smaller ports.

Outside North Shields most fish is sold by direct contract, with the exception of Amble where a significant proportion of the finfish is sent to the market in Eyemouth "because smaller fish fetch better prices in Scotland". Fishermen at Hartlepool also currently sell significant amounts by direct contract to buyers outside the region, meaning that the opportunity to add value locally is lost.

3.2 The Public Sector

There are seven local authorities with coastal strips. Of these four - Durham County Council, Redcar and Cleveland Council, South Tyneside Council, Sunderland City Council - appear to provide minimal support to the fishing industry apart from maintaining the physical infrastructure at the ports at South Shields, Seaham, Sunderland, Redcar in a basic state of good repair. Fishing appears not to be included in economic development plans; nor do fishermen appear to attract any specific support.

For the other three areas:

Hartlepool has previously supported its fishermen, helping to establish the Fish Quay company and participating in an abortive Financial Instrument for Fisheries Guidance (FIGG) funded piece of research on selling velvet crabs. However, the major development at Victoria Harbour (managed by Tees Valley regeneration) does not feature the fisheries at all nor is the headland/fish quay a significant part of the town's maritime tourism offer. Whilst positive, the economic development department is unlikely to be able to support it through major investment

Following local government reorganisation, Northumberland County Council is still working through the process of bringing districts and county council together. In addition the council is facing budgetary pressures caused by the global recession and in particular the collapse of Icelandic banks. It has recently developed an economic regeneration strategy which mentions the importance of fishing but also notes its low employment. The Council may therefore be supportive of other initiatives but is unlikely to take the lead.

North Tyneside Council appears therefore left as the one council with a significant interest, seeing the Fish Quay as an asset and the area around it

as a potential for regeneration. The council has expressed an interest in the economic regeneration possibilities of developing the fishing industry and may therefore be amenable to further exploration of new structures and activities.

ONE North East¹³ currently has nobody specifically responsible for fisheries. As an organisation, the Regional Development Agency (RDA) is already working against an uncertain background caused by the coming General Election. It is unlikely that they would currently have funds directly for a fisheries project, but they currently have responsibility for coordination of Leader (under the Rural Development Programme for England – RDPE). In conversation they expressed interest in ensuring that actions under Leader and those under the European Fisheries Fund Axis 4¹⁴ are complementary.

ONE North East is also a supporter of the North East England Food and Drink Group and its Northumbria Larder branding. This is currently in the process of reorganisation and re-launching but it currently has limited involvement with fish and fish products¹⁵. This might be a valuable source of support - branding and promotion - but would require coordination with whatever future regional branding guidelines emerge. We note that the corresponding initiative for Yorkshire and Humberside has its own seafood section (Yorkshire and Humberside Seafood Group) but we were unable to find details of its activities.

3.3 Fishermen

We note the views and types of fishermen outlined in the Typologies Report and our interviews with fishermen, unsurprisingly, concur with the clear views expressed there. A summary of the key points made in our interviews with fishermen is included as annex D.

We would particularly like to underline:

- that there appears to be a general resentment and antipathy towards Defra¹⁶ and to the quota system in particular (both in the level of quota and in its management)

13 ONE North East is the Regional Development Agency (RDA) covering North East England. One of nine RDAs in England, it was established to transform the English regions through sustainable economic development

14 The Leader groups are established as part of the implementation of the Rural Development Plan for England and operate in a similar way to the proposed Axis 4 groups for EFF which would organise fishing related sustainable development projects. Whilst it is possible to have combined administration there is clear demarcation between the two programmes.

15 There are two fish related products on the website, one selling oysters and the other a smoke house largely based on imported fish

16 As noted in the Typologies Report, fishermen did not make a clear distinction between Defra and MFA, and used the term "Defra" to indicate their antipathy towards central regulation in general.

- that resentment towards buyers arises particularly where the smaller vessels feel that prices are set by market events beyond their control¹⁷
- that the status of fishermen in some North East communities, notably Hartlepool, Sunderland, North Shields, and Blyth, is diminished by being marginal in wider industrial areas. This is in contrast to the South West.

We note the point made in the report regarding the attraction of quality over quantity (section 5.4.2). Although this is merely a response to a scenario, it is difficult to take it at face value and we would note: some buyers' suggestions that fishermen are not interested in quality; fishermen's assertions that buyers were more interested in consistency than quality; and elements of a "race to fish" at different times, caused by the market failure and exacerbated by the quota management system.

It would be useful to have data to substantiate any conclusion (for example whether the Hartlepool ERF vessels landed higher quality fish). Our view - formed through direct consultation with the fishermen - is that many smaller fishermen are mainly motivated by fishing per se, and therefore see the size of the catch as being more important than the quality or the unit price.

3.4 The Value Chain

We do not have full figures. Estimates are made from a combination of Seafish's report on the market in North Shields, interviews with fishermen and processors, and general observation (see Annex C for assumptions made).

Using some general assumptions we understand the value chain to operate in the following way

1. **Total landings in the North East are around £13m by value.** A very small amount of landings are sold directly to the general public¹⁸ and we have disregarded these for the purpose of our analysis.
2. **The majority (by value) of the finfish landed at North Shields goes through the auction market.** Elsewhere, a significant proportion of finfish landed in Amble goes to Eyemouth market but almost all other landings are sold by direct contract to buyers. We would estimate that the total value which goes to auction markets is between £0.5m and £1m.
3. The markets (and buyers) do not make any specific distinctions in the fish based on size of boats or methods of fishing etc., **rather they are interested in price and quality.** Quality commands a greater premium

¹⁷ In our view there are actions which can be taken (see below) but most fishermen will not believe in them unless there is concrete proof

¹⁸ This is based on conversations with fishermen and MFA and noting the limited opportunities to do this. The figure is probably less than £100k

for finfish, than for shellfish where there is a more constant price. We note that different vessels develop a reputation for quality over time and that judgement of quality (and hence price) by buyers is developed over a period, rather than just by observation of an individual catch.

4. **Both processors and wholesalers buy significant amounts from other parts of the country or from abroad.** Estimates for the North Shields market for 2007 show that 70% of inputs come from other sources and this is probably duplicated across the region. In assuming that 60% of landings are bought by local processors and wholesalers this would make a total value of processed fish of around £20-30m in the region.
5. **Restaurants are typically supplied by wholesalers** and there is an existing network (e.g. Hodgson and Taylors) that own their own retail outlets. The number of fishmongers in the region is decreasing (Yellow pages lists just over 30) but these are again supplied through the wholesale market. In estimating the value chain, using Seafish reports, it could be suggested that the value of the food service sector for restaurants is probably less than £5m in the region - but this figure would benefit from further investigation.
6. **A large proportion of fish is exported**, especially shellfish and whiting. This represents around £6m of the landings and perhaps twice this much after processing.
7. Multiple stores now account for 90% of sales of fresh and frozen fish¹⁹. **Supermarket buying appears to be mainly from a small number of processors** (preferring those with their own boats) and can therefore manage the supply. Supermarkets try to avoid buying on the open market and are unlikely to make any direct contract with a smaller boat owner. Therefore, while they are an important factor in the consumer's view of the market, there is at least one intermediary between them and the fishermen²⁰.

If we consider this picture, we can note the following factors affecting the price which fishermen receive:

- The market is a national or international one depending on the species and, although local prices do vary, there is volatility caused by markets outside the North East (specifically the prices at Peterhead *to some degree* affect the prices in North Shields).
- The relatively small size of the local market means that there is a concentration of buyers, and this leads to allegations of collusion. Some

19 Rodgers PE et al (2008) Marketing and Price Formation of Fisheries and Aquaculture Products, Report for the European Parliament Committee on Fisheries, No. IP/B/PECH/IC/2007-039, October.

20 This applies even for Sainsbury's who are making a specific effort to promote seasonal British fish

fishermen sell outside the region for this reason. We have not found evidence of malpractice and note that with a shrinking local supply, buyers are eager to find appropriate deals. We note that many fishermen over-speculate the mark ups made by processors and underestimate the costs involved in processing - Seafish's survey from 2007 does not suggest that *in general* processors make excessive profits. Indeed, often the processor's profit seems reduced as the rent appears to be garnered by the multiple stores as a result of their buying power.

- Auction markets are valuable in that they do give a reference or guide price for direct contracts. Buyers are therefore interested in making private deals to undercut the guide price and it seems that this, along with the size of the market, was one of the reasons for the demise of the auction in Hartlepool. We speculate that buyers find it much easier to offer quick and cheaper deals to individual fishermen lacking in negotiating skills, even when the guide price is widely known.
- The quota regime makes it difficult for <10m vessels to guarantee consistency or constancy of supply. This appears one of the reasons that some processors have their own boats. This is a factor which makes it more difficult for smaller vessels to supply larger retailers (e.g. supermarkets), who find it easier to deal with wholesalers²¹. Sainsbury's have to some degree overcome this problem on the South Coast by using a single wholesaler/processor to deal with a large number of day-catch boats, but have had difficulty repeating this exercise on the East Coast owing to inconsistencies in supply.

4. The Need for Action

4.1 Adding value to fish

In seeking appropriate actions we note that

- There is a real market, though anecdotally there is some evidence of collusion amongst buyers particularly with shellfish. In general fishermen have the option of several buyers to sell to, the price varies according to supply and demand. For some part of the catch, the auction market at North Shields gives a benchmark price.
- Fishermen do not always perform actions which would help them add value, even when they are relatively easy - specifically keeping the fish better (using ice), using the market to set a price, or looking for alternative buyers.
- Restaurants on the whole buy from wholesalers and it is difficult to see that there is a critical mass of buyers and sellers which would make it efficient to set up a new intermediary.

²¹ This is a normal tendency of supermarkets for other food products, for similar reasons

- Supermarkets prefer to buy from processors (who may have their own boats/quota), and can guarantee supply and traceability. They do not normally buy directly from markets and North Shields in any case would not be a preferred market for a national buyer since it is too small. Fish from the North East of England that ends up on supermarket shelves will do so via a processor who buys widely on behalf of its client supermarket, but this means that any value added is lost to the locality unless the supermarket is making a specific promotion (for example, Sainsbury's promotion of British fish).
- A large proportion of the catch is sold as a commodity and quality will not make a large difference to price, although it may have an effect
- Regional branding such as through Northumbrian Larder is in the process of reorganisation. Nonetheless, this is likely to be a unified regional brand and public money will not be forthcoming for attempts to brands which might conflict with it. Future marketing initiatives regarding fish should therefore be aligned with the new branding if possible.
- Although there is a move toward evidencing responsibility and sustainability, the 'ethically caught' trademark does not necessarily appear to command a higher price again because of the buying power of the supermarkets. Supermarkets each have their own scoring system for this aspect and use it in marketing, but it does not seem to be a barrier to buying from the North East per se, nor is it likely to be in the future.

This means that actions are unlikely to make immediate large difference to the price and are unlikely to be seen by fishermen as "quick wins"²². Areas where the market could be improved include:

- Enabling cooperative marketing/selling. For example, fishermen at Seahouses (mainly shellfish) complain that they have to sell to one of three buyers because they do not have any holding facility. If they were able to have a holding facility they could bulk supplies and sell to buyers and markets further afield²³.
- Marketing different species (for example sprats - see annex G)
- Seeking to demonstrate to fishermen the value of keeping the catch better i.e. in a better condition for sale. This point was made clearly by buyers and proven at the auction market where a skipper - known to keep the fish well - commanded a higher price for his catch. There

²² In addition, variations in market prices related to supply and demand (number of boxes landed in Peterhead) often create larger swings than the likely premium for quality (which varies with the size of the fish and the reputation of the skipper, among other things), meaning that demonstration that there is a higher price for fishermen will be difficult

²³ We leave this as an example, although we note that MFA figures indicate that Seahouses fishermen received higher prices for lobsters than any other group so their assertions may be due to lack of information rather than a market gap

seems to be view, however, that many fishermen do not follow this, for example not taking ice on board their vessels even in summer.²⁴

- Support for MSC certification of appropriate fisheries would help with marketing to buyers who are not based in the immediate area. However, MSC certification is not cheap, it can be difficult to apply within a mixed fishery and there is no obvious source of full external funding²⁵. Discussions suggest that MSC accreditation of fisheries (and RFS accreditation of vessels) is becoming more important to some buyers (e.g. supermarkets) but does not guarantee or command a higher price.
- Promotion of a local brand, either in conjunction with other regional food promotion and marketing or as a stand-alone activity. There have been discussions with a prominent local individual who may lend his name to a new initiative, but funding would have to be found from elsewhere for any serious action.
- Seeking to more closely match landings to demand, for example being aware of peak demand for shellfish (such as Spanish festivals) and planning fishing trips before this, where possible. Although fishermen are notoriously independent, there could be some advantages by giving them advanced information.
- Removing overcapacity in the inshore fleet to promote a stable, sustainable, profitable fishery
- Removing the incentive to over-fish by giving fishing enterprises a stake in the future of the stocks through capitalising their present value. As Defra has already successfully achieved this in the >>10m sector it would make sense to offer the same opportunity to the <10m fleet.

Discussions with fishermen suggest that, while they are obviously interested in gaining higher prices, they are cynical about the ease with which it can be done, citing examples such as the Responsible Fishing Scheme which they believe has had no effect. Accordingly they would look for evidence before putting funds behind any of these initiatives. Demonstrating effectiveness to individual fishermen will be difficult, noting that there can be quite high unpredictability in prices. This can already be seen by the views regarding the effectiveness of putting the fish through the auction market, where fishermen had very different ideas of the competitiveness of the prices compared to direct contracts with processors.

Experience from elsewhere, including both Seafood Cornwall and other initiatives, would indicate that initiatives to support the market in this way almost inevitably require continuing public funding. Public funding of activity

24 Noting that fishermen on the whole deny keeping their fish badly, and allegations that for some species (particularly shellfish), consistency appears more important than quality to some buyers

25 We note that EFF funds can be used, but there would have to be matched funding from some source in such cases

once the fish is ashore does not necessarily exacerbate the market failure present in fishing itself but it is questionable whether the benefits in terms of value added will filter down as improved prices for landings to the fishing enterprises. They are normally price takers. The price they receive is governed by the Law of One Price. This says that a common price will be struck in a wider market which will determine the price in a local market. Subject to transport costs, it would make no sense for a processor to purchase fish locally for a higher price than from further afield. A small differential can be obtained where branding and reputation creates a sub-market, for a particular product but is unlikely that such branding could be applied successfully to all fish landed in the North East .

4.2 Quota and Quota Management

Quota is a key issue for most fishermen and was in almost all interviews the first area which they wanted to discuss^{26,27}. Discussions centred on changes in the level of quota or the way in which quota is managed that would allow fishermen the ability to plan longer term, catch when species are plentiful, and provide consistency to potential buyers). Currently it is possible for <10m fleet to purchase or lease quota from the >10m fleet but this has not happened to a large degree because of the price and availability of quota and the need to buy quota in large amounts. Previous experiences where there was a substantial cost to joining a PO have left a deep suspicion of dealing with POs regarding quota. Other possible causes include a simple lack of knowledge as to how to go about buying quota and resentment at having to pay to obtain something that has been allocated free.

Ideas for community management of quota have been around for some time and are highlighted in *Net Benefits*. There are a number of possibilities, including :

- a a commercial quota trust on the model of the Duchy of Cornwall Quota company^{28, 29},
- b a community quota based on ring fencing some part of the pool managed currently by the MFA.

They could be complementary. The latter approach would require a policy decision by Defra, but it could be part of a solution. If this approach was used, it would require careful definition of a community, which would unlikely to be

26 The exception being the fishermen in Seahouses who first complained about the proposed Marine Protection Area

27 This included fishermen who caught mainly non-quota species. This would suggest that the reason for concentration on non-quota species is due to the perceived (or actual) difficulties of dealing with quota. We note also that there is a degree of seasonality in all species and therefore "non quota" fishermen would like the ability to fish for other species during the low season - a reflection of tradition in a mixed fishery.

28 see Annex H

29 This would also avoid situations such as the European Commission judgement on the Shetland Islands example

the whole of the North East since fishermen identify either with others at the port level or with fishermen more generally – as such the North East as a *region* does not have an identity in the fishing industry. If the North East was chosen as a regional level then it would be helpful for other administrative bodies to coincide (e.g. at present there are two IFCAs). Smaller community quotas could interact with a regional quota trust, which we examine in more detail below.

We produce further analysis of the idea of a quota trust in Annex E. This shows that while the idea in itself is feasible, indeed, to be commended, any attempt to establish one would face real challenges. If reliance on the public purse is to be avoided, the most serious difficulty is one of scale. In order to be viable the quota trust would have to be considerably larger than could be envisaged in the North East alone where so few vessels target quota species. The margins used in the examples although they comply with those obtained by on-shore general wholesaling businesses appear optimistic compared to those achieved by the Duchy Fish Quota Company.

Similarly, it would appear that some £300,000 to £500,000 would be needed in the first year of operation to accommodate purchase of quota for onward lease to the fleet then and in successive years.

The figure is perhaps less of an obstacle than it appears. Clever management of the cash flow might permit quota to be obtained with significantly less capital outlay if the quota trust were itself to lease quota for onward leasing. Public funds for pump-priming might well be available with this approach. Then the problem faced would be the learning curve for the executive of the quota trust, since there exists virtually no expertise or experience of running such an operation. Nonetheless the greater problem remains one of the size of the market for leased quota faced by the quota trust. An alternative would be to start small and build but this would require careful attention by the Board and the help of another organisation, perhaps a PO or an otherwise dedicated local marketing group.

The idea of a quota trust on suitable terms is attractive to fishermen in general since it is seen as a way of both increasing the size of the catch and allowing better control. Reservations relate in general to the costs involved (since desirable quota is often high priced) or to the ability to make agreements at a regional level on how the quota will be divided fairly. Neither of these objections is insuperable, but the final answer may well depend on the way in which funds are raised for buying quota - who pays the piper calls the tune.

4.3 Management of Risk

Regardless of reform of quota management (which will not happen instantly in any case), fishermen operate in a business environment full of risk. This includes:

- The way in which catch limits change, frequently and (in the opinion of fishermen) unpredictably and without adequate notice
- The weather
- The actual levels of particular stocks
- Variations in costs such as fuel costs
- The price of particular species in the market

In common with most small businesses and micro businesses, the majority of fishermen do not plan far ahead (typically no more than the next quarter) and concentrate on cash flow.

There are possible collective approaches to mitigating against some risks, including

- scheduling landings
- diversifying species landed (subject to quota restrictions) and targeting species based on improving profit
- pooling information about stocks and results of fishing
- possible community management of quota
- making risk assessments and through this improving long term planning

Currently there is no local organisation capable of organising this which has the trust of fishermen who might join it. Indeed, discussions with fishermen produced a negative view regarding any collective action - there is a view that fishermen are a 'special breed' and are 'highly independent'. We suspect that this negativity stems from number of past attempts to manage the industry without harnessing the necessary support of those directly involved in it. On the other hand, history and experience elsewhere shows that fishermen are quite capable of forming collective organisations when they have a clear interest in doing so, and there is much more pragmatism than may sometimes be heard in the rhetoric. A greater barrier now is lack of belief in such approaches and the need to demonstrate some real immediate benefits in order to get buy in from local fishermen.

The North East of England has virtually no slack in the quota available except in *nephrops* which appear to be unprofitable in further quantities to the local fleet, and sprats, which are in the same position but which might provide a small opportunity on the back of a sophisticated marketing strategy.

Pooling information requires fishing enterprises to impart intelligence to competitor businesses. Such an approach is not impossible and, indeed, fishermen do share a lot of information already. However, experience of clusters in other sectors, suggest that there needs to be some "carrot" in order to encourage this to happen.

This is an area which needs to be borne in mind in the actions of any new organisation, but is unlikely to be its selling point in gaining membership.

4.4 Community Development

None of the Local Authorities (LA) see fishing as being a key activity. Only two LAs have a real interest (North Tyneside and Hartlepool) and for both of these it is centred on infrastructure. Northumberland's economic strategy with regard to fishing is still not finalised but probably sees support to smaller communities as being related to tourist development.

LAs and ONE can be positively involved in projects but will not be enthusiastic about setting up new institutions unless they are self-sustainable. Existing LEADER groups are specifically demarcated from EFF Axis 4.

For a new organisation, management of EFF Axis 4 represents an opportunity since there is a need for Axis 4 groups, there are parts of the coast which are eligible for Axis 4 but not covered by LEADER groups³⁰, and any new organisation would necessarily have fishermen involved. A real issue in setting such groups up is the need for fishermen to be involved - this could be combined with possible community approaches to managing quota.

4.5 External Factors

We note that reform of the way Marine and Fisheries Agency (and the Marine Management Organisation going forward) operates the <10m quota should form a part of the operation of any new organisation. This causes something of a dilemma, because on the one hand better management and allocation of quota is the key issue which will make fishermen join (and pay to join) but on the other hand we are in a situation where the actual position could change radically (see the ideas mentioned in the SAIF proposition paper, for example).

Decommissioning also creeps into the discussion. On several occasions, while apparently successful, there has been more than a strong suspicion that the funds received for decommissioned vessels have reappeared in the fleet as new more powerful vessels, defeating the object. Equally there is acknowledgement that if prices don't go up and there are restrictions on catch sizes, then the only solution is fewer fishermen. This is not something which the new organisation will be occupied with directly, but again it needs to be coordinated with any actions and is an inevitable consequence of improving technology where the resource is limited once the distortions caused by capital stuffing have gone.

³⁰ In fact North Tyneside and anywhere south of there - the East Durham Leader group only affects Seaham which is not significant. Blyth appears ineligible.

5. Possible Structures

In analysing the actions above, we find three distinct approaches to the new organisation. These are as follows:

1. A social enterprise model (the Community Interest Company) with voluntary membership but run by fishermen
2. A project management model (running projects which benefit fishermen and their businesses) run for fishermen but not necessarily by them, and involving fishermen in its strategic direction
3. A statutory model (with all vessels becoming members and taking over some of the current duties of MFA) based on reform of the way quota is managed for the inshore fleet.

There is some overlap between the different approaches, but there would still need to be a focus and not all aspects are compatible with each other (e.g. voluntary or compulsory membership, control by fishermen or by others)

In all three cases, there is a question of size of the organisation for reasons of viability and cohesion - whether this should be for the whole of the North East or at some other community based level. Indeed it may be that a larger organisation than currently envisaged is needed to satisfy viability and self-sufficiency.

In all cases, identification and recruitment of appropriate Board members and managers will be important - and not easy. We note that in discussions we have not identified anyone who could genuinely be considered to be a champion for the project, and this point will extend the time taken for the establishment of any organisation.

We examine the options and the size in more detail below

5.1 The Social Enterprise Model

Membership is voluntary, members pay a fee to be member but get services/benefits which outweigh the costs. The services may not be applicable to all but will not be exclusively targeted at those who make a good living already, since the organisation has a social objective. The organisation receives pump priming funds but then has to find its way to self-sustainability. The organisation would be run primarily by fishermen for fishermen, although there may need to be participation from public bodies.

Responses from fishermen do not suggest that there would be great enthusiasm in joining a body which does purely marketing-type and business support activities, and there is justifiable scepticism about the value of this. In the same way, actions which might relate to planning of effort and scheduling

landings etc are either not seen as valuable or dismissed as not being possible (certainly not on a North East basis). The representative function may have some virtue, but in general fishermen feel that they are not heard from representations which they have already made (associations they have already joined) and, again, there would need to be some demonstration that a new body could be more effective than actions in the past.

We note that the Sustainable Access to Inshore Fisheries Advisory Group Proposition paper also includes the idea of data capture. We did not explicitly test this with fishermen, but feel that their reaction towards the science of fish stocks and management means that they would see this principally as another duty. Certainly they would not see it as an activity which had immediate benefits which they would therefore be prepared to pay for. Given the antipathy toward data management and log record keeping for some of the over 10's, it is presumed that this activity would not be well received.

As already noted, the greatest attraction for fishermen to join would be some form of quota trust (or system of managing existing pool quota)³¹. We note that the Duchy Quota Trust is only viable through Seafood Cornwall's running of other activities. In the current circumstances this means some form of public pump-priming support for marketing and branding, but for which there is no obvious terminal date.

The essential demand at present in the North East would be an increase in the whiting quota. There is little else the fishermen ask for³². Yet to achieve this would mean re-allocating some away from the >10m fleet. This sets up a potential political conflict of fisherman against fisherman which will present unwelcome difficulties for Defra without in any way dealing with the fundamental market failure.

The alternative appears to be a significant investment maybe of £0.5m with the funding to purchase (mainly) whiting quota from the >10m fleet and then re-sell it in a wholesaling exercise in small parcels to the <10m vessels. It is not certain that there are enough of them, capable of catching enough fish to make such an operation viable and this may be a barrier to establishing the quota trust, depending on what other assumptions we make about finance and discount rates (see annex E). Certainly the 50% or so mark up (which is by no means out of the normal range for wholesaling in other land-based industries) is several-fold above the 10% that the Duchy Fish Quota Company charges.

31 Almost all fishermen depend to some degree on quota stocks with only very few making a good living on shellfish (excluding nephrops) alone. Even those who were primarily dealing with non-quota species expressed a desire for more quota for reasons of flexibility and seasonality

32 Quota supply and demand will vary in the future and the quota trust will need to return to this, but at present this would be the key stock required to attract some fishermen to join a quota trust.. If a quota trust was established then it would be able to adapt to future trends and buy or lease quota accordingly.

The option remains for the quota trust itself to lease quota rather than buy it and then perform the wholesaling operation. The danger is that unless staff are employed dedicated to the task, this would become a minor and potentially irritating part of any PO that might be asked to undertake the leasing operation on a percentage commission. Otherwise, the quota trust's need to take on staff leaves the activity not viable on the local scale envisaged.

The position of mackerel may produce some opportunities in the future. In 2009, the catch limits were restrictive (less than £25,000 landed) which would be insufficient on which to base any activity. In 2010, a swap has been agreed to increase the overall quota allocation of North Sea mackerel to 400t, including for use by the <10m fleet in sea areas 4b and 4c, an area much wider than the North East. Since the allocation will be to the pool, this would not make any difference to the viability of a quota trust, unless the quota was somehow allocated to the new organisation. Mackerel does represent a marketing opportunity, but there would need to be some investment made given the dominance of Scotland (and the premium branding of Scottish mackerel in supermarkets) if added value is to be realised from the fact that it is hand-line caught. This is not viable in 2010 due to the timetable but may be appropriate in future years if the new organisation has been established and the quota is reasonably predictable. For the quota trust, mackerel is not likely to be significant owing to continuing low overall quota allocations (for the >10m fleet), although of course it could form a part of the operation.

In essence, while the quota trust is a sound idea, the scale envisaged is insufficient to be tenable and the project needs to be re-thought on a larger scale with the notion of dealing with the market failure as the first priority. Once that is in hand, there is plenty of evidence from other fisheries that many of the current problems, lack of cooperation, cynicism, the race to fish, overcapacity, the need for ever-increasing amounts of scientific data, the lack of care for the catch, ignoring seasonal demand, will over a period of time largely solve themselves because the mind-set of the fishermen will adapt to the new circumstances. The CIC would be in a position to deal with residual problems as they developed.

5.2 The Project Management model

The purpose of the organisation is to be a vehicle for running projects (probably with individual public subsidy³³) which benefit fishermen, the fishing industry, and the community they serve. It becomes less necessary that fishermen are the main drivers behind the organisation and equally they would not be expected to pay significant amounts to join. The services (marketing and promotion etc) would be industry-orientated but the focus

33 In this we include fee-based public services which directly benefit fishermen if the fee is coming from the public sector

would depend on the availability of funding. All fishermen would be expected to benefit from collective action.

This is effectively an operation where services are run for fishermen rather than by fishermen, though close interaction with the fishing community is of obvious benefit. To a large extent we expect services to be on a free or subsidised basis towards fishermen with the subsidy coming on a project basis. The model is one which relates strongly to the Seafood Cornwall approach, producing a number of initiatives which can contribute together to covering administrative costs. In addition such a body could form the vehicle for organising appropriate certification activities and organising activities under EFF Axis 4 (both forming the group and assisting in its operation and administration).

An important issue here is one of funding. Fishing is not as significant within local authorities and the local economy as it is in Cornwall for example, yet Seafood Cornwall still has problems in raising funding for projects, even with an energetic and committed figurehead, and after several years of operation. In this respect the North East seems much less fertile ground, particularly in the current climate of anticipated public sector funding cuts.

This type of approach is used in part by many voluntary organisations and charities but it is rare to find an organisation which works *purely* on this basis. This is because there needs to be a certain administrative function which manages the risk of having more than one project, seeks new opportunities, and applies for funding on a continuous basis – and this function cannot generally be funded out of administrative charges on projects. Accordingly, the project management approach can well be used to grow an existing organisation which has some basic form of income, and realistically needs to be added to an existing stable organisation. Again, we found difficulty in finding an appropriate host, with the few projects we noted being too local or specific. For example, Amble Development Trust may host an Axis 4 group under suitable circumstances but is not likely to be capable or interested in hosting general operations for marketing fish across the North East.

5.3 The Statutory Model

A statutory model would be based on all vessels being members and public duties (for example managing the pool quota). The organisation will still be run by fishermen as members within closely confined rules. The organisation would have public subsidy based on a service level agreement (charge for management of public sector assets and providing public sector information). It could have subgroups in particular locations.

An approach might be to consider local management of quota (community quota idea) or effort. It is difficult to produce more than a sketch of this as an idea, given current discussions around the SAIF proposition paper regarding future options for managing the inshore fleet - obviously this would act as part

of it. We note, however, that as well as considering the mechanism for management, it is important to look at the institutions involved. We present some comments on community management of fisheries in Annex F.

Much of what is written at the conclusion of Section 5.1 could apply here. Establishing a single company to own and manage the <10m quota would help to correct the market failure. There only remains the need to determine how current fishermen would receive shares in the new company (limited and profit-making, not limited by guarantee). The executive of the new company would charter only the capacity needed to catch the quota. The rest would be surplus to be allocated elsewhere or scrapped, but the owners would have their shares in the new enterprise.

5.4 Size of the Organisation

The different ports in the North East each have their own fishing communities and ways of working and do not represent a cohesive whole. Fishermen do not all fish the same stocks and have different local problems, whilst there appears to be a history of insularity and a certain rivalry between different ports partly caused by the market failure and race to fish. This does not mean that fishermen cannot work together for a common goal (although there are many who would like to suggest this) but rather that structures of any new organisation should take account of this, for example, by classifying membership by port of operation or by having some sub-regional (port-orientated) structure. This would apply to any issue related to quota and effort management, where decisions need to be made at an appropriate local level. This would apply even for the CIC approach and a regional quota trust, having community quotas or organisations which feed into it. Our view would be that there will be a need to have a structure which acknowledges the principal ports where commercial fishing takes place, perhaps dividing activities between these as, say, Berwick, Seahouses, Amble, Blyth, North Shields, Hartlepool and Redcar. The situation of the smaller ports would need to be discussed to be accommodated into this scheme.

5.5 Other Activities

We note that there may be other activities which would benefit the fishing industry as a whole in the North East but are at the same time project-orientated and not specific to the inshore fleet. None of these activities are certain to happen but may have an impact on the viability of a new organisation and may form part of a package of measures put together if there is a bid for project funding from public sources (such as local authorities). Specifically we note:

- Improvements to North Shields market. An electronic auction could increase the number of buyers and through this the prices which are commanded. The actors involved assert that there is not a good business case at present but this may merit further investigation. Any

new organisation could be a vehicle for collating data and supporting the business case

- Infrastructure in various ports will need repair over time and again support to producing appropriate business cases may be an appropriate activity
- Collective actions which assist specific businesses (e.g. investment in storage facilities). Again, support in producing a business case and raising investment would be needed.

6. Analysis of Options

6.1 Approach

General

In this section we synthesise two options to go forward from the analysis of possible structures above and analyse this against a number of different scenarios in order that an appropriate solution can be chosen as the environment changes. For each option we will therefore look at both the general business case and the organisational structure, as well as making some commentary on the risks involved.

For the scenarios we look at the following possibilities, as well as the base case (that the environment continues as it is now):

1. The achievement of either of the two options outlined in the SAIF proposition paper paragraph 4.3.3, namely

- 1.1 modification of quota allocations and fleet sizes so that there is balance between capacity and opportunity in the inshore fleet
- 1.2 a rigid geographical demarcation between the inshore and offshore fleets

2. The introduction of management activities for shellfish, noting that the majority of the catch of the inshore fleet is in non-quota/shellfish stock. This would not necessarily be global introduction of quotas but could also include initiatives at the local level based on community demands.

For reference we refer to these as follows

A	Base case - continuation of current system
B	Balance between capacity and opportunity
C	Demarcation between inshore and offshore fishing

We note that scenario D is not necessarily contradictory to B and C

Options for Consideration

Clearly it is not possible to look at every option, and we note that, in the current circumstances, the idea of a body which runs primarily on a project basis, making an administrative cut on other projects is likely to be unattractive and unsustainable (particularly if the body does not have some other core activity) – see section 5.2. We therefore would like to consider putting options 1 and 2 together. We consider option 3 separately, although obviously such a body may also be in a position to look at some of the activities under option 2. So, our outline of the two options would be as follows:

Option 1 - combined social enterprise/project model

- Membership is voluntary but not free of charge
- Governance is controlled by individuals/organisations with a direct interest in fishing, but others (such as local authorities) may join
- A major incentive for joining (from the point of view of those fishermen that fish for quota stock) will be some form of quota trust and hence better access to quota
- The organisation will additionally operate projects which assist in the marketing and operation of inshore fisheries, although these are expected to be operated in a way which is paid for by external sources (possibly with an administrative cut)

For financial reasons we assume the following

- The quota trust part of the organisation has to be self-sustaining, although the administrative part (salaries, office costs) may be paid for by other activities
- A maximum of 30% of funding for other activities will be involved in core administrative costs if these are funded on a project basis³⁴
- Any EFF funding will require 50% co-financing from somewhere else³⁵

Option 2 - the statutory model

- In this we assume that the body is set up with free membership for all and that this is part of the reform of management of the inshore fleet

34 This is maximum, and the reality may be much less, particularly for projects involving EFF, see later

35 or 60% if the co-financing is private.

- Nonetheless, fishermen need some incentive to be actively engaged and the most obvious one would be that they have full engagement in the management of quota (and/or other systems)
- We expect that the organisation will be paid on an ongoing basis for the local management of fisheries (i.e. a fee for a service rendered)
- Other projects will be self-financing in the sense that the organisation will expect all costs to be covered by external sources and/or fees
- Again, the governance will be controlled by fishermen or fishing interests, although other interested bodies will be represented

In view of the current state of debate and the wide range of options included in the SAIF proposition paper we need to make some general assumptions about the way in which this would work, which would include

- The cost of operations cannot be more than the current system using MFA/MMO
- Devolution of management of the under 10 quota (or the inshore fleet at a future date) will be to a regional level - for the North East this means the two IFCAs
- Fishermen's sense of identity and differing interests will mean that there may well be a second tier of structures and/or organisations
- The purpose of the organisation(s) will be effective sustainable management of the inshore fisheries

Scenarios

The SAIF proposition paper does not represent Defra policy and in any case has been written to start debate. Indeed, some care needs to be taken with the options set out in Section 4.4.6. While some of the possible input controls, such as protection of nursery grounds, have obvious virtues, there is substantial empirical evidence of the failure of others, notably closed seasons, which the paper does not have the space to discuss. Similarly, the requirements to land all catches would require a change to Article 19 of Council Regulation 850/98 which currently forbids the retention on board of undersized fish. As a result, the options in it which we would like to consider as scenarios are not fully elaborated. In order to make the situation and analysis as clear as possible, we consider 4 scenarios as outlined below. These scenarios are not completely mutually exclusive but are presented separately in order to make analysis more clear.

We note that both scenarios B Balance³⁶ and C Demarcation³⁷ involve some degree of balancing opportunity against capacity for the inshore fleet (indeed,

36 Our interpretation of option 1 in the SAIF Advisory Group's proposition paper (see point 4.3.3).

37 Our interpretation option 2 in the SAIF Advisory Group's proposition paper (see point 4.3.3).

for the fleet as a whole) but the mechanism for this is left unclear. We base our analysis on the fact that this has taken place by some means unknown.

Scenario A - base case

- Quota levels (in general) and quota management of the <10m fleet remain as at present (in other words, the level of quota for the pool stays at a similar level, there is neither significant decommissioning nor expansion of the inshore fleet and the pool quota continues to be managed nationally by MFA/MMO)
- Finance may be available for pump-priming but otherwise all funding is on the basis of services rendered (in other words service level agreements or projects which cover their costs)
- Public finance is not available to buy quota

Scenario B - balance

- Quota levels remain a problem but not as acutely as at present (since there is better balance - but this does not necessarily extend to all locations and species)
- Pool quota is managed through some form of mini-PO. Unless we make this assumption there will be an obvious tendency for the current imbalance between the POs and the pool to recreate itself³⁸
- Effectively options 1 and 2 are the same thing - the only questions might be the degree of funding coming from central sources and the geographic level of the PO

Scenario C - demarcation

- Quota levels are less of a problem than currently (because of balance)
- Assumed that fishing opportunities are managed for the inshore fleet at the IFCA level but possibly in the same way as at present
- The quota trust is non-viable because of demarcation - inshore vessels should not deal with other quota
- In view of the lack of a quota trust, Option 1 becomes automatically non-feasible

Scenario D - shellfish

- The situation is in all ways the same as present except that, for the purpose of creating this scenario, there are quotas for non-quota species, specifically shellfish (crabs and lobster)

³⁸ We note that in this case, there would be a strong argument for insisting on compulsory membership of the pool PO since otherwise MMO will be left with the task of dividing the pool quota in small lots for those who do not join and monitoring this. Efficiency savings in management would therefore not be made.

- In the initial stages shellfish quota are quite generous and therefore can be purchased easily (based on *nephrops* experience)
- Shellfish quota will only be available to those with shellfish licences (and so in the early stages at least will not be held by those who do not fish for it)

We would stress that we have constructed this scenario solely for the purpose of illustrating options and not in anticipation of any additional controls measures.

6.2 Effect of Scenarios on the Options

In this section we consider the effect of the different scenarios on the assumptions made in our development of options.

Quota

In the current circumstances there is a real demand for quota of all species (except perhaps *nephrops* and sprats for which the price is low and the quota not fully exploited). This is caused by the following factors:

- the fact that <10m fishermen do not control their own quota and therefore a system for leasing quota under their own control would be very attractive
- the non-availability and high prices of certain quota (specifically whiting)
- the difficulties of obtaining quota (administratively), particularly in small quantities.

This means that there will be a demand for a quota trust even in Option 2. In this case it is not clear that the Quota Trust would need to be part of a new statutory organisation (particularly noting possible problems of state aid) and questions related to how finance will be raised for it still remain.

We perceive the attractiveness of a quota trust to vary, according to three scenarios as follows

A Base	There is demand for certain quota The mark up for leases would need to be 50% for breakeven, even though this is not the experience of the existing quota trust company
B Balance	It is difficult to be sure whether demand for quota would increase or decrease because it is impossible to gauge the extent of the distortions introduced by the current management regime. This also impacts on the potential demand for quota. Most likely demand would decrease

	<p>because part of the reasoning is the lack of balance between the inshore and offshore fleets</p> <p>Price of quota may increase since one possible approach would be to increase the proportion of quota allocated to the <10m fleet</p> <p>Quota trust would be done through the mini-PO</p>
C Demarcation	In this case the issue will be one of allocation of quota within the inshore fleet and therefore the rationale for the quota trust will disappear (since logically there would be no possibility of buying quota from the offshore fleet)
D Shellfish	This would increase viability since shellfish are key and the quota trust could invest at an early stage when prices are cheap.

Marketing Initiative and Other projects

We note the reluctance of fishermen to pay for activities which *might* increase the value of fish landed, owing particularly to bad experiences in the past. It therefore *may* be possible to gain some support from them in the longer term, but this would almost certainly not be in the establishment phase of the new organisation nor would it cover costs.

The key questions here are:

- The need for an institutional structure to run project-based activities
- The need for a local/regional focus
- The need to find project funding

Under Option 1 we can see that

- In all scenarios there is likely to be difficulty in finding public financing for marketing type activities - although there is some funding from EFF (see below) this will require 50% funding (60% if the funding is from private sources). Discussion suggests that it will be hard to find this from local authorities or ONE North East.
- The formation of a PO-type structure (scenario B Balance) would assist in establishing an institutional basis for activities³⁹.

Option 2 will give greater opportunities to produce marketing initiatives (since we are including all fishermen) but probably more difficulties in raising finance for them (since it will be seen as a public body).

³⁹ In any case POs have a duty to be involved in marketing

European Fisheries Fund

EFF funds are relevant for the following reasons:

- They can co-finance marketing initiatives (Axis 3), at a rate of 50% (40% for private projects). It should be noted that this does not include organisational running costs.
- The establishment of Axis 4 groups could be a function of any new organisation⁴⁰ - though again the co-financing rate is 50% and support for running costs is limited
- Assisting in gaining grants (under all Axes) may be a function of the new organisation.

EFF will therefore be a useful factor in extending operations, but will not, in itself, be the deciding factor in the viability and sustainability of the new organisation under any of the scenarios.

Other Sources of Finance

Whilst reference has been made by various stakeholders to the need for more general business support services (rather than marketing and promotion), there are limited funds available for this. The Business Support Simplification Programme and the working of Business Enterprise North East mean that this is seen as the primary source of business advice, at least for existing businesses⁴¹. This in turn has the implication that there are unlikely to be funds from either ONE North East or local authorities directly for this purpose.

With regard to finance for the new organisation as a social enterprise, there are a number of sources of finance which are orientated directly for social enterprise. Most of these are some form of loan (possibly subsidised) and the more attractive and softer ones come from public finance. This might be a problem with regard to the Quota Trust owing to possible state aid implications, but in any case the need to pay funds back decreases the viability of the enterprise in general. Possible approaches are shown in Annex J.

In practice all these funds would only be available for Option 1 - for Option 2, it would be seen that any new organisation is in reality a creation of Defra and funds would be expected to come from central government sources, perhaps in recompense for taking over some of the current functions of the MFA.

40 Final criteria for Axis 4 groups have still not been agreed by the PMC, but current thinking would suggest that there will be at most 2 in the North East, based around Amble and Seahouses.

41 Indeed, we note that fishermen already have used the Business Link service (figures for 2008/9 show 12 customers in the fishing industry, 7 of them established businesses)

Pump-priming funding of around £100,000 is envisaged. The details are shown in Annex J.

Governance/Staffing

We consider that any new organisation needs to be substantially directed by fishermen or at least fishing interests. We consider the different legal structures in Annex I, which suggests to us that a Company Limited by Guarantee model would probably be most appropriate for Option 1, except perhaps in the case of scenario B Balance, where it may be more appropriate to have a conventional share company (if the participants are seen to have unequal interests). There does not appear to be any immediate need to be registered as a CIC and this can be done simply at a later date if it is seen to have advantages (for example in dealing with potential funders).

Our view in talking to fishermen is that putting together a committee of committed fishermen would not be difficult - certainly a number of North East fishermen have shown considerable tenacity in going to consultation meetings and dealing with projects such as SAIF and these same "usual suspects" along with a number of processors could form a strong Board.

A bigger challenge will be finding someone to run the CIC, since this inevitably will be an onshore job and not one that fishermen will be attracted to. Similar initiatives (not just in fishing) are typically moulded around the energy and vision of a single individual, which would be key if the organisation is to be more than one which allocates quota between its members. We have not identified any candidates in the North East in our research and in our view, and it would be unwise to establish a company without more clarity that such an individual can be found.

6.3 Option 1 - Social Enterprise

In the current environment (Scenario A Base) it would only be possible to establish the new organisation on the basis of a viable quota trust (which could subsidise administrative costs related to the management of marketing and other support projects). Analysis shows that the minimum size for a quota trust would be as a PO administered organisation with sales of 103 tonnes of quota (whiting equivalents) which would require an investment of around £20,000⁴². See Annex E for further details. We have found no credible source of finance for this, noting in particular the likelihood that the vast majority will need to come from private sources⁴³.

The introduction of shellfish quotas (Scenario D Shellfish), the feasibility of setting up a quota trust would be increased, owing to the lower cost of quota (for shellfish) and the possible increased demand from fishermen. However, we note that, taking the introduction of *nephrops* quota as an example, while this represents a long term opportunity, it will probably be several years before supply is less than demand and until this time the value of quota will be effectively zero. At the point where such a change happens, there is an opportunity for someone to establish a quota trust running at a minimal level as preparation for the future

As already noted Scenario C Demarcation rules out any easy way of establishing a viable social enterprise: on the one hand the demarcation would presumably mean that the inshore fleet would not be in a position to buy additional quota whilst on the other hand, the possible use of an enterprise for marketing and other projects would be even more difficult owing to a smaller number of members (whose reaction to paying for services are likely to be similar to those at present). Whilst there would be support that would be useful we cannot see a way that this can be delivered on a self-sustaining basis.

As we already note, Scenario B Balance suggests a PO like structure with compulsory membership which we consider in the next section.

Although the general idea of a quota trust is relatively simple and attractive, the establishment of such an organisation, in particular in raising finance, ensuring appropriate rules, and carefully steering through legal questions (specifically avoiding questions about state aid and distortion of competition) will be time-consuming. Even if there were ready sources of private finance

42 For clarity, we emphasise that these figures are solely for the quota trust, this assumes that quota is leased (making long term planning difficult), and that the mark-up is 50%, which is unsubstantiated. This would be a very risky venture.

43 While there is a case for de minimis support from public sources, even this is unlikely given the Shetland Islands ruling, the relative conservatism of local authorities, and the reluctance of the public sector to find another way of subsidising what is only a small industry in the North East.

(which we have not identified), establishment of such an organisation would take years to come to fruition.

The approach is also not without commercial risks, since the viability of the approach depends on assumptions regarding the continuing approach to quota management and general availability of quota. In view of the reform of the CFP and the discussions surrounding SAIF, there is a real risk that within five years a different regime could be in place which would alter the commercial model completely. It seems unlikely that any serious private investor will come along until this uncertainty is decreased to some degree⁴⁴.

If this option is seen, nonetheless, as desirable, there is an urgent need to form a core group (as a future Board) who would have as a first task to look for appropriate private sources of finance. As already noted, ideally this would be led by a key individual who had vision and was committed to the industry, although we have not yet identified a suitable candidate.

6.4 Option 2 - Statutory Body

Background

In this section we consider the option of setting up a body with compulsory free membership and how this might work in each of the scenarios. This is speculative at present and therefore we seek to explore principles of operation rather than exact figures and structures.

The objective of setting up a system of fishery management for the inshore fishery of the North East of England based on a statutory model is to retain in as far as possible employment and income in the local area.

The fishery exhibits a number of features typical of poor management and of unhelpful practice among the fleet and onshore.

Some problems also of the locality exist. These include a fleet based on a relatively large number of harbours and creeks given the size and numbers of vessels in the fleet. There are relatively low levels of landings from a fishery where some stocks are seriously depleted.

In practical terms the over-riding objective is to overcome the effect of the market failure which produces negative externalities.

Overcapacity may be caused by restricted open access. Distortions may have resulted from the flight from the sector as a means of avoiding the quota and effort measures. It may also be a residual from subsidisation of capital in the

44 This is at the same time, an argument for not establishing the organisation as a CIC, since the asset lock involved in a CIC structure could cause problems in restructuring in the future.

past, though it is some time since grants and loans for vessel-building have been available. The bulk of their effect has probably been written off in depreciation now, leaving the remaining effect to be that of decommissioning funds which have been reinvested in fishing.

The size of local industry is important though if the crab and lobster vessels are not to be included in the scheme we are looking at only around 50 jobs, sufficient to be worth consideration but not of major importance.

The size of the industry reflects on the question of retention of local capital and employment generally, causing problems for the viability of harbours and making investment in all or one apparently a less than exciting prospect. Many of the crab and lobster vessels use the local creeks rather than harbours with bunkering, ice and repair facilities, let alone an effective auction market with a strong customer base.

The dichotomy between the needs of the crab and lobster vessels on the one hand and the demersal and nephrops vessels on the other also adds to the strain on facilities.

All these lead to a weak market.

Structure

It has long been understood that a fishery owned by a sole owner would be fished in a different way from one where open access or restricted open access prevailed. The reason is that a sole owner would be able to find the level of activity where profit was maximised. Where many individual fishing enterprises exploit a fishery with inadequate entry barriers they are each unable to identify an optimum level of activity for themselves either individually or as a group because the market failure obscures the information essential to make such a decision.

The solution to this is to create a monopoly among the participants. This could be done by offering all existing participating participants membership of a limited company with voting rights in proportion to some measure such as their average track record of landings over say three of the previous four years.

It would be necessary to offer the new company, here called the group company, a secure entry barrier to prevent others from breaking down the monopoly, which they would do in the presence of a profit, until the profit were again dissipated.

The barrier would be the allocation of the sole right to fish the quota species in the specified locality. For the North East of England this could be the <10m quota in an area from Berwick-upon-Tweed to Redcar.

Monopoly is generally considered an undesirable market state. This is because a monopolist is frequently able to fix a price for its product. It is from this ability to set the price at a level to suit itself that the monopolist in normal markets can obtain its power. The price will normally be higher than it would be in a competitive market and the result is that the consumer is able to purchase fewer of the product, there is a lower return to society and excess profits can be garnered by the monopolist.

For the fishery monopoly proposed here, however, these detrimental impacts do not occur because the monopoly is being given over an input rather than the output. Competition still exists because the product is similar if not identical to fish of the same species from other markets, so the group company could not set its own price. It remains a price-taker.

On the other hand, there are clear benefits. The market failure no longer obscures from the group company the point of maximum returns to society, the incentive to over-invest in productive capacity is reduced because the group company will charter only the capacity it needs.

Some clarification of the last clause is necessary. Sole ownership of the fishery removes the impact of the congestion externality on the participants. This is the spill-over effect that one vessel has on another in the fishery. These are caused by each affecting the fishing prospects of the other, both by restricting activity (analogously to road traffic congestion where each vehicle slows the others up as they try to avoid collisions) and by the race to fish – getting to the stock before others deplete it.

The stock externality is only indirectly affected. The group company will receive a quota each year. It will not have the opportunity to conserve stocks other than by adhering to its quota limits. Being a participant in a the exploitation of stocks shared with sector and non-sector vessels >10m, and with vessels of other North Sea countries the group company cannot on its own conserve fish stocks as a true monopoly owner would. Anything saved would merely be re-allocated to the other participants. Nevertheless, the opportunity to maximise the profits from the quota it is allocated is a powerful incentive not to overfish because that would reduce the profits achieved.

The company would acquire the same executive structure as most others, based on the activities of a Board of Directors elected by the shareholders. The Board would appoint an executive to run the company. For such a small company as is envisaged a single executive officer and an administrator might be necessary.

Method of Operation

The group company could receive the quota allocation which would otherwise currently be reserved for the <10m vessels. The inshore vessels currently fishing off the coast of the North East of England would remain the property of their current owners (unless sold) but would not become the property of the

group company. The group company would own no vessels, at least in the meantime.

The executive would then plan the level of landings for each species which would maximise the value of landings by ensuring in so far as is possible with a fishery prone to the effects of weather. The plan would be seek to make the best of seasonal fluctuations in landings and market prices and would be continually revised throughout the year. In order to provide the planned level of landings to the market, the executive would estimate the amount of fishing activity needed to achieve them. Then it would charter the vessels needed from among those of the group company members (and later possibly others) after a competitive tendering process.

This process would enable the group company to eradicate from the fishery the excess capacity which currently reduces the profitability of the fleet. Unused vessels could be scrapped or converted to other uses. It should be noted that a decommissioning scheme for unneeded vessels of group company members would not in these circumstances lead to funds being re-invested in the fishery exploited by the group company (though they could turn up elsewhere) because the group company would be restricting its use of capacity to the profit-maximising level.

Once the number of vessels available to the group company came close to the number being chartered, the group company could be permitted to own its own vessels as the overcapacity in the fleet would have been all but eradicated. It might prefer to continue chartering.

Conclusion

This model achieves the principal objective of countering the market failure. However, it would without doubt mean that fewer people would be involved in the seaward side of the fishery. Perhaps this is inevitable where there is acknowledged to be overcapacity, but all those displaced by being unable to win chartering contracts with the company would have a share in the success of the new venture as shareholders. Since increased profitability is to be expected because of the cost reduction achieved by using fewer vessels, they would share in that too. The scheme offers nothing to those crewmen who are not owners or shareholders in a vessel if they lose their jobs, and the practice of fishermen of registering as self-employed share fishermen would mitigate against their receiving a return.

While establishing a group company does not protect all the creeks and harbours, all the vessels, or all the employed, perhaps that is too much to expect in the face of the overcapacity. By offering a chance of survival it would preserve the fishery and return it to a level of profitability probably not experienced since the second world war. Multiplier effects arising from the income effect would also mean that the displaced labour could find jobs in the local economy. A virtue of the group company is that the shareholders would

be local so that almost the whole of the profit would remain in the North East of England to be re-invested there.

Possible Variations

The approach above, of a single PO-like structure, is equally applicable to any of the four scenarios. Establishment of the structure would be through Defra policy since it involves a change to quota management and compulsory membership of an appropriate set of licensed vessels. This means that it would probably have to start at the end of a quota year and there would have to be adequate notice given to individuals involved, but in general the timetable would be a question of Defra's policy-making.

In order to justify this approach, which devolves management of quota from MFA to a regionally-based organisation, the new organisation would need to show efficiency savings relative to the current management system. MFA estimates the costs of managing quota for the North East (based on apportionment) are around £10,000⁴⁵ which would make it difficult to establish a new organisation on this basis.

In creating a structure, we note the following possible variations, which still apply to a greater or lesser extent to all scenarios:

1. It would be difficult to create a quota trust as part of the organisation without ring-fencing it to a degree that it would act separately. This would be because of issues of state aid, when an organisation is being established. Nonetheless, it could form a useful complement if private financing could be found, even if this is difficult for the reasons stated in the previous section.
2. The exact level of a regional company needs to be considered carefully. The SAIF proposition paper suggests a number of possible definitions of "local", including at the level of IFCA's, MMO regions, and RACs, none of which necessarily correspond to the identity and interests of fishermen. Specifically we would note:
 - a. It would not be helpful if there were several bodies which compete with each other for regional funds (for example for marketing initiatives) and therefore there would need to be agreement on the way in which they work together
 - b. Since fishermen, although they have common interests and approaches, tend to organise themselves on a port-orientated basis, it may make sense to have a second tier structure whereby community-based organisation (at the port level) bid for quota which they manage themselves through a contract with the regional organisation. This would allow more clear local control without mitigating efficiency savings and would at the

⁴⁵ Estimate supplied by MFA

same time conform better to the models suggested for community management of fisheries (see Annex F) which would maximise the input of local fishermen's knowledge.

Risks

Since the quota is already closely controlled, and will continue to be so under this model, the risks would appear to be kept low. Nonetheless, the change of management regime is not without its problems and we would highlight the following:

- There is a need to find appropriate people to manage the new company, and this may be difficult. Whilst it should not be too difficult to find the Board, the Chief Executive will have the unenviable task of allocating quota in a difficult situation. Unless there is substantial guidance given by Defra initially (we would expect this to be lessened as the company develops), the initial year is likely to include many conflicts between fishermen which would be counter-productive
- Cynicism amongst fishermen regarding Defra/MFA is strong and therefore a very real selling job will need to be done to ensure that they realise that this is not "old wine in new jars" and that it will really give them some of the freedoms they are looking for.
- As part of this, if there is a second tier of community organisations then, for efficiency's sake, this should be across the whole territory. Such organisations will be easier to found and maintain in some of the ports than others and it will be frustrating to move at the speed of the slowest ones.
- A major change in a single year can have unpredictable consequences, and there is likely to be a short term continuation of the "race to fish". The question of enforcement (since the whole PO would be liable for any fishing over quota) needs to be carefully thought out. This is more difficult than for a conventional PO given the large number of small members.

6.5 Characteristics of the North East

Whilst our study is specifically to examine the viability of establishing a new organisation in the North East, we were asked also to consider this as a pilot for other areas of the country. During our work we sought to examine whether it would be possible to duplicate initiatives from elsewhere in the country, for example collective actions such as Seafood Cornwall, or work with the local authority such as that in Hastings. Our analysis suggests that the North East is not the most fertile ground for the proposed organisation, but a number of the reasons for this may well not apply elsewhere in the country. We would particularly draw attention to the following negative factors:

- The relatively small size of the inshore fleet in the North East. North Shields (the largest port) has 33 <10m vessels operating from it, compared to, for example, 70 in Mevagissey, 81 in Hastings, 83 in Poole and 137 in Newlyn⁴⁶. This means that the significance of fishing in the local economy is much less both as the fishing industry itself and, perhaps, as a tourism asset as well.
- The relatively small numbers in each port correspondingly increases the risks attached to initiatives such as those involving marketing, where a critical mass of fishermen needs to be brought on board. The smaller the port, the higher becomes the proportion of fishermen that will need to be organised. This may partly explain the failure of Hartlepool Borough Council's venture to market velvet crabs, compared to the relative success of some of Seafood Cornwall's ventures.
- The pattern of settlements means that most ports are near to or part of much larger conurbations where there are wider problems of deprivation and other larger industries. This means that local authorities, whilst not against fishermen, are unlikely to see fishing as a key area of activity. The possible exception to this would be Northumberland, but even here the County stretches very widely and includes ex-mining areas and areas of tourism unconnected to fishing ports (the National Park, for example, does not reach the coast). Local authority support is therefore likely to be limited.
- The culture related to food (quality of local produce and restaurants) in Cornwall may be something the North East wishes to emulate, but it currently does not exist and this does not help potential initiatives related to marketing and catering (for example the Line Caught initiative of Seafood Cornwall). The situation in Cornwall is the result of a long term strategy and considerable investment, not only in the fishing industry. The North East is a long way behind in this respect.
- Finally we note that the intervention rate for EFF funded projects is 75% in Cornwall, making this a better source of funding there than elsewhere in the country.

⁴⁶ These figures are based on the register of vessels and therefore do not reflect the actual numbers of vessels in each harbour. However, they do show the comparative size of the inshore fleet. Landings in the North East from outside the region are chiefly by larger vessels and therefore naturally exclude the smaller ports.

7. Conclusions

In summary we can conclude the following:

- In the current circumstances, it would be extremely difficult to establish a viable social enterprise along the lines of the original business case. This could only work if it included a Quota Trust which subsidised other operations. The size of the quota trust itself would have to be very large, covering an area perhaps larger than the whole North East fleet. The amount of finance which would have to be raised from private sources would be at least £500k (if the quota is bought) or £100k (if it is leased) and we have no credible source for this, particularly noting that if this is secured through loan finance the need for repayment will decrease the viability of the operation still further.
- Although the hypothetical introduction of shellfish management measures would increase the likelihood of establishing a quota trust owing to the fact that quota could be bought at lower prices, it still does not make the Social Enterprise easily viable and only reduces the risk to some degree. Again, even in this case, it seems unlikely to be possible to find finance for this operation in the current circumstances.
- Nonetheless, we would highlight the fact that our work does show that there are options which, while they are not viable separately, could in the right circumstances together form the basis of a viable organisation. So, for example, a quota trust based on leasing could prove possible. It would need to be combined with some support from the public sector (local authorities and Defra) for new marketing initiatives (such as sprats). It would also need to work with fishermen to generate money for infrastructure and marketing from the EFF (for example looking at shellfish holding facilities). Reform of the inshore fleet should hopefully stimulate fishermen to cooperate more at the local level so that there are organisations to form a basis for other work, In the current circumstances such a plan is too risky for any likely source of finance, but this may not always be the case in the North East, and may not be the case at all in other parts of the country.
- In the case that there is a better balance between capacity and opportunity for the inshore fleet (Scenario B Balance) we would consider that this will inevitably mean the establishment of some sort of PO (or PO-like) structure for the existing inshore fleet, probably with compulsory membership and including management of the existing pool quota. Such an operation should be viable, based on the experience of existing POs, but would not necessarily address the problems of the viability of smaller ports (and to some extent of smaller vessels) and so would not halt the general tendency towards concentration in the inshore fleet.
- If we examine the second option, of establishing a statutory organisation with some form of compulsory membership then we have two cases. In the case of better balance, then such a body would

almost inevitably look like a PO and, as already noted may well be viable but would perhaps not fulfil the objectives of sustaining the inshore fleet at the smaller end and in the smaller ports. In the other cases, we can see a model whereby a statutory organisation, perhaps at the level of the IFCA's, could include some form of overall quota management (including possibly the management of a quota trust, provided that there was a private source of finance for this), whilst there would be the opportunity to organise smaller community quota organisations (at the port level, perhaps 5-6 in the North East) which would organise local fishermen and would bid for quota from the IFCA-level organisation. In all cases, the viability of the organisation would depend on financing from central sources (i.e. Defra), which could be partly justified through payment for services of taking over some of the current functions of MFA.

Annex A People consulted/sources of information

People

Around 30 fishermen through a variety of means (face-to-face, telephone, two focus groups in Seahouses and Hartlepool)

MFA: Mike Simmonds, John Walls, Kevin Williamson, Gary Taylor, Ian Glasgow, Rod Henderson, Neil Robinson, Ray Hedley

Defra: Bella Murfin, Gemma Daniels

Rodney Anderson

BitC project: Julia Aston, Colin Robson

Seafood Scotland: Libby Woodhatch

Seafood Cornwall: Nathan de Rosarieux

Anglo Scottish PO: David Herriott

North Shields Fish Quay: Jeremy Pritchard

Hartlepool Fish Quay: Keith Williams

Caley Fisheries: Andrew Dixon

Processors/wholesalers: Moir Seafood, HF Fish, Alliance Amble, Hodgson Fish

Supermarkets:

Sainsburys: Ally Dingwall, Head of Aquaculture, Russell Crowe, Buyer for Counters - including Fish, James Butler – Buyer

Cooperative (by e-mail); the buyer for a national chain who requested that information was given in confidence

One North East: Adrian Sherwood, Victoria Catesby

Business Enterprise North East: Jo Boaden, Rhiannon Bearne

Social Enterprise Business: Sharon O'Brien

New Under Ten Fishermen's Association

Marine Stewardship Council (and Moody Marine, Dr A Hough)

Leader (Northumberland): Ivan Hewitt

Northumberland Council: Steve Revell

North Tyneside Council: Richard Prisk, Kevin Muldoon-Smith

Hartlepool Council: Antony Steinberg
Sunderland Council: Gary Clasper
Durham County Council: Sarah Robson

Duke of Northumberland's Agent: Rory Wilson

Reports and Documentation

Business Case for a Community Interest Company (and review of the case produced by Rodney Anderson)

MFA statistical data on landings in the North East
United Kingdom Sea Fisheries Statistics 2008, Defra Publications, London

Seafish:

North Shields Value Chain 2007/2008 report
Seafood Industry Value Chain Analysis Cod, haddock and *nephrops*
UK Fleet Financial Performance 2009 Mid Year Review
2008 Survey of the UK Seafood Processing Industry

Northumberland Council:

Economic Strategy (consultation document)
Culture and Tourism strategy

Creative Research: A Fisherman's Tale: Being a Fisherman in England in 2009

Reform of the CFP: Green paper and responses

Nautilus Consultants: Electronic Fish Auctions

FAO: Case studies in fisheries self-governance

ONE North East:

North East Regional Food Strategy (and review of other regional strategies)
FISH Project Interim Evaluation Report

PMSU: Net Benefits

Defra: Securing the Benefits, Charting a New Course, Fisheries 2027 (vision and draft plan), SAIF Position Paper

EFF Operational Programme and related documents

Vivid Economics:

An economic approach to long term reform of access to fisheries for the inshore fleet

The economic benefits of fisheries management: regulatory design for stock recovery, equity and an efficient fleet

Leader Local Development Strategies for Northumberland and East Durham

NESFA: Generic SEA Framework Report

Cooperative Wholesale Society: Fish Sourcing Policy (and review of information on websites for other major supermarkets)

Newcastle University: Review of the North East Fisheries Regeneration Initiative

The Blue Book, HMSO.

Elinor Ostrom: Governing the Commons: The Evolution of Institutions for Collective Action

Jorgensen H.P, P.E. Rodgers and J. Smit (1989) The Economic Impact of Fisheries Management in the North Sea: Cod, Haddock, Sole, and Plaice, Report for the EU Fisheries Directorate DGXIV, SFIA, Edinburgh

Jorgensen H.P, P.E. Rodgers, J. Smit and G. Valatin (1991) The Economic Impact of Fisheries Management in the North Sea: Cod, Saithe, Whiting, and Plaice (Vol II), Report for EC Fisheries Directorate, SFIA, Edinburgh

Rodgers PE et al (2008) Marketing and Price Formation of Fisheries and Aquaculture Products, Report for the European Parliament Committee on Fisheries, No. IP/B/PECH/IC/2007-039, October

Watson J. and A. Martin (2002) 2001 Economic Survey of the UK Fishing Fleet, SFIA, Edinburgh

Davidse W, H. Harmsma, M.O. van Wijk, L.V. McEwan, N. Vestergaard and H.Frost (1997) Property Rights in Fishing: Effects on the industry and effectiveness for fishery management policy, LEI-DLO, Den Haag

Annex B Analysis of the North East Inshore Fleet

Figures below show the value of landings per boat broken down by home port

Home port	landings in £000 up to...															
	0	10	20	30	40	50	60	70	80	90	100	120	190	200		
AMBLE	10	4	2	4	1	1	1	2	1	1	1				28	
BEADNELL		2											1		3	
BERWICK	1		1	1						1					4	
BLYTH	8	7	1	1		1			1		1				20	
BOULMER				1		1									2	
BRIXHAM	1														1	
CANVEY ISLAND		1													1	
CRASTER	1						1								2	
CULLERCOATS	1														1	
EYEMOUTH	3	1		1											5	
FILEY	2														2	
FLEETWOOD	1														1	
FRASERBURGH	1														1	
HARTLEPOOL	18	6			2			1							27	
HOLY ISLAND	1			1	1							1			4	
HOLYHEAD	1														1	
KIRKWALL	1														1	
LOWESTOFT	1														1	
MACDUFF	1														1	
METHIL AND LEVEN	1														1	
NEWBIGGIN	2	1		1	1										5	
NORTH SHIELDS	11	5	3	2	1	3	2								27	
PITTENWEEM	2														2	
PORTREE	1														1	
REDCAR	17	3	3												23	
SCARBOROUGH	7		1		1										9	
SEAHAM	4														4	
SEAHOUSES		1		1	1										3	
SILLOTH	1														1	
SOUTH SHIELDS	2														2	
ST ABBS		2													2	
STAITHES	3	1													4	
STORNOWAY		1													1	
SUNDERLAND	16	1													17	
ULLAPOOL														1	1	
WHITBY	16	4		1	1	1		1				1			25	
WHITEHAVEN	1														1	
Total Result	136	40	11	14	9	7	4	4	2	2	2	2	2	1	1	235

Source: MFA statistics, does not include ERF fishermen in Hartlepool

Annex C Assumptions in Analysis of the Value Chain

The North East value chain is not highly distinct from the national market and value chain. In particular this relates to the fact that local prices follow ones which are set by national or larger markets (specifically Peterhead), whilst processors buy and sell fish from all parts of the country and abroad. For this reason we have made general assumptions that processors in the North East act in a similar way to those in the rest of the country.

Our analysis of the Value Chain is based on the following:

- The analysis of the North Shields value chain done by Seafish as background to the renovation of the Fish Quay - we assume that North Shields typifies the local market.
- Various reviews of the Value Chain done by Seafish - in this we assume that the North East is not atypical compared to the Northern region or the whole of the UK, depending on which figures were available
- Discussion with fishermen about where/how they sell their fish and with processors about sourcing
- Estimates from those involved (e.g. Fish Quay Company manager, comments from supermarket buyers)
- Figures for landings are based on MFA data for 2009 - other figures are worked from this in proportion.

Annex D Views of Fishermen

This is a summary of interviews with fishermen. Although we structured our interviews, we have tried to widen discussions around what fishermen see as key problems and how they would react to different solutions. This qualitative information should be seen against the more structured work undertaken by Creative Research.

General

The majority of respondents (77%) felt that they were unable to make a profitable living from fishing and this was for the most part put down to quota. This is seen as a long-standing problem. Respondents provided a variety of possible solutions, which included:

- Scrapping the quotas, making the mesh sizes bigger for everyone (under and over 10 metre boats) and landing what they catch.
- Give every <10m's 180 days at sea per year (hour days not kilowatt days)
- Limit the number of crab/lobster pots to 150 per registered man on the boat (currently 800)
- Restrict twin rigging from fishing with 25 miles of the shore or have them only using one net within that boundary so that they are competing fairly with the <10ms.
- Possibly being part of an association
- PO's operating the quota
- Longer term quotas (12 months)
- Bigger quotas for the smaller vessels

The quota was seen also to be responsible for the large numbers of fish discarded – mainly whiting – which were seen to be wasted as the numbers seemed to be plentiful. Other issues centred on competition. It was accepted that fishermen from Scotland and Ireland fished alongside the local fleets however disadvantage was most keenly felt from twin rigging boats fishing within 25 miles of the shore.

Fishermen have diversified and adapted their boats (often at considerable cost) in an attempt to have a sustainable livelihood. As a result, respondents outlined that they were just breaking even. Increases in general running costs - such as fuel and wages –also restrict the profitability of the fishing vessels.

Value of fish

The majority of respondents felt that the value of fish did affect their profitability and this was linked closely to where they were able to sell their catches.

- *It's mad - the price hasn't significantly improved locally for almost 10 years. It's easier to take fish to Peterhead.*
- *Yes, here whiting are considered to be the vermin of the sea - low quality fish destined for dog food. But in Scandinavian countries whiting are bought to eat. But buyers set the market prices.*
- *Fish caught in deeper water are generally larger than inshore fish. Bigger fish set the market prices. <10m's catch smaller fish.*
- *Probably - have fish transported to Eyemouth or Peterhead for a better price. Why? Because they are internationally recognised fish markets - fish are sold across the world from these ports. They are renowned for selling the best quality fish - it doesn't matter whether that fish is caught at Amble or off the Scottish coast.*
- *It depends - I travel quite a bit - Peterhead [market] pays more but I'd rather make a living off our shores.*
- *Keeping the value up would be good - if the price can go down fairly swiftly when there are large catches - the Scots and the Irish boats can push the price down because there's more landed.*
- *We can't get a decent price locally - people just aren't prepared to pay. You could charge twice the price in Peterhead and they'd pay it. Round here though they're reluctant to pay.*
- *It's time restricted and it depends on the market. The value can go down very quickly if there's a big catch and that's not just local*
- *The higher the price we get paid means a higher level of profit and bigger wages. We do not need to catch a lot of fish if prices are high to maintain profitability*

Fish Markets

It was generally agreed that in order to get the best price fishermen would transport their catch to other markets:

- *The local fish markets don't work. Buyers go elsewhere if the fish aren't available. If there's a restriction on a species, then you're going to take it to the market that attracts the most buyers. If there is a glut of a particular species, the price plummets.*
- *We send our fish to Eyemouth via an agent. Even though he takes a percentage, it's still better for us to do that than to sell it locally.*

- *I have an agent that takes my catch to Eyemouth. Unfortunately the price is set and he takes a percentage which limits the profit. I'm trying to negotiate a better price locally (North Shields) but until that happens I'll carry on using an agent.*
- *Peterhead is where you get the best price, although it's the buyers that pretty much set them. North Shields is a pretty good market.*
- *The markets are ok. Obviously the buyers can set the price - lot of fish and the price goes down but generally the markets are fair.*
- *They're pretty good usually - don't have any bother with them. Again, it's the numbers of catches - the market can drop the price of prawns when the Scots and Irish have come over.*
- *We have a problem if Peterhead market takes in a large catch because the price goes down. What difference should it make if Peterhead's got fish? Well it does! We have no control over the pricing - we're at the mercy of what's been caught in the far north of Scotland!*
- *All markets are linked. If there is a lot of fish on one market it affects the price on all markets, irrespective of what quality it is. It works in reverse if supplies are low; demand on one puts up prices across the board.*

It was agreed that while getting a better price for the fish might improve profitability, it was not possible or practical to increase the price to buyers when the fish was not considered to be of high value. Certain species of fish were thought to be very low value to the local buyers and respondents were unsure how that might be changed. There was an element of cynicism that this would be attempted:

"I've had a quick look at the questions and to be honest I wouldn't feel comfortable answering some of them. It seems to me that the info is to be used to set up some sort of company to get the fisherman a better price for his product, this type of scheme was tried in Sunderland, promoted and pushed through against the majority of licence holding Sunderland fishermen's wishes by people who had no idea of how Sunderland fishquay worked,. The line "a better price for your fish even when there was a glut" was their slogan. Sunderland's fishing fleet and fishquay is now a shadow of its former self. It used to be the port that was the envy of the Northeast coast."

Local Branding

Opinion was pretty much divided when it came to considering a local brand. Respondents felt that in theory, promoting locally caught fish might have some value but they were not convinced that it was a practical solution:

- *I don't know... the quality of the fish caught is very good but that doesn't seem to help the market now.*
- *I don't think there's much to distinguish our prawns from Dublin Bay's (although ours are better and bigger!) but it's not something you could really push.*
- *The Irish and Scots fish alongside us - it doesn't matter who catches what fish or where - the fish are taken to the market that is able to give the best price. We couldn't compete with Peterhead.*
- *If we could have North Shield prawns, Northumberland whittings etc, like Craster crabs? Yeah, that could work. There'd need to be a big marketing campaign and promotion behind it to raise the profile. But our fish (like the prawns) is a much better quality than you get in other places - it would be great if people travelled to the North East because of the sea food. If it was processed locally, all the better - it would really raise the profile. Renaming nephrops? Amble lobsters?*
- *Not really - the North East always gets the poorest price. I've been selling to Peterhead and Eyemouth markets - you can get a better price. Sometimes twice as much as I can make here.*
- *Probably - if you had a 'North East' caught.... but they'd have to let us catch them.*
- *I've been thinking about this - I approached a farmers' market to see if there'd be any interest in North Shields Caught Scallops. There was - I think I've to get a licence to sell direct to them. The same with nephrops - plenty of them. North Caught might be a way, although the supermarkets would possible drag the prices down if you approached them.*
- *Not really - there are some fish that won't sell unless they're the size of bin lids. It's got nothing to do with locally caught stocks or species, if the market wants big, that's what it'll buy.*
- *No if it would, we would have done it a long time ago. Perceive as an expensive gimmick. Price is the main driver. Local brand could end up being too expensive appeal only to a very small market.*

When asked if decreasing the number of fishermen would make a difference and what might be an appropriate way to do this e.g. decommissioning, promoting diversification, restricting time at sea, most of the respondents recorded that this didn't necessarily work.

- *Fewer fishermen doesn't work - they find other ways of catching more (too many pots, more nets, smaller mesh sizes, bigger boats etc). Restricting how long they can fish in a year and also how they fish would make a difference.*
- *We've already tried that - fewer fishermen, those that are left catching different things, smaller quotas. It's not worked though.*

- *No - already answered. Decommissioning also takes crew away from fishing. It's harder to get a crew now and we're paying a lot of money to get experienced men. Some boats are now taking on Filipino crews.*
- *No, that really doesn't make a difference. Of the 63 boats that were decommissioned last year, only 1 fisherman hasn't gone straight back into the industry. All the others just bought boats off other people. But what happened to the quota from those 63 boats that was supposed to be shared out? Nothing! It's never been seen. There'll be new move soon to get rid of a few >10m's -but the same thing will happen. Amble used to have 30 trawlers going out, now there are 8. The fishing hasn't got better because we're not allowed to fish it. The future is VERY bleak.*
- *I was a fisherman years ago and left do other things to make money -I came back last year with my own boat. This is what I do. Getting rid of fishermen doesn't make more profitable for everyone else if there's less fish to catch.*
- *Not really. It's not the number of fishermen that's the problem, it's the disparity in how much they can catch and from which area. They need to stop the Scots and Irish twin riggers from clearing out the catch. You can't blame them from coming but it really isn't right that they've got the bigger quota and two nets!*
- *No - over the year there were loads of boats all along this coast - families of fishermen. A lot have gone but there's still a very small local fleet. But we haven't benefited from their going. What does make a difference is when the visiting boats come in. They just clear up!*
- *Yes decommissioning is the most effective way of doing this. Most fishermen just want to leave the industry now whether they are making a profit or not – me included.*
- *If Defra wanted to have a fleet modernisation scheme they could have done it more simply and not called it decommissioning*

Associations

60% of the respondents were members of an association but there were doubts as to whether they could help address some of these concerns. There was also uncertainty as to whether they would pay an agency that was set up to help address some of their concerns. There was a feeling that any agency would have to prove its worth in the first place and that they were already paying out for other services. It was mentioned that any agency that tackled the quota issue would likely gain the attention of local fishermen.

Annex E The Economics of a Quota Trust

Function of the Quota Trust

The purpose of the quota trust operated by the new organisation would be to ensure that an adequate supply of fishing opportunities was made available to the fishing enterprises based in the harbours and creeks from Berwick-upon-Tweed to Redcar to enable them to function as stable, profitable and unsubsidised businesses.

As such the quota trust would act as a wholesaler of quota for those species governed by the regulations of the Common Fisheries Policy (CFP) relating to Total Allowable Catches in the North Sea defined by ICES sub-areas IVa and b, where the enterprises' vessels fish.

This has to be seen in the context of the general fishery management regime. The CFP is currently undergoing a thorough review in preparation for possible significant reform when the new legislation comes into force on 1st January 2013. If the Council of Ministers and the Commission understand the market failure present in fisheries it is not yet clear that there is a will to apply the measures necessary to correct the problem. The EU Commissioner for Marine Affairs and Fisheries, Maria Damanaki, is reported as saying that "replacing TACs and quotas with an effort reduction system (days-at-sea) across the whole EU will not be easy. It might be appropriate in some fisheries but not all."⁴⁷ As such, therefore, the new organisation has to operate in such a way that it will be able to cope either with the current regime or some undefined new set of measures. The UK under 10m vessels remain within an inefficient system of individual vessel allocation of quota from a common pool, in contrast to the system applying to over 10m vessels, which offers economic efficiency within the limits of UK management power under the CFP and subject to the usual inefficiencies of any market system not related to the market failure.

Products and Services

The principal species landed by the target vessels are lobster and crab, neither of which is currently a species whose landings are controlled by TACs or Precautionary TACs (although there are other access and environmental controls).

However, there are substantial landings of quota species, *nephrops norvegicus* (the scampi prawn) being the most important. The mesh size permitted for fishing for *nephrops* (70mm) is significantly smaller than that for other trawling activities (generally 110mm but with a complexity of derogations), but there is also a large by-catch (again subject to specific limits) which is often greater by weight but not value than the *nephrops* catch.

47 Fishing News, 12th February 2010, pg 11

Among the other species of importance are whiting, and potentially cod (were the stock to recover sufficiently).

The table below shows the take up of quota for 2008 for the species of relevance to the North East of England fleet.

The table shows some £25m of fish by value which were apparently available but not landed in 2008. Some care should be taken with this. The grounds along the North-East coast of England while not excluding any of these species are not always especially favourable to them. Nor are the fish always found in numbers that would contribute anything but a negligible amount to the earnings of the vessels in the North East, which are almost entirely day-boats. In addition, Defra is in the invidious position of having to err on the safe, under-caught, side when deciding to close a fishery because there will be quota penalties the following year if the quota is exceeded. This requires it to project the course of landings so there will inevitably be some shortfall. The £25m figure therefore overstates in practicality the value not taken. Among the species in the table whose quota is more than 50% taken, the average under-utilisation is 7%. Only haddock and hake exhibit under-utilisation of greater than 10%, and these are not abundant off the North East coast. In essence therefore, the fishery's products are lobsters, crabs, *nephrops* and whiting. Some lobster and crab vessels switch to fishing by line for mackerel during the summer season.

This said it is clear that there are some unexploited opportunities.

Uptake of UK Quotas relevant to the North-East of England Fishery, 2008.

Species	ICES Area		Tonnes	Spare Tonnes/%	Value ¹ (£m)
Anglers Monkfish	<i>IIa (EC), IV (EC)</i>	Quota	9,258		
		Catch	8,608	650	1,816,791
		Uptake %	93	7.0%	
Cod	<i>IIa (EC), IV</i>	Quota	8,746		
		Catch	8,708	38	71,723
		Uptake %	100	0.4%	
Haddock	<i>IIa (EC), IV</i>	Quota	31,914		
		Catch	27,313	4,601	4,238,722
		Uptake %	86	14.4%	
Hake	<i>IIa (EC), IV</i>	Quota	2,198		
		Catch	1,878	320	843,801
		Uptake %	85	14.6%	
Skates and Rays	<i>IIa (EC), IV (EC)</i>	Quota	766		
		Catch	731	35	43,463
		Uptake %	95	4.6%	
Spurdog	<i>IIa (EC), IV (EC)</i>	Quota	470		
		Catch	92	378	142,914
		Uptake %	20	80.4%	
Whiting	<i>IIa (EC), IV</i>	Quota	10,562		
		Catch	10,379	183	122,575
		Uptake %	98	1.7%	
Dabs and Flounders	<i>IIa (EC), IV (EC)</i>	Quota	1,920		
		Catch	923	997	420,759
		Uptake %	48	51.9%	
Lemon Sole and Witches	<i>IIa (EC), IV (EC)</i>	Quota	4,001		
		Catch	1,896	2,105	3,957,698
		Uptake %	47	52.6%	
Plaice	<i>IIa (EC), IV</i>	Quota	11,690		
		Catch	11,071	619	870,573
		Uptake %	95	5.3%	
Mackerel	<i>IIa (EC), IV (EC)</i>	Quota	492		
		Catch	452	40	33,430
		Uptake %	92	8.2%	
Sprats	<i>IIa (EC), IV (EC)</i>	Quota	4,405		
		Catch	227	4,178	805,838
		Uptake %	5	94.8%	
Nephrops	<i>IIa (EC), IV (EC)</i>	Quota	24,660		
		Catch	19,521	5,139	12,099,109
		Uptake %	79	20.8%	
				Total Value	25,467,396
<p>Note: Some deep-sea or reduction species with a quota which nominally includes the North Sea have been omitted as they are inappropriate to the North East of England fisheries. Similarly several species found in extremely limited numbers which could not provide target species or significant by-catches have also been omitted. These include saithe, megrim, soles, turbot, brill, horse mackerel, shrimps (northern prawn) and halibut.</p>					
<p>¹ at 2008 Prices</p>					

The table suggests that there are significant opportunities in haddock, hake, spurdog (dogfish), dabs and flounders, lemon sole and witches, sprats, nephrops and, to a lesser degree, mackerel.

However, the quota areas cover a far larger area than those within the range of most of the vessels in the north-east of England's fleet. The fishery is essentially a day (or overnight) fishery up to about 15 nautical miles from the shoreline.

Off the English northeast coast most of these species are caught only in small numbers, so that they must be regarded as products which could not be targeted and could offer benefits no better than by-catch.

The figures suggest that this fishery is concerned in practice with only half a dozen species; cod (though not at present with the poor stocks and associated quota), whiting, *nephrops*, crabs, lobsters, and in the summer, mackerel. The position of crab and lobster stocks is unclear as they are not systematically assessed by scientists. There is no room for expansion in the whiting catch and little for mackerel, though there seems little doubt that if there were opportunities they would be exploited. Opportunities to fish *nephrops* and sprat quotas abound at present⁴⁸.

Some 5,000 tonnes of nephrops representing 20% of the quota and worth £12m is unfished. Nephrops are a valuable species worth £2,400 per tonne on average for landings into the UK in 2008. However, this price varies enormously with the size of the fish. Analysis of MFA figures shows that the average price was £2,514 for <10m vessels and £2,988 for >10m, though this is skewed by a small number of vessels which were getting £8,000 or more. The highest prices are for large live prawns for the Rungis market in Paris. Tails fetch less.

4,000 tonnes of sprats, 95% of the quota, worth £0.8m, were available in 2009 too, though this figure will have fallen with the reduction in the TAC for 2010 to 3690 tonnes. In contrast to *nephrops* they are almost worthless at only £200 per tonne. These are a seasonal species available in the late summer and early autumn.

As these two apparent opportunities are not taken at present one needs to ask why?

In fact, the profitability of nephrops appears too low and availability off the North East coast on the Farne Deeps ground, is out of range of the smaller vessels in the <10m fleet. In addition, the vessels often do not possess licences to fish nephrops. Similarly the profitability of fishing for sprats is questionable because of their low value.

Elsewhere, there are really few opportunities. While there may appear to be a little slack in most of the quotas one must note difficulty for the MFA in

⁴⁸ Of course, quotas change over time, but they have been relatively stable over time and we would therefore expect this situation to continue in the short to medium term

allowing exact quotas to be taken. The European Commission imposes significant penalties on countries exceeding their quota and it is therefore necessary to close a fishery before that occurs.

Potential Customers and their profile

The markets for the fishing sector in the North East are thin, despite the presence of a large population nearby, because of the poor condition of the local fisheries. Much of the demersal catch is transported out of the region for processing, a loss of local value added, because the quantities are too small to create a strong market.

Otherwise, supplies for the locality are provided by a small number of processors who satisfy the demands of fish-mongers, hawkers and catering establishments by purchasing from local and external sources.

The Market

	Quantity (tonnes)	Value (£ '000)	Price (£ per Tonne)
Brill	262	1,538	5,870
Cod	1,611	3,009	1,868
Dabs	123	67	545
Flounders	114	33	289
Dogfish	518	196	378
Haddock	1,906	1,756	921
Hake	279	735	2,634
Lemon Sole	779	2,909	3,734
Megrim	446	1,528	3,426
Monks or Anglers	2,415	6,748	2,794
Plaice	1,952	2,744	1,406
Pollack	1,253	2,592	2,069
Saithe	85	60	706
Sand Eels	13	25	1,923
Skates and Rays	1,936	2,411	1,245
Soles	1,913	13,979	7,307
Turbot	294	2,370	8,061
Whiting	2,169	1,456	671
Herring	139	81	583
Horse Mackerel	5,265	1,458	277
Mackerel	2,301	1,904	827
Sprats	3,406	657	193
Nephrops	2,262	5,326	2,355
Shrimps	880	2,449	2,783

Break-Even

To begin with, the costings suggested here are made on the basis that the new organisation undertakes only its quota trust operations. The question of funding for branding and marketing activities is introduced later.

The costings set out in the initial business case have been used except that it has been assumed that the basic number of transactions would be too low to justify the hiring of permanent staff (or the need for office premises for them) and that the transactions would be handled by a friendly PO charging instead a rate of 5% of the value of each transaction.

This gives a set of fixed and variable costs as follows:

Fixed Costs (£)	14,400	
Salaries	0	
Office Rental	0	
Energy, Rates	0	
Legal Fees	5,000	
Accountancy Fees	2,000	
Insurance	3,000	
Communications	1,500	
Website Maintenance	1,000	
Printing & Stationery	500	
Travel & subsistence	1,000	
Hire of Meeting Rooms	400	
Variable Costs (£)	Unit Cost	
Cost of Quota	332	per tonne
PO Admin Fees	5.00%	

The question legal fees is rather uncertain. In practice they will be a variable cost and while it might be possible for the quota trust to require them to be paid for by the quota lessees as each transaction is completed, it is more likely that the quota trust will have to bear its own costs directly, even if the lessees bear them indirectly through the mark-up on quota. It is assumed that some costs for meetings of the group and officers' travel and subsistence will remain.

The quota trust can be expected to lease quota of a mixture of species and it is impossible to anticipate what that mix may be, though given the current activities there would appear likely to be a demand for whiting, cod, mackerel, and *nephrops*.

To overcome this uncertainty the approach adopted here is to examine the break-even point using whiting, cod and *nephrops* to provide equivalent levels of activity.

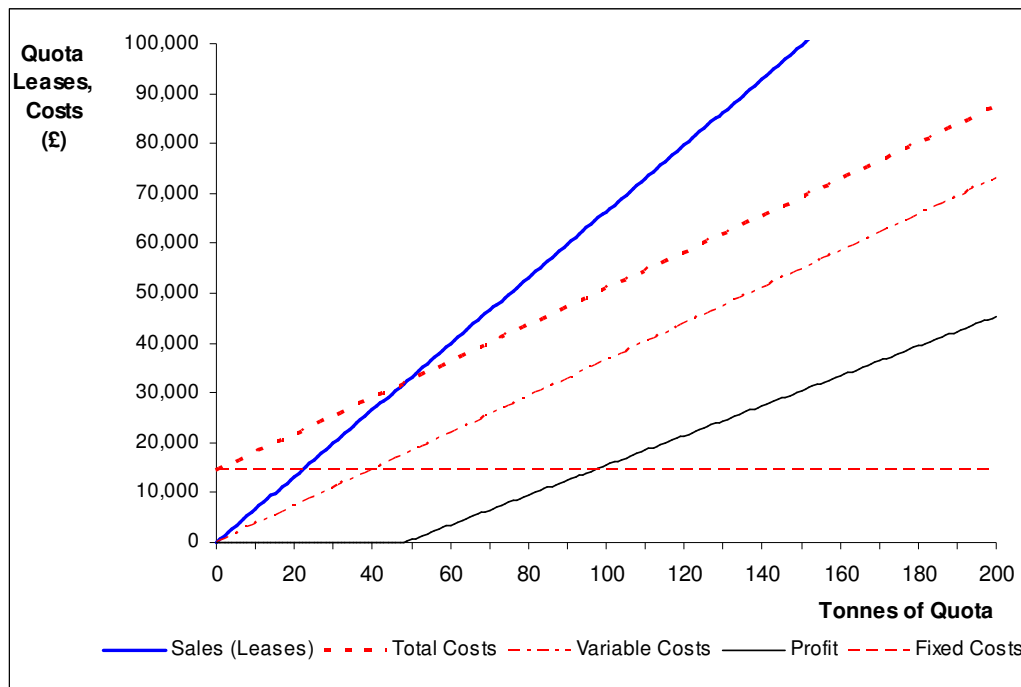
Whiting Equivalent Leases

The Fixed Quota Allocation for a 100kg unit of whiting quota was set at 25.61% for 2009 translating to a cost per unit of £85 and a cost per tonne of £322 using 2008 average prices. Whether the quota is owned by the quota trust or leased wholesale and sub-let in smaller parcels this represents the opportunity cost.

Whiting Equivalents	
Unit 2009	25.61
Cost of Unit (£)	85
Cost of Tonne	332

The figure below shows that under these strict assumptions the break even point occurs where the quota trust sells leases 49 tonnes of whiting.

Break-Even Point for Whiting Equivalent Quota Leases.



In order to satisfy this, leases worth £32,500 need to be made. To determine how much quota the trust would need raises the question of the relationship between the cost of quota to the trust and the cost of (wholesale) leases to the trust. The capital value of the quota represents the present value of an annual lease, assuming the value remained unchanged in real terms. The present value of a stream of benefits to infinity is simple to calculate where the stream of benefits is constant in real terms. It is the annual return divided by the social time preference rate of discount. For long term capital projects, the

discount rate is normally taken as between 4% and 6%⁴⁹. A rule of thumb for business is to earn back the capital cost in the first three years of sales, representing a 33% discount rate. Investment in quota may be regarded as something in between so an arbitrary figure of 10% has been chosen.

Break Even Point	49	tonnes
Capital Stock	325,264	
Annual Income	32,526	
Stock Factor	10	

It can be seen from the above table that this suggests that the quota trust will need to hold more than £300,000 worth of quotas to service this relatively small activity.

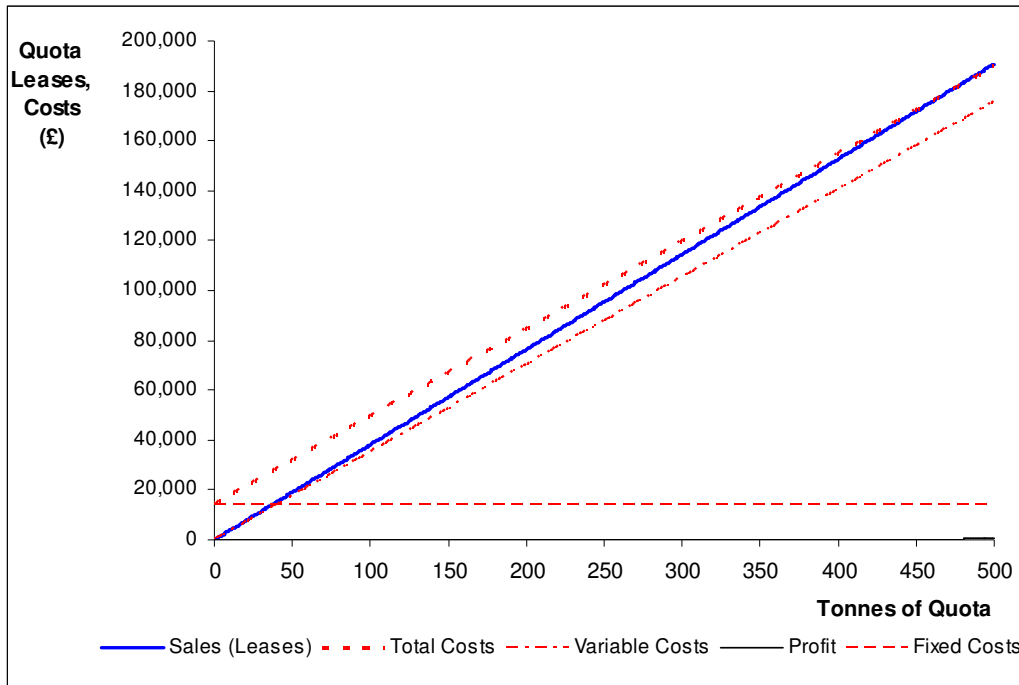
Sales	Unit Sales	
Quota Leases	664	per tonne
Mark-up	100%	
new organisation Profit on Quota	332	per tonne
Vessel Profit on Quota	7	per tonne

The sales figures have been arrived at assuming that the quota trust is able to charge a 100% mark-up on its purchases. This is a realistic amount in terms of wholesaling at such a low level of activity but given the simplicity of the operation and the ready availability of customers the quota trust should not have an expensive task in selling leases to its local fishermen. However, the vessel is left with only £7 per tonne gross profit. Given that fishing costs, including crew share, represent something in the order of 67% of the gross value of sales in the under 10m sector⁵⁰ there would be no demand for leases as they are unprofitable.

As the fleet only has approximately 30% of its income attribute to capital costs, a more realistic mark-up might therefore be 15%, allowing the gross profit from the quota to be shared equally between the vessel and the quota trust. This gives the position shown in the figure where the break-even quantity of sales is 470 tonnes.

49 The Blue Book, HMSO.

50 Watson J. and A. Martin (2002) 2001 Economic Survey of the UK Fishing Fleet, SFIA, Edinburgh, 225.



At that point, and with a discount rate of 33% the quota trust would need to own £0.5m worth of quota or lease wholesale the equivalent 470 tonnes a year. A word of caution may be introduced by noting that the Duchy Fish Quota Company has been able to charge only an average 10% mark-up.

Break Even Point	470	tonnes
Capital Stock	538,178	
Annual Income	179,393	
Stock Factor	3	

The perceived capital stock needs of a Community Interest Company are clearly sensitive to the value of the stock factor. The only current evidence we have been able to obtain applies to the difference between purchase and lease of *nephrops* quota. *Nephrops*, however, may not be typical. Quota may be less valuable at present because there are significant amounts of *nephrops* quota for the North Sea not taken. This is true of no other demersal species⁵¹. In the early days of the Fixed Quota Allocation (FQA) management system the factor was 8.33 for haddock. In Iceland the annual lease price of

⁵¹ For the purposes of fishing method, nephrops may be treated as a demersal species rather than a shellfish because the trawl gear used is akin the demersal gear, albeit with a different permitted minimum mesh size. Nevertheless, there is a significant by-catch of demersal species which frequently outweighs the nephrops catch by quantity, but not by value.

quota has been reported as being between 10% and 25% of the price of purchase, giving a stock factor of between 10 and 4⁵².

In whiting equivalents, with the quota trust asking for a margin of 50%, the break-even tonnage of quota leases is 103 tonnes. With a stock factor of 4 this implies the need to hold £200,000 worth of quota. If the stock factor is 10 the quota trust needs £0.5m worth of quota.

This also shows the sensitivity of the results to the mark-up that the quota trust might be able to charge.

The average size of quota leasing transactions at the Duchy Fish Quota Company has been in the region of £750 per lease agreement, or the equivalent of 2 tonnes of whiting per deal. In order to meet the break-even level of 470 tonnes, some 230 transactions would need to take place, if these figures were to transpose to the North East of England. This is highly unlikely to be achieved given the small number of vessels fishing for quota species along the North East Coast.

If we summarise the situation, considering different assumptions we have the following pictures:

Firstly, using a 50% mark-up with administration by a PO, a cash flow projection is given for the situation where 103 tonnes of whiting equivalents sales of leases are made.

52 Davidse W, H. Harmsma, M.O. van Wijk, L.V. McEwan, N. Vestergaard and H.Frost (1997) Property Rights in Fishing: Effects on the industry and effectiveness for fishery management policy, LEI-DLO, Den Haag.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Income													
Quota Leases	188	564	1,127	1,878	2,818	3,945	5,072	6,011	6,762	7,326	7,701	7,889	51,279
Total	188	564	1,127	1,878	2,818	3,945	5,072	6,011	6,762	7,326	7,701	7,889	
Expenditure													
Quota Costs	501	751	1,252	1,878	2,630	3,381	4,007	4,508	4,884	5,134	5,259	5,259	39,445
Salaries	0	0	0	0	0	0	0	0	0	0	0	0	0
Office Rental	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy, Rates	0	0	0	0	0	0	0	0	0	0	0	0	0
Legal Fees	2,000	273	273	273	273	273	273	273	273	273	273	273	5,000
Accountancy Fees	167	167	167	167	167	167	167	167	167	167	167	167	2,000
Insurance	250	250	250	250	250	250	250	250	250	250	250	250	3,000
Communications	125	125	125	125	125	125	125	125	125	125	125	125	1,500
Website													
Maintenance	500	45	45	45	45	45	45	45	45	45	45	45	1,000
Printing & Stationery	500	0	0	0	0	0	0	0	0	0	0	0	500
Travel & subsistence	500	0	0	0	0	0	500	0	0	0	0	0	1,000
Hire of Meeting													
Rooms	100	0	0	100	0	0	100	0	0	100	0	0	400
Capital Expenditure	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest &													
Repayments	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0
PO Admin Fee	9	28	56	94	141	197	254	301	338	366	385	394	2,564
Total	4,652	1,639	2,168	2,932	3,630	4,438	5,721	5,668	6,082	6,460	6,504	6,514	56,409
Balance	-4,464	-5,540	-6,581	-7,635	-8,448	-8,942	-9,591	-9,248	-8,568	-7,703	-6,506	-5,130	

Table: Capital Stock needed by a Quota Trust to Break Even under different scenarios

Discount Rate %	Implicit Capital Stock Factor	Mark-Up Charged %	Break-Even Tonnage of Quota Leased (t)	Annual Value of Leases (£)	Capital Stock needed
3.5	28.6	10	965	352,314	10,066,101
		50	103	51,279	1,465,108
		100	49	32,526	929,324
10	10	10	965	352,314	3,523,315
		50	103	51,279	512,788
		100	49	32,526	325,264
20	5	10	965	352,314	1,761,568
		50	103	51,279	256,392

The Table shows a series of different assumptions regarding the factors in the break-even model. In essence the break-even tonnages of quota that must be leased are dependent upon the mark-up charged while the capital stock needed varies with both the implicit stock factor given by the assumed discount rate and the mark-up that the Quota Trust is able to charge. The capital stock needed is inversely proportional to both the mark-up and the discount rate.

It is worth noting too the annual value of leases of quota necessary to break even. At the 10% level of mark-up achieved by the Duchy Fish Quota Company a turnover of some £½million would be needed. Only with a mark-up of 100% does the necessary figure come down towards levels achieved by the Company yet for the few demersal and *nephrops* vessels in the North East of England vessels that could be part of a Quota Trust scheme there would need to be an average of £1000 spent on quota leases by each vessel for the Quota Trust to achieve its break-even turnover. This would not allow the Trust to purchase quota of its own volition or otherwise progress, or to repay the original source of funding if it were from private funding rather than public subsidy.

The remaining option would be for the company to itself lease quota and then on-lease it in smaller bundles to willing lessees among the inshore fleet.

It should be noted that the situation might change significantly if stocks of crab and lobster were to be brought into the TAC and quota system. Much would depend on the extent to which these species are considered under pressure at present and the quotas set in the light of that opinion. When *nephrops* were subject to a Precautionary TAC imposed by the European Union it was at first slack, not serving to act as a constraint on landings. The implication of such a position is that the price of the quota would zero or close to it. Only if the quotas set for crabs and lobsters were to serve as a constraint on landings would the quota acquire a value and be able to be leased at a profit by the Quota Trust.

Annex F Community Management of Fisheries

Although there has been discussion regarding methods of controlling access to fisheries and dividing access rights, in general there has been less discussion of the institutions necessary to manage this effectively. This has changed in recent years, spurred perhaps by Elinor Ostrom winning the Nobel Prize for Economics for her work on demonstrating how common property can be successfully managed by user associations.

Ostrom's work suggests a series of success factors for management of common pool resources (CPRs), such as fisheries which are

- Group boundaries are clearly defined.
- Rules governing the use of collective goods are well matched to local needs and conditions.
- Most individuals affected by these rules can participate in modifying the rules.
- The rights of community members to devise their own rules is respected by external authorities.
- A system for monitoring member's behaviour exists; the community members themselves undertake this monitoring.
- A graduated system of sanctions is used.
- Community members have access to low-cost conflict resolution mechanisms.
- For CPRs that are parts of larger systems: appropriation, provision, monitoring, enforcement, conflict resolution, and governance activities are organized in multiple layers of nested enterprises.

It is clear that the current mechanisms by which the MFA manages the <10m pool are some distance from this prescription.

Specifically we can see that

- Factor 1 is clearly the case (there is a licensing system which makes it clear who is in what system)
- Factors 2 and 6 are arguable, though there is considerable inflexibility in the system, including in the use of sanctions
- Factors 3, 4 and 5 are not true for the <10m fleet, where fishermen have no chance to modify the rules per se nor are they part of the monitoring system beyond the RBS
- Factor 8 is also untrue for the <10m fleet, who are part of a national system which does not make allowance for local peculiarities

We can note that the PO system is much nearer to the list above, though we again note the fact that most of the rules are set externally, monitoring and enforcement are done externally, and there is no easy conflict resolution mechanism.

Ostrom notes that organisations can interact at different levels and defines specifically three levels

- The Constitutional Level (which institutions - formulation, governance, adjudication, modification)
- The Collective Choice Level (which policies - policy-making management adjudication)
- The Operational Level (day to day decisions - appropriation, provision, monitoring, enforcement)

These three levels interact with each other, but can be governed in different ways by different institutions and rules.

Ostrom's work does not state that inevitably collective choice institutions will develop for common pool resources such as fisheries, but rather makes the points:

- It is possible for self-organisation to work as a way of solving problems, and there are examples where this does take place (including in fisheries). This is at variance with the general belief in the "tragedy of the commons" which sees such situations as essentially a "prisoner's dilemma" game where individual self-interest will result in a non-optimal equilibrium. It is therefore not always necessary to have either privatisation and division of the resource or a strong external body.
- Where such organisations operate, they are often very effective, but for maximum effectiveness, they share some common characteristics (listed above)

If we consider this in the context of the inshore fleet we can see the following:

- The overall context is set externally, specifically in that:
 - There is a total allowable catch and this is divided into quota levels for individual species
 - If these quota are exceeded then there is a penalty which is passed on to individual fishermen (not necessarily those who have over-fished)
 - Except in scenario C, where there is rigid demarcation, on a geographical basis the inshore fleet has to interact (and compete) with the rest of the fleet whether or not it operates under the same rules
- On the other hand, the way in which fishermen are organised in order to ensure that the quota is not exceeded is not necessarily prescribed
- The level at which decisions are made (actually nationally for quotas and regionally for enforcement etc) is wider than the context in which most fishermen organise themselves (which appears to be in general around their home ports, though not exclusively)

Taking this into account we can note the following opportunities:

- Within a clear context (TAC, quotas for individual species by area), it would be possible to allocate responsibilities to groups of vessels organised on a community basis who could devise their own rules for keeping to quota limits
- A quota trust or regional CIC structure could be used to service smaller locally based community organisations, for example in being more flexible with quota or in organising collective marketing operations (noting the difficulty in funding these)

Annex G Sprats

The plight of sprats is remarkable. They represent a considerable opportunity for marketing as a delicacy.

If the vessels in the fleet could reach the shoals and land the fish there is a substantial profit to be made if a successful marketing operation were mounted, but it needs something of the scale of the conversion of the Chinese gooseberry to the kiwifruit if it is to succeed.

Nevertheless, consider the figures. There are about 60 sprats to a kilo. 6 fish would serve to make a starter for a restaurant meal – this would be the best way to sell them if they could be made fashionable and desirable. Thus there are 10 portions per kilo. Say they fetched £3.50 a portion. A restaurant works on a rough split of costs of one-third food, one-third labour and overheads, and one-third profit, giving about £1.20 to the cost of the fish. Let us attribute this as £12 per kilo or £12,000 per tonne.

Low value species show the largest marks-up from quayside to retail consumer. Mackerel are reported to see a tenfold increase in value and herring 20-fold⁵³. Sprats are reported in the MFA Sea Fisheries Statistical Tables⁵⁴ as having had an average price in 2008 of only £193 per tonne. A value of £12,000 per tonne would represent a mark-up from vessel to consumer of 62-fold, or more than 6,000%. Sprats require almost no processing before cooking, which itself is simple and quick.

There are some difficulties; they are seasonal, and despite the tonnage available – 5000 tonnes are left untaken - they are not particularly valuable to fishing enterprises.

The seasonality may prove to be a benefit for the fleet in that the £800,000 that might be added to earnings by catching sprats in the North Sea might be concentrated in a shorter period enabling a switch to complementary activities for the rest of the year.

Otherwise, even if they were to take the entire remaining 5,000 tonnes the revenue would not serve to keep more than three or four vessels in the fishery while they would need to take say. The vessels would need to take 10 to 15 tonnes of fish per night. This makes it clear why the fishery is currently unexploited. It is not economically viable.

Creating viability hinges on raising the returns from the fishery. The availability of fish from the fleets of other countries fishing the North Sea, particularly the Danish, who harvest some 60,000 tonnes in the central North Sea, mean that

53 Rodgers PE et al (2008) Marketing and Price Formation of Fisheries and Aquaculture Products, Report for the European Parliament Committee on Fisheries, No. IP/B/PECH/IC/2007-039, October.

54 Marine and Fisheries Agency (2009) United Kingdom Sea Fisheries Statistics 2008, Defra Publications, London.

the price is likely to continue to be depressed. An increase would only draw in imports pushing the price back down. Branding might serve to create the product differentiation needed to enable the fleet to extract for itself some share of the mark-up. An additional possibility would be some vertical integration, creating a cooperative or jointly owned limited liability company for packing and distributing. If this were possible the economic rent could be shared more equally between producer and caterer, but there are several marketing operations involved that must be thoroughly thought through and coordinated if this is to stand any hope of success.

It should be noted too that being a pelagic species fished by a mid-water trawl, a different licence is needed for the vessels from that held by the demersal trawlers.

Annex H The Duchy Fish Quota Company

Background

The Duchy Fish Quota Company was established in 2001 by members of the fishing industry concerned at the sale of fish quota to purchasers outside the Duchy of Cornwall. The company estimated that in the first five years of the Fixed Quota Allocation fishery management system which was introduced in 1999 fish quota was sold out of the county for some £4m.

This it was felt would have a severe impact on the size of the local fishing industry and the on-shore sector built on it as well as other negative effects such as a loss of opportunity for young fishermen to enter the industry and the loss of an attraction for the tourist industry.

Objective

The primary objective is to keep in Cornwall all the existing fishing quota held by companies based there and to repurchase quota sold outside the County.

To achieve this, the company purchases quota of interest locally and leases it to locally-based vessels.

A secondary objective is to publicise the position in order to gain support and funding for the company. Included in this is the sale of a range of publicity merchandise.

The Market for Services

The market for the services of the company is the fishing fleet based in Cornwall which comprises the most important part of the English fleet. There is no direct intention to target the inshore fleet and indeed the potential market includes some Spanish-owned British-Flagged vessels.

A particular target is young fishermen, but the company is not permitted legally to discriminate beyond Defra's economic link criteria which require a proportion of landings to be made in Cornwall.

Marketing and Promotion

The company offers quota for lease in parcels of varying sizes.

It also offers a book on seafood, a range of clothing and a calendar for publicity.

Pricing

The Company currently owns about £200,000 of quota and has an income from quota leasing of about £20,000. In the beginning there were only some

five or six leasing contracts a year made but this has increased to around 30, giving an average lease of about £650 worth of quota equating very roughly to about 2 tonnes of whiting equivalents. Leases are made at current market rates and no attempt is made to offer a subsidised product to fishing enterprises. The mark-up obtained on leases of quota normally varies between 8% and 12% of the original purchase price or current value and averages 10% but the range can extend from 5% to 18% depending on market conditions.

Management Structure

The company is run by a board of 10 directors drawn from various groups with an interest in the Cornish fishing industry. One director acts as chief executive responsible for the day-to-day running of the company. The staff is shared with Seafood Cornwall which has the marketing function.

Funding

The company has four sources of funding; bonds, donations, profits and funding from the banks.

Philanthropists have the opportunity to purchase bonds which enable the company to buy quota. The bonds offer no interest or protection against inflation. They may be for any amount and are normally for a minimum of five years, redeemable after a year's notice. Matching funding from the banks is sought.

The company seeks donations from supporters.

The number of bonds and donations has been severely restricted by concerns over the legality of the company's objective and the questions raised over the Shetland quota scheme, (where oil revenue is used to purchase quota for local fishing enterprises).

There is no membership scheme available for the Duchy Fish Quota Company system so no requirement is placed on vessels to contribute to the costs of the company other than commercially through leases of quota. All profits are currently ploughed back into the purchase of quota.

Annex I Legal Structures for the New Organisation

1 Context

In the context of the development of a business plan for the New Organisation, options for legal structure must be considered. The primary purpose of the New Organisation will be to enable, or facilitate, to articulate and respond to the needs of fishermen. This will also require it to generate income through a variety of means, both through managing quota and by running projects or providing other services to third parties. As a result of its activities and innovative projects, it is possible that additional entities (possibly organisations) will emerge. Each entity will have a defined purpose and therefore its own individual characteristics, and decisions relating to legal structure will be made on a case by case basis. For the avoidance of doubt, therefore, this paper is intended to consider only the potential structure for the New Organisation as an enabler, not the solution-based entities which may emerge as a result of the New Organisation activities.

2 Key characteristics

Many potential structures for the New Organisation exist. The most appropriate structure must be identified through evaluating each option against the key characteristics which will ensure the success of the New Organisation, as follows:

- the New Organisation must be led by, and accountable to, the fishing community.
- A level of flexibility must be maintained, particularly with respect to allowing fishermen to become more or less involved over time as their needs and circumstances change.
- The structure must be suitable for running business operations, since it will be trading.
- It should have a distinct legal personality so that it can enter into contracts as appropriate.
- Its benefits should accrue to those who run it and not just to third parties.
- It should provide maximum cost efficiencies, including tax advantages.
- It will be a business which is run for the 'common good' and will not intend to redistribute profits.
- It should have a structure which has the right image for its activities

3 Summary of Options

Legal structure	Summary: most typical features	Ownership, governance and constitution	Is it a legal person distinct from those who own and/or run it?	Can its activities benefit those who own and/or run it?	Assets “locked in” for community benefit?	Can it be a charity and get charitable status tax benefits?
UNINCORPORATED ASSOCIATION	Informal; no general regulation of this structure; need to make own rules.	Nobody owns: governed according to own rules.	No: can create problems for contracts, holding property and liability of members.	Depends on own rules.	Would need bespoke drafting to achieve this.	Yes if it meets the criteria for being a charity.
TRUST	A way of holding assets so as to separate legal ownership from economic interest.	Assets owned by trustees and managed in interests of beneficiaries on the terms of the trust.	No: trustees personally liable.	Trustees/ directors no, unless trust, court or Charity Commission permit.	Yes (if trust established for community benefit).	Yes if it meets the criteria for being a charity.
LIMITED COMPANY (OTHER THAN COMMUNITY INTEREST COMPANY)	Most frequently adopted corporate legal structure; can be adapted to suit most purposes.	Directors manage business on behalf of members. Considerable flexibility over internal rules.	Yes; members’ liability limited to amount unpaid on shares or by guarantee.	Yes (but no dividends etc to members if it is a company limited by guarantee).	Would need bespoke drafting in articles (which could be amended by members).	Yes if it meets the criteria for being a charity.
COMMUNITY INTEREST COMPANY (CIC)	New “off-the-peg” limited company structure for social enterprise with secure “asset lock” and focus on community benefit.	As for other limited companies, but subject to additional regulation to ensure community benefits.	Yes; members’ liability limited to amount unpaid on shares or by guarantee.	Yes, but must benefit wider community as well. Can pay limited dividends to private investors.	Yes, through standard provisions which all CICs must include in their constitutions.	No, but can become a charity if it ceases to be a CIC.
INDUSTRIAL & PROVIDENT SOCIETY (IPS) (CO-OPERATIVE)	For bona fide co-operatives that serve members’ interests by trading with them or otherwise supplying them with goods or services.	Committee / officers manage on behalf of members. One member, one vote.	Yes; members liability limited to amount unpaid on shares.	Yes, but should do so mostly by members trading with society.	Would need bespoke drafting in articles.	No – would have to be constituted as community benefit type of IPS.

4 Evaluation of options against key characteristics

Legal structure	Able to be led by, and accountable to, the fishing community?	Flexible re involvement of fishermen?	Suitability for running business operations?	Distinct legal personality – able to enter into contracts and manage funds?	Benefits accrue to those who run it (not just to third parties)?	Other issues
UNINCORPORATED ASSOCIATION	Yes (based on rules)	Yes (based on rules)	No	No	Yes	Would need bespoke drafting of rules
TRUST	Only indirectly – trustees are appointed not elected	Depends on way in which fishermen are involved and whether they are trustees	Overall assessment, as no limited liability	No	Can be a problem – trustees should not benefit	Involvement of fishermen as members would require complex legal drafting
LIMITED COMPANY (OTHER THAN COMMUNITY INTEREST COMPANY)	Yes, based on membership of the company	Yes, based on membership of the company	Yes	Yes	Yes	Some costs associated with running a company
COMMUNITY INTEREST COMPANY (CIC)	Yes, based on membership of the company	Yes, based on membership of the company	Yes	Yes	Yes – but benefits need to be to wider community as well	Some costs associated with running a company. Cannot be a charity
INDUSTRIAL & PROVIDENT SOCIETY (IPS) (CO-OPERATIVE)	Yes, but one member one vote	All members have to be equal	Yes	Yes	Yes but should be by trading	Orientated towards totally equal membership which may not be appropriate

5 Analysis

The ability of the New Organisation to generate its own business income will be critical to its long term sustainability. The comparison above would suggest ruling out the possibility of the New Organisation being formed as an Unincorporated Association or a Trust on the grounds that these would not have a separate legal personality, and would not really be appropriate structures for running a business operation.

The fishermen (and other stakeholders) will make varying levels of contribution to the New Organisation, both in terms of effort and financial support, and their respective gains are likely to differ dependent upon the needs of each organisation. As an Industrial and Provident Society structure requires all members to be equal, this structure is unlikely to fulfil the need to develop a core of key members, which are then accompanied by other employers on a more transient basis, determined by the needs of the New Organisation and the individual organisations at any point in time.

A *Community Interest Company* (CIC) is a relatively new structure, therefore the cost of establishment and registration are, at this stage, likely to be higher. Moreover, a CIC must be able to demonstrate that it has benefits to the wider community, not just its members. The New Organisation will be a fisherman-led initiative, and although it is likely to benefit the wider community, its primary focus will be to benefit its members. A CIC structure may, therefore, not be appropriate at the outset. It is possible to change a conventional limited company to a CIC relatively easily, but not vice versa (since the purpose of a CIC is to have a demonstrable “asset lock” which normal companies do not possess). It is possible for a conventional company to be a charity (see below) which requires more administration than a CIC, but it is not possible for a CIC to gain charitable status.

If we consider more conventional companies, there are two different types: companies limited by share capital (normal private companies) and companies limited by guarantee. In the latter case, the assets cannot be directly distributed to the members (in the way that dividends can be issued on shares) except by dissolution of the company or its sale (and this can be restricted in the Memorandum and Articles). Hence, by its nature the company is one where the assets are locked in for community benefit. A company limited by guarantee is the most popular form for membership organisations, where the members guarantee the liability to a maximum of (say) £1 and the company has separate legal personality and holds any assets. Normally there would be one vote per member, although this can be varied in the Articles of Association.

In deciding upon the legal structure it is also necessary to consider the overall purpose of the New Organisation.

For profit?

The New Organisation is being established to enable fishermen to secure their future growth and sustainability through helping them to address their skills gaps. Its purpose, therefore, is not to generate profit in itself as a commercial concern, rather to enable its members to increase their own profitability. The structure of the New Organisation could enable the distribution of profits amongst its members, however as its only customers will be the members themselves, we recommend that it is formed as a 'Not-for-Profit' organisation. If as a company, the New Organisation was a CIC or a Charity this would be clear to the outside world and would assist in gaining funds for public purposes or social enterprise. While this would not be impossible without such a status, it may make applications for funding more difficult.

Charity?

Registering the New Organisation as a Charity would have tax advantages, and may provide access to sources of funding not available to a non-charitable organisation. It is questionable whether it could be demonstrated that the initiative has a purely public purpose, as required by the Charities Commission. The potential for charitable status should therefore be considered as new entities emerge as a result of the New Organisation, rather than for the New Organisation itself. It is possible for a conventional company limited by guarantee to gain charitable status, but not a CIC.

6 Conclusion

We suggest that the New Organisation could be constituted as a Company Limited by Guarantee. This will enable it to be fisherman-led, with a core formed by key members which will then be accompanied by other fishermen on a more transient basis, determined by the needs of the New Organisation and the individual organisations at any point in time. This structure will also enable the organisation to generate its own income stream from its activity, and to enter into contracts with fishermen and funders in its own right.

At a future date, consideration should be given to gaining the status either of a charity (partly for tax purposes) or a CIC (to demonstrate its nature as a social enterprise). Since the two are exclusive, consideration should be given to the correct balance and image as the enterprise progresses: charitable status limits the objectives and increases administration, but on the other hand gives tax reductions; on the other hand CIC status makes it clear that it is a social enterprise but denies the possibility of charitable status at a later date.

Annex J Approaches to Operation

This annex considers four different operating approaches for the CIC using four combinations of staff levels and funding methods.

All four approaches assume that the CIC will reach the breakeven level of sales of quota after twelve months of operations.

The first staffing method is for an executive and secretary, which would permit some other activities, most notably in marketing, which might make the CIC eligible for public funding. The second is for a single administrator, whose function might be solely to handle quota acquisition and transfers.

The funding methods are in the first approaches for the losses to be covered by the public purse until breakeven is reached. The remaining approaches assume that funding has to be obtained from a loan of £100,000 with interest payable at a market rate of 10% pa over 5 years.

The first two approaches consider different staff levels given that the CIC is funded by pump-priming until it reaches break-even level. Given that the approach to break-even is via an S-curve it is implicitly assumed that the CIC will continue to operate at break-even in perpetuity and will not make profits to repay the initial funding.

These approaches show that losses of between £43,000 and £45,000 would be made in establishing the CIC. Prudence, to ensure that the enterprise was not under-capitalised, would suggest that funding of £80,000 to £100,000 would be advisable.

The second two approaches also consider different staffing levels with private funding. The same approach to breakeven is used as in the first approaches but it is implicit that if the CIC is able to meet the cost of establishment and repay the losses of the first year in the following four years, that it will subsequently become profitable and able to pay a dividend to its owners. A further difference is the third and fourth approaches is that purchase of capital equipment (computer, desks and chairs etc), interest and repayments of loans, and depreciation are included in the costs.

These third and fourth approaches show cash flow shortages of between £53,000 and £60,000 in the first year. Again a prudent approach to capitalisation would suggest initial funding of £100,000 to £120,000 should be sought and that therefore the £100,000 included in the cash flow projections includes a safety margin.

The gross margin on quota leases used is 50% which shares the mark-up almost equally between the fishing company and the CIC. 100% would leave fishermen with little, and a 10% mark-up is inadequate for the CIC.

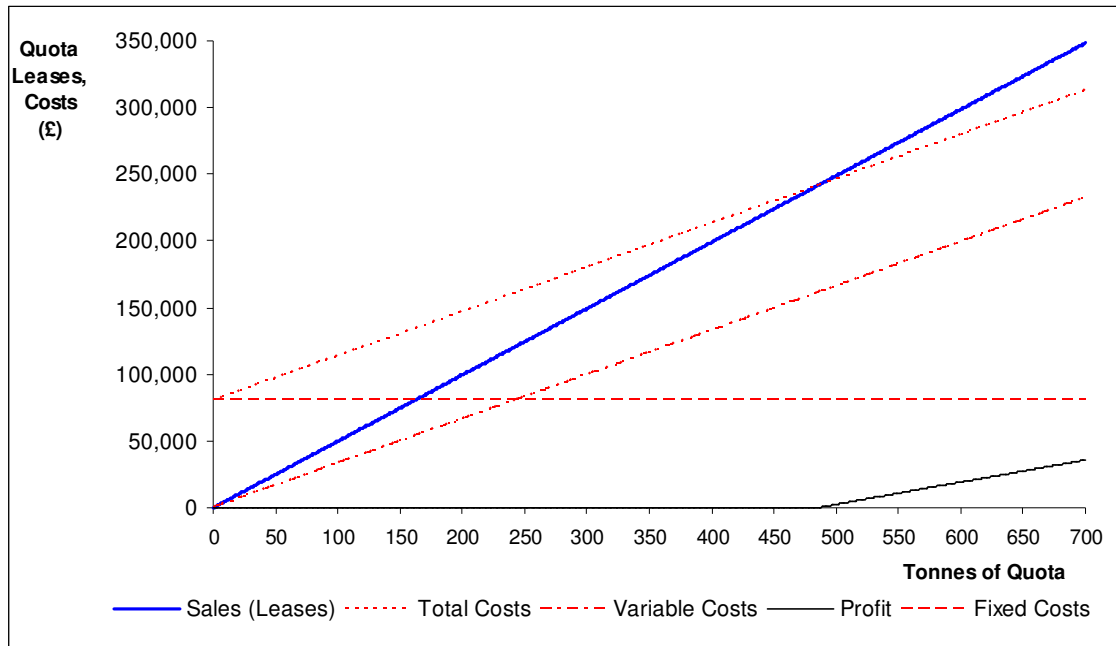
The paradoxical result – that the greater the costs incurred by the CIC, the lower the pump-priming funding needed – occurs because the increased levels of sales necessary to reach breakeven offer a greater level of profit and diminish the relative size of the fixed costs. However, the sheer scale of the operation in these circumstances is daunting, given the actual fishing opportunities even with crabs and lobsters within the quota system.

It is important to understand that the Cash Flow Charts are estimates of what the CIC would need to achieve to reach break-even in twelve months, not a forecast of what it will achieve. The success of the enterprise in the circumstances considered therefore hinges on the CIC being able to reach the levels of sales postulated in the first twelve month period. It is probably more realistic to consider that a longer period might be needed to reach break-even, especially given the tonnages of quota that have to be leased, or that some other sources of income might need to be explored to assist with staff and other costs.

1. Approach with an Executive @ £40,000 and Secretary @£15,000 plus other labour costs, totalling £60,000, Office rental £5,000pa. Public Funding to avoid loan costs.

Fixed Costs	80,400	
Salaries	60,000	
Office Rental	5,000	
Energy, Rates	1,000	
Legal Fees	5,000	
Accountancy Fees	2,000	
Insurance	3,000	
Communications	1,500	
Website		
Maintenance	1,000	
Printing & Stationery	500	
Travel & subsistence	1,000	
Hire of Meeting		
Rooms	400	
Capital Expenditure	0	
Interest &		
Repayments	0	
Depreciation	0	
Variable Costs	Unit	
	Cost	
Cost of Quota	332	per tonne

Whiting Equivalents	
Unit 2009	25.61
Cost of Unit (£)	85
Cost of Tonne	332



Break Even Point	485	tonnes
Capital Stock	2,414,584	
Annual Income	241,458	
Stock Factor	10	

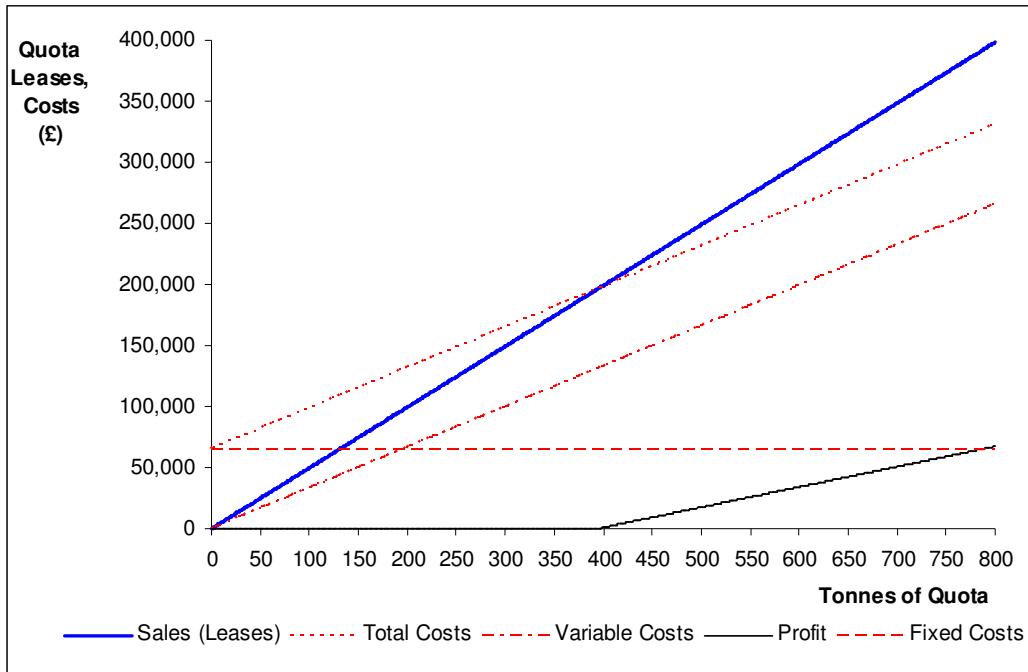
Sales	Unit Sales	
Quota Leases	498	per tonne
Mark-up	50%	
CIC Profit on Quota	166	per tonne
Vessel Profit on Quota	173	per tonne

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Income													
Quota Leases	884	2,653	5,307	8,845	13,267	18,574	23,880	28,303	31,841	34,494	36,263	37,147	241,458
Total	884	2,653	5,307	8,845	13,267	18,574	23,880	28,303	31,841	34,494	36,263	37,147	
Expenditure													
Quota Costs	2,359	3,538	5,896	8,845	12,382	15,920	18,869	21,227	22,996	24,175	24,765	24,765	185,737
Salaries	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	60,000
Office Rental	417	417	417	417	417	417	417	417	417	417	417	417	5,000
Energy, Rates	83	83	83	83	83	83	83	83	83	83	83	83	1,000
Legal Fees	2,000	273	273	273	273	273	273	273	273	273	273	273	5,000
Accountancy Fees	167	167	167	167	167	167	167	167	167	167	167	167	2,000
Insurance	250	250	250	250	250	250	250	250	250	250	250	250	3,000
Communications	125	125	125	125	125	125	125	125	125	125	125	125	1,500
Website													
Maintenance	500	45	45	45	45	45	45	45	45	45	45	45	1,000
Printing & Stationery	500	0	0	0	0	0	0	0	0	0	0	0	500
Travel & subsistence	500	0	0	0	0	0	500	0	0	0	0	0	1,000
Hire of Meeting Rooms	100	0	0	100	0	0	100	0	0	100	0	0	400
Total	12,000	9,898	12,256	15,304	18,742	22,280	25,828	27,587	29,356	30,635	31,125	31,125	266,137
Balance	-11,116	-18,360	-25,310	-31,769	-37,245	-40,951	-42,899	-42,183	-39,699	-35,840	-30,702	-24,679	

2. Approach with a lone Administrator £35,000 plus £10,000 other labour costs, totalling £45,000, Office rental £5,000pa. Public Funding to avoid loan costs.

Fixed Costs	65,400	
Salaries	45,000	
Office Rental	5,000	
Energy, Rates	1,000	
Legal Fees	5,000	
Accountancy Fees	2,000	
Insurance	3,000	
Communications	1,500	
Website Maintenance	1,000	
Printing & Stationery	500	
Travel & subsistence	1,000	
Hire of Meeting Rooms	400	
Variable Costs	Unit Cost	
Cost of Quota	332	per tonne

Whiting Equivalents	
Unit 2009	25.61
Cost of Unit (£)	85
Cost of Tonne	332



Break Even Point **395 tonnes**

Capital Stock 1,966,517
 Annual Income 196,652

Stock Factor 10

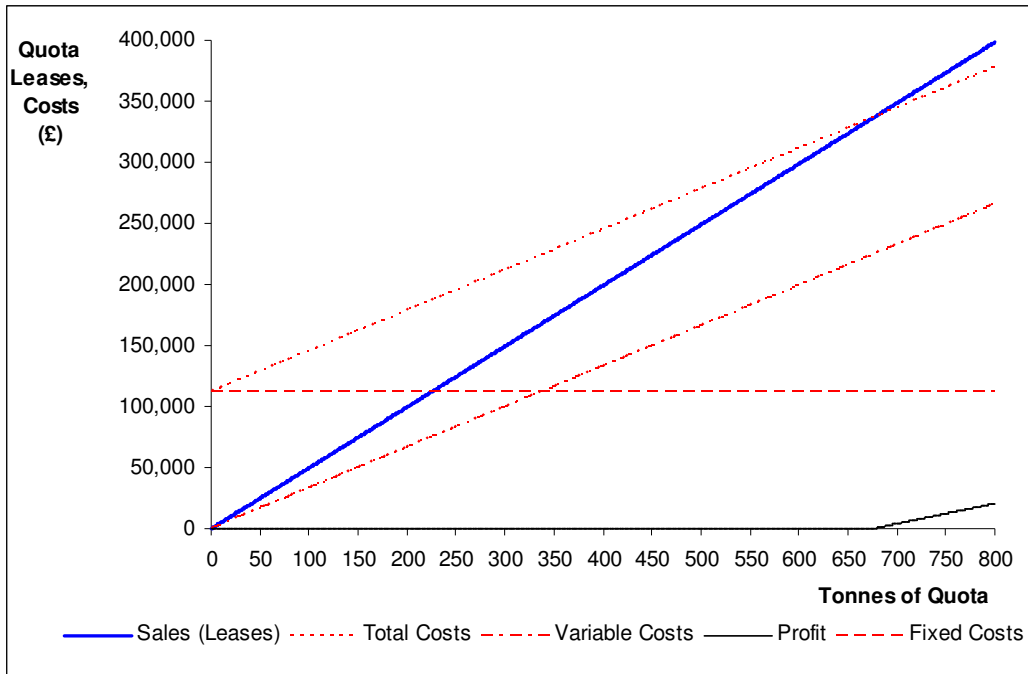
Sales	Unit Sales	
Quota Leases	498	per tonne
Mark-up	50%	
CIC Profit on Quota	166	per tonne
Vessel Profit on Quota	173	per tonne

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Income													
Quota Leases	720	2,161	4,322	7,203	10,805	15,127	19,449	23,051	25,932	28,093	29,534	30,254	196,652
Total	720	2,161	4,322	7,203	10,805	15,127	19,449	23,051	25,932	28,093	29,534	30,254	
Expenditure													
Quota Costs	1,921	2,881	4,802	7,203	10,085	12,966	15,367	17,288	18,729	19,689	20,169	20,169	151,271
Salaries	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	60,000
Office Rental	417	417	417	417	417	417	417	417	417	417	417	417	5,000
Energy, Rates	83	83	83	83	83	83	83	83	83	83	83	83	1,000
Legal Fees	2,000	273	273	273	273	273	273	273	273	273	273	273	5,000
Accountancy Fees	167	167	167	167	167	167	167	167	167	167	167	167	2,000
Insurance	250	250	250	250	250	250	250	250	250	250	250	250	3,000
Communications	125	125	125	125	125	125	125	125	125	125	125	125	1,500
Website													
Maintenance	500	45	45	45	45	45	45	45	45	45	45	45	1,000
Printing & Stationery	500	0	0	0	0	0	0	0	0	0	0	0	500
Travel & subsistence	500	0	0	0	0	0	0	500	0	0	0	0	1,000
Hire of Meeting Rooms	100	0	0	100	0	0	100	0	0	100	0	0	400
Total	11,563	9,241	11,162	13,663	16,445	19,326	22,327	23,648	25,089	26,149	26,529	26,529	231,671
Balance	-10,842	-17,922	-24,762	-31,222	-36,862	-41,061	-43,939	-44,536	-43,692	-41,748	-38,744	-35,019	

3. Approach with an Executive @ £40,000 and Secretary @£15,000 plus other labour costs, totalling £60,000, Office rental £5,000pa. Funding by means of a market loan.

Fixed Costs	112,111		
Salaries	60,000		
Office Rental	5,000		
Energy, Rates	1,000		
Legal Fees	5,000		
Accountancy Fees	2,000		
Insurance	3,000		
Communications	1,500		
Website			
Maintenance	1,000		
Printing & Stationery	500		
Travel & subsistence	1,000		
Hire of Meeting Rooms	400		
Capital Expenditure	5000	5000	
Interest &			
Repayments	25044	25044	
Depreciation	1667	1667	
Variable Costs			Unit Cost
Cost of Quota	332		per tonne

Whiting Equivalents	
Unit 2009	25.61
Cost of Unit (£)	85
Cost of Tonne	332



Break Point Even
676 tonnes

Capital Stock 3,365,482
 Annual Income 336,548

Stock Factor 10

Sales	Unit Sales	
Quota Leases	498	per tonne
Mark-up	50%	
CIC Profit on Quota	166	per tonne
Vessel Profit on Quota	173	per tonne

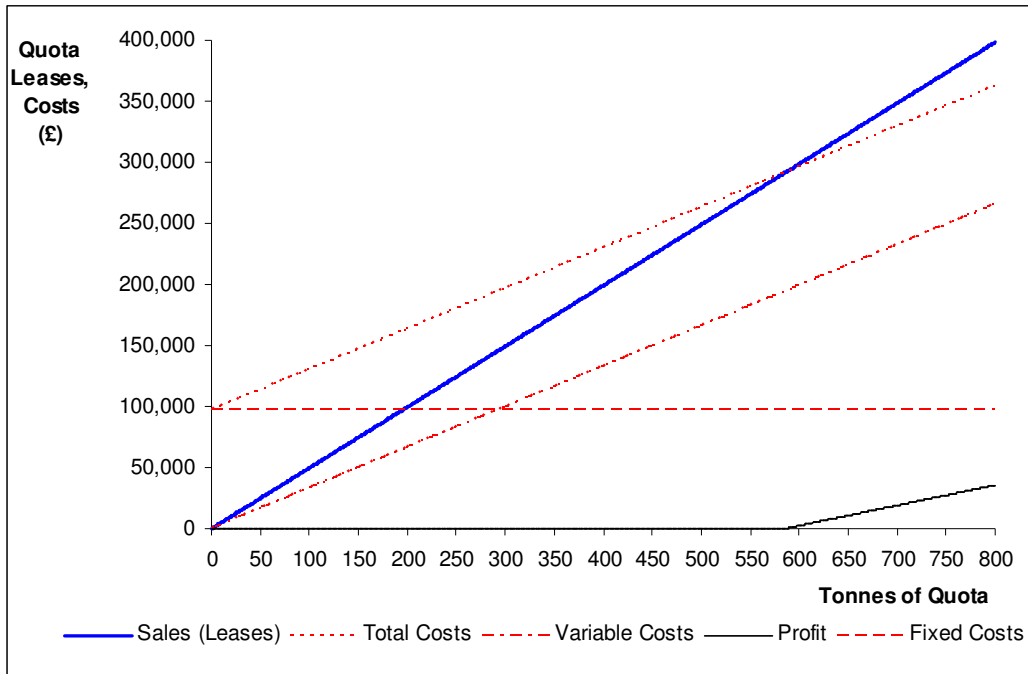
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Income													
Quota Leases	1,233	3,698	7,397	12,328	18,492	25,888	33,285	39,449	44,380	48,078	50,544	51,777	336,548
Total	1,233	3,698	7,397	12,328	18,492	25,888	33,285	39,449	44,380	48,078	50,544	51,777	
Expenditure													
Quota Costs	3,287	4,931	8,219	12,328	17,259	22,190	26,299	29,587	32,052	33,696	34,518	34,518	258,883
Salaries	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	60,000
Office Rental	417	417	417	417	417	417	417	417	417	417	417	417	5,000
Energy, Rates	83	83	83	83	83	83	83	83	83	83	83	83	1,000
Legal Fees	2,000	273	273	273	273	273	273	273	273	273	273	273	5,000
Accountancy Fees	167	167	167	167	167	167	167	167	167	167	167	167	2,000
Insurance	250	250	250	250	250	250	250	250	250	250	250	250	3,000
Communications	125	125	125	125	125	125	125	125	125	125	125	125	1,500
Website													
Maintenance	500	45	45	45	45	45	45	45	45	45	45	45	1,000
Printing & Stationery	500	0	0	0	0	0	0	0	0	0	0	0	500
Travel & subsistence	500	0	0	0	0	0	500	0	0	0	0	0	1,000
Hire of Meeting													
Rooms	100	0	0	100	0	0	100	0	0	100	0	0	400
Capital Expenditure	5,000	0	0	0	0	0	0	0	0	0	0	0	5,000
Interest &													
Repayments	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	25,044
Depreciation	0	0	0	0	0	0	0	0	0	0	0	1,667	1,667
Total	20,016	13,378	16,665	20,875	25,706	30,637	35,346	38,033	40,499	42,243	42,965	44,632	370,994
Balance	-18,783	-28,463	-37,732	-46,278	-53,493	-58,241	-60,302	-58,887	-55,006	-49,170	-41,591	-34,446	

Approach with a lone Administrator £35,000 plus £10,000 other labour costs, totalling £45,000, Office rental £5,000pa. Funding by means of a market loan.

Fixed Costs	97,111	
Salaries	45,000	
Office Rental	5,000	
Energy, Rates	1,000	
Legal Fees	5,000	
Accountancy Fees	2,000	
Insurance	3,000	
Communications	1,500	
Website		
Maintenance	1,000	
Printing & Stationery	500	
Travel & subsistence	1,000	
Hire of Meeting Rooms	400	
Capital Expenditure	5000	5000
Interest &		
Repayments	25044	25044
Depreciation	1667	1667
Variable Costs	Unit Cost	

Cost of Quota 332 per tonne

Whiting Equivalents	
Unit 2009	25.61
Cost of Unit (£)	85
Cost of Tonne	332



Break Point Even
586 tonnes

Capital Stock 2,917,415
 Annual Income 291,742

Stock Factor 10

Sales	Unit Sales	
Quota Leases	498	per tonne
Mark-up	50%	
CIC Profit on Quota	166	per tonne
Vessel Profit on Quota	173	per tonne

Annex K Abbreviations

CFP	Common Fisheries Policy
CIC	Community Interest Company
CPR	Common Pool Resource
EFF	European Fisheries Fund
ERF	Environmentally Responsible Fishing (project)
FIFG	Financial Instrument for Fisheries Guidance
FQA	Fixed Quota Allocation
IFCA	Inshore Fisheries Conservation Authority
IPS	Industrial and Provident Society
LA	Local Authority
MFA	Marine and Fisheries Agency
MMO	Marine Management Organisation
MSC	Marine Stewardship Council
NEESF	North East England Sustainable Fisheries
PMC	Programme Monitoring Committee (of EFF)
PO	Producer Organisation
RDA	Regional Development Agency
RDPE	Rural Development Programme for England
RFS	Responsible Fishing Scheme
SAIF	Sustainable Access to Inshore Fisheries (project)
TAC	Total Allowable Catch