Les publications du Pôle halieutique AGROCAMPUS OUEST n°8



2012

This report has been written by the Cellule Etudes et Transfert of Fisheries and Aquatic Sciences Center of AGROCAMPUS OUEST within the framework of the French-British project – CHARM 3 (Channel integrated Approach for marine Resource Management, phase 3) – Interreg IV A France (Channel) - England cross-border European cooperation programme, co-financed by the ERDF.

This document would be quoted as:

HENICHART Laura-Mars, LESUEUR Marie, MORGAN Richard. 2012. *Diversification of fisheries activities in the English Channel (France)*. Report. Interreg program (English Channel) CHARM 3. Les publications du Pôle halieutique AGROCAMPUS OUEST (n°8), 27 p.

Contact :

Marie LESUEUR Pôle Halieutique AGROCAMPUS OUEST Cellule Études et Transfert 65 rue de Saint Brieuc - CS 84215 35042 Rennes Cedex Tel: +33 (0)2 23 48 58 62 marie.lesueur@agrocampus-ouest.fr

© AGROCAMPUS OUEST 2012 © Photos AGROCAMPUS OUEST Les publications du Pôle halieutique AGROCAMPUS OUEST n°8



Diversification of fisheries activities in the English Channel (France)

Action 9: Economic context Synthesis of ACTION 9.2 CHARM3 Programme

Laura-Mars HENICHART, Marie LESUEUR, AGROCAMPUS OUEST Richard MORGAN, University of Portsmouth



Presentation of the project

This study on diversification of fisheries activities in the English Channel is framed within the French-British project – CHARM 3 (Channel integrated Approach for marine Resource Management, phase 3). It was selected within the scope of the INTERREG IV A France (Channel) – England cross-border European cooperation programme, co-financed by the ERDF (European Regional Development Fund).

The project started in 2003 in the Dover Strait, and was then extended to cover the eastern English Channel (2006-2008). Since 2009, the study area has been extended to the whole of the English Channel and the south of the North Sea. The expertise involved range from marine sciences to economy, maritime law, geography, statistics, conservation and information technology.

A deeper understanding of the Channel basin as a whole is necessary if we are to use its resources whilst protecting the health and sustainability of its ecosystems. This will help the pressure of the multiple user groups to be managed in harmony with the capacity of the various habitats. The multidisciplinary integrated approach of CHARM project offers decision makers a status report of the English Channel ecosystem and a range of tools based on scientific knowledge for the sustainable management of living marine resources. An integrated and coordinated view on either side of the Channel is therefore vital.





Presentation of the action 9.2

Although marine fisheries must cope with increasing difficulties (the overfishing and depletion of key fish stocks, rising operating costs and the introduction of management measures aimed at restricting fishing effort and output), the concept of multifunctionality of fisheries is emerging through the diversification of their activities. Faced with new constraints (depleted resources, rising fuel prices, etc.), fishers have developed alternatives to sustain their activity. These alternative activities call for new ways to interact with the environment, institutional players, scientists, local stakeholders and customers, in addition to their usual production activity.

The objective of this action is to list and analyse fisheries diversification activities in the English Channel. We identify the opportunities for and obstacles to the development of diversification (i.e., economic, social, and administrative limits). The final objective is to analyse how fisheries diversification activities enhance sustainability and support integrated coastal zone management (in link with action 6.2 – CHARM3 project).

Fisheries diversification activities can be defined as *"complementary activities to production (that represent less than 50% of the total turnover), in link with the product, the profession or the business that fishers practise to have an additional income but also to promote products, profession or land".*

The area discussed in the current study covers the coastline of the Eastern and Western Channel, as defined by the International Council for the Exploration of the Seas (ICES) areas VIId and VIIe.

Name	Organisation							
Marie LESUEUR								
Fabien ROUSSEL		AGPO						
Thomas SERAZIN	AGROCAMPUS OUEST	CAMPUS						
Laura-Mars HENICHART		OUEST						
Carole ROPARS-COLLET								
Richard MORGAN		University of						
David WHITMARSH	University of Portsmouth	• Portsmouth						
Damaris PHILIPPE		u n						
Bertrand LE GALLIC	Université de Bretagne Occidentale	UISC université de bretagne occidentale						
Fabienne DAURES	lfremer Brest – UMR Amure	Ifremer						

List of partners involved in this action

Acknowledgment

We would like to thank the fishers and other actors for their availability and their interest in this study. We are particularly grateful to the local and regional fishing Committees who facilitated our survey work in the territory by mobilising fishers around this project. Finally, we thank all CHARM 3 project partners who worked on the development, execution and analysis of questionnaires. They have contributed greatly to the success of this project.

	C		
lahi	e ot	conte	nts
I GINI		CONC	

INTRODUCTION1						
1. METHOD OF ANALYSIS OF DIVERSIFICATION STRATEGIES						
1.1.PRELIMINARY WORK21.1.1.SYNTHESIS OF FLEET ACTIVITIES.21.1.2.INVENTORY OF DIVERSIFICATION ACTIVITIES OF THE FLEET31.2.SELECTION OF STUDY AREA AND FOCUS ON TOPICS.31.2.1.SELECTION OF THE SPECIFIC STUDY AREA31.2.2.FOCUS ON ACTIVITIES.41.3.THE SURVEY51.3.1.METHODOLOGY.51.3.2.SAMPLING AND DATA COLLECTION7						
2. WHICH DIVERSIFICATION ACTIVITIES ARE PRACTISED IN THE ENGLISH CHANNEL?9						
2.1.MARKET-BASED ACTIVITIES						
3. WHICH ARE THE CHARACTERISTICS OF DIVERSIFICATION?						
 3.1. GEOGRAPHY OF DIVERSIFICATION ACTIVITIES						
4.1. A SEARCH FOR SUSTAINABILITY OF THEIR ACTIVITY						
5. WHAT ARE THE CONSTRAINTS ON DEVELOPING DIVERSIFICATION ACTIVITIES?15						
5.1. CLASSIFICATION OF CONSTRAINTS155.2. DIFFERENCES OF PERCEPTION DEPENDING ON REGIONS AND CATEGORIES OF STAKEHOLDERS155.3. ANALYSIS OF THE HIERARCHY OF CONSTRAINTS16						
6. WHAT FUTURE FOR DIVERSIFICATION?						
6.1. DO FISHERS WANT TO DIVERSIFY?						
CONCLUSIONS AND PERSPECTIVES20						
BIBLIOGRAPHY						



GLOSSARY	.24
APPENDIX 1: STRUCTURE OF THE INVENTORY OF DIVERSIFICATION ACTIVITIES IN THE ENGLISH	25
	.25
APPENDIX 2: LIST OF INTERVIEWED STAKEHOLDERS	.26

Introduction



The marine fisheries of Europe have witnessed a considerable change over the last forty years, which is characterised by changing access agreements, overfishing and depletion of key fish stocks, rising operating costs and the introduction of management measures aimed at restricting fishing effort and output. The fishing industry has been restructured accordingly through a process of modernisation and rationalisation of the catching sector (Symes, 2000), leading to a significant concentration and contraction of the European fishing fleet (Brookfield *et al.,* 2005). Despite the limited contribution that fishing makes to Gross Domestic Product (GDP) at the European Union and national level, the impact of these developments may be significant, especially in areas where fishing remains a significant component of regional/local economies and among independent fishers (Brookfield *et al.,* 2005).

One response by fishers to these challenges is to diversify their income source into other activities. The inherent uncertainty associated with harvesting a wild resource means that fishers have long practised horizontal diversification with respect to the species targeted and methods used by responding to variables such as season, species distribution and market price. The practice of horizontal diversification¹ is particularly prevalent among the English Channel inshore fleet (<10 m), which engages in a range of fishing activities and gears throughout the year (Ulrich *et al.*, 2002). However, in recent years, fishers have found that administrative and economic constraints have restricted such opportunities. Therefore, it has been argued that the diversification of the employment base and the creation of alternative opportunities are necessary to tackle declining employment and low incomes within the industry (Symes, 2000; Whitmarsh, 1998).

Although there is some evidence that European fishers have diversified into non-fishing related activities (e.g. Salmi, 2005; Pettersen, 2000), opportunities for such 'pluriactivity' are subject to a range of economic and social factors. Although fishers are highly skilled in the work they undertake, few of these skills are directly transferable to on-land occupations. An alternative approach is to diversify into activities that maintain a link with fishing. **This form of 'fisheries diversification', defined by Merrien** *et al.* (2008) as "complimentary activities to production, in link with the product, the profession or the business", has a number of potential benefits. In many cases, fishers can exploit their existing skills, knowledge and social networks gained through fishing without retraining. Undertaking these complimentary activities in addition to fishing may enable fishers to increase or stabilise incomes and reduce the risk associated with their primary occupation.

The aim of this report is to develop an understanding of fisheries diversification activities in the Channel. An inventory and a survey were compiled to examine the nature and extent of existing activities. Survey data was then analysed to identify the characteristics of diversified fisheries and to evaluate the opinions of fishers and fisheries stakeholders with respect to the opportunities, motives, and the likelihood of French fishers that will diversify. Finally, constraints faced by fishers when diversifying their activities were also identified.

The analysis is based on the results of a survey administered to fishers and stakeholders in France. The results of the survey on the English side of the Channel are presented in another report. A third report presents a common analysis.

¹ Horizontal diversification is a strategy where the producer decides to focus its development on new products and offers them to its regular customers or to provide existing products to new markets. Vertical diversification is a result of the company to diversify its revenue sources by integrating upstream activities (activities related to maintenance or supply of vessels) or downstream activities (promotion of products, etc.) (source: definition adapted from Wikipédia - http://fr.wikipedia.org).



1. Method of analysis of diversification strategies

The research strategy presented in this section is based on a survey. The first stage, which was conducted between November 2009 and January 2010, provided the basis to develop a methodology for the survey presented in the second section. The objective of this survey is to analyse existing diversification activities and the constraints of diversification development in the study area.

1.1. Preliminary work

Preliminary work aimed to describe the general context in which the research is embedded. We have collected general data on the fleet within the study area. In addition, we have collected specific data on diversification activities (inventory).

1.1.1. Synthesis of fleet activities

The study area of this research comprised the English Channel fishery, which is defined by the International Council for the Exploration of the Seas (ICES) management areas VIId (the eastern English Channel) and VIIe (the western English Channel), and included Channel ports on the periphery of these areas. Covering an area of approximately 75 000 km², the Channel contains approximately eighty commercially caught species of fish, shellfish (crustaceans and molluscs), and seaweed (Boncoeur *et al.,* 2000). However, the majority of landings are dominated by a smaller number of higher-value fish and shellfish species.

The research population is defined as fishing vessels registered in Channel ports on the French side, including the Channel Islands. 1483 French vessels are registered in the English Channel or nearly one third of the national fleet, and 43% of the fleet of the facade North Sea - English Channel - Atlantic. More then 3 700 fishers are involved in this area or one-third of the national total and 44% of the facade of the North Sea – English Channel - Atlantic (Phélippé *et al.*, 2011). The French fishing fleet in the English Channel is mostly composed of vessels under 12 meters (Figure 1).



Figure 1: Distribution of registered vessels by district (2008)

Source of data: European fleet file, 2008



A number of study areas of the English Channel were selected for fieldwork. The choice of areas was made according to the characteristics of each fishery maritime district based on the study conducted by Phélippé *et al.* (2011) in the CHARM 3 project. The objective was to select maritime districts that are representative of the fishing activity along the English Channel.

French fleets in the Channel are diverse in terms of gear and largely made up of vessels under 12 meters.

1.1.2. Inventory of diversification activities of the fleet

The aim of the inventory was to develop a general overview of existing diversification activities in fisheries. The existing inventory is the most extensive (in terms of activities), and a selection of activities will be undertaken later. This selection will focus on fishing activities that have a direct link with fishers (direct participation of fishers). The other activities (no direct link) may help action 6.2 of CHARM 3 project, presented by Tim Acott and Julie Urguhart (University of Greenwich).

We worked together to design a framework to collect data. Appendix 1 explains the structure of data collection. Upon agreement of the inventory framework in autumn 2009, the process of data collection commenced. Two main forms of data collection were used: internet searches and direct contact with stakeholders. Thirty-two interviews were conducted between November 2009 and January 2010 in the four French regions (Nord-Pas de Calais, Haute-Normandie, Basse-Normandie and Bretagne). They were interviewed either because they represented fishers or because they had information on diversification. An informal method of interviewing was used to facilitate appropriate flexibility of the conversation on specific topics and to allow respondents to develop relevant points. From the initial interviews and meetings, we identified the social factors belonging to the system under study and gained an understanding of the economic, social and legislative contexts.

These interviews also provided the opportunity to present our project to introduce the next survey (questionnaire to fishers and stakeholders). During the interviews, respondents were presented with a 'project booklet' to provide background to the research.

1.2. Selection of study area and focus on topics

The preliminary works led to the delimitation of our focus area where the survey would take place and a selection of focus topics for the questionnaires.

1.2.1. Selection of the specific study area

To select our area of study, we used a "terrestrial approach" because diversification activities are terrestrially anchored (regardless of where the vessel goes fishing). This assumption comes from previous studies on diversification (Merrien *et al.*, 2008), which demonstrated that the diversification of fisheries was mainly influenced by the availability of fishers on land. These activities are also strongly dependent upon local habits and traditions (past and present traditions). The administrative limits of the maritime district that have been previously described (synthesis of the activities) will be conserved to keep an administrative coherence and to facilitate data collection.

In France, 4 focus zones were identified (Figure 2): one in each Region of the English Channel (French administrative unit). Each zone is delimited by the maritime district ("quartier maritime" in French). The table below (Table 1) presents each focus zone with its specific characteristics.



Figure 2: Map of the focus zones for the survey

Table 1: Focus zones and characteristics								
Regions	Maritime Districts	Specific characteristics						
Nord-Pas-de-Calais	Boulogne-sur-Mer (BL)	 the main port of France (in volume) 						
		 a strong traditional family fleet 						
		 a tradition of direct selling 						
		 a high capacity of fisheries adaptation 						
Haute-Normandie	Le Havre (LH) - Fécamp (FC)	 dissipated small ports 						
	and Dieppe (DP)	 no auction hall in all ports 						
		 a strong tradition of direct selling 						
Basse-Normandie	Cherbourg (CH)	 an area of experimentation for the 						
		implementation of the Axis 4 of the European						
		Fisheries Fund (east side)						
		 an area with specific fleets (whelks, mussels) 						
Bretagne	Paimpol (PL) - Morlaix (MX)	 district with diversified fisheries 						
		 offshore wind farms zones (in project) 						

1.2.2. Focus on activities

The interviews with key informers allowed us to determine the focus of the study and the development of the research strategy. The survey was conducted with two types of questionnaires: one for fishers and one for stakeholders. French and English questionnaires contained a common section and a specific section that was adapted to each national context. French partners identified the focus themes that are presented in the table below (Table 2).

	Table 2: Focus themes for the survey							
Focus	Reasons							
Focus on direct selling	Preliminary works show that there is real potential for the development of this activity. Moreover, in France, the theme of direct selling in fisheries is largely evoked in many projects (at national, regional or local scale).							
Focus on the role of women in diversification	The objective is to identify the role of women in diversification activities.							
Focus on halio- environmental measures ²	Halio-environmental measures are part of current affairs in Europe and particularly in France with the establishment of "contrat bleu" ³ and within propositions for the reform of the Common fisheries policy. <i>The term « écoactivity » is also used in this report.</i>							
Focus on contract works	These practices are already developed but we have identified through the survey a lack of information on these activities.							

The results of the survey on these focus themes will not be developed in this report. Summaries, which are published in French, are available at this address: http://halieutique.agrocampus-ouest.fr • Section Cellule Etudes et Transfert • Projet CHARM 3.

1.3. The survey

To adequately capture the range of opinions and experiences concerning diversification of fisheries activities, the survey was conducted with both fishers and stakeholders involved in fisheries management. To gather their perceptions of diversification, we designed two different questionnaires with common questions.

1.3.1. Methodology

We have made the choice to apply two different questionnaires to the two categories based on the specific knowledge of each group.

Fishers and stakeholders: two categories

The questionnaire for fishers allowed the interviewee to identify the activity and also to provide their perception of diversification. The main goal was to understand the practices and strategies of diversification and to identify opportunities. The objective was also to improve the understanding of how people relate to their territory. The focus of the stakeholders' questionnaire was to identify opportunities and obstacles of development of diversification activities.

Questionnaire design

Questionnaires were designed in cooperation with the action partners. The fishers' questionnaire included common questions (between French and English partners), questions from the economic survey realised by Ifremer, and specific questions on chosen focus themes. The fishers' questionnaire was mainly based on closed questions to obtain precise and clear responses. The objective was to analyse the personal perception of fishers on diversification and their diversification practices.

Similarly, the stakeholders' questionnaire contained common questions (between French and English questionnaires) and specific questions on key focus points. The objective of the survey was to analyse the development opportunities of diversification activities as well as the economic and social consequences of this development. The questionnaire contained mainly open-ended questions.

 $^{^2\,}$ Halio-environmental measures are measures to develop more sustainable fisheries, taking into account environmental stakes.

³ This is a contract between fishers and the French state (existing only in France), which develops the environmental involvement of fishers beyond regulation and previous practices. For compensation, participants receive indemnity against the loss of turnover and created costs. The collection of waste at sea is a flagship measure of this contract.



A specific methodology: AHP – Analytical Hierarchy Process

One of the key advantages of AHP over more traditional techniques of respondent elicitation (techniques to extract the truth from an interviewee) is that the use of pair-wise comparisons converts a potentially complex exercise into a series of simple judgements, and therefore, reduces the cognitive burden of prioritising decision-making (Himes, 2007). Moreover, AHP has been applied to a variety of topics within the fisheries sector, which includes establishing stakeholder objectives in fisheries management (Mardle *et al.*, 2004; Soma, 2003) and exploring user preferences for recreational angling sites (Kangas, 1995). Developed by Saaty (1977), the AHP technique is a form of multi-criteria decision analysis that works by presenting respondents with a series of paired objectives presented at opposing ends of a numerical scale. In each case, the respondent is asked to select the position on the scale that best represents the importance/preference of one objective relative to the other. Typically a 9-point scale is used, where 9 represents the extreme importance of one variable over the other and 1 represents equal importance between the two variables (Figure 3).



Complementary data collection: descriptive index of investigated ports

The purpose of these descriptive indexes is to provide an overview of the investigated ports to complement the survey data. The descriptive indexes indicate how port accessibility can influence the attractiveness of the port. The potential of the port to attract tourists was noted before visualising the presence (or not) of typical elements of fishing activity, which may indicate the authenticity of this place to tourists or passers-by. Data is collected prior to the fieldwork to provide knowledge of the ports within the study area. However, some data (data that are difficult to find) have been collected after the visit. This information is also used in action 6.2, CHARM 3 project.



1.3.2. Sampling and data collection

In France, the questionnaire was administered by face-to-face interviewing to maximise the response rate and to ensure that the AHP component was clearly understood by respondents prior to completion. Sampling was undertaken per maritime district and per fleet (established by Ifremer). For the stakeholders' survey, organisations of interest (administrations, local or regional authorities, professional structures, etc.) were identified in each focus zone.

A sampling plan was designed to establish a pertinent (statistically pertinent and representative of the English Channel coast) and achievable number of interviews (given the fact that the fieldwork period was limited in time).

Fishers

A sampling plan was designed to obtain a representative sample of the French fleet using the same sampling rate, which was applied to each category of vessels. Vessel categories were based on the maritime district, the size of vessels (over and under 12 m) and the type of fleet (combination of metiers practised during one year). Within each category, each surveyed vessel was selected randomly and a sampling rate, which was around 15%, was used to obtain a statically pertinent sample.

A list of surveyed vessels was established based on the sampling plan, the European fleet file 2008⁴ and Ifremer data (which were presented in the CHARM 3 project - Phélippé *et al.*, 2011). The sampling plan is presented in tables below (Table 3 and 4).

Table 3: Sampling plan per fishing type of gear and per length categories							
Fishing type of gear	Length of vessels	Base population (number of vessels)	Surveyed population (number of vessels)	Percentage of the base population surveyed	Refusal (number)		
Nets	Less than 12 m	402	64	16%	4		
	More than 12 m	39	4	10%	0		
Trawls	Less than 12 m	181	29	16%	7		
	More than 12 m	184	32	17%	1		
Total		806	129	16%	12		

Source: survey 2010, European fleet file 2008

Table 4: Sampling plan per Maritime district							
Maritime district	Base population (number of vessels)	Surveyed population (number of vessels)	Percentage of the base population surveyed	Refusal (number)			
Boulogne sur Mer	167	26	16%	2			
Dieppe	70	10	14%	2			
Fécamp	38	6	16%	0			
Le Havre	23	3	13%	2			
Cherbourg	304	52	17%	0			
Paimpol	99	17	17%	4			
Morlaix	105	15	14%	2			
Total	806	129	16%	12			

Source: survey 2010, European fleet file 2008

Interviews lasted between 15-30 minutes. Fishers have appreciated to exchange on their practises. 129 fishers (16% of the total population) were interviewed in France, with a limited number of refusals (9%).

Stakeholders

A sample of stakeholders was identified from those working within the English Channel fishing industry and related sectors. In France, sampling was undertaken within the seven maritime districts of Boulogne-sur-Mer, Dieppe, Fécamp, Le Havre, Cherbourg, Paimpol, and Morlaix. Stakeholders were identified from professional organisations, administrative organisations, local authorities, the tourism industry, and other organisations linked to the sector. Fieldwork was conducted in France during summer 2010 and yielded 83 responses (Table 5 and detailed list in appendix 2).

⁴ Available at http://ec.europa.eu/fisheries/fleet/index.cfm)

Table 5: Number of interviewed stakeholders per administrative region and per categorie						
Region	Administration	Regional or local authorities	Stakeholder involved in fisheries management	Professional organisations	Tourism	Total
Basse-Normandie	1	3 (2)	1	7 (1)	3 (1)	15 (4)
Bretagne	3	6 (3)	5	10	4 (2)	28 (5)
Haute-Normandie	2	5 (4)	4	6 (4)	4 (1)	21 (9)
Nord-Pas-de-Calais	1	4 (2)	5	4	5 (1)	19 (3)
Total	7	18 (11)	15	27 (5)	16 (5)	83 (21)

Source: survey 2010 - NB: the number of refusals is specified in parentheses

Synthesis of research strategy:

Preliminary work

Synthesis of fleet activities in the Channel Inventory of diversification activities Selection of study areas 7 maritime districts PL, MX, CH, LH, FC, DP, BL

Selection of focus on topics 4 topics Direct selling, women's role, ecoactivities, contract work **Fishers survey** Sampling plan 16% of the total population

2 targeted populations for the 4 administrative regions

Stakeholders survey 83 interviews realized

The results of this methodology depict a general view of existing diversification activities in the English Channel, which include practises, logics and constraints.



2. Which diversification activities are practised in the English Channel?

The inventory of fisheries diversification reveals that a range of activities is being practised on the French coastlines (Figure 4). For the purpose of analysis of the inventory results, activities are categorised by type under the following headings: market-based activities, leisure and tourism, non-fishing contract work, and environmental activities.



Figure 4: Distribution of diversification-based activities in the French side of the English Channel Source: inventory, 2010 - NB: Signs are not proportional to the number of activities

2.1. Market-based activities

Market-based activities are defined as those where fishers have diversified within the existing market structure for seafood products. Market-based diversification constitutes the most prevalent type of diversification, which accounts for nearly two-thirds of activities in France (in the English Channel). The majority of these activities follow one of two themes: horizontal diversification into marketing initiatives (to propose new products), and downstream vertical diversification from fishing to retail (integration of downstream activities).

In horizontal diversification, fishers have sought to add value to their product through the use of tagging or 'eco-labelling' schemes that promote provenance, traceability or sustainability. Several tagging schemes exist along the coastline (Roussel *et al.*, 2011). These include schemes that are specific to regions (e.g. Filière Opale, Normandie Fraîcheur Mer, Bretagne Qualité mer) and associations that have created specific schemes (e.g. Association des ligneurs de la pointe Bretagne). Concerning eco-labels, lobster fishers from Normandy, members of the "Comité Régional des Pêches Maritimes de Basse-Normandie" and the Jersey Fishers' Association have obtained MSC certification in 2011. The tagging and labelling schemes to promote the production on the French coast of the English Channel are grouped in the following map (Figure 5).



Figure 5 : Tagging or labelling schemes present on the French coast of the English Channel *Source: inventory 2010*

With respect to vertical integration, fishing firms may diversify downstream into seafood processing, wholesale and retail. Typically, this type of diversification involves the selling of fresh fish, although examples were also found of processing and preparing seafood such as shellfish for consumption.

Direct selling by French fishers is considerably prevalent on the French coastline of the English Channel and represents the most developed form of diversification activity. In some ports, stands have been built adjacent to the docks and are rented to fishers for direct selling (e.g. stands on the docks of Boulogne-sur-Mer).

2.2. Leisure and tourism

In France, examples of diversification into leisure and tourism were identified, although their development has been restricted by regulations. The practice of fishers using their vessels for leisure and tourism activities is well established in parts of the English Channel. The practice of taking paying visitors aboard the fishing vessel is a summer season activity, which is generally undertaken by inshore fishers with smaller vessels that operate from ports that are popular destinations for tourists.

In addition to undertaking leisure and tourism activities for financial gain, examples were found of French fishers participating in local maritime and fishing festivals, including the demonstrations of net making, answering questions from the public, and allowing tourists onto moored fishing vessels. Festivals may be held to promote the sea fishing industry (e.g. shellfish festival in Granville) and individual species of fish or shellfish (e.g. scallop festival in the Côtes d'Armor and herring festival in Boulogne-sur-Mer).

2.3. Non-fishing contract work

Examples of diversification into non-fishing contract work were limited, although fishers have undertaken work for the utilities sector in recent years. While non-fishing contract work is often financially lucrative, opportunities to diversify into such activities are supply-driven and invariably sporadic. Opportunities within the telecommunications industry have become less frequent following the installation of underwater fibre-optic cables for broadband internet services in France (in the Channel). However, new opportunities may arise on the English Channel with the development of offshore wind farm zones at Le Tréport, Fécamp, Courseulles-sur-Mer and Saint-Brieuc.



2.4. Environmental activities

On the French coastline (English Channel), fishers participate in local and national research programmes including initiatives with Ifremer and national authority. Activities identified through the inventory include participating in scientific work and surveying, allowing observers onboard vessels and collecting different forms of data.

Environmental contract work, including the collection of waste, is also practised within the framework of "contrat bleu". This is a contract between fishers and the French state, which develops the environmental involvement of fishers beyond regulation and previous practices. For compensation, participants receive indemnity against the loss of turnover and created costs. The collection of waste at sea is a flagship measure of this contract.

The preliminary work reveals that a range of activities are being practised on the English Channel. However, an analysis of the fishers' and stakeholders' perception of these activities is required to complete the study and better understand the development of these activities.

3. Which are the characteristics of diversification?

The inventory revealed that diversification is practised by fishers throughout the English Channel. Diversification of fisheries activities, which is seen as an opportunity for the fishing sector, is not a new concept. Less than 20% of surveyed fishers are not involved in a diversification activity. The main activities in the English Channel are:

- direct selling first activity developed on the coastline of the English Channel;
- collection of waste at sea, within the framework of "contrats bleus" or not;
- allowing observers onboard vessels and participating in local and national research programmes;
- maritime festival participation.

Some of these activities are well established (e.g. direct selling), while others have been developed more recently in response to changing market conditions (e.g. eco-labelling). A number of trends are also discernable with respect to geographical location; vessel characteristics; and role of family members in the development of diversification activities. These are explored in greater detail in the following sections.



3.1. Geography of diversification activities

Diversification activities are strongly dependent on the region considered (Figure 6). In the North of France, fishers have practised these activities for many years (eg. direct selling in Haute-Normandie). Some activities are encouraged by local professional organisations (e.g. collection of waste in the Nord-Pas-de-Calais).



Figure 6: Practice of diversification activities per region (% of fishers, sample of 129 fishers)

Source: survey 2010

The opportunities must be present of for fisher to diversify. For example, diversification into contract working, while potentially lucrative, is often highly localised which makes it an infeasible option for many fishers. Similarly, diversification into tourism activities is more prominent among English Channel ports that receive large numbers of tourists during the summer months. Furthermore, fishers may be deterred from diversifying into these activities due to the presence of competitors (e.g. direct selling in little ports is not much developed because of the lack of clients). The additional time required to practise diversification activities can also represent a major constraint, which can explain the low number of diversified fishers in some regions (e.g. western part of the English Channel).

3.2. Specific characteristic of vessels for each diversification activity practised

Diversification is not practised by all vessels. Specific characteristics of vessels facilitate the practice of diversification. Thus, direct selling is mainly practised by vessels under 12 m in length. These vessels return to port more frequently and fishers can directly sell fresh products. Moreover, the quantities of landings are quite low; hence, direct selling is an appropriate way to promote their products.

On the opposite, some characteristics would inhibit these practices. Collection of waste at sea cannot be practised by all types of vessels. This activity directly depends on the length of vessels and on the type of gear. Our survey showed that vessels involved in this activity are trawl vessels (because they can easily bring waste up in their nets) and are more than 12 m in length (hence, they have more space on board). In large vessels, the risk of product contamination is reduced and in the same way, the risks for fishers are reduced because waste can be stored in a specific place without occupying the work-station.

A limited number of French vessels in the English Channel allow tourists on board. This activity mainly concerns vessels of more than 12 m for safety reasons. Vessels have to be fitted as requested in the regulations. Taking tourists aboard fishing vessels is forbidden for all vessels under 7 m, trawlers under 12 m and for scallop dredgers under 15 m in length.



In the studied areas, the number of vessels under 12 m in length that participate in maritime festivals is quite important. These festivals are mainly centred on coastal traditional fisheries to promote the fishers' work and community. Moreover the link between artisanal fisheries and territory and tradition is strong.

3.3. Participation of family members as a factor that enhances diversification

Family plays a considerable role in fisheries businesses. Family members can participate in fishing activities in the water and activities on land (material preparation, transport, administrative activities, management, etc.). Surveyed fishers insist on the importance of this work, which is not always recognised (administratively and financially).

Concerning diversification, the survey revealed that family participation contributed to making diversification activities easier to establish. Half of the surveyed fishers are supported by a family member in their work. For 60% of diversified businesses, a family member is involved in the activity, whereas in non-diversified businesses this rate is around 10%. The spouse of the owner's fishing business is the main family member that is involved in the activity (for 78% of the businesses that involve a family member). In the case of diversified businesses, the family member is involved in commercialisation activities (selling activities, products preparation and sell management, etc.).

The type and prevalence of diversification activities practised is strongly influenced by geographical location, vessels characteristics and the presence of the family. Thus, it depends on external and internal environment of the fishing business.

4. Why do fishers develop diversification ?

Surveys show that the practice of diversification activities depends on the territory, on vessel characteristics and on the presence of the family. However, is the practice of these activities motivated by the desire to perpetuate the traditions of a territory or does it depend upon other factors?

4.1. A search for sustainability of their activity

According to the survey, fishers developed diversification to increase their revenue (for 64% of the interviewees) (Figure 7). The main goal is to complement revenue by developing new activities. In almost all of these cases, fishers developed direct selling.



Percentage of interviewees diversified accorded to them (n=84)

Figure 7: Reasons for diversification activity development (% of fishers, sample of 84 fishers)

Source: survey 2010

The study revealed that diversification development is an individualist business strategy. Few fishers explained the development of diversification using collective justifications. Moreover, the inventory highlighted the fact that diversification activities were mostly individualist. In some regions, diversification activities are part of the tradition of fishing and fishers develop these activities as they develop their fishing activity.

4.2. ... but that finally brings little complementary revenue

Among all diversification activities practised by fishers, direct selling is the only activity that generates stable revenue, which represents on average 20% of fishers' turnover (with a variation between 1% and 80%). In Haute-Normandie, direct selling is well developed and represents 30% of fishers' turnover. This result is explained by the fact that the tradition of direct selling enhances its development and that fishers do not hesitate to directly sell large quantities.

Others activities can also generate revenue such as "contrat bleu", which generates revenue through compensations for the engagement taken in 2009 that will be received by fishers in 2010, and do not appear in this survey.

Among diversification activities, only direct selling is a stable source of complementary revenue for fishers. The fishers do not consider isolated activities (e.g. participation in festivals) as a source of revenue because these activities are temporary or perceived as insignificant.

Moreover, surveyed fishers do not define diversification as we define it, and consider that some of diversification activities presented in the study (e.g. visit of vessels, participation in scientific programmes, etc.) are part of their fishing activity. Therefore, fishers do not make distinctions between these activities and other aspects of the fishing business.



5. What are the constraints on developing diversification activities?

Fishers are not opposed to diversification development and revealed notable interest during the interviews. However, it can be difficult for them to develop these activities. This section analyses the different constraints and obstacles of diversification.

5.1. Classification of constraints

To prioritise constraints, we have to classify them. The preliminary study allowed us to establish 5 categories of constraints:

- *Economic factors*: fishers may decide not to diversify into new activities because they may be less profitable than what they do currently. New activities may also involve more risk or require capital that fishers are unable or unwilling to invest;
- Social factors: fishers may be reluctant to diversify into new activities because they detract from the tradition of fishing or their role and identity as fishers. Diversification activities may also require new skills that fishers are unable or unwilling to provide;
- Lack of information: fishers require information about the viability of different types of diversification activities, what they involve, and how profitable they may be in order to decide whether to diversify;
- Lack of opportunities: there may be a lack of viable opportunities to diversify into other activities in the area in which the fisher is located;
- *Regulation administrative constraints:* there may be some difficulties due to laws for fishers to diversify their activity (impossibility, security constraints, etc.).



The hierarchy of constraints is presented in Figure 8. Administrative constraints are seen by both fishers and stakeholders as the main constraints to diversification.



Source: survey 2010

Administrative constraints correspond mainly to constraints encountered in the development of tourism tours onboard. In 2008, these administrative constraints were also identified as the main obstacle to diversification (Merrien *et al.*, 2008).

Economic constraints are the second main constraint identified by fishers and stakeholders. However, a paradox can be analysed: although opportunities for diversification exist according to fishers and stakeholders, investments are insignificant, yet economic factors are identified as a constraint. Fishers explain that the development of diversification, even if it generates revenue, represents a risk. The success of this activity depends on many uncontrollable factors (market, demand, etc.). Fishers are not



opposed to developing diversification activities (social constraints only represent 11% of all existing constraints) but lack of time is seen as the main constraint to developing a profitable and sustainable activity.

The main difference between fishers and stakeholders is observed with respect to information. Fishers claim to have a lack of information. Moreover, stakeholders consider that fishers will not accept diversification (social constraint is the third most important constraint identified by stakeholders) and according to them the demand for this type of activity is a constraining factor of development.

5.3. Analysis of the hierarchy of constraints

Fishers' perception of constraints depends on many factors such as class of vessels, gears, age, region, perception of diversification, and revenues.



Source: survey 2010

Fishers from Brittany and Basse-Normandie consider that the economic factor is the main constraint of diversification development (Figure 9). They think that risks linked to the development of a new diversification activity are too high. According to them, a lack of opportunities for diversification is less important.

Fishers from the North and Haute-Normandie identify social constraints as a considerable constraint. According to these fishers, many diversification activities already exist in their regions and the development of new activities would have a lower chance of success and fewer links with their profession.

Regarding stakeholders, perception depends on the category of stakeholder (Figure 10). Lack of opportunities is an important constraint that is considered by administration stakeholders (31% of constraints).



Figure 10: Importance of constraints per stakeholders' category (sample of 77 stakeholders) Source: survey 2010

Finally, professional organisations and tourism representatives view administrative constraints as the main constraint on developing diversification activities. They mainly identify administrative constraint as linked with allowing tourists on board (as seen during the analysis of constraints described in a previous section). In their opinion, the development of allowing tourists to board is a great opportunity for fishers and should be encouraged by local administrations.



6. What future for diversification?

Diversification is presented in texts as a viable opportunity for fishers to cope with crisis and to maintain their fishing activity. The survey allows analyzing, from the perspective of fishers and stakeholders, opportunities for development of these activities in the future.

6.1. Do fishers want to diversify?

In this section, we analysed fishers' propensity to develop these diversification activities (Figure 11) by asking them what they would do if their activity was no longer profitable. In a situation of crisis, fishers wanted to maintain their fishing activity (68% of the interviewed fishers). They chose to diversify their fishing activity by diversifying their captures or methods of fishing. A total of 25% would choose to stop fishing; however, this choice is strongly dependent upon age. Primarily, older fishers were more likely to choose this response.



Figure 11: What would fishers do if their activity was no more profitable (% of fishers, sample of 129 fishers)? *Source: survey 2010*

A total of 33% of the interviewed fishers considered that they would choose to diversify their activity to cope with the crisis. For many of them, the present system of fishing is no longer sustainable and new solutions need to be identified. This choice of diversifying does not depend on age, region or vessel. Fishers want to keep a link with their fishing activity and refuse to develop pluriactivity (2% of fishers choose pluriactivity). Stakeholders also think that fishers will engage in diversification activities in the future.

6.2. Future prospect for diversification

Stakeholders were asked to express their opinions regarding the likelihood of fishers diversifying into activities in the future. These results may be used to indicate future prospects for diversification within different English Channel regions, although it should be noted that these results may not necessary reflect the opinion of all fishers in the English Channel.



Source: survey 2010

Combining responses for 'Very likely' and 'Likely' (Figure 12) reveals the greatest likelihood of fishers in the English Channel diversifying into taking scientists on board (more than 90%); direct selling on docks (80%); and participating in festivals and collecting waste at sea (70%).

For others activities, interviewed stakeholders identified a lower likelihood of development: activities in link with delivering products can develop but the poor demand would rapidly limit this development. Concerning contract work, the perception of the respondent depends on their knowledge of the sector and many interviewed stakeholders have no opinion on these specific domains of activity (energy companies, environmental organisations, etc.).



Conclusions and perspectives

Defining the diversification of fisheries activities is complicated and depends on the context in which they are embedded, including motivation and logic. Some activities constitute the support of operating businesses (direct selling, promotion of sea products, etc.), whereas others are more anecdotal and correspond to new socio-cultural dynamics. Diversification may be a solution for fishers to cope with new constraints by introducing innovation. It is not a solution in itself but it can represent a response to a real or perceived degradation of the economic and environmental context.

The majority of interviewed fishers practise diversification. These activities are directly linked to the territory, the region, methods of fishing and the characteristics of the vessel. Three groups of activities are identified:

- The first group concerns activities that contribute to the promotion of products. They generate revenue and are well established in the English Channel. The main activity in this category is direct selling to consumers. This activity is traditional in certain regions and represents an important source of revenue.
- The second group includes activities that do not directly generate revenue, but for which fishers could receive compensation. The activities include the collection of waste at sea, participation in scientific programmes and tourist boarding. Eco-activities are compensated through "contrat bleu" engagement. Tourist boarding is identified as a profitable activity in many French regions.
- The third group includes activities that are not really perceived as diversification activities by the fishers (participation in maritime festivals, participation in training, etc.). These activities do not generate any revenue but contribute to the promotion of the fishing sector and the profession of fishing.

During the study, fishers reported an interest in diversification activities. In areas where diversification is absent, fishers are interested in developing diversification activities. If confronted with a decrease in their revenue, one-third of the interviewed fishers reported that they would develop diversification in their fishing business. Moreover, the environmental, economic, social and politic context may facilitate or enhance this development. Eco-activities may be enhanced by European policies. Similarly, the evolution of consumer demand for fishing tourism and direct selling may facilitate the development of these activities in future years.

Diversification development may be limited by various constraints; however, discussions with interviewees during the survey revealed that some actions would enable fisher to cope with these constraints.

How to manage administrative constraints and inform diversification opportunities?

Before developing diversification activity on a large scale, it is necessary to change the existing administrative framework. Current regulations are too strict or in many case too confusing to be applied in each territory. For some activities, our results show that fishers are uncertain in terms of taxation for diversification activities because regulations are too confusing.

Generally, our results also show that fishers regret the lack of information on diversification. In many cases, regulation is not accessible and key informers are poorly defined.



These constraints are frequently discussed in other studies. The "Grenelle de la Mer"⁵ have accounted for the administrative constraints on tourism development in fisheries and placed this activity on the general agenda as a perspective for fishers. A national working group is currently working on the administrative regulation of this type of diversification activity.

Other programmes exist to develop diversification activities. "Support for diversification" is the second objective mentioned in Axis 4 for the sustainable development of fisheries. This objective includes working to improve the linkages between fisheries and other economic sectors rather than linkages within the fisheries supply chain as described in the previous section. The EFF Regulation and the FLAGs (Fisheries Local Actions Groups) tend to look at diversification in a number of ways. These groups usually start with activities that are closely related to fisheries and then broaden out. Many local strategies focus on tourism as a means to "restructure and redirect" economic activities such as local restaurants, markets, shops and leisure activities that can both complement and create a strong multiplier effect on local fisheries. In France, 11 Axis 4 groups have been established to cover the entire French coastline, two of which are along the English Channel coast.

Moreover, other tools are available to guide fishers in diversification activities development: including a guide on diversification activities in Brittany that was developed by AGROCAMPUS OUEST (Lesueur *et al.*, 2010) and two guides developed by FARNET, one on promotion of fish products: "Adding Value to Local Fishery and Aquaculture Products" ⁶ and one on diversification⁷.

What is the demand for diversification activities?

The current study allowed us to analyse the existing demand for diversification activities. According to the survey, opportunities exist to develop diversification activities in response to consumer demand. The results suggest that an analysis of this demand would be interesting to define diversification activities that may be developed in response to characteristics based on the territories' demand.

Ongoing work in different projects will contribute to our understanding of tourism-related activities. Action 6.2 of the CHARM project analyses the impact of fisheries on tourism, the cultural significance of fisheries and the potential development of markets for local products. The current study will provide a general view of the potential development of diversification. To have a market-based analysis, the local scale is more suitable. The EFF is a new tool for fishers to finance such studies on market opportunities for diversification.

Which stakeholders should be involved?

The study also revealed that administration, local authorities and the state authorities play an important role in terms of diversification development. They should be able to encourage and sustain diversification projects. They should also contribute to adapting regulations and developing structures that reflect the demand for diversification. Additionally, stakeholders should play a role in training. For example, some interviewees identified a need for training on hygienic measures in relation to direct selling.

In some ports, activities could be encouraged by the development of new structures adapted to diversification. Improving public access to ports will encourage the development of tourism linked with fishing activities.

⁵ The "Grenelle de la mer" (the French Grenelle Ocean Forum) process of stakeholder workshops is a move towards a willingness to establish the tools and the means necessary for cautious and responsible exploitation of the seas. ⁶ This report is online at the following address:

https://webgate.ec.europa.eu/fpfis/cms/farnet/sites/default/files/documents/FARNET_Adding-value_Guide-3_EN.pdf ⁷ This guide is online at the following address:

https://webgate.ec.europa.eu/fpfis/cms/farnet/sites/default/files/documents/FARNET_Diversification-of-Fisheries-Areas-5_EN.pdf



Diversification is supported by institutional actors as a possible development strategy. According to this survey, diversification may be one solution to the current crisis in the fisheries sector. However, there can be only one "element" response. The diversification of activities can never, by itself, solve all of the economic, ecological and social problems. Currently, even if the activities are performed to generate higher incomes than those derived from fishing alone, the added income is often too low to overcome the financial difficulties of fishing enterprises. Moreover, certain activities (e.g. direct selling) represent a significant overtime of work never or rarely coupled with a reduction of fishing effort thus causing a significant increase in the total working time. Thus, if the development of diversification is advantageous for fishers, other avenues should also be considered to attain their expectations.

However, the results of the survey highlight the conclusion that beyond financial contributions, diversification may have other roles. The practice of certain activities contributes to improving the image of fishers and fisheries, promoting links with the land or anchor fishing within local regions. The practice of activities related to tourism diversification and product promotion will create links with the territory to make its fishing more visible. This is one of the main aims of Axis 4 of the EFF, which is used to encourage various sectors to work together.

Bibliography



- Boncoeur, J., Coglan, L., Le Gallic, B., & Pascoe, S. 2000. On the (ir)relevance of rates of return measures of economic performance to small boats. Fisheries Research, 49, 105-115.
- Brookfield, K., Gray, T., & Hatchard, J. 2005. The concept of fisheries-dependent communities: A comparative analysis of four UK case studies: Shetland, Peterhead, North Shields and Lowestoft. *Fisheries Research*, 72(1), 55-69.
- Kangas, J. 1995. Supporting the choice of the sports fishing site. Journal of Environmental Management, 43, 219-231.
- Leblond, E., Daures, F., Berthou, P., Merrien, C., Pitel-Roudaut, M., Brigaudeau, C., Demaneche, S., Jezequel, M., Bodere, E., Le Blond, S. 2009. La Synthèse des Flottilles de pêche 2008 Flotte Mer du Nord Manche Atlantique Méditerranée. Ifremer. http://archimer.ifremer.fr/doc/00003/11456/
- Mardle, S., Pascoe, S., and Herrero, I. 2004. Management objective importance in fisheries: an evaluation using the Analytic Hierarchy Process (AHP). Environmental Management, 33(1), 1-11.
- Merrien, V., Lesueur, M., Boude, J., & Folliard, G. 2008. Diversification des activités de pêche en Bretagne: Acceptabilités et conditions de développement. Rennes: AGROCAMPUS OUEST.
- Pascoe, S. (Ed.) 2000. Bioeconomic modelling of the fisheries of the English Channel. Final Report. University of Portsmouth: CEMARE: Rep. no. 53.
- Pettersen, L. T. 2000. Household Adaptations and Gender Differences in Inshore Fishing Communities in Northern Norway. In Symes, D. (Ed.). 2000. Fisheries Dependent Regions (pp. 82-91). London: Fishing News Books.
- Phélippé, D., Daurès, F., Le Gallic, B. 2011. Panorama des caractéristiques d'exploitation des ressources halieutiques par la flotte de pêche française en Manche. Projet Interreg IVa CHARM III. Action 9.1 « Dynamiques des communautés marines exploitées et viabilité des pêcheries ». Publications électroniques Amure. Série rapport. N° R-19-2011. 98 p.
- Roussel, F., Sérazin, T., Hénichart, L. M., Ropars, C., & Lesueur, M. 2011. Diversification des activités de pêche en Manche: Etat des lieux et conditions de développement. Rennes: AGROCAMPUS OUEST.
- Salmi, P. 2005. Rural pluriactivity as a coping strategy in small-scale fisheries. Sociologica Ruralis, 45(1), 22-36.
- Soma, K. 2003. How to involve stakeholders in fisheries management a country case study in Trinidad and Tobago. Marine Policy, 27, 47-58.
- Symes, D. 2000. Fisheries Dependent Regions: Scoping the Problem. *In* Symes, D. (Ed.). 2000. Fisheries Dependent Regions (pp. 3-14). London: Fishing News Books.
- Ulrich, C., Le Gallic, B., Dunn, M. R., & Gascuel, D. 2002. A multi-species, multi-fleet bioeconomic simulation model for the English Channel artisanal fisheries. Fisheries Research, 58, 379-401.

Whitmarsh, D. 1998. The Fisheries Treadmill. Land Economics, 74(3), 422-427.



Glossary

AHP	Analytical Hierarchy Process
BL	Boulogne-sur-mer
CFP	Common Fisheries Policy
СН	Cherbourg
CHARM	Channel Integrated Approach for marine Resource Management
DP	Dieppe
EFF	European Fisheries Fund
ERDF	European Regional Development Fund
FC	Fécamp
FLAG	Fisheries Local Actions Group
GDP	Gross Domestic Product
HEM	Halio-Environmental Measures
ICES	International Council for Exploration of the Seas
LH	Le Havre
MSC	Marine Stewardship Council
MX	Morlaix
PL	Paimpol
SIH	Système d'information halieutique
VAT	Value Added Tax

Appendix 1: Structure of the inventory of diversification activities in the English Channel

	Organisation	Activity	Action	Geographical scope Descripti		Geographical scope		Geographical scope		Geographical scope		Geographical scope		Geographical scope		Description	L	Link with fishers		Impact on			Sou	irce	
Organisation	type	type/s	type	NUTS- 2 level	ICES division	of activities	Yes/No	Type of Link with fishers	Number of fishers	fishing businesses	Starting point	Stakeholders involved	Туре	Descriptio n	Contact										
Name of the organisation - programme- project - restaurant - etc.	G = Governmental	B = Blue Tourism	Collective	Town	VIIe	Description in few words	Y = Yes there is a direct link with fishers	Description of fishers participation in the activity (if YES)	(if YES) Number of fishers involved	Promotion of their production , promotion of the activity, etc.	How does this activity was launched	Who is involved in the development of this activity	NP = News papers	Name of the News Papers	lf we have a contact person : Name										
	NG = Non- Governmental	E = Eco- activities	Individual				N = No direct link with fishers						Personal = Own Website	Site Name											
	P = Private business	M = Market activities											Indirect = Indirect Promotion on	Name of the Organisati on that promote the activity											
		H = Heritage activities											Field = Due to field contacts	Type of contact (fishers, insitutions)											

Appendix 2: List of interviewed stakeholders

REGION	ORGANISATION	REGION	ORGANISATION
Basse-Normandie	Direction départementale des affaires maritimes de Cherbourg	Bretagne	Chambre de commerce et d'industrie de Roscoff
Basse-Normandie	Conseil général de la Manche	Bretagne	EDF
Basse-Normandie	Conseil régional Basse-Normandie	Bretagne	Crédit Maritime de Bretagne
Basse-Normandie	Communauté Urbaine de Cherbourg	Bretagne	Ifremer
Basse-Normandie	Chambre de commerce et d'industrie de Cherbourg	Bretagne	Chambre de commerce et d'industrie de Roscoff
Basse-Normandie	Comité Régional des Pêches Maritimes et des Elevages Marins de Basse-Normandie	Bretagne	Comité Régional des Pêches Maritimes et des Elevages Marins de Bretagne
Basse-Normandie	Comité Local des Pêches Maritimes et des Elevages Marins Ouest Cotentin	Bretagne	Comité Local des Pêches Maritimes et des Elevages Marins de Paimpol
Basse-Normandie	Comité Local des Pêches Maritimes et des Elevages Marins de Grandcamp	Bretagne	Comité Local des Pêches Maritimes et des Elevages Marins du Nord Finistère
Basse-Normandie	Normandie Fraîcheur Mer	Bretagne	Comité Local des Pêches Maritimes et des Elevages Marins Nord Finistère
Basse-Normandie	Organisation de producteurs de Basse-Normandie	Bretagne	COBRENORD
Basse-Normandie	Comité départemental du tourisme de la Manche	Bretagne	NORMAPECHE
Basse-Normandie	Office de tourisme de Granville	Bretagne	Organisation de producteurs - OPOB - Pêcheur Breton
Basse-Normandie	Office de tourisme de Saint Vaast	Bretagne	Organisation de producteurs - PROMA / PMA
Bretagne	Direction InterRégionale de la mer (DIRMer NAMO)	Bretagne	Comité départemental du tourisme des Côtes d'Armor
Bretagne	Direction Départementale des Territoires et de la Mer du Finistère	Bretagne	Office de tourisme de Morlaix
Bretagne	Direction Départementale des Territoires et de la Mer des Côtes d'Armor	Bretagne	Office de tourisme de Roscoff
Bretagne	Conseil régional de Bretagne	Bretagne	Office de tourisme de Paimpol-Goëllo
Bretagne	Conseil général des Côtes d'Armor	Bretagne	Chambre de commerce et d'industrie de Saint-Quay-Portrieux
Bretagne	Conseil général du Finistère	Nord-Pas-de-Calais	Communauté d'agglomérations du Boulonnais
Bretagne	Mairie de Paimpol	Nord-Pas-de-Calais	Pole Aquimer
Bretagne	Communauté de communes Paimpol-Goëlo	Nord-Pas-de-Calais	Office de tourisme de Boulogne
Bretagne	Morlaix Communauté	Nord-Pas-de-Calais	Office de tourisme d'Equihen

REGION	ORGANISATION	REGION	ORGANISATION
Nord-Pas-de-Calais	Direction Départementale des Territoires et de la Mer du Pas de Calais	Nord-Pas-de-Calais	CME
Nord-Pas-de-Calais	Conseil régional Nord-Pas-de-Calais	Nord-Pas-de-Calais	FROM NORD
Nord-Pas-de-Calais	Conseil général Pas de Calais	Nord-Pas-de-Calais	Comité départemental du tourisme du Pas de Calais
Nord-Pas-de-Calais	Office de tourisme d'Etaples	Nord-Pas-de-Calais	Chambre de commerce et d'industrie de Boulogne sur mer
Nord-Pas-de-Calais	Office de tourisme de Wimereux	Nord-Pas-de-Calais	Le Marin
Nord-Pas-de-Calais	Comité Régional des Pêches Maritimes et des Elevages Marins du Nord-Pas-de-Calais	Nord-Pas-de-Calais	Crédit Maritime
Nord-Pas-de-Calais	Comité Local des Pêches Maritimes et des Elevages Marins du Pas de Calais	Haute-Normandie	Syndicat Mixte du port de Dieppe
Haute-Normandie	Direction départementale des territoires et de la mer	Haute-Normandie	Comité Local des Pêches Maritimes et des Elevages Marins de Fécamp
Haute-Normandie	Direction InterRégionale de la Mer Manche Est – Mer du Nord	Haute-Normandie	Comité Local des Pêches Maritimes et des Elevages Marins de Dieppe
Haute-Normandie	Conseil général de la Seine Maritime	Haute-Normandie	Comité Régional des Pêches Maritimes et des Elevages Marins de Haute-Normandie
Haute-Normandie	Conseil régional de Haute-Normandie	Haute-Normandie	Office de tourisme Dieppe
Haute-Normandie	Mairie du Havre	Haute-Normandie	Office de tourisme de Fécamp
Haute-Normandie	Mairie de Fécamp	Haute-Normandie	Office de tourisme de Saint Valéry en Caux
Haute-Normandie	Mairie de Dieppe	Haute-Normandie	Office de tourisme du Tréport
Haute-Normandie	Chambre de commerce et d'industrie de Fécamp	Haute-Normandie	Chambre de commerce et d'industrie du littoral Normand-Picard

Réalisation, mise en page : Pôle halieutique AGROCAMPUS OUEST ISSN 2116-8709 (en ligne) ISSN en cours (papier) © 2012, Pôle halieutique AGROCAMPUS OUEST. Tous droits de reproduction, même partielle, par quelque procédé que ce soit, sont réservés pour tous les pays

Crédit photos : AGROCAMPUS OUEST

This report presents the results of the study conducted in France by the Pôle halieutique- AGROCAMPUS OUEST in the framework French-British project – CHARM 3 (Channel integrated Approach for marine Resource Management, phase 3) – INTERREG IV A France (Channel)-England. The objectives of this action are to:

• identify and describe the practice of diversification introduced by fishers on the Channel coast;

• analyze the tendency of fishers to engage in diversification;

• determine the constraints (social, economic and administrative) and the potential development of this strategy.

In France, a survey of fishers elicited the opinions of 129 fishers from the French-side Channel in the maritime districts of Boulognesur-Mer, Dieppe, Fécamp, Le Havre, Cherbourg, and Morlaix-Paimpol. A second survey of 83 stakeholders (professional organizations, local authorities, government, tourism, etc.) helped to generate external perspectives.



This study was conducted as part of the CHARM 3 programme within the scope of the INTERREG IV A France (Channel) – England cross-border European cooperation programme, co-financed by the European Regional Development Fund (ERDF).

CONTACTS

• FRANCE (AGROCAMPUS OUEST)

Marie LESUEUR : marie.lesueur@agrocampus-ouest.fr

• ANGLETERRE (University of Portsmouth)

Richard MORGAN : richard.morgan@port.ac.uk

AUTHORS

AGROCAMPUS OUEST

Laura-Mars HENICHART Marie LESUEUR

University of Portsmouth Richard MORGAN

With the collaboration of:

Fabien ROUSSEL Thomas SERAZIN Carole ROPARS-COLLET (AGROCAMPUS OUEST)



Cellule Études et Transfert Pôle halieutique AGROCAMPUS OUEST

65 rue de Saint Brieuc CS 84215 • 35 042 Rennes Cedex

http://halieutique.agrocampus-ouest.fr/

ISSN 2116-8709 (en ligne) ISSN en cours (papier)