Seafood Products Enhancement: The Case of Artisanal Fishing in France

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Abstract: Fishermen, who initially harvest the resource, usually content themselves with landing and selling the raw material. It is the food processing industry, wholesalers, distributors and retailers that create added value from the fish by transforming it or/and differentiating different types or quality grades.

Focussing upon Brittany, Normandy and the Channel coasts of Northern France, we observed that actors of the channel of market could also play their part in adding value to seafood products.

A pilot study was made among 18 fishermen, 18 wholesale firms, 11 seafood products department supervisors in supermarkets and hypermarkets and 37 fishmongers at the beginning of 1999. These 84 market studies focussed on the seven methods used to add value: modification of fishing techniques; introduction of quality improvements; differentiation between fish, shellfish and crustaceans; policies of certification or collective brands; economic integration in the sector; creation of value added products; information and promotion to consumers.
After recalling the various reasons for adding value to seafood products, the results of our market study of 84 professionals are presented in this paper.

Keywords: valorisation, artisanal fishing, strategies, behaviour, integration.

INTRODUCTION

With a production of 818,000 tons, 265,000 tons of which result from aquaculture[1], the French fishing sector is beyond the twentieth position[2] in the world. Its 9.6 billion Francs turnover represents only 0.2% of the GDP, and generates a quite low value at the first sale: 0.06%[3]. Today, fishing has the greatest deficit of all primary sectors, with –5.7 billion francs in 1998[4].

In addition, with only 14,000 direct jobs[5], the fishing industry is not particularly efficient in terms of employment.

Regarding consumption, French people eat 29 kg of fish per year, which remains quite low compared to the 60 kg consumed in Portugal (Chart 1)[6]. Seafood products correspond to a very small proportion of consummation at home: 1.1% in volume and 3.8% in value plus canned fish corresponding to 0.3% in volume and 0.8% in value.

Artisanal fishing represents 97% of the French fleet[7], that is to say 5,914 boats on a total of 6074[8]. In 1999, 282,300 tons of fish were marketed in French auction rooms for a total value of 4.2 billion of French Francs (Chart n° 2). Besides, a mode of remuneration being defined in share, artisanal fishing induces specific working conditions and

[1] Ofimer (2000) Inter-professional Office of Seafood Products and Aquaculture. The Ofimer is a public research institution for the enhancement and promotion of seafood products. (It used to be named FIOM).
[2] Agriculture and fishing figures 2000, Agreste.
[3] Landing/GDP : Bulletin Satistique Eurostat (1999).
[4] Douanes-Agreste, 1999.
[5] Insee (1999).
[6] USDA, Economic Research Service, (1999).
[7] Artisanal fishing refers to the use of boats under 25 metres in length. A subdivision specifies that boats under 12 metres represent 74% of the whole fleet, and those comprised between 12 and 25 metres correspond to 23% (Ofimer 2000).
[8] Ofimer, 2000.

ways of life (fishing time that lasts from one night or day for coastal artisanal fishing, up to fifteen days for open sea activities, sharing out in "quote shares" of the turnover between the crew and the ship owner).

Chart n° 1: apparent fish consumption in kg *per capita* (1996)

Country	**Consumption Kg/year**
France	28,7
Italy	21,6
Portugal	59,7
Denmark	23,7
Finland	32,7
Germany	12,9
Greece	19,2
Ireland	21,6
Spain	36,7
United Kingdom	19,1
European union	**22,9**
USA	21,6
Canada	22,1
North America	**21,6**
Oceania	**19,3**
Eastern Europe	**6,6**
Japan	70,7
USSR	**10,2**

Source: USDA, 1999.

Another specificity of French fishing concerns the percentage of sales made out of the auction room[9]. In spite of important disparity between the different harbours, these were estimated to be about 40% of the volumes landed along the Channel areas, and 80% in harbours of the western part of Brittany (Paimpol, Morlaix, Brest). On the contrary, these sales made out of the auction room do not exceed 10% in of "Pas de Calais", and "Haute Normandie" Regions (Dunkerque, Boulogne, Dieppe)[10]. Such situation results from both practical and cultural reasons: regional "specialisation" in terms of species, regional organisation of the fishing sector…

Finally, if we had to focus on another specificity, it would be worth underlining the great diversity of the marketed species (more than 40 species of fish, crustaceans and shellfish), as well as the important fragmentation of the landing areas, notably on the north coast of Brittany (there are 45 landing places in Brittany).

[9] Two types of sales exist out of the auction room: by mutual agreement or by direct sale.
[10] Fiom, 1999.

Chart n° 2: Major species landed and sold at the auction room in France, in 1999

	VOLUMES (in Tons)
TOTAL	**282 300 ***
Sardine	24 500
Whiting	19 650
Anchovy	18 000
Saithe	14800
	VALUES (in million francs)
TOTAL	**4 242,7**
Sole	0,42
Monkfish	0,31
Fresh cod	0,20
Sea bass	0,19

* 292 500 tons landed, 10,250 of which out of the auction room, 3.5% of the total volume.
Source: Ofimer, Division Observatoire Economique Entreprise, 2000.

Regarding this situation, for a few years, the fishing sector has tried to find itself a new position at the level of the fishing industry's structure (reduction of intermediary actors between fishermen and consumers), as well as referring to marketing processes (intention to enhance certain seafood products by providing a new definition of their intrinsic and extrinsic qualities). Yet, due to differing interests, this current seeking of position results quite problematical and poses a certain number of difficulties. Indeed, though each actor demands greater income, the means implemented to achieve are to the same. As a result, each one acts individually, thus underlining the problem of organisation and cooperation within the fishing sector.

Undoubtedly, such difficulty has a significant effect on the marketing process in which demand from consumers has become more and more demanding. Because the origin of seafood products is not always known, demand refers to food security, innovation and enhancement of the products through modes of processing, preservation and marketing. Obviously, these changes also affect artisanal fishing, even if some enhancement attempts are initiated thereto. Unfortunately, these are too often based upon the raw material and its location.

What are steps and means of the enhancement of seafood products, faced with the evolution of demand and markets, to find better balance of the added value between the actors of the industry?

In order to solve this problem, several hypotheses have been retained:

1. The enhancement of seafood products is necessary to meet the consumers' demand.

2. Enhancement is imperative to put an end to the difficult selling of certain species.
3. Enhancement is a major factor to increase the actors' incomes and particularly in artisanal fishing.

Several means were implemented to answer our problem[11]:

- A bibliographical study in order to underline the problem inherent to the sector.

- A field study based upon a survey conducted next to professionals, among which 18 fishermen, 18 wholesale firms, 11 seafood products department supervisors in supermarkets and hypermarkets, and 37 fishmongers. These 84 quite long interviews focused upon 7 enhancement techniques listed beforehand.

1-Modification of the fishing techniques;
2-Setting up of a quality program;
3-Differentiation of the various fish, shellfish and crustaceans;
4-Policy of certification, labels or collective standards;
5-Economic integration in the sector;
6-Manufacturing of elaborated products with high added value;
7-Information and promotion to consumers.

Besides, the marketing techniques concerning 7 species (sole, whiting, turbot, brill, red mullets, pouting, horse mackerel) harvested in the Channel helped to refine the different steps implemented by the fishermen for better enhancement.

In this paper, we will present the different strategic approaches used in the fishing sector in France, and more particularly those implemented by artisanal fishermen in the Channel geographical area (the area that extends between France and England). The actors' strategies, as well as those of the industry, will be simultaneously treated through the main results of our field survey, underlining the main recommendations relevant to the 7 species studied.

1. Strategies used by the various actors of the fishing industry.

In this sector that is comprised of a whole of different actors, from the fisherman to the consumer, many professional intermediaries purchase, process, and sell a raw material from which they try to create a more or less important added value (diagram n° 1, appendix A).

Today, actors of the seafood product sector have three different strategies: the strategy of concentration, the strategy of integration, and the strategy of diversification.

Chart n° 3: Market shares and central buying offices owned the French major Distributors.

Distributors	Central buying office	Market Shares (%)
Carrefour Promodès Comptoirs Modernes Economiques	*Carrefour*	**29,4**
Leclerc Système U	*Lucie*	**21,1**
Casino, Monoprix, Prisunic Cora	*Opéra*	**16,8**
Intermarché	*ITM*	**15,4**
Auchan	*Auchan*	**13,0**
	Total (%)	**95,7**

Source : AC Nielsen, 1999.

1.1 The strategy of concentration

Involving every element of the chain of market, this strategy aims at reaching scale economies and increasing the market shares (Montfort MC., 1998). Wholesalers are the most concerned; their concentration results from the obligation to adopt European standards for their buildings, the problem of a decreasing resource that obliges them to find new supply sources (notably for importation on important volumes), and finally the increasing number of food retailers.

The strategy also concerns the fish processing industry. Of the 200 fish-processing firms that existed in western France in the early 1980s, less that 45 of them are still in activity[12]. Their objective consists in having a certain economic influence and weight, to better negotiate with chain of distributors, and have easier access to European and/or world markets. This is particularly true in western France where seafood products have become the object of more and more elaborated processing (Armoric, Narvik, Kritsen, Furic Marée, Saupiquet, Comapêche…).

Since the early 1990s, the chain of distribution has been adopting similar behaviour in view to establish an "opposition force" against industrials regarding product referencing. For the moment, the first five groups of French distributors control 95% of the food industry market shares (vs. 25% in 1980)[13]. Besides, the proportion

[11] This implemented means refer to the research program "Valpêche" (FIOM).

[12] Observatoire Economique des IAA (food processing industries) de Bretagne, (2000).
[13] ACNielsen, 1999 in Dossier ANIA.

of seafood products purchased by these “large scale distributors” reaches 67% in volume and 63% in value[14]. The creation of large central buying offices activates the phenomenon of concentration (Carrefour, Lucie et Opéra) and poses the delicate problem of access to “mass distribution” in this sector, notably regarding the uncertain nature of the fishing activity and the decreasing stock of certain species (Chart n° 3).

1.2 The strategy of integration

In order to better control the various cost prices, the actors involved in the sector aim at “getting closer” to the resource. This prevents uncertain supplies in terms of quality and quantity. A strategy that concerns wholesale merchants, as well as fish processing firms, and distributors, which in some cases may even integrate the whole upstream (including purchasing of the ships) or only a certain proportion (purchasing of wholesale rooms). Basically, there are two possibilities:

- In order to invest in fishing, distributors may try to convince wholesale actors;- They may initiate an even more complete integration with hypermarkets.

Regarding the second possibility, there can be various interpretations:- A contract of direct supply between a ship owner and a hypermarket (the case of the hypermarket Leclerc, in Plérin, Côtes d’Armor Region, Northern Brittany).

- Purchasing of the ship by the integrated business; a practice that only concerns industrial fishing due to the volumes required. This is the case of Intermarché, which owns: more than 10 fishing ships; the brands of fresh processed products “Capitaine Houat” and canned products “Capitaine Cook”; the cooked meals brand “Claude Léger” some products of which are made from fish; the brand “Moulin de la Marche” that includes salmon and smoked trout; as well as the brand “Viviers de la Méloine” (Chart n° 4, appendix B).

1.3. The diversification strategy

At the wholesale level, and that of processing as well, more and more firms have been setting up this kind of strategy. Their objective consists in having better distribution of the potential risks on a larger range of products, thus amortizing the investments made. For wholesalers, the development of self-service, and «convenient» products (ready-made meals, frozen food, caterer-made products…) represents a quite interesting opportunity of diversification (boneless fillets, ready-made fish); a situation that is also profitable for fish-processing firms (cooked meals, salads, caterer-made products…).

It seems that the development, or just the preservation, of wholesale areas supposes a diversification of their activity, including notably “modern productions”. The increase in the price of raw material results in lesser profit margin for the wholesaler, thus making more imperative the diversification of its activity towards high added value products. Fish processing offers such opportunity.

In this context, because investments are quite different, the problem of the most relevant strategy remains unsolved. In this case, is it worth investing in the first or second transformation?[15]

Possibly, due to an easily controllable technology, wholesalers should better specialise in the processing of fresh products, thus diversifying their activity (fish brochettes, joints of fish, semi-elaborated meals). Productions requiring important financial investment (cooked meal technology, coating, freezing...) would remain within the kingdom of the food processing industries.

2. Collective strategies in the fishing chain of market.

Being comprised of heterogeneous actors, all having divergent objectives, individual strategies lead to the inefficiency of the fishing industry. Risks exist for each actor.

This is the case of the wholesaler who’s faced with to the various problems inherent to the sector (decreasing resource, reduction of the fishing fleet, limitations of quantities imposed y the Common Fishing Policy (CFP), regression of the sector (European standards, reduction of the working time, lack of skilled workforce). In the same way, they have to face the various constraints imposed by hypermarkets (decreasing prices, demand for regular supply, competition rules between suppliers…). Being caught between supply and demand, wholesalers often have to reduce their profit margins or even try one of the strategies we have described above. Being already in a fragile and uncertain position, the wholesale sector is basically unable to plan the future and get involved in collective programs.

Due to the favourable situation of fishermen regarding the decreasing number of boats, the decreasing resource, and higher prices, the delicate situation of wholesalers is even more obvious. As a result, we observe a dominating effect of the fishing activity on the rest of the industry. Regarding the downstream part of the sector, the situation is characterised by a domination of distributors. The

[14] Ofimer (2000).

[15] First transformation : fillet preparation, chopping, pre-packaging, semi-elaborated fresh products.
Second transformation: preparation of cooked meals, breaded fish, frozen food, etc…

specialised areas of distribution of seafood products have become somewhat insignificant, and today distributors are practically without competitors.

Hypermarkets and supermarkets can thus impose their requirements to the producers who wish to work on important volumes. The others prefer to work on different sectors such as restaurants and fishmongers.

As we could notice, many steps are being undertaken to organise the industry. Yet, most of them result from individual actors. Generally speaking, these actions are devised collectively and thus depend on the willingness of everyone. In its new prerogatives, the Ofimer has been trying to establish a collective dialogue. It aims at developing a policy of enhanced partnership between the downstream and upstream parts of .industry. Today, the organisations of producers constitute the operational link of this action in view to propose some concrete applications (Chart n°5, appendix C).

The creation and development of collective brands must be supported by favouring cooperation and mutual aid between the regions and organisms in charge of their implementation. Indeed, for practical reasons (specificities of each region in terms of species, operators, market organisation, local industry), these programs are more easily initiated by regional structures, which basically focus on small scales and local productions. Nevertheless, now they have to favour the transfer of experience between one another. At term, the federation of these various initiatives might be considered.

Regarding the various initiatives taken for official quality standards, the many difficulties encountered suppose that they are not adapted to the specificities and requirements of the fishing sector. As a result, the creation of a label that would be designed to meet the specific demands of “wild” seafood products should be considered with the *Commission Nationale des Labels* (CNCL, National Labelling Commission). A “Blue Label”, certifying higher quality, or a “French Label” certifying a location ("Brittany product"), and even a “Sustainable Fishing Label” that would certify a fishing technique respectful of the environment, might be considered (Terrier, 1995).

For any new program, as well as for those being already in application, the effort of control related to the various requirements shall be improved at all levels in the whole fishing sector. This would assure the credibility of the product in the opinion of the distributors and consumers.

The survival of the fishing sector is also dependent upon its profitability, and its added value constitutes the stumbling block. Yet, in too many cases this added value is based on the raw material, and especially for the noblest species. Although demand exists, research for extrinsic added value is still too timorous. Young consumers remain reticent to buy seafood products. Only a few species, in fillets and at reasonable price can attract the young customers. The consumption of “entire” fresh products remains limited to elderly persons.

As a consequence, it is advisable to propose viable enhancement solutions that would enable the different actors of the sector to pass greater and more equitable added value on the prices. Today, the main lines of enhancement that seem to be applied in the sector concern production (resource management, control of the quality of fish), processing (ready-made fish products, elaborated fish based products, brochettes, joints,) and marketing (communication, special price policies, customer services…).

3. The main lines of enhancement conceivable in chain of market.

In the fishing chain of market characterised by fragmented professions, the divergence of interest of the various actors leads to difficult collective adaptation (Delreve, 1996). The increase in the number of regional collective brands is a perfect illustration. In the end, both actions and the will to undertake characterise the sector. Yet, the difficulty consists in their implementation within the sector that is atypical of agriculture and its related food activity.

Regarding our surveys, despite everything, we can reasonably consider that there exist two possible sector strategies, the marketing and commercial tools of which constitute the major bases:

- A high-enhancement strategy, based upon extrinsic criteria for basic species;
- A low-enhancement strategy rather based upon intrinsic criteria for noble species.

3.1. High-enhancement strategies

These strategies refer to basic species, the sale of which (at least unprocessed) doesn’t really arouse interest except for connoisseurs. In order to widen the potential range of consumers, and also to establish customer loyalty, enhancement in terms of processing (fillets, steaks) and marketing has become necessary.

Regarding marketing, solutions exist in the segments of “ready to cook” (PAC) and “ready to grill” (PAG) products. Basically, these solutions rely on extrinsic qualities such as packaging (shape according to the fish, colour code…), the logo, labelling (location, fishing method, processing of the fish onboard and ashore, etc…), and the brand (proposed as follows: manufacturer brand, umbrella brand, product range brand, and product brand), (Arthur and al., 2000). At the store level, these extrinsic assets should imperatively be part of a shelf space based upon organisation methods and merchandising control (warm zone, cold zone, areas proposing the most famous brands, control ratios: yield rate, productivity rate, turnover rate…).

Finally, it is advisable to combine to these methods of marketing, some relevant consumption areas favouring the customer's situational and functional constraints (service brought by the product considering the constraints of consummation place, the time devoted to the action of consumption, as well as the consumer's living environment).

3.2. Low enhancement strategies

These strategies would rather refer to noble species from the wild: sole, turbot, brill, sea bass, and salmon. Due to their intrinsic qualities (flesh, texture…), these products belong to the top end of the range (K. Galatoire, 1999). *De facto*, their locations, freshness, the way they are caught are obvious advantages that must be exploited. Yet, in the tangible and intangible universe of the consumers, these assets are not always exploited the way they should be (appetence). Indeed for the consumer, these species are basically assimilated to a festive marketing positioning. Thus, such products are not directly aimed at the young consumers. Their prices act as a brake and even an obstacle that must be removed, at least if the professionals' intention consists in targeting these species at wider categories of consumers (20-35 years old). The key component that would lead to the democratisation of these species seems to be the aggregation of the different actors of the industry in a common policy combined with a more generic communication program. But you still have to give yourself the means. The many regional collective actions initiated here and there just add confusion to the consumers' mind. In the end, such steps result in a compartmentalisation of the market, and to the rapid saturation of its many "micro segments".

Among the possible enhancement possibilities, most of those referring to processing rely on its first stage: fillets, steaks, etc. As far as the commercial enhancement possibility is concerned, a logo and a brand indicated on a codified packaging (colour, shape…) seem to be imperative (Chart n° 6, appendix D).

All the professionals we met are favourable to the development of communication means that would incite people to eat more fish, crustaceans, and other seafood. They would also accept to pay a financial contribution. Advertising is probably more useful in regions distant from the sea. On the littoral, the rate of consummation is undoubtedly higher due to a better knowledge of the product and the confidence consumers have regarding fish (A. Fady, and al, 1999).

In a perspective of traceability, some fishermen are favourable to the identification of the geographical location of the fish and they admit that it has even become a necessity.

Compared to agricultural products, and those related to this sector of activity, seafood products have a major advantage. Indeed, we must stress on the fact that in spite of the expenses generated by this communication (various advertising media, salary of the people in charge of promotion), seafood products are the last natural products "from the wild", that have not been artificially processed, or tampered with.

CONCLUSION

This study revealed a real problem of coordination between the different actors of the industry, prejudicial to the development of added value for artisanal fishermen. Basically, this results from divergences of interests between the upstream and downstream parts of the sector. Fishermen are more interested in maximum profit on non-processed raw material, than in integrating the organised sector with contacts and relationships between the various partners. This is all the more regrettable since consumers tend to be more and more attracted by processed and enhanced products.

Generally speaking, and also for each species studied, the analysis of enhancement practices that were initiated by other participants (wholesalers, distributors and fishmongers) confirm this observation.

The detail of these additional studies will be presented in subsequent papers.

References

Artur Ph. et al., Valorisation d'espèces de poisson : Turbot – Barbue – Rouget barbet – Tacaud – Chinchard issues de la pêche artisanale en Manche, Insfa - *Ensar Halieutique*, janvier-avril, 96p, 2000.

Charles E., Les démarches qualités en conchyliculture. mémoire de DEA Economie et Politique Maritime, *ENSAR-UBO*, 198p, 1997.

Charles E. and Paquotte P., Product differentiation, labelling and quality approach : developments and stakes in the french shellfish market, *Aquaculture Economics & Management*, vol. 3, number 2, 10p, 1999.

Charles E., Valorisation des produits de la pêche artisanale en Manche : quelles stratégies et incitations pour les entreprises de pêche ? , *Working Paper, Séminaire CEDEM*, 26p, 2000.

Delreve V., Marins de pêche artisanale en Manche orientale, études des organisations professionnelles et des pratiques des pêcheurs du boulonnais et de l'Est Cotentin. thèse de sociologie, *Université des Sciences et Technologies de Lille*, Lille, 1996.

Eurostat, « Importance économique de la pêche », Bulletin Statistique, *Commission Européenne 3*, DG XIV, septembre, 1999.

Fady A. et al., Valorisation des produits de la pêche, revenus des pêcheurs et pratiques de pêche. octobre, Recherche Valpêche, *Ensar – Université de Rennes 1*, 28p, 1999.

Galatoire K., La valorisation des produits de la mer : exemple de la sole et du merlan débarqués par les bateaux de pêche artisanale du littoral de la manche. *Insfa-Ensar Halieutique*, avril-septembre, 98p, 1999.

Guillotreau P., Valorisation des produits de la mer : le cas lorientais. mémoire DEA, *Ensar, Rennes*, 1989.

Insee, Images économiques des entreprises au 1er janvier 1998. tome 2, *Insee Résultats*, 327-329, 1999.

Monfort MC., Le marché européen de produits de la mer, changements structurels et réponses de l'indusrie, *La pêche maritime*, janvier-février, 264-270, 1998.

Observatoire Economique des IAA de Bretagne, Les cartes de la Bretagne agro-alimentaire. *Conseil Régional Bretagne*, 15p, 2000.

Ofimer, Bilan annuel de production 1998 des pêches et de l'aquaculture. *Office National Interprofessionnel des produits de la mer et de l'Aquaculture*, 18 p, 1999.

Ofimer, Bilan annuel 1999, données de commercialisation sous criées. *Office National Interprofessionnel des produits de la mer et de l'Aquaculture*, 61 p, 2000.

Terrier I., Label bleu ou adaptabilité des produits de la mer aux signes de qualité. mémoire DAA halieutique, *Ensar, Rennes*, 92p, 1995.

USDA, Aquaculture Outlook. *Economic Research Service*, LDP-AQS-9, March 5, 1999.

APPENDIX A: Diagram 1 : Actors and their relationships in the artisanal chain of market.

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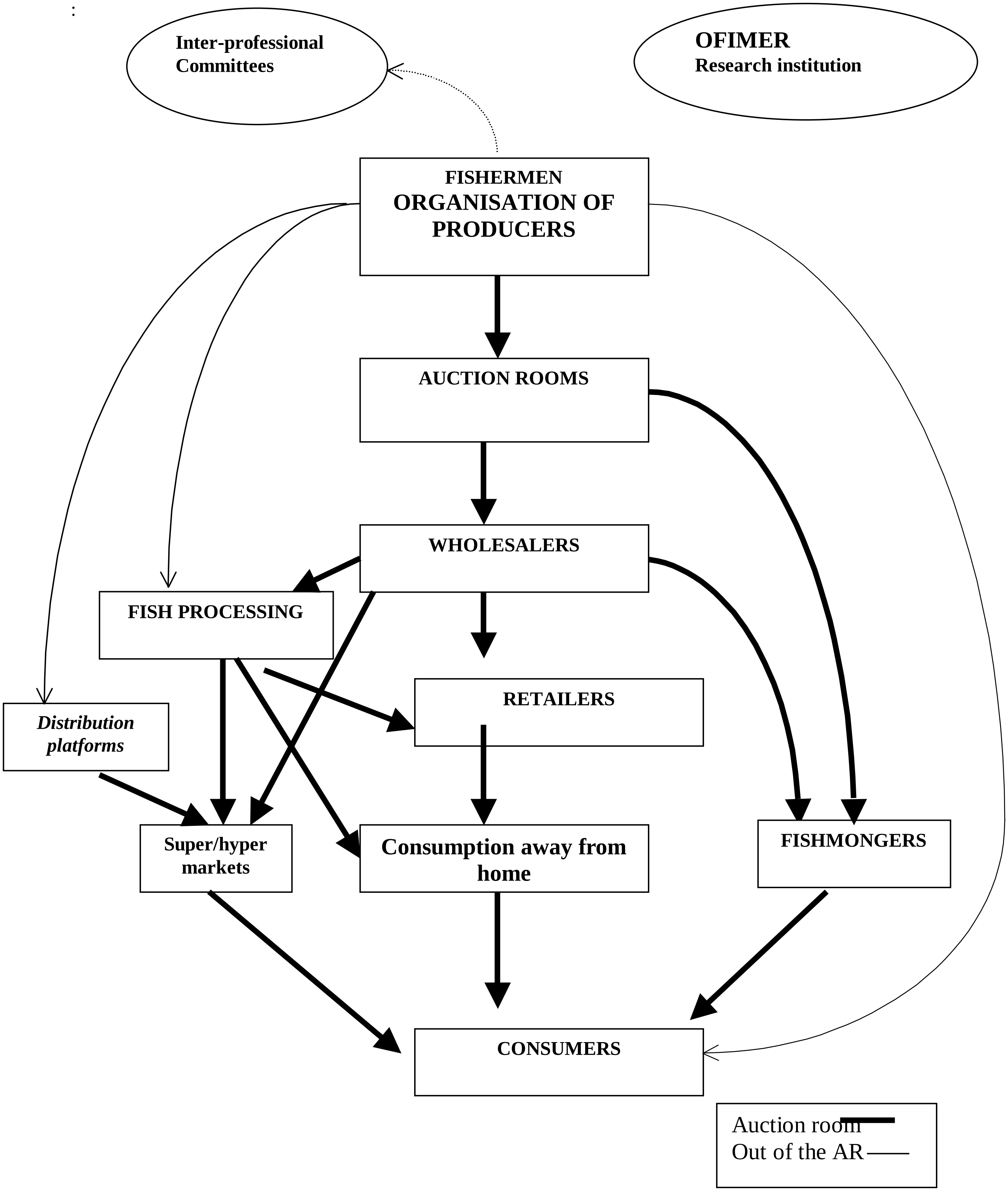

APPENDIX B: Chart n° 4 : Sectors and brands owned by Intermarché Groupings.

Sector	**Fleet of Fishing Industries**	**Fleet**	**Ship size**
Fishing	Belonging to the group Intermarché	4 trawlers 4 trawlers 3 tuna ships	54 m 38 m 87 m
	Partnership with « Keroman pêche » (Lorient)	1 trawler	38 m
	Partnership with « Armement Nicot » (Concarneau)	13 trawlers	Between 24 et 33 metres.
Sectors	**Food Processing Industries**	**Segments**	**Product Brands**
Fish ponds	« Les viviers de la Méloine »	Vacuum-packed crustaceans and shellfish. Up-market oysters.	Régal des flots Belle du Cap
Fish smoking process	« Moulin de la marche »	Up-market smoked trouts and salmons. Mid-market smoked trouts and salmons.	Moulin de la marche Ulvik
Fresh processed products	« Capitaine Houat »	Cooked shrimp/prawn Frozen fish fillets.	Régal des flots Grand froid
Canned products	« Capitaine Cook »	Canned sardines for the western region. « sea-caterer » (tarama, potted fish flesh). Canned fish.	Douarneniste Odyssée Capitaine Cook
Cooked meals	« Claude Léger »	Whole cooked meals. In packets, to share, made from Alaska Salmon.	Claude Leger Les Poëllés

Source : Intermarché, 2000.

APPENDIX C : Chart n° 5: Setting up of enhancement and quality programs.

Sectors	**Collective steps**
PRODUCTION	Management of the restriction of resources by organisations of producers (limitation of the number of nets / seaman present onboard, catch plans concerning non over-exploited species…)
	Enhancement of the species thrown back to the sea (partnership between producers and industrials: Stalaven and Celtigel…).
	Enhancement of "over-harvested" species: pouting, red mullets…)
	Processing of the fish onboard (sorting, gutting, washing, icing and separation of the species with film: Boulogne sur Mer)
	Labelling of fresh fish boxes: name of the boat, weight of the box and name of the species (CME and Copéport)[16]
	Improvement of hygiene onboard (bleach washing of the boat, different gloves for the different operations, high pressure washing of the hold, sorting and management of scraps).
	Limitation of the time spent at sea: « Qualité Petits Bateaux », « Pêche du jour » (Etaples, Pas-de-Calais)
TRANSFORM-ATION	Ready-made products (PAC), products ready to grill (PAG): Semi-elaborated products: gutted fish, with the head cut off, scaled; fillets, thin and thick steaks…(whiting, sole, turbot, pouting)[17] Elaborated fresh products[18]: joints, brochettes, fish-based pudding, pâté, potted fish flesh, minced steaks, cooked meals…(pouting, red mullet, whiting).
	Packaged fresh products available in self-service department: fillets, joints, steaks (whiting, sole, turbot…)
	Frozen products (whole or fillets): whiting, pouting
MARKETING	Interconnection between auction rooms[19]
	Collective brand *Bretagne Qualité Mer* (BQM)[20]
	Ligneur de la pointe de Bretagne
	Certification Qualité Pêche Fraîche : CQPF
	Charte Qualité Carrefour-Béganton : common crab
	Assistance to advanced landing in Guilvinec
	Normandie Fraîcheur Mer (NFM)
	Fraîcheur du Littoral de Haute Normandie
	Label rouge (farmed fish, aquaculture and shellfish farming)[21]
	Generic communications

Sources : Ensar-Halieutique, Insfa, IGR (2000).

[16] A process to which some actors are favourable in order to make clients more confident and incite them to buy. Yet, it would be necessary to control the exactness of these indications. This would also pose a certain number of difficulties to the wholesalers, who usually group the various supplies of several auction rooms to constitute the large volumes required by customers.

[17] This refers to the enhancement of products stemming from artisanal fishing on the Channel coast of France. It is the same regarding fresh packaged products and frozen products.

[18] We did not notice any situation in which fishermen would be at the origin of the manufacturing of elaborated products; yet, such observation does not mean that these practices do not exist.
For professionals, their absence from the industrial system results from choices of investment.

[19] It would be worth having a real-time assessment of the quantities proposed for sale and the prices practised in the reality in all French auction rooms. It could prevent situations such as important quantities of a species proposed in a single auction room. Prices would not collapse, and supplies could be scattered equitably on the different markets.

[20] This certificate of quality, (with labelling of the fish at landing), is accepted by most fishermen. Nevertheless, it gives rise to interrogations about the way the goods are controlled and followed up in the whole industry throughout time.

[21] The creation of labels has become the object of multiple reflections about artisanal fishing. Fishermen wish that organisations of producers agreed with the idea that all supplies are not similar. Differences are obvious whether the catch was harvested during the day, or several weeks. The grant of labels to a given type of fish must notably depend upon the time spent at sea. Yet, a labelled product at the source might be damaged, thus deceiving the final customer: a « lined sea bass » is not necessarily of better quality than a trawled one being caught at the end of the fishing campaign; many professionals admit they would not be able to differentiate the two fish.

APPENDIX D: Chart n° 6: Main lines of enhancement according to the species studied in the Channel.

Species	**Appellations**	**Segments**	**Enhancement by processing**	**Commercial enhancement**	**Communication tools**
Sole	Night fishing Sole Sole de pays (Regional sole)	Pre-packaged in small box (LS)	Gutted, scaled fish, with the head cut off Fillet with or without bones, thin and thick steaks	Labelling: location, fishing method, processing made upstream Logo + brand	
Whiting	Lined whiting	Pre-packaged in small box (LS) Fresh elaborated (smoking)	Gutted, scaled fish, with the head cut off Fillet with or without bones, thin and thick steaks, minced, pâté, potted flesh, tartare	Labelling: location, fishing method: « artisanal fishing whiting » Logo + brand	Communication in the store
Turbot	Turbot from the wild		Fresh, pâté		Animation
Brill	Harvested in the Channel Autumn fish	Small box PAC (LS)	Fresh or smoked fillet, pâté, marinaded		
Red mullet		Small box PAC (LS or RHD)	Fresh	Labelling: « artisanal fishing red mullet » or «coastal fishing » « harvested in the Channel » Logo + brand	Communication at the national level
Horse mackerel		Small box PAC or PAG (LS)	Fillet, pulp for « surimi », canned (export)	« Artisanal fishing horse mackerel » or « coastal fishing » changing of the name (in French) Logo + brand	Training of the salesmen
Pouting	Small boat quality	Small box PAC (Caterer LS)	Fillet, boneless minced steak, pâté, potted flesh, tartare, “surimi”, pulp	« Artisanal fishing pouting » or « coastal fishing » changing of the name (in French) Logo + brand	

PAC: “Ready to cook”, PAG: “Ready to grill”, LS: Self service, RHD: “Out of home” catering (Source: Surveys)