Growth and Competition in the Italian Seafood Chain

Massimo Spagnolo, IREPA
Erhard Ruckes, FAO and Audun Lem, FAO.

Abstract: The Italian seafood chain is experiencing strong evolutionary pressures. Domestic operators, especially at catch level suffer from weak organisational structures and poor logistics, fragmentation and lack of specialisation. Based on an analysis of the sector's strengths and weaknesses, the authors present three recommendations for bringing about the necessary changes. Whereas institutional support and investments are needed, the catalysts of change are found in the system itself and brought about by the operators.

1. INTRODUCTION

The nucleus of this paper derives from a report produced in 1999 by IREPA (Istituto Ricerche Economiche per la Pesca e l'Acquacoltura) for the Italian Ministero delle Risorse Agricole, Alimentari e Forestale, Direzione Generale della Pesca e dell' Acquacoltura as part of the IV Triennial Plan for Marine Fisheries and Aquaculture in Italy.

The analysis evidences the fundamental elements which characterise the production and distribution levels in the Italian seafood chain. In the study the variety and peculiarities that characterise but also influence the Italian seafood sector clearly emerge. At the same time, the high level of interaction between the elements makes identification of the sectoral dynamics and evolutionary tendencies very complex.

In particular, the study shows that solutions to evolutionary problems that appeared to be urgent already a decade ago, have still not been found or implemented. The wholesale fish markets which should have acted as catalysts for renewal of the system have for various reasons not managed to reach the set targets and have lost market-share. In addition, problems which already had been evidenced in previous studies, such as lack of market transparency and excessive industry fragmentation, have in the meantime only been aggravated due to lack of action and new external influences.

Before outlining some potential strategies for the sector it is perhaps opportune to make some preliminary considerations regarding the Italian seafood chain in order to arrive at an improved definition and understanding of the sectoral problems and their context.

2. CHARACTERISTICS OF THE ITALIAN SEAFOOD CHAIN

First of all, it is necessary to underline that the present organization and structure of the seafood sector derive to a large extent from the geomorphologic characteristics of the country. Italy's long coast does not favour the concentration of points of landing. In addition, the typology of the catch discourages use of larger vessels or intensive fishing techniques elsewhere used for ocean fisheries. As such, the fragmentation at production or catch level only reflects these characteristics. Further, the relatively homogeneous distribution of the population within the national territory and the resulting absence of very large conglomerates of potential consumers have led to an extreme fragmentation at distribution level. However, this situation also contains various opportunities, in particular for the distribution of fresh seafood, with a relevant impact on the entire value chain.

In a system such as the Italian seafood sector with its large number of micromarkets and short commercial flows, the individual economic operator tends to be unspecialised with respect to supply in order to maximise his sales over a short period of time. This lack of specialisation leads to a low level of functionality at production level which lowers the attractiveness of the supply itself, and since almost all the operators follow the same strategy, they appear undifferentiated, interchangeable and as a result, become marginal. This situation has hampered innovation in logistics and support services which generally are left to the intermediary or wholesaler to carry out. This increases the producers' dependency on the intermediary level and contributes to making their own role marginal in the market. It is therefore possible to say that if the fragmentation results from the structural situation (geographic, demographic, etc) the short-sighted strategy results from the lack of a conscious in-depth understanding of the systemic dimension of the reality on part of the operators.

The lack of specialisation, which reduces the functionality of the operators, is a result of the strong artisanal basis at catch level. Similarly, although for different reasons, the retail level has artisanal rather than industrial connotations with its instability in products offered in terms of quality, quantity and price leading to uncertainty and confusion. In a market in which industrial parameters are now required from suppliers, and given the impossibility of resolving the problem technically, the solutions must be found organisationally. The sector must therefore undergo an intense transitional period in which the operators through an evolutionary process manage to transform the seafood chain into an "intelligent system" which can generate complex solutions in an environment of increasing uncertainty and speed of change.

3. GENERAL GUIDANCE CRITERIA

In relation to the above, it is possible to establish three overall guidance criteria against which the specific actions to render the system more efficient can be judged:

- strengthening of the chain which on one hand should lead to greater consciousness and comprehension of the competitive realities on part of the individual operators, and on the other hand favour those actions that increase systematic cohesion in the chain. The last fact is to a large degree linked to the degree of available information and the nature of information flows within the system;

- increase the degree of specialisation of the individual operators in the system;

- favour the functionality of the operators, or with other words, increase their capacity for interconnectivity within the system.

To better evidence the evolutionary tendencies, which the Italian seafood value chain is undergoing at present, we have found it helpful to represent them schematically in terms of **weaknesses** and **strengths**. The scenario represented here aims at evidencing the risk of stagnation and decay that threaten the sector, aggravated by the absence of a plan of action which would permit the concentration of efforts and means in an urgent activation of evolutionary dynamics indigenous to the system and which could transform or convert the existing threats into opportunities.

4. WEAKNESSES AND THREATS

- Growth of G.D.O. (grande distribuzione organizzata=large retail chains or multiples) which, at present, is in the process of substituting the wholesale level as the major holder of concentrated decisional power. As the G.D.O. pursues exclusively its own interests (which is logical and legitimate) and not those of the system as a whole, the Italian suppliers will increasingly come under pressure if they do not upgrade their operational and logistical capabilities. This fact is further aggravated by a number of factors:

1. International retail chains are buying into Italian chains or forming alliances with these leading to higher penetration by suppliers from abroad which are able to offer the services and parameters requested by the G.D.O;

2. The G.D.O. in Italy has a very strong presence in geographical areas with less-than- average consumption of seafood. An absence of cultural barriers to new products offered from non-Italian suppliers may in the long run have negative effects on the competitive position of the Italian system as a whole;

3. International suppliers of the G.D.O. have matured an important experience in supplying the chains in international markets and are better prepared than the Italian suppliers for supplying the G.D.O. in Italy as well.

- Growth of advanced systems of logistics for competing food commodities (poultry, etc) may further damage the competitive situation of the Italian seafood sector;

- The current stronghold of intermediaries and wholesalers to the detriment of producers and small retailers;

-The current structure of wholesale fish markets which instead of representing solutions and opportunities in many instances have introduced new barriers to trade flows, especially in the Southern regions, and further weakened the competitive position of the system. In this sense, without a profound redefinition of their role and tasks, further investments in the wholesale markets could aggravate current problems;

- Changes in consumer attitudes which penalise traditional products and often require time consuming and complex preparation;

- Cultural conservatism on part of the operators who while opposing change frequently propose solutions of a limited horizon which given the lack of a holistic understanding of the seafood chain would further increase the inefficiencies inherent in the system.

5. STRENGTHS AND OPPORTUNITIES

- Growth of the G.D.O. has the potential to force about a modernisation of the Italian seafood sector. The logistical services demanded from suppliers should induce Italian operators to improve operational and strategic capabilities. In addition, the growth of G.D.O., especially in inland areas, has led to a better overall distribution of seafood products and consumption in Italy is growing; development of **new techniques and technology** at both catch level (more selective and better quality), storage level (improved cold chain and volume reduction of

equipment) and product level (improved packaging, vacuum and MAP technology, value added products);
- improved legislation especially regarding sustainability of catch which will safeguard resources and survival of the sector in the long run;

- the role of the intermediaries which in the context of a fragmented retail sector[1] and lack of adequate support services continue to play a crucial role in the Italian current seafood chain;

- a capillary network of wholesale fish markets (port and inland markets) with the potential for linking the various operators;

- new trends in consumption with the potential of producing fresh second-generation products and relaunching traditional products given an increasing demand for authenticity.

Based on the considerations already undertaken it seems possible to single out some potential ways of action which, while respecting the strengths of the system, could lead to a better cohesion within the system, a higher degree of specialisation and of their functionality. Given the linkage between the fundamental elements in the sector and the overall guidance criteria, it is obvious that any strategy for action must be linked to these same criteria in order to be functional to the system as a whole. In this light, we have identified the following areas of intervention.

6. AREAS OF INTERVENTION

6.1. Investments in infrastructure

To reinforce the capillary elements of the system, it is necessary to invest in the infrastructure of the system with the scope of facilitating the system's potential for increased interconnectivity and internal information flows. The investments fall into two main categories:

1. Strengthening of the infrastuctural logistics, including all those elements of infrastructure which favour the quality of product flows within the system (transports, warehousing, etc.). Because of the problem of creating a system sufficiently capillar and obtaining economies of scale, the line of action should be integrated in the national policy of incentives for the introduction of dedicated areas for logistical services and aimed at the seafood sector as part of general structures (seaports, inland transportation terminals, transhipment areas, general wholesale markets, etc.). This line of action should increase the availability of basic services and in particular of transportation and warehousing, and promote expansion beyond the territory of origin as well as lessen the operators' dependence on services rendered by intermediaries.

2. Creation of an information net-work. The creation of a physical information infrastructure should be in support of the present interpersonal relational infrastructure at base level with the intent of increasing the internal information flow in the system. As seen before, many of the weakness of the current Italian seafood chain result from the difficult and cumbersome flow of information caused by lack of transparency, fragmentation, difficulty in implementing the necessary adaptive measures, and not the least, lack of information regarding consumption itself. In this aspect it seems logical to make use of the existing network of wholesale fish markets as centres for collation and dissemination of information.

The present structure of wholesale markets has for several reasons not managed to contribute to changes in the overall value chain, not least because of the asymmetry in numbers between landing points and wholesale markets and for this reason the marketshare of products sold through parallel or alternative channels has increased.
However, in the planned information infrastructure, the wholesale markets could and should play an important role. Given their close proximity to most landing sites with information on type of catch, quantities, quality, etc. the wholesale markets have the potential for reliable and timely information collection. The structure proposed for governance of the network should be able to guarantee though the use of adequate controls the reliability of the information made available to the system.

Given that the usefulness of the system depends not only on the reliability of the information but also on the possibility of confronting or comparing it with other information from other sources, it would be necessary to design a system of classification of product quality to use together with the official classification of Italian fish species.

The network must of course be an open system. Every operator should have the possibility to access the information and to contribute information to the system. In this way, one constructs an information system which permits the free flows of relevant information superseding the present system with its asymmetric information flows. An open system would permit any operator to access the information and make those decisions which he finds more rational based on his own decisional and organisational capabilities, his attitude towards risk or his core competence. For example, chain buyers would be able know the supply situation in the entire system

[1] The marketshare of super and hypermarkets in seafood retail distribution in Italy reached 52,5 % in 1999 but with large geographical variations.

including geographically distant areas, and suppliers can direct products where prices are higher.

The two categories of investments will have a direct impact on the system's cohesiveness. Improved information flows will contribute to a better perception of market and system dynamics for the operators. In addition, the reduction of distance resulting from an improved logistics infrastructure and the sharing of information among operators including those in peripheral areas should favour aggregation on the individual links in the chain.

An indirect effect of infrastructure development is increasing levels of specialisation and functionality as the reduction of distances allows for greater market reach with resulting economies of scale and specialisation in specific activities, including support services.

The improvement in information flows could therefore contribute to reduce many of the current short-sighted strategies and highlight the necessity of increasing the attractiveness versus other economic operators in the value chain. The adoption of strategies which aim at increasing the scope of operations is also helped by the reduction of access barriers to logistical services necessary for carrying out transactions.

6.2. Promotion of innovation in the value chain

Another area of public intervention is an action plan which stimulates, either financially or fiscally, the introduction of innovation in the sector. The innovations must be valued according to the three criteria already mentioned in the above, leading to greater cohesiveness of the system as a whole; an increase in the degree of specialisation and an improvement in the functionality of the economic actors in the chain.

In support of this area of intervention it would seem useful to stimulate training of professionals who could be instrumental in the implementation of the new system structure. In particular, the need for creating new logistical support services for the retail chains should be a priority as the potential impact of the large supermarket/hypermarket chains will only increase over the next years.

In addition, training of technical and managerial staff is necessary for introduction of new technology at both catch level (greater selectivity and increased quality) and at post-harvest level (better operational efficiency, volume reduction of refrigeration equipment, new packaging technology such as vacuum and Modified Atmosphere Packaging). The training must also aim at stimulating the production of new value- added products (second-generation products).

This line of intervention should have a strong relevance on all the three guidance criteria. The promotion of innovation should also have clear synergies with the recommended improvements in infrastructure, in particular the setting up of an information network with improved information flows should enable operators to implement innovations in the seafood value chain.

6.3. Improving the operators' own perception of the system

This strategy is based on the principle that increased consciousness and knowledge favour the search for new solutions. Actions should be recommended that aim to increase the operators' comprehension or understanding of the new market reality in which they operate with the goal of improving operational efficiencies as well as stimulating search and adaptation of new management strategies.

In this context it would be advisable to establish a national network of information centres, within existing structures, for dissemination of information on opportunities already present in the seafood chain.
The network should also furnish a set of support services and assistance to support operators in relation to strategic choices (conversion of operations, new services, modernisation, specialisation).

As integral part of this programme is a number of training activities on quality related to both current services and operations as well as retraining for new tasks and services and training of managers. The training activities should span from short informative workshops designed to improve the operators’ comprehension of the competitive dynamics present in the system to regular training courses made to increase the responsiveness of the links in the system to present and future competitive pressures as well as changes in demand.

This component has an indirect relevance for all the three guiding criteria. In fact, it targets the basis for any change in the seafood value chain; the human element. In this sense all the proposed actions of intervention aim at creating an enabling environment for change and thus for the development of the other recommendations; increase consciousness and perception of the dynamics of the system, stimulate entry of new operators, reduce uncertainty and discourage short-sighted strategies, promote specialisation, functionality and cohesion.

7 MODALITIES AND CONCLUSIONS

The modalities of the recommended interventions should have a significant impact on the system as they guide or reinforce developments already occurring within the system, rather than forcing the development of the system in any defined and pre-determined direction. This is done by:

- improving information flows and internal understanding and perceptions;

- promoting innovation;

- influencing behavioural aspects.

The catalysts of change are thus to be found within the system itself and supported and stimulated through implementation of the recommended programmes. The operators within the system are given the opportunity for renewal and for the creation of an improved value chain able to support and thrive in a new competitive environment.