The Development of Business Relationship in the European Market for Fish Quality

Dr. Le Nguyen Doan Khoi

Associate Professor, Department of Scientific Research Affairs, Can Tho University, Can Tho, Vietnam

ABSTRACT
This paper focused on how important for business relationship in the determination of fish quality in the foreign markets. From the data collected and the analysis made, the researcher concluded that the determinants of quality fish for export markets are performed accurately with the help of the European inspectors. There are different determinants of quality fish that are performed throughout the industry for the well-being of the product. The determinants acquired through excessive interviews are organoleptic assessment, instrumental method, chemical assessment, packaging, storage, vessel and transportation.

KEYWORDS: business relationship, fish quality, European market

1. INTRODUCTION
There is no short and precise definition of quality. Kotler (1996) defined quality as the totality of features and characteristics of a product or service that bears on its ability to satisfy stated needs. Juran (1993) also defined quality as conformance to requirements and fitness for use.

Quality of a product is ultimately defined by customers based on the conformance and performance of the product. Attainment of quality requires the performance of a wide variety of identifiable activities. The introduction of modern technology, highly skilled employees and other activities alone do not determine quality unless there is customers’ involvements in the specification of quality determinants. The general view of the research is, then, to explain the importance of business relationships and customer involvements on the determination of quality fish products.

2. Literature review
Practitioners of the use the term “quality” to describe the notions of function, suitability, reliability, conformance with specifications, satisfaction with actual performance and high price. But this is highly confusing and quality is defined as the ability of the vendor to provide goods in conformance with specifications and may also refer to whether the item performs in actual use with the expectations of the original requisitioned, regardless of conformance with specification (Leeders et al, 1988). Most of the time, quality is measured by the close users of the product or service. To emphasize this relationship, Juran and Gryna (1995) defined quality as customers satisfaction and fitness for use. A customer is anyone who is impacted by the product. Customer satisfaction can be achieved through product features and freedom from deficiencies.

In the case of fish industry, customers specify quality fish in terms of their species, the diet they get, the freshness, processing style and the packing and other criteria that make them perceive as quality fish. The quality of fish differs from country to country and from people’s perspective. There are fish which are low quality but highly desirable in European markets, and the revenue holds true. The difference is practically customer satisfaction.

The quality of fish depends on characteristics of the fish and on the activities performed from landing site to final export or local consumption. This means that the species of the fish, the clearness of the landing site, qualified inspectors, modern machinery and the packaging and icing mechanism. To clarify this idea, Van Weele (1995) defined quality as the degree of which the whole of the properties of the product, service or process meets the requirements, which result from its practical purpose. The needed characteristics should be defined in the purchase order or contract so that both parties know and agree to the requirements. For example, a purchase order from the European wholesalers may state that the fish should be of such species, processed in such a manner and packaged by foam vacuum box stored at 00C. Having the above definitions in mind, the quality of fish can be stated as the delivery of the right species with all processing requirements fulfilled with the order received. As
stated earlier, the requirements could be from the type of diet they give, the ease of processing the fish, duration of the fish from being spoiled easily and its smell.

**THE VALUE CHAIN AND COMPETITIVE ADVANTAGE**

A systematic way of examining all the activities a firm performs and how they interact is necessary for analyzing the sources of competitive advantage (Porter 1985). The value chain of a firm is composed of a series of distinct value creating activities including production, marketing, materials management, R&D, human resources, information system, and the firm infrastructure. According to Porter (1985,1991) firms can gain a competitive advantage by performing these strategically important activities more cheaply or better than its competitors.

The concept of value chain is more critical and relevant to firms involved in food businesses. The application of HACCP system, which is being mandated in an increasing number of developed countries, establishes process control through the identification of points in the chain of food production where the loss of control could result in unacceptable food quality and safety risk. Most of the points in the principles of the HACCP require a systematic way of examining all the activities in the vertical chain. The system identifies critical control points in the production process, thus food safety hazards can be prevented, eliminated or reduced to an acceptable level before they occur.

The value chain that shows the total value of the product consists of value activities and margin. Value activities are activities that are physically and technologically distinct to the firm. Margin is the difference between the amount buyers are willing to pay and cost of performing the activities (Porter 1985). The total value of a firm’s product is a function of not only the value chains of a focal firm but also that of its suppliers and buyers. According to Porter (1985) suppliers and channel value chains include a margin that is important to isolate in understanding the sources of a firm’s cost position, since supplies and channel margin are part of the total cost borne by the buyer.

The value creating activities are divided into two broad categories: primary activities and support activities.

The primary activities are the activities involved in the physical creation of a product and its sales and transfer to the buyer as well as after sales assistance. In any firm these activities are divided into five generic divisions and each activity is divided into sub-activities.

The support activities support the primary activities in the accomplishment of the process.

**IMPORTANCE OF FISH**

Seafood refers to edible aquatic animals excluding mammals, comprising both fresh water and ocean creatures. It includes fish. Fish is a word commonly used to describe all forms of edible fish, mollusks (e.g, clams and oysters) and crustaceans (e.g, crabs and lobsters) that inhabit in the aquatic environment (Huss 1994).

Fish from the marine and fresh water bodies of the world have been a major source of food for human kind since long time ago. The increased health consciousness of consumers has led to the popularity of seafood as part of their diet. The low fat content of many fish species like white fleshed demersal, and the effect on coronary heart disease of the polyunsaturated-fatty-acids found in fatty (pelagic) fish species are extremely important aspects for health conscious people particularly in affluent countries where cardiovascular1 mortality is high (Huss 1994). This has led to an increase in the demand of fish, thus good opportunity for trade of fish and its products.

Benefits of developing an export trade in fishery products which meet international health and sanitary regulations can be summarized as: improved income and employment in export fish processing and distribution, improved incomes and security of employment in fishing, higher levels of foreign exchange revenues and national tax income, and improved quality and safety of fishing products for the national market.

Despite these benefits, fish consumers are subject to the risk of morbidity and mortality due to intoxication or infection. Some of these diseases have been specifically associated with consumption of fish while others have been of more general nature (Huss 1994).

Consequently, the increased health awareness of consumers increased the demand for quality and safety of fish like in all other food products. Similarly, as the result of the increase in income, consumers in developed countries started to be selective on the products they use. Thus quality and safety standards in the seafood sector have been an essential component of food consumption. This means that although the increased world-wide fish consumption is an attractive opportunity for countries with extensive inland waters or with access to the seas and oceans, quality regulations for seafood products is a pre-requisite to success of exploiting this opportunity. With the intention of doing this, there needs to be a clear understanding of the factors that determine the quality of seafood, especially fish.

The term “quality” of a product can be defined in different ways. From the customers’ point of view, quality is often associated with value, usefulness or price and from producers’ point of view it is associated with conformance to specification. This means that, it is related with producing the product according to its design. Recently, quality of a product is not only the responsibility of production function, it was extended outside of the production to include all other functions using a concept of total quality control. With total quality control, the entire organization is mobilized to help produce a quality product.

Generally quality has been defined as ‘fitness for use’ (Schroeder 1985). This means that all characteristics of the product must satisfy the customers’ needs thus the product is fit for the customers’ use. Fitness for use is related to value received by the customer and to customer satisfaction. According to this, only the customers and not the producers determine quality.

The traditional view of seafood quality is based on appearance, technical quality and biological quality (Wood

---

1 Relating to the heart and blood vessels (arteries, veins, and capillaries); the circulatory system.
et al. 1994). Thus food is expected to look good, taste good, and be with no direct harm to its consumers. Recently, this definition has extended to look at factors relating to cultural, environmental and ethical values. Cannon (1990) highlights, biological, sensual, nutritional, and environmental factors. Woodward et al. (1990) categorize the major components of food quality as being authentic, sensual, biological, nutritional and ethical. All these must exist within a social, political and economic environment, and reflect society’s increasing interest in the environment, animal welfare and culture.

From recent papers where the subject of fish and food quality is discussed (Sloan 1998), there seems to be at least three groups of characteristics and features that contribute to quality: Characteristics and features of the product that can be directly measured or assessed. For instance weight, shape, temperature, fish species, color, taste, texture, size, homogeneity, composition, oil content, etc. Most of these characteristics and features are normally specified in the seller- buyer (wholesale) contract.

Characteristics and features of services involved with the product: including consistency in the quality of different shipments and within a shipment, integrity (in trade), and communication and keeping time. Most of these are usually part of expected customary and ethical trade practices, although some may form part of local regulations or be included in contractual agreements.

Characteristics or features of the product that can have a desired or undesired effect on human health. For instance, nutritional value (desiderated), pathogens counts, pesticides, etc. Most of these characteristics and features are usually defined by law although they may be incorporated to contractual agreements. Recently, characteristics related to environmental and ecology (that could create problems to human beings in the medium and long term) is added to this group (e.g. recyclables and biodegradability of packaging).

Each market, each buyer, will have a working definition of quality that encompasses these three characteristics and features, however excluding the environmental and ecology issues, the last characteristic or feature is given an emphasis in this study since it is mostly used as a prerequisite to export for all fish business exporting to most attractive markets like EU. The producer must know the working definition of the aimed market in order to succeed in business (FAO 1998).

Claiming to meet the above three characteristics or determinants of seafood quality does not promise market for fish in most developed nations. The EU issues regulations that lay down conditions for products produced within the union and also for fish imported from third countries. The introduction of some regulations like the HACCP (Hazard Analysis Critical Control Point) system is also being accepted worldwide and is becoming a requirement in international trade as an effective means of ensuring food quality and safety. One reason for this development is that a number of national food legislations today are placing full responsibility for food quality on the producer (e.g. EEC council directive no. 91/493/EEC).

The HACCP is a system based on identifying hazard and controlling risks at specific points of the processing chain (Zaibet 2000). There are at least two features that characterize the HACCP system. First it deals with the whole system; from receiving of raw materials to the delivery of the final products. Second, it requires the documentation of all the processes (Zaibet 2000).

According to this, the HACCP system mainly focuses on preventative quality assurance strategy. The system applies to each specific operation separately. For example, the application of the HACCP concept in fish processing firm, should be unique for every process of every factory. However, some general principles can also be outlined for firms with similar handling and processing practices.

To summarize, although the nutritional properties, hygienic properties and organoleptic properties (its appearance, color, integrity, texture and flavor) are some of the determinants, compliance to the EU regulations including the HACCP system can also be mentioned as a major determinant of seafood quality. Although the main focus of the system may be considered as safety assurance of food, the safety issue is a pre-requisite for assuring quality of the product. In contrast to the principles in traditional quality programs relying heavily on control of end-products, the HACCP system is a preventative strategy based on the study of prevailing conditions and is much more likely to provide a better guarantee of quality. According to this system, the quality assurance of fish and its products requires an organized way of investigating all the activities in production process of the product. The thorough analysis of all the activities performed in the processing of fish is essential not only to identify the potential hazard of its quality, but also to discover sources of competitive advantage for the firm.

**IMPORATANCE OF QUALITY IN FISH EXPORTING BUSINESS**

World fisheries have gone through some dynamic developments. The most important was the expansion of international trade in fish and fishery products. Today more than 30% of the fish caught for direct human consumption enter international trade. The major fish importing countries are the European Union (EU), the United States of America (USA) and Japan (FAO 1998). Such dynamic developments of international trade in fish and the fishery products resulted not only from the gradual liberalization of international trade but also from the growing demand for fish as healthy food. The increasing worldwide fish consumption, as the result of increased health consciousness of consumers, need for convenience and increased income, guarantees the global market for fish businesses.

Accordingly, commercial fishing is of great economic importance for many less developed countries. Around 50 percent of the total fish supply in international markets comes from developing countries. Thus, fish exports are, in general, the largest net hard currency earner among food products for these countries surpassing other traditional food products like rice, coffee, tea, and bananas (FAO 1998). However, since the consumption of fish and fish products also causes diseases from intoxication and infection of the product, safety and quality issues are vital components in the industry.
The fish exports of less developed nations (LDCs) are mainly targeted into the developed countries where food quality and safety standards are increasing rapidly. The EU issues regulations that lay down conditions for products produced within the union and also for fish imported from third countries. To approve imports from a third country, “inspections may be carried out on the spot by experts from the commission and the member states” (OJ-EU 1991). These EU regulations require information on: (1) the fishery legislation of the exporting country, (2) the organization of the competent authority and its inspection service, (3) the actual health conditions during the production, storage and dispatch of fishery products; and (4) the assurance, which a third party can give, on the compliance with the standards of the EU. The EU directives also require the HACCP approach as a basis for food safety (93/43/EEC).

On the other hand, most exporters of fish from less-developed nations, which have to adapt to the new and stringent regulations related to fish quality and safety, have a difficulty of meeting the requirements of the importers at least in the short to medium term. The fish quality problems that are common in LDCs are related to poorly defined inspection and approval procedures, weak technical regulations, and lack of staff for inspection and laboratory testing. In addition to this, most of the fish exporting firms in LDCs have poor levels of personal hygiene and sanitation, and poorly defined institutional frameworks.

In conclusion, although the commercial fishing is identified as a major source of hard currency for countries in less developed nations, because of the risk of food-borne diseases, importing firms in general and EU wholesalers in particular have tight rules regarding fish imports from these countries. This rapid increase of food quality and safety standards in developed nations can be stated as one of the major challenges of fish exporters in LDCs. Hence the inter-organizational cooperation is a useful concept that enables the firms to obtain the required resources from external partners, gather the necessary information about their markets, customers etc., so as to increase their compliance level accordingly.

3. INTER-ORGANIZATIONAL NETWORKING IN FISH BUSINESSES RELATIONSHIP

It is a current issue for strategic writers to argue that competition is dead (Moore 1996), or that co-operation rather than competition is the way forward (Branderburger and Nalebuff 1996). The basic argument of these writers is that, business success will be derived from companies managing the enhancement of the total performance of the relevant organizations, so that it can deliver improved value to customers. Some of the major objectives of the network formation include: gathering of information, response from external environment, canvassing and looking for customers and suppliers, enrichment of own knowledge, psychological significance and sources of finance, exchange of technology etc.

In general, the cooperative strategy is very crucial to food businesses. Some of the arguments for cooperative strategy in food business include (Eastham et al. 2001) as following:

- The firm is able to focus on its core business, for example food processing: This is a very important reason of cooperative strategy since some operations from a strategic standpoint are non-core activities for such business. For some types of food business, for example, involving home deliveries, distribution is clearly part of the core business.
- Capital investment in non-productive assets can be reduced: Valuable business capital can be tied up when it might be better employed in developing the core business.
- Better budgeting control: Costs are known and budgets can be prepared once the terms of a contract have been signed.
- Leading edge IT systems can be provided and used by the contractor.
- Operational efficiency will improve: The expertise of some actors in the network will bring significant benefits in the performance of other actors.

Moreover, networking is a powerful and cost-effective way of sharing information and achieving various other goals that individual organizations cannot achieve alone. The food quality and safety, that is an important issue for seafood businesses is an example of information asymmetry between sellers and buyers. Sellers know the quality and safety attributes of their products much better than buyers, and it is hardly possible for buyers to fully assess these attributes during transaction. With these features, this issue falls into the boundaries of adverse selection problem (Akerlof 1970). According to him, adverse selection refers to the fact that buyers may buy low quality or less safe food items because of lack of information. In addition, the existence of asymmetric information increases the transaction costs and hence generates private incentives to decrease such costs (Holleren et al. 1999). Akerlof (1970) showed that, institutional warranties such as quality assurance standards play an important role to solve such problems. The food quality and safety standards, which are voluntarily accepted and applied by firms to improve their competitiveness, guide them towards quality assurance systems. Fundamental operations of most food quality and safety assurance institutions include the documentation, third party control and accreditations.

Quality assurance systems (QASs) aim to increase the competitiveness by providing confidence on quality and safety in the food production chain (Morris 2000) hence, the integration of firms in seafood business to quality assurance systems leads to the reduction of transaction costs which may include; information search cost for quality assurance and food safety, negotiation cost and marketing and enforcement cost (Hobbs 1996). In addition, Mazzocco (1996) and Bredahl and Zaibet (1995) show that most of the firms integrated to QASs have seen not only declines in the cost of transaction but also have experienced improvements related to their production process and final product. Among these, increases in productivity, better management, improvements in consumer relations, elimination of deficiencies in production processes, better adaptation of new personnel, and the conservation of current customers. Bredahl and Zaibet (1995) showed that total cost of integrating to QASs for the firms they studied was less than the benefits acquired directly or indirectly. Consequently, they state that integrating to QASs with consideration of quality and safety standards is an important strategy for firms. This strategy is especially crucial to seafood business located in developing nations and exporting to developed nations where the food safety and quality standards are
rising continuously. In addition, forward integration of firms in food businesses gives them better or more timely access to market information allowing a more rapid or specified adjustment of product characteristics, and backward integration may allow these firms to obtain a specialized inputs through which they may improve or at least distinguish their final products (Porter 1985).

To conclude, the cooperative strategy is decisive to fish business relationship because success of these companies is derived from managing the enhancement of the total performance of all related organizations, so that value to customers can be improved. Networking is useful to ensure seafood quality and safety in that it enables the buyers to fully assess the quality attributes of the products of the sellers during transaction. In addition the integration of firms in seafood business to quality assurance systems leads to an increased competitiveness by providing confidence on quality and safety in the food production chain.

4. THEORETICAL FRAMEWORK

Networking is one of the best solutions given for firms in LDCs, because it lies between the hierarchy (bureaucracy) and the market, which are the polar ends of the governance options (Borg 1991, Jarillo 1998). For firms in LDCs, the economic functions and transactions within the boundaries of hierarchical firms are either impossible or extremely difficult because small firms, being small and alone, lack resources. It causes higher production costs. Market mechanisms also not a better solution because perfect competition is far from reality especially in LDCs. It causes higher transaction costs. Therefore, these firms find it difficult to perform their economic activities either at the level of hierarchy or market. This means that, they need support to compete and survive in their business.

One of the aims of the networking model is to provide a basis for studying the roles of actors and sets of actors in the performance of firms. This model helps to understand how firms mobilize the support they need in order to maintain successful business ventures. The basic elements of the network concept are the actors, resources, activities, and linkages. These elements of the network are related to one another. The actors can be individuals, organizations, firms, or government agencies.

Firms in LDCs can use the formation of networking as a means of ensuring seafood quality and safety. This helps to avoid the information asymmetry between the buyer and the seller regarding the quality of the product. This lowers the transaction cost which may include the information searching cost for quality assurance, negotiation cost between the actors and control costs of maintaining the relationships. For example, in order to survive and succeed in the fish exporting business, the export firms need to possess the necessary information about the quality and safety standards demanded by the EU inspectors. Through cooperative strategy, they can access this information, which is an intangible resource of the Fish Inspection and Quality Control Division.

To conclude, the concept of the network theory implies cooperative efforts among persons, business firms, government bodies, other organizations, and other entities that are interconnected through activities and resources. This means that, the network concept provides a support environment for all the actors and provides them with all the resources that are essential for their competitiveness and survival in the market.

5. CONCLUSION

In summary, the export of fishery products, which meet international quality and safety standards, is essential to improve a country’s level of foreign exchange revenues and income and security of employment in the fishery sector. However, most fish exporting firms located in LDCs have a problem of meeting the requirements and overcoming their quality-related problems on their own. These firms can use the formation of the networking model as a means of ensuring seafood quality and safety because this strategy provides a support environment for all the actors and provides them with the resources that are essential for their survival and competitiveness in the global markets.

References