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THE PERCEPTION OF ORGANIC FISHERY PRODUCTS IN SOUTH – EAST DEVELOPMENT REGION OF ROMANIA

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Abstract

The paper follows two main objectives: to understand consumers' perception and image of fishery ecological products and to identify communication levers in order to improve the perceived image of fishery products. Orientations in terms of communication are product-focused and aim at enhancing the reputation of products, consequently with impact on product consumption. The present research is focused on the Fishery products, regardless of their presentation – fresh, frozen or processed. This paper conducted a questionnaire survey of Romanian consumers' perception toward fishery products. The empirical study with tractor brands indicated that farmers shown different awareness to domestic and foreign fish ecologic products. National fishery ecological products got more attention from the consumers. Foreign fishery ecological products had higher perceptive price, but Romanian fishery ecological products acquired higher perceptive value, and got a better rank in the preference list and in the purchase intention of the consumers.

Keywords: ecological products perception, perceptive price, fishery ecological product

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INTRODUCTION

The ecologic fish market is mainly concentrated in five countries, representing 71% of the total European market: Spain (18%), France (17%) and Italy (14%), United Kingdom (12%) and Germany (10%). These are the most populated countries in Europe, representing a naturally more of Community consumption. Apparent consumption in EU 25 for aquatic products amounted in 2009 to 21.8 kg per capita in equivalent live weight, 16.1 kg of which 5.7 kg of fish and shellfish. This data includes all presentations (fresh, chilled, frozen or canned) and all places of consumption (home, restaurant or while travelling). The average consumption of the EU is slightly different from the average world consumption (20.0 kg) (Xiong et all, 2010).

The general trend, however, masks the highly heterogeneous levels of consumption by country and type of product. Thus, by way of example, per capita consumption is 20 times higher in Portugal than in Romania. Three categories of consumer countries in Europe stand out:

• countries with high consumers (40 kg and over): Portugal, Spain

• consumer countries moderately (16 to 30 kg): Finland, France, Malta, Sweden, Estonia, Greece, Denmark, Cyprus, Italy, Latvia, United Kingdom, Netherlands, Ireland, Belgium and Malta.

• low-consumption countries (2.5 to 13 kg): Germany, Austria, Poland, Czech Republic, Slovakia, Slovenia, Hungary, Bulgaria and Romania.

The fishery products represent a kind of important producer goods as it plays a significant part in agricultural production market. With the development of aquaculture, there are rapidly growing demands for fishery ecological products from consumer, so fishery ecological products farms will face increasing fierce competition in the market. (Armstrong et all, 2000) In the modern market economy, consumers are the main body of fishery ecological products market, their attitude, perception and preference toward a brand will largely influence the sales volume of this kind of products, and even the survival and development of the fishery farm.

There are plenty of research on brand management based on consumers' perspective, such as consumers' brand experience (Bernd, 2009), brand image and consumers' purchase decision (East et all., 2008), brand competition (Ding, 2009), and brand satisfaction (Zeng, 2009). Moreover, there are not many researchers pay close attention to the consumer-based ecological products research in Romania. Some papers involve brand development research of fishery ecological products, but mostly are qualitative research and macro-economy approach (Ernst et all, 2000).

This paper purpose is to investigate and analyze consumers' fishery ecological products awareness, purchasing behaviour, based on an empirical survey.

MATERIALS AND METHODS

Conceptual framework

Consumers' perception to the fishery ecological product included product familiarity, perceptive price and value, which were influenced by consumers' demographic characters and their economy condition, also by their purchase experience and information from others.

Questionnaire

A questionnaire about fishery ecological products consumers' perception was designed based on conceptual framework. The questionnaire consists these sections:

- consumer demographic (gender, age, education level, labor number and annual income of household);
- farmers' purchase behavior of fishery ecological products (purchase experience, money source, information source);
- product perception (familiarity, perceptive price, value.

Survey

The questionnaire survey was conducted with consumers from Braila, Galati, Tulcea, Constanta, Vrancea and Buzau, all being counties of South East Romania's development region, were chosen as the respondents.

200 questionnaires were distributed in above 6 counties and returned 134. After eliminating the validity of the returned questionnaire, 26 questionnaires that incomplete and with logical mistakes were deleted, 106 valid questionnaires were obtained; the effective response rate was 53%. From 106 respondents 82 expressed the intention to buy organic fish products.

Statistical methods

All the data obtained from the responses at the questionnaires were transformed into statistics variables and then processed. Descriptive Statistics method was mainly adopted to calculate the mean with standard deviation of each variable, and to examine the different levels of consumers' awareness.

The index values of product familiarity were the ratio between each product's familiarity value and the average value. The same calculation method was adopted in perceptive price and perceptive value.

RESULTS AND DISCUSSION

Consumer characters

The questionnaire survey gained a total of 106 valid samples and 82 with intention to buy organic fish products. Table 1 shows the demographic characters of respondents.

Table no. 1 Demographic description of organic fishery products consumers

Demographic variables	Categories	Subjects no.	Percent %
Gender	Male	31	37.80
	Female	51	62.20
Age	18-30	24	29.27
	31-40	29	35.37
	41-50	19	23.17
	51-60	6	7.32
	Above	4	4.88
Educational level	<primary school	1	1.22
	primary school	5	6.10
	junior school	18	21.95
	senior school	20	24.39
	≥college	38	46.34
Labor number of household	<3	41	50.00
	3	19	23.17
	4	21	24.39
	5	2	2.44
	>5	0	0.00

Samples are mostly female (62.20%). They are more inclined to interest in organic fishery products. Women show a higher sensitivity in health and a greater propensity than men to follow the recommendations for nutrition. This does however not always reflected by a high consumption of fish higher in women than in men in Western Europe.

Age is often presented as an important determinant of demand for food in general and more specifically the consumption of fish. However, the demographic determinants such as age will also be correlated with other determinants such as interest and knowledge of nutrition topics (including aspects so beneficial to health) or health status of person. The interest in issues related to health and nutrition, for example increases with age. The most common age group was 31-40; educational level college (46.34%). Less than 3 person accounts for 50% in the labor number of household.

The education level is correlated positively to the image of fish as food easy to prepare. The higher the education level increases, the consumer sees the fish as a food easy to prepare.

Place of residence (and more specifically its coastal or continental character) is an important factor in explaining the consumption of different seafood and is linked to historical and current availability of fresh fish.

Purchase behavior

Information plays an important role in the process of consumer purchase. The survey research displayed consumers' main sources of organic fish products information coming from friends and relatives, 34.74% consumers chosen this item. It implied consumers were convinced of people that having close relationship with them or surrounding them. It also implied that word of mouth communication of public would have a strong impact on consumers' brand awareness, which was in accord with the existing research (Wang et al., 2009). Fishery products producers must attach much importance to their brand reputation so as to retain their old customers and develop new customers, and then keep customers loyal on their brand, which is a successful marketing.

Purchase intention is widely believed that directly interrelated with purchase behavior, it is the main index to forecast whether consumer will purchase (Zheng et all, 2010), so the organic fish products intention could imply the familiarity of whether consumer will choose a organic fish product in the future. Among the respondents, 82 described that they considering purchase a organic fish.

Price, risks of contamination (microbiological and chemical), sustainability aspects such as environmental risks (damage of the ecosystem, animal cruelty, etc.) and risks of depleting fish stocks are the main barriers to eating fish in general for the consumers.

Barriers vary a lot depending on the levels of processing (for example, price is no longer the main barrier for eating frozen fish products).

In general, consumers would eat more fishery and aquaculture products if: there was a quality label, prices were more affordable and they had a better knowledge of the quality of these products.

Guarantee of the European origin of fish encourages consumers to eat fish in general, all the more so in Southern European countries. Consumers have a positive overall image of fishery and aquaculture products. In general, they think they are good for health, and that they are fresh products.

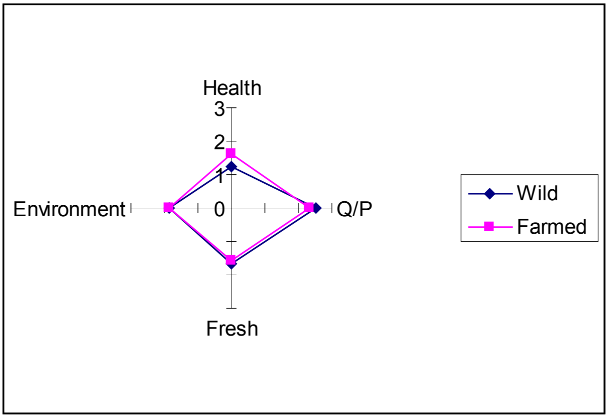
Fresh fish received the most positive overall image score and the most positive image with regard to health (Table 2).

Table no. 2. Image scores for fish production method in South East development region of Romania

	Health	Quality/Price	Fresh	Environment
Wild	1,26	2,51	1,68	1,86
Farmed	1,63	2,34	1,59	1,85

Thus, the image of fresh fish is very similar to the image of fish in general. However, this kind of product obtains a poorer image in terms of quality/price ratio (mostly due to its price, since its quality is considered as good). With regard to health benefits, frozen fish has a less positive image than fresh fish, but its quality/price ratio is considered to be good and its availability to be higher. Preserved fish has a poorer image in terms of quality, but its quality/price ratio is more positive. This product is also considered by all respondents to be the most available. Fish-based ready meals receive the poorest image with regard to health and to quality/price ratio (Fig. 1).

Fig. 1: Results on the perception of the fish product



When buying fish, a quality and/or food safety label is the most important expectation of consumers in terms of information on fishery and aquaculture products. Nutritional information as well as information on the geographic origin of production is among the most important pieces of information consumers are looking for. However, fishing zones as defined by FAO is ranked last by consumers. Consumers are also interested in information relating to the production method and its environmental characteristics.

The most popular sources of information used by Europeans are labels and sellers in retail and in supermarkets. These two types of information is directly gathered by consumers at the time of purchase. The media (Internet, television, advertising followed by written media) also plays an important role in the information of consumers. Non commercial sources of information like scientific reports, consumer associations, institutional campaigns and information are less popular. However, this remark should be qualified by the fact that the question asked within the survey implied an active investigation by consumers.

For the retail sector, farmed fish offers major advantages. On a general level, retailers perceive farmed fish as a product much easier to market than wild fish. Regularity in terms of supply, taste, quality and freshness are the main arguments put forward. One disadvantage of farmed fish for the retailers has to do with the somewhat negative image that can be associated with the aquaculture sector. Still, in most cases, the aquaculture product does not possess any specific image in the mind of the consumer. There is henceforth no distinct link in the mind of the consumer between the aquaculture sector and its image on the one hand and the aquaculture product on the other hand. This is reflected in the behavior of the consumer, who does not differentiate between farmed and wild products when purchasing fish.

The absence of image of the aquaculture sector is still seen as a risk by some managers of the retail sector. Indeed, the image can then still be developed and hence be hijacked. To fill this gap in terms of image should therefore be considered as a strategic priority for the aquaculture sector. The consumer places a high level of trust in the retailer. He/she has the tendency to transfer the responsibility of some of his/her consumption decisions to the retailers, what leaves these later as unmistakable partners in any communication action.

Fish is generally considered as a healthy product by consumers. Any type of communication on fishery and aquaculture products should capitalize on this image of "healthy" product, and put "health" at the centre of the message conveyed. Communication on fishery and aquaculture products should mention the efforts made to guarantee their healthiness to the consumers (quality and food safety labels, standards of production used). The other side of the coin is that fish products in general are considered to be expensive. Proposing special offers may thus be a relevant manner to appeal to new consumers.

Consumers have a confused and slightly negative image of the aquaculture sector. The image of aquaculture products derives from the image of the sector, although consumers generally do not distinguish wild fish products from farmed fish products. They generally consider that the products they buy are wild fish products. Thus, the issue at stake is to understand whether to promote farmed products as such or to promote them as "fish products".

If a specific promotion of farmed products were to be preferred, it should base itself on the positive but often unknown attributes of these types of products: o an affordable price, freshness and guaranteed nutritional characteristics, optimum traceability along the production process. Beyond the product in itself, filling in this information gap will benefit the image of the sector as a whole. Indeed, improving the image of aquaculture products should be a priority of the aquaculture sector, as it will contribute to improving market acceptance of this type of product, on the long term.

Consumers place environment amongst their first preoccupations and declare to be ready to pay the price requested for a guarantee of quality.

CONCLUSION

The research results show organic fish consumers have different perception of organic fishery products. The information channels of brand are mainly from friends, relatives and neighbors, so word of mouth spreading is very important for a brand. The higher perceptive price of foreign organic fishery brands may reduce consumers' perceptive value and purchase intention to them.

In conclusion, although this paper is an empirical study based on 106 valid samples, it provides a chance to understand consumers' awareness to different organic fishery products brands in Romania. A further quantitative research with wider samples will be necessary in the future.

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