

9 Mediterranean consumers and products protecting the health and the environment

The present-day context is marked by loss of citizen-consumer confidence in food products. Yet the operators in the agro-food sector (producers, industrialists, distributors) are undertaking measures which ought to reassure consumers more: more stringent control of quality and food safety, more information and greater transparency with regard to public opinion. These initiatives are not always effective; they can even help to increase public uncertainty, and they do not suffice to build or restore confidence amongst the actors themselves and between consumers and the agro-food sector.

In order to trust producers, consumers expect the actors in the sector to commit themselves to more environmental ethics, more social ethics and a health guarantee. Six major movements have thus emerged for building up agri-foodstuff quality around these commitments. In the case of the environmental component there is organic farming, integrated farming and hydroponics; in the case of the social component there is fair trade and ethical trade; and in the case of the health component there are health-enhancing foods, fortified foods or diet foods, and even products with a guaranteed nutritional content. These movements are growing in importance in terms of both product marks (multiple quality labels and marks) and consumer perception (Codron et al, 2002). In terms of history and origin, a distinction can be made between the organic farming and fair trade movements, which have developed in radical opposition to the dominant industrial system, and integrated farming, ethical trade and health movements, which are an integral part of the predominant model.

How do consumers react to these products? Do they really meet consumer expectations? Do they have an adequate future in consumption? Although there are in fact very few surveys at our disposal enabling us to answer these questions, particularly in the southern Mediterranean countries, where consumer awareness is very recent and still marginal, we shall nevertheless endeavour to outline the situation.

9.1 - Consumer perception and purchasing motives in the Euro-Mediterranean countries

Spain

In Spain, the term "bio"¹ is used to describe all health products and does not necessarily refer to organic production methods. It is a term very widely used by the food industries, which is confusing for consumers, only 3% of whom think "organic product" when they see the term "bio". (USDA, 2005). Consumers consider that their Mediterranean diet is natural and therefore biological. They are thus much more interested in how olive oil is extracted, for example, than in how olives are grown. Yet Spain is the fourth organic producer in Europe, with a market value of US\$300 million, 40% of which concerns olive oil.

Many consumers' motives for purchasing organic products focus on the wholesomeness and safety of food for themselves or their family. Others have more idealistic reasons for buying them that are connected with the environment and animal protection, for example. The purchasing motives of most clients, however, are related to health, taste, and the environment. (Joensen, 2003).

France

A quality survey on all organic foodstuffs was conducted jointly by the CSA² and the Agence Bio³ in October 2003 on a sample of 1000 people representing the French population. It revealed that 83% of the French view organic products positively and 54% have already consumed such products; 37% of the French population are regular consumers.

When one compares the virtues of organic products with those of non-organic products, one notes that consumers find that organic products are more natural (85%), better for the environment (84%), better for the health (79%), and respectful of animal welfare (74%), that they have higher nutritional qualities (66%), that they are manufactured non-industrially (62%), and that they taste better (59%) (CSA/Agence Bio survey, 2003). Consumers thus regard organic products as healthier and more natural.

In short, the main feature of organic farming seems to be that it is reassuring with regard to food safety. Although the "environmental" side of organic agriculture is visible (mentioned by 84%), it seems to come after health concerns.

Consumers have numerous expectations with regard to organically produced foods and their reasons for consuming these foods are evolving. The predominant reason

¹ One of the terms for "organic farming" in Spanish and French is literally « biological farming ». – T.N.

² French broadcasting regulatory body – T.N.

³ French public interest grouping for the promotion of organic agriculture – T.N.

registered in 1991 was that they had health benefits (48% of the reasons given for consuming organic products). Quality and taste came next (22.1%), conformity with ideals (10.6%), and, finally, environmental concerns (9%); this latter reason is progressing slowly and is quoted mainly by young consumers (30-35-year age group) (Sylvander, 1998). Ten years later the CSA/Printemps Bio opinion poll (2001) highlighted four consumer motives for buying organic products: health benefits (73% of interviewees), quality and taste (66%), ethical, environmental and animal-welfare reasons (46%), and, finally, food safety (40%).

For the last five years or more, some of the new consumers have turned to organically produced goods and labels in general as the result of the various health or social crises ("mad cow disease", the debate on GMOs, dioxin, etc.) (Sylvander 1999). They seem to have even greater expectations in general with regard to food safety. In the CSA/Printemps Bio survey, for example, 57% of the French considered that organic farming provides a satisfactory solution to the current concern about food safety (almost 80% of this group were regular consumers and 70% occasional consumers).

The reasons for consuming organically produced products thus do not necessarily reflect the objectives of the specifications for organic farming: the vast majority of consumers consider that organic agriculture provides a means of obtaining more wholesome food which benefits the health, whereas the principal objective of organic farming specifications is environmental awareness in farming practices.

There are two categories of organic product consumers that can be identified: occasional consumers (consuming 1 to 5 different organic products per week), who make up approximately one-third of the general population, and regular consumers (consuming more than 6 different organic products per week), who make up less than 6% of the general population.

Botanical organic foods account for 3% of all plant products consumed. Animal organic foods account for 1.7% of all animal products consumed with the exception of eggs (they account for 3.5% of egg consumption).

The data from the INCA survey⁴ show differences in the quantities of foodstuffs consumed (irrespective of whether they are organic or conventional products) between organic product consumers (regular or occasional) and consumers who do not consume organic products.

Italy

The majority of Italian consumers are located in the north of Italy, where the major economic structures are established, whereas organic production units are generally situated in the south of the country. A survey conducted by the

⁴ National survey on the food consumption of individuals – T.N.

“Demoskopea” research institute in May 2001 revealed that 73% of consumers are familiar with and can define the term “organic” and that 22% give definitions that are rather vague but not incorrect. In September 2000, a study of the “Ispo” opinion poll institute showed that some 77% of (adult) Italians thought that organic products were safer for the health, 75% of the persons interviewed thought that organic farming was healthier for the environment, and 63% thought that organic products tasted better; 42% of Italians seem to be willing to pay a higher price for this type of product. The study showed in conclusion that 14% of the Italians interviewed were regular consumers, whereas at the end of 2002 the figure had been only 11%. According to IRI infoscan, the consumer profile in 2002 was more a city dweller from the north of the country between 30 and 60 years of age with an average and/or higher level of education and average or high income (Pinto and Zanoli, 2004).

As can be seen, environmental concerns are not consumers' primary motive for purchasing organic products; this is also the case in France and Spain, as has already been mentioned, and it poses the problem of the sustainability of organic agriculture, since the primary purpose of organic products is not to preserve the health of human beings, and their beneficial effects on human health have not yet been scientifically proved.

We have some data at our disposal on the profile of non-European Mediterranean consumers and their purchasing motives, so that we can draw up a North-South comparison and check whether there is a homogeneous Mediterranean conception of organic products.

9.2 - Perception and purchasing motives of (non-European) Mediterranean consumers

Very few consumer studies have been carried out on the perception of organic products in developing Mediterranean countries, so that it is impossible to have a general idea of the consumer profile. The limited number of surveys that have been conducted provide a means of explaining the behaviour in certain developing Mediterranean countries, however, but can on no account be applied as a general rule to the entire Mediterranean region.

Lebanon

Lebanese organic product consumers buy these products for various reasons, which have scarcely changed over the last 20 years (Brombacher and Hamm, 1990; Crier, 2001). In the mid 1980s, the main reasons for consuming organic products were health reasons followed by disappointment with conventional products. A consumption survey conducted in 2002 shows that organic product consumers are relatively well-off, with an annual income of over US\$12 000 and sometimes over US\$24 000 (Bteich, 2004). These consumers thus have incomes between 5 and 10

times higher than the minimum annual income in Lebanon (approximately US\$2 400). So although no statistical study has been carried out on the percentage of the total population familiar with organic production methods, these figures suggest that the proportion is relatively low. In 2005, 61% of households still mention reasons of health followed closely by the contribution of these methods to the environment (55%). Approximately 58% of buyers choose organic products because of their added value and because they epitomise higher-grade foodstuffs, and almost 40% of consumers are attracted by the taste, which they find better (Annassi, 2005).

Turkey

A consumer survey conducted in Turkey in 1999 (1005 households selected at random) revealed that 75% of the interviewees stressed the nutritive value of organic products and the fact that they contained no residues as the major reasons for buying such products (Akgüngör et al, 1999).

Whereas organic farming accounts for a relatively large proportion of Turkish agricultural production (103 190 ha in 2004 [Babadoğan and Koç, 2004]) accounting for 56% of Mediterranean production (excluding Europe) and 3.7% of total Mediterranean production in the organic farming sector, the percentage of persons aware of the existence of organic products (9%) is relatively low. This may be due in part to the fact that the vast majority of organic farms produce for export and to the limited development of local markets. Furthermore, one of the reasons for the low level of consumption is that most consumers have difficulty in differentiating between organic and conventional products (Babadoğan and Koç, 2004).

There thus seems to be quite a difference in organic product consumer profiles between the Euro-Mediterranean countries and the other Mediterranean countries, although consumers seem to be relatively well-off in general and motivated in particular by health reasons. For although the conception of organic products as "health" products is common to all of these countries, Euro-Mediterranean consumers are more aware of the environmental side of these products compared to their counterparts in the southern Mediterranean countries.

There are also differences in the percentage of persons who are aware of the existence of organic products. These differences may be due on the one hand to experience of organic farming (the countries in the North being about 20 years ahead of those in the South), to the fact that Euro-Mediterranean consumers have become more aware as the result of the food crises of the past 20 years such as the ESB crisis or the cases of dioxin contamination, and to the scale of the communication campaigns on organic products.

Other products such as those grown in soilless cultures can also be classed as "environmental" products. For in view of the methods used for producing these commodities they could provide a solution to consumer apprehension with regard

to the degradation of the environment and ecosystems and could play a role in environmental conservation.

However, only very few consumer studies on hydroponic products have as yet been carried out in the Mediterranean region. The data from a consumer survey in Morocco are the only data included in the present chapter; they cannot, however, be applied as a general rule to the Mediterranean region as a whole.

9.3 - Consumer perception of hydroponic products

Consumer interest in the methods used for producing the foodstuffs they consume is growing in general. Consumers are worried by the increase in the use of chemicals, pesticides and biotechnology (Smith, 1996) and they therefore tend to seek foodstuffs whose production has a minimal effect on the environment (Ottman, 1992). These consumers could thus be interested in hydroponic products, which would be produced by environmentally sound methods such as solution cultures where the water is recycled, the production environment is controlled, and less weed killers, insecticides and pesticides are used.

The IAM thus conducted a consumer survey in Morocco in order to determine how Mediterranean consumers perceive hydroponic products (Oberti, Padilla, El Jabri, 2005). These original data concerned only one product – tomatoes – and cannot be applied generally to the other Mediterranean countries. Only very few plants are actually grown in soilless cultures (tomatoes, cucumbers, lettuces, sweet peppers, etc.). The limited information may be due to the limited number of consumer surveys on Mediterranean hydroponic products on the one hand and to the low percentage of consumers familiar with this type of production method on the other. For no matter where the products are purchased the production method is never mentioned.

This survey shows that, taken as a whole, environmental and health aspects are not the main criteria involved in the purchase of foodstuffs in Morocco; pleasure and the good taste of products are still the main criteria. Furthermore, when one pursues the analysis further one observes that men are more interested in production methods for reasons of safeguarding their health as opposed to women, who seemed to be more interested in the organoleptic qualities of products. The traditional production methods (Beldia) seem to be the only methods which fulfil all of the conditions for obtaining a "good product". Similarly, the urban population is more aware of the environmental and health aspects of certain hydroponic production methods (Oberti et Padilla, El-Jabri, 2005). These differences in the purchasing criteria of men and women could be due to the lifestyles of the Moroccan population. Surveys were also conducted in Turkey for comparative purposes. Products grown in soilless cultures are not well known to consumers, although the latter are quite in favour of these foods. In many cases, if products of

this type meet their expectations they do not reject them and are prepared to consume them without any apprehension. Turkish consumers make very conscious choices when purchasing their food and attach great importance to the organoleptic qualities of products in particular – they seek the "taste of bygone days".

9.4 - Conclusion

Farmers, industrialists and distributors have never been so concerned about the food safety of the products they supply to consumers, yet consumers have never exacerbated the risks connected with their diet to the extent they do today. There is an appreciable discrepancy between the real risks and the risks that are perceived. When problems occur they are spectacular and are given wide media coverage. Consumers therefore resort to new foods for which there is a certain guarantee that they have been produced according to methods which conserve the environment or which incorporate an ethic or which are declared to be good for the health. It is observed from the results of the various surveys conducted in both the northern and southern Mediterranean regions that the education and information provided for consumers in the north do not have the expected effects. Despite product labelling that is designed to provide information on the product, consumers still confuse environmentally friendly products and products which safeguard the health – to the extent that organic products, for example, are diverted from their initial purpose, which is to practise an environmentally sound production system. Food safety is no longer the priority for European consumers, no doubt because they now have confidence in this aspect of the food system. They are very interested in the health aspect of food, on the other hand, combined with hedonistic values (taste, organoleptic qualities). Consumers in the non-European Mediterranean region are gradually becoming aware of the health risks connected with their diet but are still rarely concerned by the health aspects of products and even less by the environmental aspects. Access to so-called environmentally sound and health-conscious foods is limited for these consumers, since these foods are produced locally for export. These consumers consider that production in accordance with crop-growing traditions is the main factor providing a health guarantee.



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