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Competition in the EU Food Industry: Quality Control and Traceability

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■ 10.1 INTRODUCTION

The EU Food Industry is in a dynamic stake with many opportunities but also uncertainties due to the strong competition coming from inside and outside sources. The beginning of the new millennium brings the interactions of several important events: Communication and Information Technologies, liberalization of the market process, globalization, resources among others, creating a turmoil of uncertainties to the entrepreneurs, where competition is essential to survive in the new scenario.

In this chapter we try to give a brief view about the importance of competition in the Food Chain, considering the Food Industry as a significant piece of the whole marketing channel, from farm to table. Actually the real competition is between food chains, not just at individual firm level. Therefore, Food Industry entrepreneurs have to be integrated to the others stakeholders in an efficient way in order to compete and survive.

Traceability is a significant element in the new Food Industry strategy, with the intention to secure consumer confidence and differentiate products from other competitors.

The analysis of the food quality policy and traceability in the EU may orientate firms about the importance of those dimensions in their strategy dealing with competition, quality control and food safety in the coming future.

10.2 COMPETITION IN THE FOOD CHAIN

The Food Industry is a significant link in the Food Chain and for a rational analysis all the links have to be considered in an interdependent way. We know that the weakness of a chain is conditional on the strength of the weakest link, from producer to consumer.

On the other hand, competitiveness is a relative concept and may be focused with several approaches: macroeconomic, microeconomic or macro-micro economic, according to the main goal of analysis. As a first approach we may consider a competitive industry as that one which combines sustainability, profitability and maintenance of market quota in all the markets where it regularly operates.

There may be distinguished several group of measures: performance measures (growth, profitability, market share), competitive process measures (management process), competitive potential measures (input interaction, productivity) Looking at the future, we may question about the possibility to build an umbrella to interpret the main problems and issues in the agrifood chain. Perhaps we may have a Hybrid Paradigm, considering the multidisciplinary sciences involved in the whole process:

Economic scenario:

To provide the adequate structure we may consider some of the basic doctrines, such as Industrial Organization (with market structure, conduct and performance). The method de “la filière” is also useful on this way. Because they are dynamic doctrines, we should pay attention about the main problems and results. Transaction costs analysis (Williamson 1975, 1985) are another important item to consider, because they are an important determinant of the distribution of economic activity between firm internal organization and the market place (N.D. Poole, 1997)

Market scenario:

Evolution of Food Markets performance is closely related to the Efficient Consumer Response (ECR). The goals is how to diminish costs and increase transparency and market efficiency. Some authors identify four Key E.R.C. practices:

- Efficient category management.
- Efficient customer plans and promotions
- Efficient innovation
- Efficient replenishment (minimum costs and sell-outs)

Technological scenario:

- Effect of market structure, conduct and performance on innovation
- Government policy in R & D
- Patents on products, process or design
- Situation of copyrights and trademarks
- Problems or solutions of adopting new technologies

Some hypothesis should be questioned:

- Market Clearing, where demand equals supply, with or without price adjustment.
- The intensity of competition in Western food markets is generally expected to increase with renewed interest in food products with greater value added (K. Grunert et al 1996). The analysis of different situations and countries may change.

The EU is facing a lack of confidence in the food chain for several reasons among them we may mention:

- The complexity of the net system,
- Inadequate legislation at EU and national levels,
- The lack of experience in the integrated supply chain safety system, specially at cross-border, national and international levels,
- Lack of tradition in the relative common market, to deal with some topics such as environment, sociotechnology issues (such as GMO),
- Interactions among several EU policies: (CAP, economic, social) and third countries. We are in a dynamic process, with a continued enlargement towards new European candidate countries,
- The international scenario, with serious discussion with other countries (USA and others) and institutions (WTO).

As a result there are several movements of European institutions (public and private) eager to study the new situation. The problem is how to organize and select the main topics, such as:

- Integration of quality and safety assurance, through coordination of legislation, investment and technology transfer in the food chain.

- To develop an integrate risk management at EU and international horizon able to deal with safety hazards through supranational institutions and technological solutions
- How to transmit confidence to European consumers. There is a great concern for food safety and bio industrial production.
- During last years EU faced some serious problems such as BSE, dioxin, foot and mouth, swine fever and others. The reaction of EU institutions and national governments has been slow and inadequate. Therefore there is an urgent need to create new institutions, independent of political power, and new regulations related to human and animal safety, environment and economy of natural resources.
- The globalization trend is opening the markets through a liberalization process. Consumer habits are changing but maintain the concern about health. International trade will increase and adequate legislation on food safety should be discussed in institutions such as WTO, FAO, WHO among others.
- To establish a network management along the whole supply food chain regardless the regional, national or international character.
- To provide quality and food safety assurance, requires the traceability of the product, from producer to consumer. Therefore we should integrate multidisciplinary activities: production, product improvement, transport, storage, distribution, market performance, adapted to different situations: socioeconomic, technological, multicultural, demographic and political.

To overcome some of the above mentioned barriers, there is a need of theoretical framework. There are many ways to focus on specific problems, but no one is able to provide a common method to analyze the problems faced. Difficulties arise from the dynamic evolution of the food industry and consumer attitudes, the multidisciplinary of the challenges with the participation of experts from different areas.

The task should be developed by public and private institutions: universities and research institutions in close collaboration with business organizations. Theoretical models should be tested by practical experience.

10.3 TRACEABILITY AS A MARKETING STRATEGY IN THE FOOD CHAIN

Food Industry entrepreneurs have to regard traceability as a new marketing tool, besides an administrative regulation and the obligation to be applied since January 2005. As a first step to define the strategy we should distinguish among the different types and roles: internal-external, upstream downstream, qualitative (product)-quantitative (logistic).

However, as traceability has a cost to be introduced and operated, it is necessary to identify the main functional roles (food safety problems, food hygiene, food residues, fraud, food wastage). We should keep in mind that traceability system is a permanent tool for occasional use, and it has to provide us the capacity to track items in a more efficient way, reducing losses, wastage storage requirements, and specially to get consumer's confidence. As we mentioned, since the beginning of 2005 traceability is required for all food products in EU, either domestic or imported.

This gives an advantage over developing countries, unable to provide at short run the minimum conditions required. However there is no bias or discrimination on this action. Thus, at international markets there is a legacy and standards to support traceability such as EAN:UCC with a number of technologies that enable to apply it (data carrier, storage, security, identification, communication). One of the main goals at the moment is the establishment of a universal data appliance protocol.

10.4 CONCLUSIONS AND RECOMMENDATIONS

EU Food Industry have to face many questions in the coming future dealing with competition, quality control and traceability. Habits of consumption are changing, new markets mean new opportunities but higher risks. Adoption of ICT should close the gap of SME and large enterprises. There is still little collaboration among stakeholders in the chain, with large differences in chain performance, legislation is an important incentive for traceability application but not in an isolated way, tracing is quite often a question of chain organization.

To accomplish the main goals, initiatives should be developed at firm and government agencies, with more coordination of national food safety

systems, achieving international recognized accreditation bodies, and better coordination of the risk assessment risk management protagonists.

As a recommendation to the Administration, we may indicate to harmonize terms and definitions, define responsibilities, define minimum performance of traceability, research into value added in the food chain among others. Entrepreneurs have to apply standards for identification and data registration, explain the added value of traceability, learn from other best practices and chains, work together with ICT providers, and define the expected performance level of traceability.

10.5 REFERENCES

- Alvensleben, von, R., *Agrofood Marketing*, Ed. Padberg et al. 1997 CAB International CIHEAM. N. York.
- Bain, J.(1997)., *Industrial Organization*, John Willey & Sons. New York.
- Becker, T., et al. (1998), *Quality Policy and Consumer Behavior*. Annual Report. FAIT-CT 95-0046, DG 12-SSMA.
- Briz, J.et al.(2003) *Internet, trazabilidad y seguridad alimentaria*. Mundiprensa, Madrid 494 pag.
- Cruz, I. (1997), *Evaluación de los Problemas del Comercio: un Enfoque Competitivo. Distribución y Consumo*, num. 31, December-January 1998, pp. 7-15.
- Garcia M et al (2004) *Benchmarking international food safety performance in the fresh product sector*. 84th seminar of EAAE of food safety on a Dynamic world, Zeist, The Netherland (8-11 February).
- Dagevos H., Hansman H. (2004) *Analysing consumer responses to food safety: result of a survey in the Netherlands*. 84th seminar of EAAE of food safety on a Dynamic world, Zeist, The Netherland (8-11 February).
- Grunert, K. (ed.) 1996., *Market Orientation in Food and Agriculture*, Kluwer Academic Publ. Massachussets.
- Mahon D, Cowan C (2004) Irish consumer perception of food safety risk in minced beef. *British Food Journal*, 106(4), 301-312.
- Senauer, B., et al. (1991), *Food Trends and the Changing Consumer*, Eagan Press, St. Paul Minn.
- Steenkamp, J.B. et al. (1996) Dynamics in Consumer Behavior with Respect to Agricultural and Food Products. Proceedings of the 47 Seminar EAAE. *Agricultural Marketing and Consumer Behavior in a Changing World*. Wageningen, 13-15 March.