

Cost-effective management tools for ensuring food quality and safety

FOR SMALL AND MEDIUM AGRO-INDUSTRIAL ENTERPRISES



Module 1: Use of market information for improving quality management



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Foreword

The Rural Infrastructure and Agro-Industries Division (AGS) of FAO works to improve and strengthen the capacities of small and medium agro-industries, the enterprises that provide them with services and materials and the relevant support organizations in order to ensure food quality and safety. It carries out these activities using an approach that integrates the different factors affecting the capacity of a business to produce foods to meet the demands of the market according to recognized standards, while maintaining and increasing the profitability and viability of the business. Management and technical aspects must be integrated within a practical and cost-effective approach. This ensures that higher incomes, sources of jobs and the food security of the rural population are also promoted.

The training manual entitled *Cost-effective management tools for ensuring food quality and safety – for small and medium agro-industrial enterprises* focuses on these objectives.

This manual is the result of a collaborative effort by technical staff of the Rural Infrastructure and Agro-Industries Division of FAO. It is based on case studies carried out in Bolivia and El Salvador on opportunities for the improvement of capacity of small- and medium-scale food processing enterprises, through training to meet the demands of the market.

These case studies, which were carried out as part of the FAO programme 'Agribusiness Development: Small and Medium Post-production Enterprises', identified the training needs of small and medium fruit and vegetable agro-industries. This sector had been chosen as representative of the food industries operating in Latin America.

In Bolivia, a range of agro-industries was evaluated. These produced: (i) processed dried fruits, jams and/or fruit pulps, particularly pineapple and peaches; (ii) processed vegetables such as faba beans and garlic; (iii) various processed products such as pickles.

In El Salvador, the study focused on the development of products such as tomato-based foods, fruit juices and nectars (including peaches, apples, grapes and tropical fruits), as well as other fruit and vegetable products. This made it possible to identify problems common to the different enterprises, such as low-quality raw materials, inefficient processing operations, lack of knowledge of the relevant quality and safety standards and their implementation and lack of entrepreneurial vision. There was a consensus among small-scale entrepreneurs that these problems could be overcome by implementing innovative training strategies. This consensus led to the idea of preparing this manual.

The manual is divided into four modules, each subdivided into themes. Module 1 discusses the use of market information as a tool for business decision-making. Module 2 covers systems and tools for improving the management of food quality and safety in agro-industry. Module 3 focuses on the principles of quality

management in small and medium agro-industrial enterprises. Module 4 discusses planning as a tool for the management of food quality and safety.

This manual includes case studies, exercises and bibliographic references, as well as a trainer's guide, PowerPoint presentations, appendices, further reading and links of interest.

The purpose of this manual is to assist trainers and entrepreneurs wishing to use the material for self-learning. With this manual, FAO can now provide the small and medium agro-industry sector in developing countries with an important tool for improving its competitiveness and its capacity to deliver high-quality products to consumers.

The English version has been revised to include references, recommended reading and links suitable for English readers. In Module 2, information on standards and regulations relating to quality and safety has been included in order to provide norms that are relevant worldwide.

Geoffrey C. Mrema

Director

Rural Infrastructure and Agro-Industries Division

Acronyms and abbreviations

EU	European Union
EUR	euros
Four 'P's	product, price, place and promotion
GAP	good agricultural practices
GMP	good manufacturing practices
HACCP	hazard analysis and critical control points
SENA	Colombia's National Training Service
US\$	US dollars

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Study guide for the module

MODULE 1

USE OF MARKET INFORMATION FOR IMPROVING QUALITY

Objectives

- To recognize the value of market information for improving the competitiveness of agro-industrial enterprises
- To identify the characteristics and the value of some basic tools for the collection, processing and analysis of market information
- To understand the steps to follow for researching markets and preparing a marketing plan

Content

Theme 1: Market information needed by the company

- The enterprise and its relationship with the market
- The importance of market information
- The market information that needs to be collected

Theme 2: How is market information collected?

- Research: collecting and processing information
- Steps in market research

Theme 3: How is market information used?

- The marketing plan
- The information flow within the enterprise

Activities

Case study: The importance of market orientation

- Exercise on Theme 1

Case study: Coordination of market demand and production capacity

- Exercise on Theme 2

Case study: The trend towards removal of the intermediary – direct exporting

- Exercise on Theme 3

Assessment

At the end of each theme, section participants carry out an exercise to assess their general understanding of the theme

INTRODUCTION

Module 1 provides agro-industrial entrepreneurs with an overview of the importance of the market for the effective functioning of all companies. Businesses in the agro-industrial sector operate in increasingly competitive markets. The proper coordination of production, logistics, processing and distribution to meet the client's specific requirements is therefore fundamental to the sustainability of the enterprise. Module 1 presents simple tools for handling market information, stressing their importance in improving the competitiveness of agro-industrial businesses.

CONTENT

The elements to be developed have been divided into three themes. These provide: (i) simple guidelines for entrepreneurs in defining the type of market information needed; (ii) tools for obtaining such information; (iii) advice on how to use it to support the decision-making process.

Theme 1: Market information needed by the company

This theme illustrates the importance of a close link between agro-industrial enterprises and the market. This link allows agro-industrial entrepreneurs to interact with a group of agents in order to obtain regular information to ensure that the right decisions are made for improving production processes, distribution, logistics, etc.

Theme 2: How is market information collected?

Market research techniques are presented in a simplified form as one of the main tools for obtaining market information on different aspects of the business. Other simple and effective techniques can be implemented easily by most agro-industrial enterprises.

Theme 3: How is market information used?

Guidelines for the development of a marketing plan are presented for planning future actions to improve positioning in the target market(s).

ESTIMATED TIME

A total of 10 hours should be sufficient, including the time required for classroom sessions, practical exercises, review of materials and any other activities proposed by the participants.

Theme 1: Market information needed by the company

INTRODUCTION

Current trends in food consumption indicate a consumer preference for natural foods that are beneficial to health and well-being. Nowadays many supermarkets stock a wide variety of products to satisfy the specific preferences and tastes of different consumer groups. This is known as 'market segmentation'.

This raises the basic question of how companies can identify these preferences and incorporate them into real products. There is no doubt that change is driven by observing the market and adjusting output accordingly. This is essentially a decision-making process based on a shrewd interpretation of the information provided by market agents, as well as the data generated directly by the company. Enterprises constantly face new challenges: they must achieve optimum levels of quality and customer satisfaction, offer new products, support their existing products in the market and penetrate new markets. This places demands on businesses for improving levels of contact, communication and knowledge of the different actors in the chain, including suppliers, competitors and distributors.

In the past, companies produced goods and then looked for a place to sell them, whereas nowadays companies are required to produce products that people are prepared to buy. This market approach takes into account consumer desires and expectations; it also demands a degree of planning to meet consumer expectations over the long term. This basically requires constant adjustment of supply to meet changes in demand.

Agro-industries have characteristics that differentiate them from firms in other sectors. Their raw materials are usually perishable and this reduces substantially the time available for operations on a particular product. Moreover, they are mainly seasonal industries and are reliant on natural factors outside their control. Agro-industrial enterprises must therefore obtain raw materials of suitable quality and price at the right time, in adequate quantities and in an organized manner. This demands an understanding, and synchronization, of the entire supply chain.

Market globalization, developments in communications, new sales techniques and changing consumer habits have intensified competition, which can lead to a decline in established positions in a specific product market. A constant flow of market information is extremely important for all companies in order to adapt to and anticipate these changes. In many Latin American countries, small enterprises drive economic development and must be able to respond to rapid changes in the market at all times. They must therefore manage information more

efficiently to ensure that it serves as a powerful decision-making tool. Agro-industrial entrepreneurs must be proactive in gathering relevant information and designing systems for managing this information in the best way possible. In all cases entrepreneurs must determine and evaluate the usefulness, availability and cost of any information that could support their own particular decision-making process. How well an agro-industrial enterprise is able to seize opportunities and correct any problems encountered depends to a large extent on how effectively it can manage its market information. The more effective it is in obtaining and using information, the lower the risk attached to any business in the agrifood chain.

EXPECTED RESULTS

By the end of this theme, participants are expected to have a better understanding of:

- the importance of market information within agro-industrial enterprises;
- the functioning of the enterprise as an integrated system within which market information acts as a motor for continual improvement and innovation.

SUPPORT MATERIALS

Case study: The importance of market orientation

Reading for Theme 1: The links between the enterprise and the market

PowerPoint presentation: Theme 1

Exercise for Theme 1

Case study**MODULE
1**

The importance of market orientation

Introduction: opportunities

The Chilean company Invertec Foods produces dried vegetables, with red peppers being one of its most important products. The company hopes to benefit from agreements reached with the European Union (EU) concerning the forthcoming reduction of tariffs. One of its managers stated: "There is much work to be done to become the preferred choice of European consumers ... we are so far away that we have to provide them with better guarantees to attract their interest." It is important to note that production costs of local agro-industries are lower because of low-cost raw materials. "Fresh apples cost us between US\$60 and US\$70 per tonne, while in Europe they cost between EUR100 and EUR120." This underlines the great importance of production costs because the price of the raw material represents 65 percent to 70 percent of the final cost. The manager also stressed the fact that Chilean products require almost no additives and that they are becoming progressively more "organic". These positive factors combine well with the other major advantage of being produced during the off-season in European markets. "The other aspect is the importance Invertec places on customer service because our goal is never to lose a customer." Companies in this sector generally need to improve this process so that all their employees are aware of the importance of links with the customer.

Development: strategies to seize market opportunities

Given that an agreement with the EU is expected soon, the company is already sending samples of its products to potential buyers to secure shipments for the coming season and to take immediate advantage of lower tariffs. "If we wait until the agreement comes into force in January and we start to produce apples only in May, a full year will be lost," the manager warned, underlining the fact that Europeans are accustomed to closing business deals in September.

He also pointed out that the agreement will call for diversification of exports. Current exports, particularly in the case of peppers, concentrate on markets in Japan and the United States of America. "Europe is made up of many niche markets because each country is quite different from the others," the manager added.

Europe currently buys 35 percent of Invertec Foods exports, which makes it the most important market. "We are keen to continue growing in this market and to reduce our dependence on markets such as the United States of America and Japan. Serving more markets would reduce our level of risk. The idea now is to add frozen products, juices and other dried products."

According to the manager, the agro-industrial products with the greatest growth potential in the EU are dried vegetables, “because they are used a lot and are being imported from Turkey”. Frozen products also have huge potential, especially those used to prepare pizza. It was disappointing that frozen raspberries, dried tomatoes and mushrooms were not included in the initial list of products with a reduction in duties. “It will be seven years before any reduction applies to all the products with the highest duties,” he added, pointing out that the agro-industry could grow by at least 20 percent in the wake of the agreement.

The European markets that Invertec Foods is contacting to familiarize them with these products include Germany, France, the United Kingdom, Italy, the Netherlands and the Scandinavian countries. Contacts so far have revealed that Europeans have little awareness of the Treaty of Association signed with Chile, although they are aware that Chile is a part of the Latin American region.

Support: the importance of the environment

According to the general manager of another Chilean company, Corpora Aconcagua, the entry of Eastern European countries into the EU will mean greater competition for Chile in the market and it will therefore have to make great efforts to position itself over the next two years to take advantage of this period and introduce the Chilean concept. “Chilean products must be fully recognized”, the manager declared. He also stated that a body was required to monitor trade agreements and that a formal procedure was needed to ensure that signed agreements are defended and respected. He noted that the Government’s budget of US\$1 million was inadequate for assisting exporters. “Much of this is political and requires the Government’s active participation,” the manager affirmed.

With the Eastern European nations joining the EU, the addition of more countries would result in domestic products becoming more competitive, because subsidies would fall proportionally and the EU was not willing to increase them. The manager emphasized that, in the European Union, agro-industry is currently taxed through duties of between 15 percent and 25 percent but that, when subsidies are included, duties rise to 40 percent. The manager added that this year the EU had modified its subsidy policy, previously aimed at processors, which had led to anomalies, but now it was aimed at agricultural producers, resulting in less price distortion.

He suggested that the national bank should develop instruments denominated in euros. This agreement provides a major opportunity for increasing exports; in fact, by the fifth year, agro-industrial shipments from Chile will probably see an annual growth rate of 20 percent. He estimated that growth would not be very significant in the first year of operation of the trade agreement but that, as from the second year, it would increase substantially. He believed that the European countries most likely to be interested in Chilean agro-industrial products included Germany and the countries of Northern Europe. “Spain could also be a good partner.”

Source: Based on *El fuerte potencial de los productos agroindustriales en la Unión Europea*.
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