ISSN 2224-8471

FAO TRAINING MATERIALS FOR AGRICULTURAL MANAGEMENT, MARKETING AND FINANCE



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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11

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Module 1: Use of market information for improving quality management

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS Rome, 2011

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ISBN 978-92-5-107020-8

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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 agroindustries. 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 decisionmaking. 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

Acknowledgements

The preparation of this training manual, which was originally published in Spanish, was made possible by the valuable contribution, dedication and collaboration of the National Service for Training in Industrial Work (*Servicio Nacional de Adiestramiento en Trabajo Industrial [SENATI]*), Lima, Peru. Special thanks go to Claudio Muñoz Franco and Rossana Fernández who coordinated the team and produced the first version of the manual.

Special acknowledgement is made to Luz Berania Díaz and Marta Bentancur for their support in reviewing the technical, educational and structural aspects of the manual. We also extend our thanks to FAO colleagues, especially Florence Tartanac and Eva Galvez, for their support and recommendations. Equally, suggestions provided by participants at training events using early versions of the manual were highly appreciated, particularly the input of María del Carmen Fonseca and Wedleys Tejedor.

The support of Doyle Baker and Gavin Wall (Rural Infrastructure and Agro-Industries Division, FAO) was also invaluable. Our thanks also go to Cadmo Rosell for the Spanish editing and style review, to Lynette Chalk for formatting the text and to Claudia Bastar and Donna Kilcawley for their administrative assistance.

For the English version, special thanks to William Edwardson for the translation, Malcom Hall, Joan Venanzi and Andrea Broom for editing, Lynette Chalk for formatting, Maaike Loogman for the added material, Claudia Bastar for her administrative assistance and Larissa D'Aquilio for the production coordination.

Study guide for the module

USE OF MARK	ET INFORMATION FOR IMPROVING QUALITY
	• To recognize the value of market information for improving the competitiveness of agro-industrial enterprises
Objectives	 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
	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
Content	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
	Case study: The importance of market orientation
	Exercise on Theme 1
Activities	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 MODULE

efficiently to ensure that it serves as a powerful decision-making tool. Agroindustrial 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

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."

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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. Revista Agroeconómica No 69.

CRITERIA FOR ANALYSING THE CASE

After reading the above case study carefully, analyse the text, including the following steps:

- Identify the type of internal and external information that management uses to describe the company's situation.
- Highlight the key aspects of the relationship between Invertec Foods and its customers.
- Evaluate how important market information has been for the company as a supplement to internal information.
- Identify the company's weaknesses in terms of its knowledge of the quality and safety requirements for the importation of fruit and vegetables into European Union markets.

The same tasks are listed at the end of Theme 1 so that they can be completed on the basis of newly acquired knowledge.

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Reading for Theme 1

The links between the enterprise and the market

THE ENTERPRISE AND ITS RELATIONSHIP WITH THE MARKET

To improve our understanding of how the market influences the enterprise and vice versa, as well as how they are interconnected, we need to clarify some key concepts relating to the market, to the enterprise and to marketing itself.

Market

A market is a group of buyers and sellers willing and able to carry out transactions. The market is defined by consumer demand (what consumers want, how, when, where and at what price), including final or intermediate customers who demand quality control, packaging and logistics, price negotiation and forms of payment.

Competing enterprises have a major influence on decisions concerning prices, forms of distribution, promotion policy, etc.

The market also includes the government, industry groups and unions. The government is very important as it can regulate aspects of product quality and safety, requirements for the installation of equipment and policy on duties, taxes and quotas, as well as other issues that may affect end results.

Finally, it is important to define the market environment in order to analyse its different components: local, regional and international.

Market segmentation

There is a simple premise underpinning the theory of consumer behaviour: buyers – current and potential – are not all the same. Each customer buys according to different needs, desires, interests, preconceptions, experience and other personal parameters. Nevertheless, in a group of current or potential customers it is possible to identify subgroups of people, companies or customers that behave in a similar manner and demand products and services of the same type.

To segment the market means to divide it into subgroups of homogeneous buyers. The criteria for segmentation can be demographic (age, sex, residential location), psychographic (activities, interests, opinions, personality, lifestyle) or socio-economic (income, standard of living). When a specific segment is identified as not being served, this is known as a 'market niche'.

Marketing

Marketing covers a set of activities directed at satisfying the wishes and needs of customers through trading, thereby generating profits.

The marketing process involves a series of activities based on knowledge about customers, suppliers, product quality, safety requirements, prices, etc. These activities interact in every direction:

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- with the source (suppliers);
- with the destination (distribution and the final customer);
- all around (with the political, social, cultural and ecological environment).

The marketing mix

This is a set of controllable marketing variables that govern the decisions taken by the company to achieve its objectives in the target market. The major variables that can influence demand for the product are often referred to as the 'four Ps' (product, price, place [or distribution] and promotion). These four variables allow different combinations of strategies to be implemented for each product or group of products, market segment, etc.

Enterprise

An enterprise is an economic and social unit that functions as a system of parts that interact in a coordinated manner to offer goods and services that satisfy needs. The system comprises a group of processes that operate in different areas of the enterprise. These processes govern the consumer products and services that are put on the market in accordance with the quality, quantity, price and opportunity that the market requires. The enterprise must be in constant contact with agents in this environment. The flow of information and agro-industrial products therefore travels in two directions: from the enterprise to the market and from the market to the enterprise.

The specific demands of globalized markets oblige agro-industrial enterprises to prepare internally to receive and process valuable information coming from the market. This allows them to respond quickly and precisely in order to seize opportunities and overcome any constraints. The enormous costs involved in taking wrong decisions mean that well-informed decisions must not be based solely on instinct or common sense. Decisions must also be guided by market knowledge or, more specifically, market information.

Agro-industrial enterprises usually produce goods, so entrepreneurs also have to consider what to produce, for whom, when, and using which resources.

The enterprise and its processes

The following processes can be identified within an enterprise:

- marketing
- financial
- accounting
- production
- human resources

All of these processes are closely interconnected inasmuch as the failure of any one of them affects the functioning of the system as a whole. Although each process deals with specific requirements, at the same time it contributes to the proper functioning of the others. Given that all the areas and processes are important, it is essential for an agro-industrial enterprise to continue to manage

its processes, while giving due weight to marketing aspects as the starting point for planning its actions. As market information is fundamental to improving the competitiveness of an agro-industrial enterprise, it is imperative to strengthen processes by improving contacts with the market.

An important part of the data and information required in a market information system comes from the enterprise itself or is obtained from its environment. Each area generates valuable data that should be taken into account in decision-making. For example, the financial process analyses and evaluates the fulfilment of payments and the payment terms for different clients. The production process generates information on the quality, accessibility and seasonality of raw materials. The human resources process extracts information on wastage from the preparation of each product. The sales sector receives information on what is happening outside the company. The important point is that all the data and information generated within or received by a company can be analysed and made available at the right moment.

THE AGRIFOOD CHAIN AND VALUE ADDED

Every food in the fruit and vegetable sector has a history or a path it has followed; value is added to the product at each step until it arrives in the hands of the consumer. This agrifood chain comprises people, enterprises and institutions dealing with production, processing, marketing, transport, storage, consumption and other related activities. An understanding of the processes in the chain and their synchronization is key to achieving success in any enterprise.

The main links in this chain are:

- primary production
- post-harvest handling
- manufacturing or processing
- transport
- distribution
- marketing
- consumption

Each link in the food chain delivers a product with added value for the following link. There is synergy in the process because the contribution of each agent affects the results of the subsequent stages and the ultimate quality of the product. Quality is understood to relate to the level of satisfaction of the agents involved in each successive step in the process, until the product reaches the final consumer.

The demand for differentiated products

One of the major characteristics of market trends for fruit and vegetable products is the demand for products with quality and safety guarantees and with certification of quality management, fair trade or social responsibility.

In general terms, quality can be defined as the product properties and characteristics that satisfy the consumer's explicit and implicit demands. In the case of agro-industrial products, consumer demands have been evolving in recent decades, incorporating the characteristics known as 'product attributes'. These include **physical characteristics such as** size, colour, shape, freshness and freedom from damage, as well as flavour and smell (organoleptic qualities), nutritional value and others that are beneficial to health. In addition, there are 'process attributes' which relate to production and processing practices and their impact on the environment, human health, animal and plant health and the welfare of employees.

Other quality aspects include the product's shelf-life and the ethical responsibility of the actors in terms of human resources and environmental management. The concept of quality also covers the ability of a company to satisfy the explicit and implicit demands of its customers.

In all cases, quality is referred to as the attributes that behave dynamically and change in response to the changing tastes and preferences of customers and consumers.

Demand for quality and safety guarantees

Consumers are able to judge directly only some of a product's characteristics, such as flavour, aroma and appearance. Labels, brands, seals and certification provide additional information on quality aspects that the customer or consumer is unable to assess directly. Regulatory institutions monitor these aspects, which include nutritional levels, safety and processes, as well as social responsibility in the management of human resources and the environment.

The demand for guarantees relating to characteristics that consumers cannot assess directly and the need to guarantee food safety and public health have given rise to growing demand for certification. Examples include certificates granted by governments that products meet sanitary and phytosanitary requirements, or by private entities to certify processes. Other guarantees are implemented by companies as part of their quality management activities, including good agricultural practices (GAP), good manufacturing practices (GMP), hazard analysis and critical control points (HACCP), labour standards, organic and fairtrade production systems and corporate social responsibility.

Demand for products differentiated by value added

Consumers find it very attractive when value added facilitates the purchase and consumption of products. This is especially so for packaging and specific formats, labelling and extending the shelf-life of the product. Technological innovation is therefore key to improving the company's competitiveness and long-term sustainability.

Companies do not always require complex research systems to obtain timely and relevant information. Below are some of the activities that small-scale agroindustries can carry out to strengthen the marketing process:

- participating in events, such as symposia and conferences on market trends, new demands from buyers or similar topics;
- organizing a small team to search constantly for relevant information (the internet is a good source of information, as are subscriptions to relevant publications);

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- creating a simple system for recording information in databases to make the information easier to consult;
- networking with potential clients and other entrepreneurs by participating in associations and industry groups, as well as through contacts with institutions organizing trade fairs and business round tables.

MAIN ACTORS IN THE CHAIN

Actors in the market can be divided into four groups: consumers and customers, suppliers (of products and services), competitors and regulators.

Consumers and customers

This group comprises users and consumers who are the final beneficiaries of the agro-industrial enterprise's products and services. The enterprise generally makes contact with customers or economic intermediaries who not only transmit consumers' concerns, tastes and preferences, but also identify trends and act as generators of new consumption habits.

Suppliers

Suppliers are a group of agents that provide the agro-industry with raw materials, technology and services, such as transport, freight, financing and storage, port services, auditing, quality certification, market research and studies. There is a wide diversity of suppliers, catering to the needs of all the company's areas and activities. Their participation and commitment are important elements in the company's quality management.

Competitors

This group comprises all the agro-industrial enterprises that compete in the world market or at the local, regional or national level, depending on the company and the products it handles. Competitors' actions can bring about (sometimes quite sudden) market changes, in terms of prices, distribution or changes to the promotion model. Understanding the competition is just as important as understanding consumers.

Regulators

This group comprises public and private bodies whose common purpose includes protecting consumer health by ensuring the safety and quality of foods, protecting the life and health of animals and plants and monitoring the application of good business practices.

THE IMPORTANCE OF MARKET INFORMATION

Market information is an invaluable resource for decision-making in agroindustrial enterprises, enabling the company to influence and expand in the market, thereby improving its competitive position.

Why is it necessary to know the market?

Knowledge of the market is required in order to: identify opportunities; increase confidence in the product being sold; determine quantities, locations and forms of distribution; identify current and potential problems and understand the competition.

Every day entrepreneurs must make decisions concerning the purchase of supplies, staff recruitment and investment. Over the longer term, they make decisions regarding the development of new products, the expansion of distribution channels and conducting market research or promotional campaigns. Entrepreneurs also make decisions concerning which products to produce or sell, their quality, and which market segments to target.

In order to meet planned objectives, market information must be:

- in a suitable format for ease of interpretation;
- timely;
- available at the right place;
- cost-effective for the company.

Subsequently, when exploiting the information, entrepreneurs must organize activities to achieve the planned objectives and then develop and implement the range of strategies and changes established during the planning process. This is not a static process; there is a permanent flow of market information that triggers activities as part of an integrated and continual improvement approach, which accompanies strategies and actions within the agro-industrial enterprise.

WHAT TYPE OF INFORMATION SHOULD BE COLLECTED IN THE MARKET?

Each company should have: (i) a clear understanding of the demands of its customers and consumers; (ii) information on the suppliers of its raw materials and services; (iii) data and information on competitors; (iv) relevant data on standards and the regulatory environment. All the above affect the production and marketing of its products.

How can this information be accessed?

It can be accessed by means of:

- market intelligence;
- market research;
- internal data and information within the company.

Information from various sources is used as a tool for quality management in the company, planning and developing strategies for improving existing products, developing new products and analysing clients, distribution patterns, etc.

Figure 1 gives an example of how market information can be used as a decisionmaking tool in an agro-industrial enterprise, considering the four main actors in the market:

- consumers or customers
- suppliers

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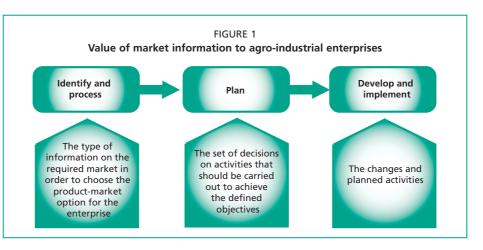
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- competitors
- legal and regulatory bodies

Even though the search for market information is linked directly with the company's objectives, the entrepreneur should keep abreast of trends in demand relating to:

- the consumption of and preference for healthy foods, including functional foods (foods that add nutritional value to the diet and have a positive impact on health, illness prevention, etc.);
- the consumption of fruits and vegetables (fresh, processed, organic, fair-trade, etc.);
- the presentation of the product (packaging units, types of packaging and materials used, as well as the opportunities for product differentiation through value added);
- voluntary and compulsory standards and regulations in force in the target market(s).

According to McGillivray (1998), an entrepreneur in a small or medium enterprise should have sufficient information to answer the following questions:

- a. For which products, varieties and presentations are there buyers?
- b. Who are the buyers?
- c. What prices are they willing to pay?
- d. What are the conditions of payment?
- e. What are the buyers' demands?
- f. What quantities do they wish to buy?
- g. Where will the buyers purchase the products and what type of transport is required?
- h. When do the buyers require the products?
- i. What competition will have to be faced?
- j. What are the relevant government regulations and standards?
- k. What measures are being planned to reduce the risks associated with the sale?

Applicability of market information	Information on demand	Information on suppliers	Information on the competition	Information on regulations and standards
Identify	 Unmet needs or business opportunities Market segments needing attention, consumers whose needs are not adequately met Profitable market niches General and specific characteristics of products that are suited to the needs of the market segments and the identified and selected niches, especially those linked with quality and safety The size of the market 	 Raw material suppliers Reliable suppliers of materials of consistent quality Seasonality of supplies of goods and services, which helps to improve planning and decisionmaking to enter a specific market Conditions of operation (volume/opportunity/cost) Suppliers of inputs and critical services Packaging Additives and preservatives Transportation 	 Companies that are or could become competitors for the product(s) in question Enterprises in a dominant position and the trends in concentration and control of the market Strengths and weaknesses of competing companies, key to establishing companies, key to establishing companies, key to establishing the weaknesses of the competition Levels of quality, positioning and development of markets and the strategies used by the competition, taking into account the four Ps (product, price, place and promotion) How committed competitors are to achieving protocols on product quality and safety. 	 Legal framework that regulates national and international trade in the products being studied Voluntary standards that apply in the market for current and potential customers, such as protocols for quality and safety certification phytosanitary regulations, duties, traceability, safety, maximum residue limits and accepted products Promotion policies or preferential agreements relating to market sthat provide advantages for our company or our consumer protection Agencies for certification of private protocols
Plan	 Confirm or redefine your objectives, particularly those relating to quality and safety, based on the supply of raw materials and their seasonality, quality and safety attributes Redefine your strategies and goals and the action plans for achieving them Decide on changes in the production of raw materials: varieties, technology, estimated production volume 	 Define criteria for the selection of suppliers on the basis of their objectives, goals and action plans 	irket strategies strategy on	 Identify and strengthen the criteria for the selection of target markets on the basis of their objectives, strategies, goals and action plans
Develop	 The appropriate product to satisfy the identified needs The variety of products for each segment that has been selected 	 Knowledge of and relationships with key suppliers Strategic alliances with suppliers of inputs and services 	 Strategic alliances with alternative producers, which enhance competitiveness 	 Policies on quality and sectoral or trade- association proposals with specific targets on country-based positioning of products Alliances with customers for the implementation of sales campaigns

Exercise

COMPLETING THE CASE STUDY

After reviewing the content of this theme and comparing it with your own experience, review your responses to the tasks listed initially and try to correct or supplement them. Link your replies to the topics that have been covered in this section.

APPLYING THE EXERCISE

In order to encourage the practical application of the knowledge acquired in Theme 1, complete the following tasks with specific reference to your own business:

- Make a matrix of information sources that your company uses for making decisions, including both internal and external sources; take into account the four Ps (product, price, place and promotion).
- Describe two practical applications of market information that would improve your company's competitiveness.
- Consider consumer trends for your company's products and design appropriate market segmentation, then come to a conclusion regarding the implications of these trends for the environment of your business with respect to the four Ps.

Assessment	of the	theme

omp	lete the following tasks, using additional pages as required.
	Indicate why it is necessary and important for agro-industrial enterprises to have market information.
	dentify and highlight some trends that affect your business activity, or would benefit it.
a	In the specific case of your company, and bearing in mind that an enterprise is a system, what are the sources of (and the ways to access) internal information n your company? How is it used in decision-making? What external sources
С	of information do you currently use? Assess the criteria you would use to
	analyse the feasibility, quality and cost of gathering such information on your products.

Summary

• The demands of a globalized market oblige agro-industrial enterprises to prepare internally to receive and process valuable information from the market to enable them to respond rapidly and appropriately to seize opportunities and resolve any problems.

- Market information provides invaluable support for the decision-making process, enabling the company to outperform the market and improve its competitive position. As a first step, entrepreneurs should clarify the type of information needed and process it in such a way that it can be used to define concrete objectives: this is known as 'market intelligence'.
- In general terms, the company should have a clear knowledge of the demands of its customers or consumers, as well as information on the suppliers of its raw materials and services, on the competition and on the standards and regulatory environment that impact the production and marketing of its product(s).
- In the case of fruit and vegetable products, market trends are oriented towards products with quality and safety guarantees and towards product differentiation through value-added certification.

Theme 2: How is market information collected?

INTRODUCTION

As mentioned in Theme 1, information is essential for entrepreneurs who realize that market orientation is the only approach that ensures that their products meet the requirements of current and future demand.

The entrepreneur's task is to define the best ways of collecting such information. There is a considerable amount of information in the company environment that could be used for establishing objectives, goals and markets. In many cases all that exists is a mass of data, which has to be converted into information. Companies should strive to obtain market information in a planned and organized manner to ensure that its cost and value are reasonable.

Information used in decision-making can come from inside the company (costs, sales prices per customer, customer complaints, surplus of unsold products, lack of installed capacity to meet demand, personnel unlikely to satisfy customer quality and safety requirements, etc.). Other information from the enterprise's environment can be obtained from employees, the press or public or private information systems, or else by what is known as "market research".

Market research is a way of integrating the product with demand and demand with the product. The research process comprises a series of steps, from defining the research to final analysis of the data obtained. It may consist of simply conversing with current and potential clients or with consumers of the product; at more sophisticated levels it may also include surveys, taste tests and structured interviews.

Each enterprise can form its own market information system that includes information from secondary sources (the press, consultants, public or private information services for the entrepreneur or for the consumer), information generated inside the enterprise and market research.

EXPECTED RESULTS

By the end of this theme, participants should be able to:

- understand the meaning of market information, its different sources and its usefulness as a tool for decision-making in the company;
- identify the characteristics and usefulness of some basic tools for the collection and processing of market information;
- understand the sequence that should be followed to carry out market research.

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SUPPORT MATERIALS

Case study: Coordination of market demand and production capacity Reading for Theme 2: Market research PowerPoint presentation: Theme 2 Exercise for Theme 2

Case study

Coordination of market demand and production capacity

Presentation: the situation

In the province of Chepen on the northern coast of Peru there are large tracts of land that have been used for crop production but have not been profitable or managed optimally. A few years ago a company was established in the area for the production of 'minimally processed products', mainly avocado and plantain. Later, having identified opportunities in overseas markets, the company began processing paprika.

This new venture was apparently profitable to the processing company as well as to local farmers in terms of market prices (US\$2.42 per kg) and yields per hectare (4 tonnes). The suppliers were located close to the plant.

The company initiated contacts with producers interested in paprika production. The results obtained after the first harvests were well below the company's expectations. The average yield in the best of cases was 1.0–1.2 tonnes per hectare, and the product quality did not meet the specifications of buyers in international markets. The only market price that could be obtained (US\$1.40 per kg) was little more than half the anticipated price.

After this experience, the processing company sought support from specialists at a technical institution with experience of managing markets in order to review the problems encountered and to make recommendations on how to overcome them.

Development: the identification of failures in obtaining reliable market information to support the decision-making process

The comments of the consulting company took into account the fact that there was insufficient information on the market that the agro-industrial enterprise had planned to serve. Poor or missing data could be summarized as follows:

- The data on quality requirements demanded by the buyers, i.e. sizes, defects, presentation, were insufficient.
- The expected yields per unit of land were below the minimum amounts for feasibility; at least 20 tonnes per hectare would be needed to make a profit. Moreover, the fact that average yields of only 4 tonnes per hectare were harvested in the second year had not been taken into account.
- The agro-industrial enterprise and producers were unaware that plant disease and pest management would affect yields and quality levels.

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- There was a lack of awareness of the production and processing practices necessary to maintain product quality and reduce the percentage of post-harvest losses.
- There was a lack of awareness of fluctuations in prices according to supply and demand.

Outcome: possible solutions

An analysis of the situation makes it possible to identify the major problems and to conclude that this type of crop might be an interesting business opportunity if sufficient information could be obtained. The following actions were suggested:

- Obtain information regarding the quality requirements for the markets and customers to be served.
- Stay informed and aware of the experiences of other processing companies operating in this field.
- Promote the technical improvements required to increase the crop's productivity.
- Control post-harvest losses during product handling and processing by means of staff training and the use of appropriate equipment in order to maintain product quality.
- Plan seed sowing to take into account the expected yields and customer demand.

Improving the technical qualities of crops would increase and improve the agroindustrial enterprise's production, enabling it to manage the availability and quality of its products for the market.

Source: Authors, based on experience of the Delcampo company, Peru, 2005

CRITERIA FOR ANALYSING THE CASE

After reading the above case study carefully, analyse the text and answer the following questions:

- What do you consider to be the starting point for initiating or changing a business activity?
- Why is appropriate and reliable information such a determining factor for the success or failure of an agro-industrial business activity?
- Which gaps in market information concerning production and processing of the product are identified in the case study?
- Which lessons were learned from the experience described in this case?

The same questions are posed at the end of Theme 2 so that they can be answered based on the newly acquired knowledge.

Reading for Theme 2

Market information

No company can operate in isolation from the market environment. Enterprises that are able to obtain and manage relevant information will be more likely to beat their competitors by producing better and more competitive products and meeting the requirements of target markets.

According to Alvin Toffler, the problem of the twenty-first century is not access to information but the capacity to process and use it efficiently. Generating information requires human and economic resources. The company must have clear objectives and priorities to avoid being inundated by data. Therefore, information must: (i) reach the company in a format that can be interpreted; (ii) be available on time; (iii) reach the staff responsible for taking decisions; (iv) have a reasonable cost. Enterprises can use market information to:

- reduce risks associated with marketing;
- identify where to sell;
- verify current prices;
- decide on whether to sell a product immediately or to store it;
- determine changes in the cycle of production, varieties cultivated, qualities of the products, etc.

Therefore, it is useful to implement what is known as a market information system, which includes:

- information generated by the enterprise itself (production, costs, sales by type of client, attention to customer complaints, reliability of suppliers, etc.);
- 'intelligence' data and information on the company's business environment (economic trends, behaviour of competitors, strengths and weaknesses of competitors and of the enterprise itself);
- data collected by market research.

WHAT IS MARKET RESEARCH?

Market research is a part of the overall information that the company can obtain from its market information system.

Market research is defined as the collection, recording and systematic and objective analysis of data relating to problems and opportunities in markets for goods and services.

It is a systematic process because the research project must be well organized and planned. Objectivity refers to the efforts and professionalism of specialists who perform their task impartially.

The strategic aim of market research is to improve knowledge of the system by providing information that reduces the degree of uncertainty and bridges gaps in market knowledge. The main objective is to generate information on concrete problems in order to improve the management's decision-making. In small-scale enterprises market research is often improvised and is little more than a trial and error approach that produces generalized data. In this case a company simply launches a product for sale but over time it will be forced to make the necessary adjustments.

WHY USE MARKET RESEARCH?

Market research is a powerful tool that allows a company to obtain information directly from the market.

Research is a tool accessible to all types of enterprise. However, many smallscale enterprises perceive market research as being very expensive and therefore impossible for them to undertake. This is not true because a great deal of market research can be carried out with minimal resources, depending on the type of product and the depth of the research.

While market research is an important aspect in the planning of an agroindustrial enterprise, it should be recognized that this type of research is an inexact science. It is impossible to predict the future precisely and, in many cases, the marketing difficulties encountered by entrepreneurs depend on external factors beyond their control.

For an agro-industrial enterprise, market research can contribute to:

- decision-making by providing information needed for making immediate and long-term decisions;
- improving the company's management capacity;
- providing management with valid information concerning the potential sales of a product, the factors that can influence these sales and the best way to market the product;
- improving the company's profitability.

Basically, market research contributes to increasing profits through such improvements as:

- adapting products to demand;
- perfecting promotion methods;
- defining prices in relation to quality requirements;
- constantly evaluating proposed objectives and strategies for achieving basic goals;
- defining a promotion campaign;
- adapting logistics to requirements.

Table 2 presents a list of the topics that can be studied using market research.

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TABLE 2

Variable in the marketing mix that should be studied	What to research?
Product	How much can be sold, when and where?
	Recognize and consider the importance of major buyers, wholesalers, and retailers.
	Determine current offers and the different market segments.
	Evaluate the supply according to source: national, imported.
	Learn about the seasonality of demand and current supply.
	Which type of transport is used by the competition, and what do buyers want?
	Which services do competitors provide, e.g. just-in-time delivery, stock control?
	Are there reliable transport services in my area for my products, and what are the costs?
	What are the quality and safety requirements for customers/consumers?
	Is there a reliable cold chain to preserve the quality and safety of the product?
	Quality and safety specifications for products by segment and by type of customer
	How can I make my product more attractive in terms of presentation, package size and characteristics, price, etc.?
	Is a brand an attribute that the consumer is willing to pay for?
	How are competing products protected from fraud, contamination by dirt or physical damage?
Price	Analyse competitors' prices.
	Analyse prices of similar products that could compete with your company's products.
	Analyse different packaging, presentations and logistics for competing products
	Analyse the criteria for establishing prices for the different customers, terms of payment, handling of product rejects at the point of sale.
	Elasticity of supply and demand.
	Seasonality of prices and the sales cycle.
Place (distribution)	Analyse various marketing channels and forms of distribution (direct to consumers, retailers, wholesalers, importer–distributors, institutional buyers).
	Determine minimum and maximum quantities of the product that distributors are willing to handle.
	Analyse margins, surcharges and forms of payment.
Promotion (and advertising)	Determine the type of promotion expected or needed by current and potential customers (advertising, point-of-sale demonstrations).
	Which promotion or advertising is carried out by the competition?
	Which types of promotion agreements are common among competitors and the customers or distributors?
	Which type of advertising is being used (posters, flyers, point-of-sale demonstrations, special offer pricing, tasting)?
	Which messages are being used to promote competitors' products?

Guide for determining what market information is needed to develop my products

TYPES OF MARKET RESEARCH

There are several types of market research, depending on the area of study, the information collected, the time allotted and the degree of accuracy required.

Exploratory research means gathering preliminary information as a basis for defining the problem and establishing a hypothesis to be tested.

Descriptive research means that the results obtained describe elements or aspects of a product within a specific market.

Classification is also possible according to the elements of the **marketing mix:** products, prices, distributions, promotions or consumer behaviour.

Finally, the **procedures** used to collect the primary data are: observation, survey and experiment. Contacts may be made by mail, in person, through the internet, etc.

STEPS IN MARKET RESEARCH

The process of market research involves a series of phases that are summarized in Table 3. If the research is not carried out in a structured way, with very clear objectives and precise limits on what is to be collected, the final result could be simply a mass of data and erroneous information.

TABLE 3 Steps in market research

Steps ii	indirect rescurent	
(a)	Definition of the problem or need for information	The items to be researched are defined in order to focus efforts and resources on topics or situations of relevance to the company.
(b)	Objectives of the research	The goals of the research are defined. Objectives and precise targets enable the company and the researchers to focus on the steps to follow during the research process.
(c)	Identification and analysis of the sources of information	Sources of information and the necessary data are reviewed and selected to optimize the allocation of resources during the market research.
(d)	Preparation of instruments and methods according to requirements	The instruments and methods to be employed are prepared in order to proceed to the information collection stage.
(e)	Definition of the sample	Calculations are made of the total number of people to be consulted in the study, where they are located, etc.
(f)	Fieldwork	The data collection process is carried out.
(g)	Processing of information	The information is organized, coded and tabulated for processing.
(h)	Analysis of information	The information collected is analysed and evaluated. This is one of the most important steps because: (i) the results of the process are compared with the objectives established and (ii) the methodology is assessed taking into account the information still required to achieve the objectives of the study.
(i)	Final report	A report is prepared that includes the formal conclusions of the study, a presentation of the company results and recommendations for decision-making by the company's senior management.

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Definition of the problem or need for information

Research is undertaken where there is a need for better information on a specific situation or because a problem has become evident. The reason why information is needed must be clarified. The person who will be in charge of this task should ask the following questions (for example):

- What precisely is the market research expected to achieve?
- Is it to solve a problem or to identify a solution?

Market research is frequently undertaken in particular circumstances where there is a need to:

- obtain further details about the subject of the study (e.g. to find out more about the buying habits of consumers in a new market);
- forecast and, where possible, anticipate changes in the market (e.g. discover the implications of new tax measures on product offerings);
- monitor the effectiveness of the company's actions (e.g. ascertain the degree of satisfaction of a group of consumers concerning the product, packaging or price);
- identify problems relating to a particular market variable: price, product, place or promotion (e.g. comparing competitors' prices with those of your company).

A basic knowledge of the company and a review of previous studies are of great value in defining the underlying problems and opportunities. These studies are likely to provide sufficient elements for further identification and understanding of past and current problems to speed progress to subsequent phases of the process.

Several tools for defining and prioritizing problems are described in Module 3 of this manual, in particular brainstorming and multivoting.

Example

Rico's is a company that produces sauces and pastes and would like to introduce one of its star products (vinaigrette dressing), into a new market. Although this market is known to be very similar to the current market, the company does not wish to rely on intuition and limited information. It must therefore obtain more information in order to reduce the risk associated with entering this market.

Determining objectives

Market research has to be designed in the light of the objectives set by the company. Moreover, there must be adequate financial, technical and human resources available to carry out the research. Market research can be an expensive activity, especially in terms of time. Therefore it must be designed and streamlined on the basis of well-defined objectives to ensure that costs and duration can be foreseen clearly. The objectives of market research answer the question: Why is this study being carried out?

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Example

If Rico's states its problem as 'insufficient information before launching the star product in a new market', then its objectives could be defined as follows:

- investigate the frequency of consumption of the type of product to be introduced;
- analyse the general characteristics of the potential group of consumers;
- identify the principal points of purchase of potential consumers.

Identification and analysis of information sources

The tasks to be carried out prior to any research project focus on identifying appropriate sources of information to be analysed and on collecting the information concerning the problem to be studied. This forms part of the 'market exploration' described in Table 4.

When data and information sources already exist, the information they generate is considered to be from **secondary sources**. When there is no information prior to the study, the information must be developed; this is known as information from **primary sources**.

It is important to evaluate secondary sources with respect to the following factors:

- origin of the source;
- degree of reliability;
- level of obsolescence;
- validity;
- utility for the purpose.

The company generally uses primary and secondary sources and seeks information inside and outside the company in order to be well informed before initiating the field research.

The information to be collected can be either qualitative or quantitative.

Quantitative information deals with observable facts (what, how much, where, when, how) in magnitudes that can be measured objectively. Quantitative information can be said to measure the visible part of whatever is being studied.

Example

A quantitative research study is designed to identify customer preferences for specific products.

The result could be: Product B is preferred by 66 percent of the participants, while the remaining 34 percent prefer Product A. Therefore, Product B is twice as popular as Product A. For example: iDo you prefer cherry tomatoes or Roma tomatoes?

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Information from secondary sources		
External	Generating source	Search
Generally found in publications such as newspapers, reference works,	These sources are available	International organizations:
books, statistics, official panels, economic reports, journals and magazines	to the public in libraries and information centres	 Food and Agriculture Organization of the United Nations (FAO)
	or on the internet (using	 Organization of American States (OAS)
	search engines)	 International Trade Centre (ITC)
		World Trade Organization (WTO)
		World Bank (WB)
		 Inter-American Development Bank (IADB) Ministries or equivalent bodies: agriculture, industry, planning, overseas trade, central bank, etc.
		Chambers of industry
		Chambers of commerce
		Exporters' associations
		Embassies (trade offices)
		Projects run by the private sector or by international donors
		Specialized publications produced by retail groups (supermarket chains) or companies specialized in market research
Internal	Generating Source	Search
Generally found in reports of accounts, trade, invoices, buying orders and inventories, as well as reports generated within the company through its operations, formal and informal customer complaints, assessment of suppliers, production statistics by type of customer, levels of rejects and the causes, etc.	The company itself	The company's files
Information from primary sources	Generating Source	Search
Characteristics		
Can be adapted easily to the company's needs Has the great advantage that the information obtained is direct/ and refers specifically to what is being studied Is more detailed than secondary sources	The researcher	A range of methods is used to obtain this information, including observation, interviews and different types of survey, which can be carried out by various means such as mail or electronic mail

Qualitative information deals with latent facts that are not directly observable: opinions, thoughts, feelings, attitudes and motivations. Most surveys are used to highlight opinions or motivations containing a degree of subjectivity.

Example

A qualitative research study is designed to identify the preferences of customers for specific products.

The result could be: Product B is preferred over Product A because of its good flavour and its convenient packaging, etc. For example: Do you prefer Cayena Lisa pineapple or *La Española*?

Preparation of instruments and methods

The materials for conducting the research must be prepared as follows: development of the questionnaire; selection of the type of questions and the model for collecting responses; sequencing.

The type of personnel needed to carry out the study is identified. The bestknown qualitative techniques are focus groups and in-depth interviews.

In qualitative research – which aims to identify reasons, motives, thoughts, beliefs and opinions relating to a topic – more than one technique can be used. The instrument most commonly used for collecting qualitative information is the **questionnaire**¹.

Definition of the sample

Whatever the interview technique used (telephone surveys, internet or face-toface), it always attempts to study the total population by taking a small sample. A sample is a segment of the population considered as representative of the whole. This is of vital importance because the results cannot be extrapolated to the entire population if the sample is not 'representative of the totality'.

Fieldwork

This refers to the physical collection of information and should be carried out in a series of simple steps:

• Planning the fieldwork

In this phase, preparations are made for all the steps to be carried out in the field, such as ensuring that an appropriate number of questionnaires and support materials are available. Interviewers and other team members are also identified during this phase.

¹ A deeper understanding of questionnaire design is provided by the publication *Market research for agroprocessors*. FAO, 2003. pp. 39–45 (also available at http://www.fao.org/docrep/007/y4532e/ y4532e00.htm)

• Preparing the interviewers

Given that the interviewers greatly influence the study, it is important that they have at least a minimum of preparation. Whether the interviews are carried out by company employees or by people contracted specifically for the task, it is best to have a preliminary trial to be sure that the questionnaire is well designed and that the interviewers understand how to use it.

- *Carrying out fieldwork* The main field exercise is completed when the required information from the selected sample of respondents is obtained.
- *Quality control and assessment of the information obtained* This step is necessary in order to verify that:
 - i. the questionnaires have been completed in full;
 - ii. all information has been obtained correctly;
 - iii. there is coherence between the responses registered by the interviewers;
 - iv. the people chosen in the sample have actually taken part in the survey.

Processing the information

The information analysis process must be well prepared beforehand. This is normally done in three sequential stages: coding, tabulation and the construction of tables and graphs. Appendix 3 provides guidelines for the implementation of these three stages.

Analysis of the information

Analysis of the information involves developing an understanding of what is represented by the tables and figures in relation to the objectives originally established for the market research. In the analysis stage we need to try to understand the reasons for the specific behaviour of a variable (e.g. price variations or customer tastes, such as a preference for margarine or butter) and to establish relationships and dependencies between the variables.

Final report

The results of the market research are presented to the people in the company responsible for decision-making. It is therefore important for the people in charge of the study to take great care when presenting these results. They should always be submitted in writing, even when it is only a small study. Presenting the results in an organized way makes it easier to evaluate the findings.

The report must present clearly the principal problems that were studied, as well as the assumptions on which the research was based. Similarly, a clear description of the methodology used should be included, as well as the sources of information, how the sample was defined, the type of questionnaire and the number of people that participated. Preferably the results should be presented in tables and graphs to make it easy to assess the links between the variables studied. Finally, the report should include conclusions, recommendations and points for follow-up, based on the results obtained. Μ

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Example of the analysis of quantitative information

The following table presents the consolidated results of a survey to determine opinions regarding a particular issue 'X' according to the gender of respondents.

What can be observed in the table?

Gender Opinion	Female %	Male %	TOTAL %
In favour	53	52	53
Against	46	30	38
No response	1	18	9
Total interviewed	830	822	1 652

The dependent variable is taken as a group, and the following is observed:

• The majority of those interviewed are in favour of X, although there is a significant percentage against. However, the proportion of favourable responses exceeds half the total.

If the analysis focuses on opinions in favour according to gender (independent variable), the following is observed:

- The percentage of men giving a favourable responsible (52 percent) is similar to that for women (53 percent).
- A larger percentage of women give an unfavourable response. This is because there are more men in the sample who gave no response, perhaps because they had no opinion on the issue.
- Taking women as a group, the majority can be said to be in favour, although the percentage against (46 percent) is not much less than the percentage in favour (53 percent).
- On the other hand, even though the percentage of men giving a positive response is similar to that of women, the percentage of men against is much lower because a larger proportion of men gave no response.

Exercise

COMPLETING THE CASE STUDY

Review the responses to the questions set initially and try to clarify or supplement them, linking your answers to the topics that have been covered in this section.

APPLYING THE EXERCISE

In order to encourage the practical application of the knowledge acquired while working on this theme to your own particular business, please perform the following tasks:

- Define the objective of a research study on an aspect of the market that your company needs to examine.
- Consider the nature of the information required and propose the appropriate type of research.
- Identify secondary source information from inside your company and from external sources.
- Test a prototype of a simple questionnaire on a sample of your main customers. First, formulate closed or open questions, then arrange them in the form of a simple questionnaire.

Answer the following questions, using additional pages as I	required.
1. What is the difference between exploratory research and des	- -
2. For your company, which information would be from secor which from primary sources?	
3. What type of information is collected when quantitative techniques are used in a research study?	
4. In your own words, what are the steps involved in the development of the steps involved in the development of the steps involved in the development of the steps involved in the steps involved in the development of the steps involved in the st	opment of marke

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Summary

- Market information, both generated within the company and obtained from the outside, can be organized in what is known as a 'market information system'. Market research is a component of this system.
- Market research is defined as the collection, recording and objective analysis of data relating to a problem or to an opportunity for marketing the products and services of an agro-industrial enterprise.
- The main objective of market research is to provide valid information (not simply data) for use in the management's decision-making process, either as a way of solving a concrete problem or of defining an opportunity. In the context of an agro-industrial enterprise, market research helps to:
 - support the decision-making process by providing the information needed for making basic and long-term decisions in the company;
 - improve the company's management capacity;
 - provide management with valid information about the opportunities for product sales, factors that can influence sales and the best way to market products;
 - improve the company's profitability.
- Market research can be an expensive activity, especially in terms of time. It is therefore essential to design and limit it using well-defined objectives in order to estimate costs.
- The market research process includes the following stages:
 - definition of the problem or need for information;
 - definition of the objectives of the research;
 - identification and analysis of the information sources for the exploratory study prior to the fieldwork;
 - preparation of instruments and methods, including content, format and methods for obtaining data;
 - definition of the sample (e.g. the number of companies or consumers that will be included in the sample);
 - fieldwork;
 - processing of information;
 - analysis of information;
 - final report.

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Theme 3: How is market information used?

INTRODUCTION

The information obtained from surveys is used to carry out planning. Planning is a fundamental tool for improving management because it helps to define the strategies and activities required to meet a specific objective. The marketing plan is based on the information that the company has obtained through its market information system, as well as on the results of market research.

The marketing plan is an operational document that guides the entrepreneur before, during and after the sale of the company's products. It contains the information necessary to make sales, as well as support for managing unforeseen situations.

This section contains guidelines to assist agro-industrial entrepreneurs in developing a marketing plan, while Module 4 provides details of planning principles for agro-industrial enterprises. Plans are then drawn up to guide the implementation of the activities required to achieve the enterprise's stated objectives.

EXPECTED RESULTS

After completing this theme, participants should have a better understanding of:

- the characteristics and importance of the marketing plan as a support tool to aid the company in improving its competitive position;
- how to prepare a marketing plan as a useful tool for organizing business activities and optimizing the use of resources, with a view to improving competitiveness.

TRAINING MATERIALS

Case study: Direct exporting Reading for Theme 3: Preparing the marketing plan PowerPoint presentation: Theme 3 Exercise on Theme 3

Case study

The trend towards removal of the intermediary – direct exporting

Introduction

Fruit producers in Chile are entering into direct negotiations with importers. Low marketing margins, the desire to gain more control over their business and the growing professionalism of fruit producers have prompted some to enter into direct negotiations with importers, thereby eliminating intermediaries. "*The profit margins are so tight nowadays that it has become a necessity in recent years to export direct*," confirmed the general manager of the El Recreo group. El Recreo is not an isolated case. It is part of a strategy developed by the Federation of Fruit Producers (FEDEFRUTA). Several business round tables have been organized with FEDEFRUTA support, including the First International Business Round Table on Chilean Fruits and Vegetables for Export. The organizers of the round table reported that the meeting brought together exporters of some 35 million boxes of exportable produce out of Chile's total annual exports of about 180 million boxes.

The manager boasted that this year, for the first time, El Recreo group's total production – which includes apples, kiwis and table grapes – would be sold to importers that the group itself had contacted. However, he stressed that it was doing business "in its own way" not because of poor relations with exporting companies but because of its strategy to improve producer incomes in today's context of fierce international competition.

According to the manager, this is a trend that is here to stay: "If producers are not exporting direct within the next five to ten years, then I do not believe they will be very profitable."

The company needs to have more control over the production process, including quality and safety during the production and marketing phases The president of FEDEFRUTA believes that the main motivation of FEDEFRUTA members who choose direct export is the need to have more control over their own activities, rather than the specific needs of individual producers.

"When you are dedicated solely to production you lose direct control over your business. However, when you have control you know exactly which variables are affecting it. This is very important. Then if one day you have a fruit tree or a variety that is not profitable, you take it out," stated the president, stressing that the group had no desire to compete with the large exporting companies.

The current objective of FEDEFRUTA is to open up new marketing opportunities for its producers and so improve their capacity to negotiate with intermediaries.

"External markets are open to all because exporting is not only for large enterprises, it is an entrepreneurial opportunity for anyone who enters this type of business," stressed the president.

The fruit export manager of Tulio Callegero, Sons and Company believes that the professionalization of producers has also been vital in motivating several producers to become interested in exporting. "Today, producers are more knowledgeable than five or ten years ago and are able to sell directly overseas and carry out their own business," said the manager.

"In my view, Chilean producers have excellent negotiating capacity. It is very professional. They are very aggressive, transparent and very clear. Compared with our experience in other Latin American countries, we are very satisfied," stated a Chilean producer.

However, fruit producers who are already exporting point out that this route is not for everyone and several requirements must be met for direct exporting to be successful.

There is general agreement concerning the need for financial support to cover the costs of management travel or losses arising from problems. It is also important to explore new market destinations on a continual basis. "Markets such as China, Colombia, Panama and the Scandinavian countries are poorly developed, but they have interesting potential. On the other hand, fruit marketing in the United States of America and Europe is well consolidated. If you lift a stone, ten importers will run out! There is little to gain there," affirmed the president.

There is also a demand for the development of products differentiated by superior quality. The keys to this are: good agricultural practices, certification and studies on global trends in fruit consumption.

Source: Based on *La tendencia a reducir el nivel de intermediación – La exportación directa.* Newspaper *'El Mercurio'*, 2003. Santiago, Chile.

CRITERIA FOR ANALYSING THE CASE

After reading the above case study carefully, analyse it as follows:

- Identify the circumstances that prompted the El Recreo group to change its strategy for accessing markets.
- Reflect on the challenges that the company had to face in order to enter into direct negotiations with importers.
- The enterprises changed their marketing strategies, which involved formulating a marketing plan with objectives, strategies and actions. Which of the strategies can you identify?

The same tasks are listed at the end of Theme 3 so that they can be completed on the basis of the newly acquired knowledge.

Reading for Theme 3

Preparing the marketing plan

INTRODUCTION

Entrepreneurs use the marketing plan as a guide for the production and sale of their products. The marketing plan can be a section within the company's overall production plan and should integrate the conclusions of and useful information resulting from market research. The plan should include only information that contributes to successful marketing. In fact, it is likely that very little of the data generated during the market research will be included in the plan. Table 5 summarizes the phases and actions required in preparing the marketing plan.

A. Analysis of the current situation

The company's current situation is analysed in terms of its mission, objectives, business activities and the markets served. The analysis also takes into account the external and internal factors affecting the company.

Phase	Action	Description
А.	Analysis of the company's current situation	Answer the question: Where is the company located? This will lead to an analysis of its location in relation to:
		• customers
		• markets
		• competition
		• product
		distribution channels
		• prices
		• promotion
В.	Definition of objectives	They should be realistic and appropriate to the resources of the company
C.	Development and selection of strategies	Identify how to achieve the situation desired by the company
D.	Preparation of an action plan	Specifies the set of actions necessary to achieve the objectives
E.	Preparation of a budget	Financial details of the plan and its actions
F.	Execution of the monitoring and assessment stage of the plan	To ascertain whether or not the company is obtaining results and achieving its objectives; to provide corrective mechanisms, as required.

TABLE 5

Phases in the preparation of the marketing plan

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• Analysis of external factors

Some of the information describing the company's current external environment comes from market research. Entrepreneurs can use this information to identify unsatisfied needs and business opportunities, market segments to be served, profitable niches, the general and specific characteristics of appropriate products for serving market segments and niches, the size of the available market, quality and safety requirements, etc. Based on these results, the company can draw up a plan to define how to achieve the identified objective(s). In addition to information on competition, prices and market trends, entrepreneurs should take into account the potential effect of external factors. These factors include the legal and labour aspects, as well as economic stability and government policies that might facilitate or hinder the implementation of a plan.

• Analysis of internal factors

This is an analysis of the company's ability to implement a plan successfully. It identifies the strengths and weaknesses of the enterprise in terms of its ability to carry out the plan. More detailed information on this topic is provided in Module 4.

B. Definition of objectives

The idea identified by the market research must be transformed into concrete objectives through which the company quantifies what it wants to achieve and how. The internal and external analyses help to define realistic and achievable objectives. These objectives should be expressed in quantitative terms, using measurable financial indicators or other measurement units.

Examples of quantitative objectives

- 1. Increase sales by 10 percent.
- 2. Increase profits by 20 percent.
- 3. Capture at least five more customers.
- 4. Recover half the number of lost customers.
- 5. Increase market share by 5 percent.

C. Development and selection of strategies

In order to achieve the above objectives, it is essential for the company to establish strategies. The selection process for appropriate strategies is based on:

- defining the target population, i.e. the section of the market that the company wishes to reach;
- the general programme and the objectives with regard to the different marketing variables (product, price, place and promotion).

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Example: definition of the target population

Sabor S.A. is a company that processes a variety of fruits into jellies, jams, compotes, etc. It identifies its target population as consumers who purchase goods in supermarkets or minimarkets, a segment of the middle class. Recently they have also begun to offer certain products in bulk, such as jams and jellies for high-end restaurants and bakeries. Even though data indicate that these are markets with a strong demand, the company has not yet succeeded in positioning its products satisfactorily.

D. Preparation of an action plan

Once the strategies have been determined, an **action plan** is prepared for implementation within a prescribed time frame. An action plan is a useful planning instrument; it details the tactics that the company must use in order to achieve its marketing objectives. Figure 2 illustrates this concept.

The action plan is used to define the following:

- the activities that must be carried out;
- how they will be carried out;
- the time it will take to carry them out;
- who will be responsible for carrying them out;
- how the results will be assessed.

As an example, Table 6 shows the action plan prepared for the Sabor company, whose marketing objective is to introduce new products into its existing markets. The action plan is an operational document that should be simple, clear, concise and specific. It should define the objectives and actions and identify those responsible for carrying them out. The actions that help to achieve the objectives generally include:

• Actions relating to products: modification, removal and launching of new products, creation of new brands, expansion of the product range, quality improvement, new packaging and sizes, adding value to the product, etc.

	FIGURE 2 Action plan to achieve the objectives	
ACTION PLAN		
STRATEGIES	Path to follow	MARKETING OBJECTIVES
TACTICS	Steps that must be taken	Destination point

- Actions relating to prices: review of current prices, change of policy on discounts, buying incentives.
- Actions relating to place (distribution channels): retailer support, wholesaler agreements, opening of new channels, improvements in delivery schedules, subcontracting of transport, internet sales and deliveries, etc.
- Actions relating to promotion and advertising: point-of-sale promotion and tasting campaigns, mass advertising, promotion at trade fairs and local events in the regions where the products are marketed, development of a brand differentiated by quality, etc.
- Actions relating to the organization of sales: modification of sales territories and routes, sales force commissions and incentives, order processing, etc.

E. Drawing up a budget

A **budget** is a document that quantifies or estimates the financial resources to be allocated to a set of planned activities. When a budget is approved, this only means that the use of financial resources has been authorized, whereas to achieve the objectives, a set of planned activities must be implemented by following an action plan.

The budget indicates how much money is required to carry out the activities proposed in the action plan. It is needed to ensure that there is a rigorous assessment of the consequences of any planned action (e.g. offering a promotion of two melons for the price of one). There are times when budget constraints make it necessary to adjust the action plan.

The budget should indicate when given amounts of money will be needed during implementation of the activities. It is also used for controlling the revenues and costs of the enterprise, as well as for identifying problems. In addition, it provides a good basis for accounting and financial transparency: when everyone can see how much was spent and received, questions can be asked about any discrepancies.

Guidelines for the preparation of a budget are presented in Module 4 and its Appendix 3.

F. Monitoring and assessment of the plan

Monitoring and assessment of the management plan provides feedback on the extent to which the objectives have been achieved (e.g. the sales of a specific product in a given month). It is also a way of recognizing partial achievement of the planned objectives over relatively short periods of time. This makes it possible to take almost immediate action when targets are missed.

Details of the assessment vary because they depend on identification of the 'key results areas'. These can be defined as topics that make the greatest contribution to the improvement of marketing management.

Reports are a useful tool in the assessment process because they show the development of activities over the short, medium and long term. Reporting allows regular adjustments to be made to the plan as part of a continuous process.

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TABLE 6

Specific objectives	Activities	Requirements	Alliances needed	Responsible	Time	Indicators
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1. An offering of	the customers	Customer specifications		(Marketing)		sheet for product, to
products suitable for consumers	Produce a short report	Specifications of current products		Luis Moreno (Production)		concerned
who use supermarkets		Define conditions for acceptance or rejection				
		Interviews with fresh produce manager				
	Prepare specifications for technical changes to products to be sent to Production	Formats of technical data sheets		Luis Moreno (Production)		Organization of changes to processes (product development)
						Written specifications prepared
	Prepare samples and technically evaluate them to check how they fit with requirements	Materials and support services for the process of preparing the products		Luis Moreno and Segundo Béjar		Samples evaluated and results produced
		Packaging and sealing equipment				
		External control services				
	Elaborate major issues for quality control and requirements to be met for products to be cleared before shipping to customers	Quality control data sheets Forms for data on rejects and				Forms and data sheets prepared and records completed
						Number of customer complaints, by client and product
	Purchase packaging according to specifications	Materials for packing: bags, food grade packaging		Pedro Suárez (Packaging)		Recording of purchases made
	Contact suppliers					
	Obtain quotes					
	Decide on packaging to use.					
Price	Analyse competitors' prices and products.	Investigation of market prices		Rosa Ramírez		
	Negotiate minimum prices according to quantities to be delivered	behaviour		Company		
		Negotiation meetings		Manager		

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Periodic assessments can be carried out with a review of objectives and the budget, as follows:

Assessment of the annual plan: marketing activities and results are evaluated using the following tools:

- analysis of sales (sales achieved compared with expected sales);
- analysis of market share;
- analysis of the marketing effort/sales ratio (marketing investments versus sales);
- financial analysis;
- analysis of customer attitudes;
- analysis of competitor behaviour.

If the company detects poor results, adjustments should be made to the plan. Adjustments may include changing prices, reducing production, increasing pressure on the sales force, or reducing the costs of lower-priority items.

Assessment of profitability involves determining the current profitability of products. Profitability refers to the cost of producing and marketing in relation to the returns generated from sales. Profitability analysis reveals weaknesses, although it does not indicate whether or not they could be improved or eliminated.

Assessment of efficiency involves improvements to marketing activities such as sales, advertising, promotions and distribution.

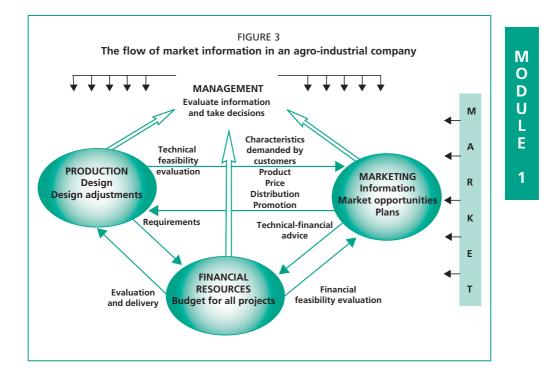
INFORMATION FLOW WITHIN THE ENTERPRISE

An enterprise comprises a set of interdependent parts that are not isolated from each other. The efficient functioning of an enterprise depends on how well it channels and processes information between its various parts and how effectively this information is used in the decision-making process. The marketing component uses tools to respond dynamically to a range of constantly changing opportunities and demands. For example, by responding to the flow of market information the enterprise can expand its market by introducing new products and reducing the production of unsuccessful products, or by applying any other strategy that appears profitable.

Information obtained by the company covers all areas, from management to operations, and is translated into plans such as the marketing plan. This process allows the company to make adjustments to its actions and strategies, which should result in improvements in all areas and processes.

Adequate output quality and the capacity to satisfy food safety standards are basic requirements for an agro-industry to enter new markets. A marketing plan must therefore consider quality and food safety in its product strategies. The diagram below illustrates the information flow and structure within a company.

Information flows from the market to the enterprise through channels created by the enterprise. Using an appropriate set of management tools the enterprise simultaneously processes and organizes this information in order to plan its future activities.



Any new information obtained on quality and safety requirements should be transmitted to the production department where the appropriate changes can be made to ensure that the market requirements are met. At the same time, the information should be transmitted to the finance department in order to assess the costs involved.

An agro-industrial company wishing to become more competitive should focus its efforts on integrated management. This takes the market as its starting point because that is where buyers' specifications and requirements are generated. Hence the importance of using management tools for collecting and organizing information for planning the company's activities. Figure 3 illustrates the concept of integrated management.

Exercise

COMPLETING THE CASE STUDY

After reviewing the content of this theme and comparing it with your own experience, review your responses to the tasks listed initially and try to correct or supplement them. Link your replies to the topics that have been covered in this section.

APPLYING THE EXERCISE

Apply the knowledge acquired in Theme 3 to your own company and attempt to answer the questions and complete the tasks below:

- As an agro-industrial entrepreneur, which marketing proposals should be included in a plan with objectives and strategies for achieving your company's targets?
- Define a marketing objective for your company by analysing internal and external factors.
- To achieve your objective you need to design strategies and activities relating to product, price, distribution and promotion activities. Identify and describe them.
- What are the requirements for implementing the marketing plan? Identify and list them.

Assessment	of the	theme

Answer these questions, using additional pages if required.	
1. What are marketing plans and what are they used for?	
2. List the steps to follow in the preparation of a marketing plan.	
3. When product strategies are being established, which topics should be taken into account?	
4. What do monitoring and assessment of the marketing plan contribute and	
which aspects should be included?	
5. Why is it important for information to flow throughout the different areas of	
the company?	

M O D U L E

Summary

- The marketing plan is an operational document, the purpose of which is to guide management in the production and sale of its products. The marketing plan can form a section of the company's production plan summarizing the conclusions and useful information collected through market research.
- The preparation of a marketing plan includes the following steps:
 - analysis of the company's current situation;
 - definition of objectives;
 - development and selection of strategies;
 - preparation of an action plan;
 - preparation of a budget;
 - preparation of a monitoring and assessment plan.
- The information flows from the market to the enterprise through channels designed by the enterprise to collect this information. At the same time the enterprise, with the support of management tools and based on the information received, processes, organizes and plans a sequence of actions guided by a set of plans.
- An enterprise does not comprise parts that are isolated from each other. On the contrary, its proper functioning depends on how well it channels and processes information between its various parts and how effectively this information is used in the decision-making process.
- An agro-industrial company wishing to become more competitive should focus its efforts on integrated management. This takes the market as its starting point because that is where buyers' specifications and requirements are generated. Hence the importance of using management tools for collecting and organizing information for planning a company's activities.

References

THEME 1

- McGillivray, G. 1998. Análisis económico e investigación de mercados para proyectos hortofrutícolas: manual de capacitación. Programa Nacional de Capacitación en Manejo Post-Cosecha y Comercialización de Frutas y Hortalizas, Convenio SENA-Reino Unido, Centro Agroindustrial del SENA, A.A. 695, Armenia, Quindío, Colombia.
- FAO. 2003. *Market research for agroprocessors*, by A.W. Shepherd. FAO marketing extension guide no. 3. Rome.

THEME 2

FAO. 2003. *Market research for agroprocessors*, by A.W. Shepherd. FAO marketing extension guide no. 3. Rome.

THEME 3

FAO. 2003. *Market research for agroprocessors*, by A.W. Shepherd. FAO marketing extension guide no. 3. Rome.

Appendix 1 Recommended further reading on Module 1 themes

THEME 1 : MARKET INFORMATION NEEDED BY THE COMPANY Reading 1: Identifying market opportunities for rural smallholder producers. Good practice guide 3

Author: Ostertag, C.; Lundy, M.; Gottret, M.; Best, R.; Ferris, S. Publisher: CIAT. Year: 2007. Document link: http://isa.ciat.cgiar.org/catalogo/listado_tools2010.jsp?pager. offset=5&tema=AGROENTERPRISES

Description

This publication combines market research, product concept evaluation and business analysis techniques, within a practical, innovative approach for identifying market opportunities for rural agroenterprise development projects within a defined area or territory. The participatory methods enable rural producers to make key decisions in market analysis and evaluation.

THEME 2: HOW IS MARKET INFORMATION OBTAINED? Reading 1: Market research for agroprocessors

Author: Shepherd, Andrew W. Publisher: FAO. Year: 2003. Document link: http://www.fao.org/docrep/007/y4532e/y4532e00.htm

Description

This guide describes in simple terms the type of market research that agroindustries can carry out and some of the forms used to do the research. The guide is aimed at entrepreneurs and companies that plan to develop or expand medium-scale agro-industrial businesses. We recommended reading Chapters 3, 4 and 5 relating to, respectively, research on consumer attitudes, information required for the presentation of the product and information regarding its distribution.

Reading 2: Direct marketing guide for producers of fruits, vegetables and other specialty products

- Author: Hall, Charles R.
- Publisher: Agricultural Extension Service, University of Tennessee
- Document link:
- http://www.utextension.utk.edu/publications/pbfiles/PB1711.pdf

Description

This guide provides an overview of direct marketing methods and gives suggestions for establishing a direct farm-to-consumer market and for developing a business plan; it also touches on advertising and promotion strategies.

Reading 3 : Training manual for small-scale enterprise for neo-literates

Author: United Nations Educational, Scientific and Cultural Organization Publisher: UNESCO, Bangkok. Year: 1999.

Document link: http://unesdoc.unesco.org/images/0011/001181/118121eo.pdf

Description

The manual provides entrepreneurial skills for neo-literates or those who have completed literacy programmes and are keen to set up small-scale businesses in their own communities. Chapter 10 is recommended.

THEME 3: HOW IS MARKET INFORMATION USED?

Reading 1: Training manual for small-scale enterprise for neo-literates Author: United Nations Educational, Scientific and Cultural Organization Publisher: UNESCO, Bangkok. Year: 1999. Document link:

http://unesdoc.unesco.org/images/0011/001181/118121eo.pdf

Description

The manual provides entrepreneurial skills for neo-literates or those who have completed literacy programmes and are keen to set up small-scale businesses in their own communities. Chapter 10 and handout 5.3 are recommended.

Reading 2: Management of agricultural marketing

Author: Crawford, I.M. Publisher: Network on Training and Agricultural Marketing for East and West Africa. FAO Project GCP/RAF/238/JPN. FAO. Year: 1999.

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Appendix 2 Links and additional documents with market information for agro-industrial entrepreneurs in Central America

USEFUL LINKS Ecomarkets

This is a project financed by the Swiss State Department for Economic Affairs and executed by INTERCOOPERATION (Swiss Foundation for Development and International Cooperation), which began operations in the Central American region (Costa Rica and Nicaragua) in January 2005. The objectives of Ecomarkets are: to promote the marketing of organic products; to support fair trade and its growth in local, regional and export markets; and to foster the access of smalland medium-scale producers in Central America to these markets, thereby contributing to an increase in their incomes and better employment opportunities. The Ecomarkets site delivers information relating to marketing opportunities for organic products and provides details of the principal export markets for these products.

http://www.ecomercados.org

Management tool box – Micro, small and medium enterprises, Guatemala

This tool has been designed in response to the needs of micro, small and medium exporters in Guatemala as a means to promote and diversify Guatemalan exports. The site provides, in a logical way, a step-by-step description of the export process presented in the form of a series of advisory notes so that the user can find details on any specific topic.

http://www.infomipyme.com/Docs/GT/Offline/exportacion/index.htm

Market studies for fruit and vegetable products

Commercial opportunities for fruit and vegetable products can be found on the web page of Partnerships for Food Industry Development, Michigan State University.

http://www.pfid.msu.edu/

M O D U L E

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Msfinfo.com – Sanitary and phytosanitary measures for fruits and vegetables

This site contains information on access to markets; it details the export procedures for Central American countries (Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua) and the regulations for access to the markets of Canada, United States of America, Mexico and the European Union. The page was prepared by the regional program of Partnerships for Food Industry Development – Fruit & Vegetables (PFID-F&V) of the Michigan State University, financed by USAID under the cooperative agreement USAID/G-CAP 596-A-00-04-00039-00. This web page is updated and maintained by the Foundation for Support of Local Income Generation (AGIL)

http://msfinfo.com/index.php

ASSOCIATIONS OF EXPORTERS IN CENTRAL AMERICA

ANIERM, A.C. – National Association of Importers and Exporters of Mexico http://anierm.org.mx/orbsite_xp/

APEN – Association of producers and exporters of Nicaragua http://www.apen.org.ni/

CADEXCO – Chamber of Exporters of Costa Rica http://www.cadexco.net/

COEXPORT – Corporation of exporters of El Salvador http://www.coexport.com/index_highres.htm

EXPORT PROMOTION INSTITUTIONS IN THE REGION

BANCOMEXT – Bank of Foreign Trade, Mexico http://www.bancomext.com/Bancomext/index.jsp

BELTRAIDE – Investment and Trade Promotion Service of Belize http://www.belizeinvest.org.bz/

CEI – Export and Investment Centre, Nicaragua http://www.cei.org.ni/

OEX – Export Promotion Fund, El Salvador http://www.foex.gob.sv/

PROCOMER – Foreign Trade Promoter of Costa Rica http://www.procomer.com/

VICOMEX – Vice-ministry of Foreign Trade, Panama http://www.mici.gob.pa/

SUGGESTIONS FOR FURTHER READING

Central American supermarkets' private standards of quality and safety in procurement of fresh fruits and vegetables

Domestic food industry actors are implementing their own private standards for ensuring produce quality and safety. This is beneficial to consumers as these standards are among the few food safety practices implemented by domestic food industries. However, meeting higher level standards is a challenge for producers as it entails significant investments, implying the need for investment assistance and government support services. The paper presents the findings of field studies carried out in Costa Rica, Guatemala, El Salvador, Honduras, and Nicaragua from 2002 to 2004.

http://www.regoverningmarkets.org/en/resources/latin_america/central_ american_supermarkets_private_standards_of_quality_and_safety_in_ procurement_of_fresh_fruits_a_0

Inclusive business in agrifood markets: evidence and action

The report is composed of briefing papers, presentations, posters and discussions (in plenary and working groups) from this conference. It seeks to capture key points and is not intended as an exact or chronological record of the proceedings. http://www.regoverningmarkets.org/en/resources/global/inclusive_business_ in_agrifood_markets_evidence_and_action

The Japanese Market for Environmentally and Socially Certified Agricultural Products from Central America

This publication analyses the Japanese market for foods that have been certified with social and environmental standards, such as organic products, fair trade or Rainforest Alliance. The study was carried out in 2004 by the International Foundation of Organic Agriculture Movements (IFOAM), Japan, under the strict technical supervision of the Commodities and Trade Division of FAO with funds from the World Bank.

http://www.fao.org/ES/ESC/en/15/16/highlight_52.html

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Appendix 3 Complementary reading

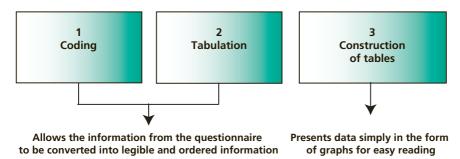
TECHNIQUES FOR PROCESSING COLLECTED INFORMATION

A mass of collected data is of no use for making business decisions until it has been analysed and prepared in a specific way. Some initial recommendations for handling information are listed below.

- Separate numerical data from data that have been expressed verbally.
- Numerical data should be processed in a way that is easily understood, using illustrative charts and tables.
- Data expressed verbally can be either converted into numerical data or remain as non-quantified or qualitative information.

As far as possible, data should be quantified. However, qualitative data are equally important. The difference lies in the degree of precision and complexity of the variables measured.

Once the criteria for each data category or subset have been chosen, the basic processing tasks can proceed. This entails three sequential steps.



CODING

Coding is the process of transforming verbal data into numerical data, which can then be processed numerically. The procedure is as follows:

- Similar types of information should be identified in order to group them. Such groups can be identified when there are many replies to the same question, or when several situations concern the same subject. In any case, there will be a variety of answers that all reveal a specific behaviour.
- A code is given to each type of response. This code can be a letter or number used to group responses or observations that are identical or equivalent.

While similar responses are almost always expressed in slightly different ways, they are easier to analyse afterwards if they are grouped together. Although there

could be any number of codes, it is preferable to limit them to the main groups of responses encountered.

• Ambiguous or inappropriate responses should be grouped under the code for 'others'.

Example

If questions are asked about opinions concerning fast food consumption, coding helps to group the responses in order to identify which are the most common opinions. For instance, the following codes could be established:

- They are a very good alternative for providing food requirements (A).
- They are not nutritious and so are harmful to health (B).
- They are the only alternative for people who lead a busy life (C).
- I have no idea what they are (D).

TABULATION

This refers to the preparation of tables containing previously grouped and quantified data. Each question should be included and tabulated. Tables should include all the responses received after they have been divided into categories.

Where there is a relatively small quantity of data, tabulation can be performed manually; otherwise it is convenient to use a computer for electronic data processing.

For manual tabulation, tabulation sheets must be created in which the data are distributed according to codes. A column should be created for responses,

		Example	
/ariable:	What is your opi	nion on the consumption	n of fast foods?
_	Code	Responses	Total
	Code A	Responses ///	Total 3
_		•	
-	A		3

If the first response analysed is from a person aged 23 whose opinion on the topic corresponds to code B, a mark should be placed in the second column in the row for code B. Another response corresponding to code A from a person aged 37 should be tabulated in the same way. The completed table shows whether opinions on the topic are affected by the age of the interviewees, or whether they are distributed uniformly across all age groups.

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with marks placed next to the code representing the category of responses to the question being tabulated.

Finally, all the responses under each code are totalled.

When tabulating responses with various options (multiple choice), note that there is a distinction between:

- the total number of interviewees;
- the total number of interviewees who answer the question;
- the number of answers, according to the various motives or codes indicated. In rare cases the results may appear incoherent, as in the following example.

In conclusion, when tabulating multiple choice responses, three elements should be tabulated separately:

- the total number of people interviewed;
- the total number of those who did not respond;
- the total number of responses for each code or category.

Example 2

What are the reasons for buying your food products in supermarkets?

Responses are obtained and grouped under four main reasons:

- to ensure food quality and safety
- for economic reasons
- for security and ease of purchase
- for the variety of products offered

The following table shows how the results are distributed. There are distinct total quantities that refer to different aspects of the same situation. One is the total number of people consulted (50); another is the number who actually responded (46) and finally, the total number of responses received (55), which means that some respondents have given more than one answer.

Total interviewed	50
Total number who replied to the question	46
Reasons identified	
Food quality and safety	27
Economic	2
Security and ease of purchase	12
Variety of products offered	3
Total responses	55

It can be concluded that 27 of those interviewed said they preferred to buy their food in supermarkets because of the quality and safety of the products offered, two for economic reasons, and so on for the other reasons identified.

TABLES AND GRAPHS

Tables and graphs should be prepared in order to produce results that can be easily interpreted, even by non-specialists. The information should be rigorously structured and the data presented logically, clarifying any element that could lead to confusion or different interpretations.

Recommendations for constructing tables include:

- Name the table clearly and accurately by indicating all the characteristics of the information presented. This should be done in a concrete, specific and concise manner. For example, if the question is "Why do you prefer to buy your foods in supermarkets?" the title of the table should be: Reasons why interviewees prefer to buy their foods in supermarkets.
- When two variables appear in a table, the first variable mentioned should be the dependent variable, followed by the independent variable. For example, interviewees' opinions on the quality of food products that are sold in the supermarket and in the marketplace, according to age, where age is the dependent variable. If another variable, such as gender, is added, it could be: interviewees' opinions on the quality of foods sold in the supermarket and in the marketplace, according to age and gender.
- The next task is to convert the tabulated data into percentages to gain a better idea of what a particular element represents within the whole. Data is much clearer when presented in the form of percentages rather than as quantities and numerical totals.

If percentages are used, a brief glance at the data makes it possible to perceive differences and similarities, appreciate variations and trends and make comparisons with other studies.

Although it is recommended to work with percentages, for a small number of cases (between 15 and 20) data are usually presented as absolute numbers. When working with percentages, a base number must be selected as the quantity on which the percentage calculation is based.

- Unless many samples are being handled, the numbers presented should be rounded where possible, because too many decimals can be confusing.
- When dealing with multiple choice questions, the basis on which the percentages are calculated is always the total number of people who responded and not the total number of responses.

TYPES OF TABLE

When there is only one variable the table design is simple: one column of ordered data is presented.

When there are two or more variables it is important to present the independent variable horizontally and the dependent variable vertically. This is shown in the example below.

Total sample size	250
Fotal who responded	247*
	%
Aged under 25 years	30
Aged 26 to 39 years	25
Aged 40 to 59 years	21
Aged 60 and over	24

If the independent variable is age, which is believed to have an influence on the opinion of those interviewed, the opinions on the statement "products that are sold in bulk are unsafe" could be presented in the following way:

Example

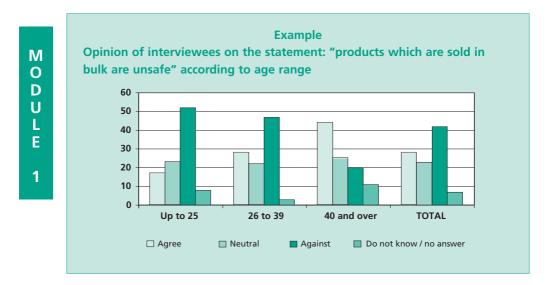
Opinion of interviewees on the statement: "products that are sold in bulk are unsafe"

Age Opinions	Under Age 25	Age 26 to 39	Age over 40	Total
Total interviewed	83	103	61	247
	%	%	%	%
Agree	17	28	44	28
Neutral	23	22	25	23
Disagree	52	47	20	42
Do not know / no answer	8	3	11	7

GRAPHS

Graphs express in visual form the numeric values that appear in the tables. The aim is to provide a broad, rapid and direct understanding of the information that has been presented elsewhere in the form of numbers.

Both specific and general information can be expressed in the form of graphs. A variety of graphs may be used, such as bar graphs, histograms and pie charts.



FAO TRAINING MATERIALS FOR AGRICULTURAL MANAGEMENT, MARKETING AND FINANCE

11

Cost-effective management tools for ensuring food quality and safety

FOR SMALL AND MEDIUM AGRO-INDUSTRIAL ENTERPRISES

The purpose of this manual is to improve and build the capacities of small and medium agro-industrial enterprises in order to guarantee the quality and safety of food products. The approach integrates the different factors that affect the capacity of a business to produce foods to meet market expectations and recognized standards, while maintaining and increasing the profitability and life of the business. Management and technical aspects are integrated through a practical and cost-effective approach.

The manual includes four modules on the following subjects: the use of market information for improving quality management; systems and tools for improving quality and safety management in agro-industry; the application of quality management principles in small and medium agro-industrial enterprises; planning as a tool for improving quality and safety management.

The manual contains case studies, exercises and bibliographic references, as well as a trainers' guide, PowerPoint presentations (on CD-ROM), appendices with further reading, links of interest and a glossary. The manual aims to assist trainers and entrepreneurs wishing to use the material for self-learning. With this manual, the Food and Agriculture Organization of the United Nations (FAO) provides the small and medium agro-industry sector in developing countries with an important tool for improving competitiveness and the capacity to deliver high-quality products to consumers.

Module 1: Use of market information for improving quality management