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Identifying Market Opportunities for Rural Smallholder Producers



C. Ostertag, M. Lundy, M. Gottret, R. Best and S. Ferris

The International Center for Tropical Agriculture (CIAT) is a not-for-profit organization that conducts socially and environmentally progressive research aimed at reducing hunger and poverty and preserving natural resources in developing countries. CIAT is one of the 15 centers funded mainly by the 64 countries, private foundations, and international organizations that make up the Consultative Group on International Agricultural Research (CGIAR).

CIAT also receives funds for research and development services provided under contract to a growing number of institutional clients.

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About the Donors

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CIAT Rural Agroenterprise Development
Good Practice Guide 3

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C. Ostertag, M. Lundy, M. Gottret,
R. Best and S. Ferris



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1. Markets.
2. Farmers.
3. Small farms.
4. Small enterprises.
5. Rural development.
6. Marketing.
7. Value added.
8. Market research.
9. Marketing techniques.
10. Profitability.

Local descriptors in English:

1. Agroindustrial development.
2. Productive chains.

AGROVOC descriptors in Spanish:

1. Mercados.
2. Agricultores.
3. Explotación en pequeña escala.
4. Empresas pequeñas.
5. Desarrollo rural.
6. Mercadeo.
7. Valor añadido.
8. Investigación de mercados.
9. Técnicas de mercadeo.
10. Rentabilidad.

Local descriptors in Spanish:

1. Desarrollo agroindustrial.
2. Cadena productiva.

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Preface

This *Marketing Guide for Smallholder Rural Producers* was first published in Spanish in 1999 as a training material for use in Latin America. The manual was translated into English later that year and has subsequently been used as a training material for development projects in both Africa and Asia.

This new English version has been extensively updated based on feedback obtained from colleagues and workshop participants. This edition is the third title within a series of best “good practice guides” describing the components of “Participatory and Area-based Approach to Rural Agroenterprise Development”. The series provides a methodological tool kit developed by CIAT’s Rural Agroenterprise Development Project.

The aim of this set of methods is to meet the entrepreneurial development needs of service providers¹, i.e., those institutions and agencies that support the development of rural communities. The methods can be used for capturing and systematizing market information leading to the development of new agroenterprises and effective local business services.

The goal of this work is to enable service providers to empower rural communities with skills to engage more effectively in the marketplace so as to increase their income, their

1. The term “service providers” refers to public agencies for research, extension and local administration and private sector actors and agencies involved in inputs, extension, business planning, finance, market facilitation, storage, etc.

capacity to innovate and ultimately improve their livelihood options. To date, the titles in the CIAT agroenterprise “good practice guide” series for agroenterprise development include:

- Strategy Paper: A Participatory and Area-based Approach to Rural Agroenterprise Development.
- A Guide to Developing Partnerships, Area-based Resource Assessment and Planning Together.
- **Identifying Market Opportunities for Rural Smallholder Producers.**
- Strategies to Improve the Competitiveness of Market Chains for Smallholder Producers.
- Evaluating and Strengthening Rural Business Development Services.
- A Market Facilitator’s Guide to Participatory Agroenterprise Development.
- Collective Marketing for Smallholder Producers.
- A Guide to Rapid Market Appraisals to Support Smallholder Agroenterprise Development.
- A Guide to Policy Analysis for Smallholder Agroenterprise Development and Advocacy.

This guide 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 area² or territory. The participatory methods enable rural producers to make key decisions in market analysis and evaluation.

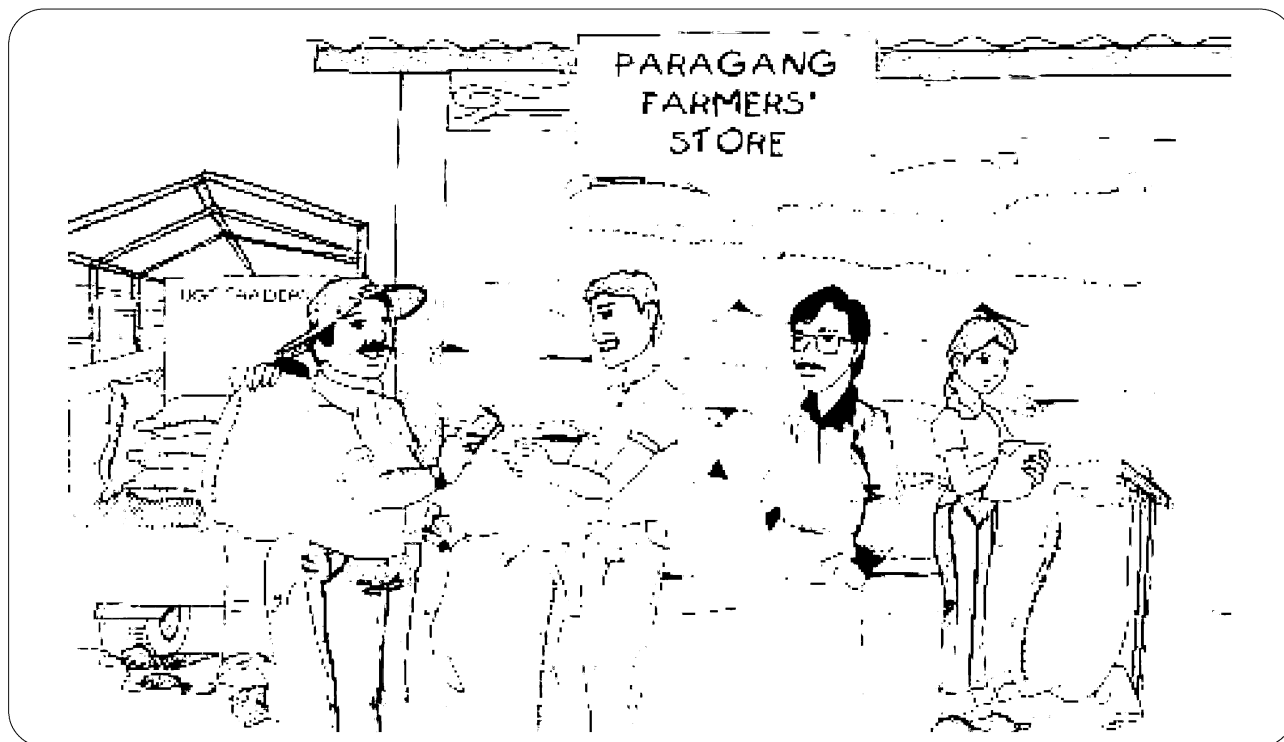
2. Area can also be interpreted as a territory and in the French and Spanish versions of this text, where the term territory or territoire is used.

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support during the development of the methodologies presented in this guide and during its production. I would also like to thank the many colleagues and trainees in Latin America, Asia and Africa who have provided questions and comments for improving this guide.

Introduction and Background to the Guide



This guide is the third in a series designed to support agencies implementing a participatory approach to rural agroenterprise development. These guides are designed for use by service providers in assisting farmer groups and local entrepreneurs within a community or “area” to develop skills in agroenterprise development.

The aim of this guide is to provide a simple and systematic participatory method for gathering market information to identify products and services for agroenterprise development. This approach enables local producers to undertake market studies and identify investment options based on their local knowledge and on market demand, rather than relying on pre-selected products that have been decided by external experts.

The starting point for this guide is an analysis of the client group and the establishment of a research team to identify new market opportunities. This process enables service providers and farmers to take a fresh look at their existing production portfolio and also to explore options for diversification based on the agronomic, marketing and financial merits of selected products.

The main output of the work from this guide is a “short list” of prioritized demand-based market opportunities. This list of products will be reviewed by farmer groups to select a product (or products) for immediate investment in the case of existing products, or for more detailed market analysis leading towards the development of new agroenterprise opportunities.

For those actors who are following the full CIAT process, this guide is the second step in the process. At this point you will have completed the following tasks:

From the work in Good Practice Guide 2 you will have:

1. Selected an area.
2. Undertaken a biophysical and socioeconomic analysis of your area.
3. Developed a vision for your community and defined the rules of engagement.
4. Identified partners who will constitute the agroenterprise working group.
5. Identified farmer organizations interested in adopting an agroenterprise approach.

Purpose

This guide aims to promote a greater market orientation when working with rural smallholders. The specific purpose of this

approach is to enable service providers and farmer groups to evaluate their marketing opportunities based on market DEMAND. This method aims to promote diversification and find ways to add value to agricultural products.

This method will also help in the identification of better market opportunities for existing products but with emphasis on finding ways of increasing income through collective or group marketing, and by evaluating current practice and finding ways to upgrade methods for production, marketing and business relations in order to be more competitive in the marketplace.

The guide proposes a participatory procedure that involves smallholder rural producer from the beginning of the research process to the final selection of products for enterprise development. Service providers are also encouraged to use this approach to support the needs of more vulnerable groups within their target communities such as women's groups, the youth and elderly, who may require special consideration in making suitable product selections.

Within the context of rural agroenterprise development, the aim of a market opportunity identification process is to:

- (i) Evaluate market demand and buying conditions for existing products with

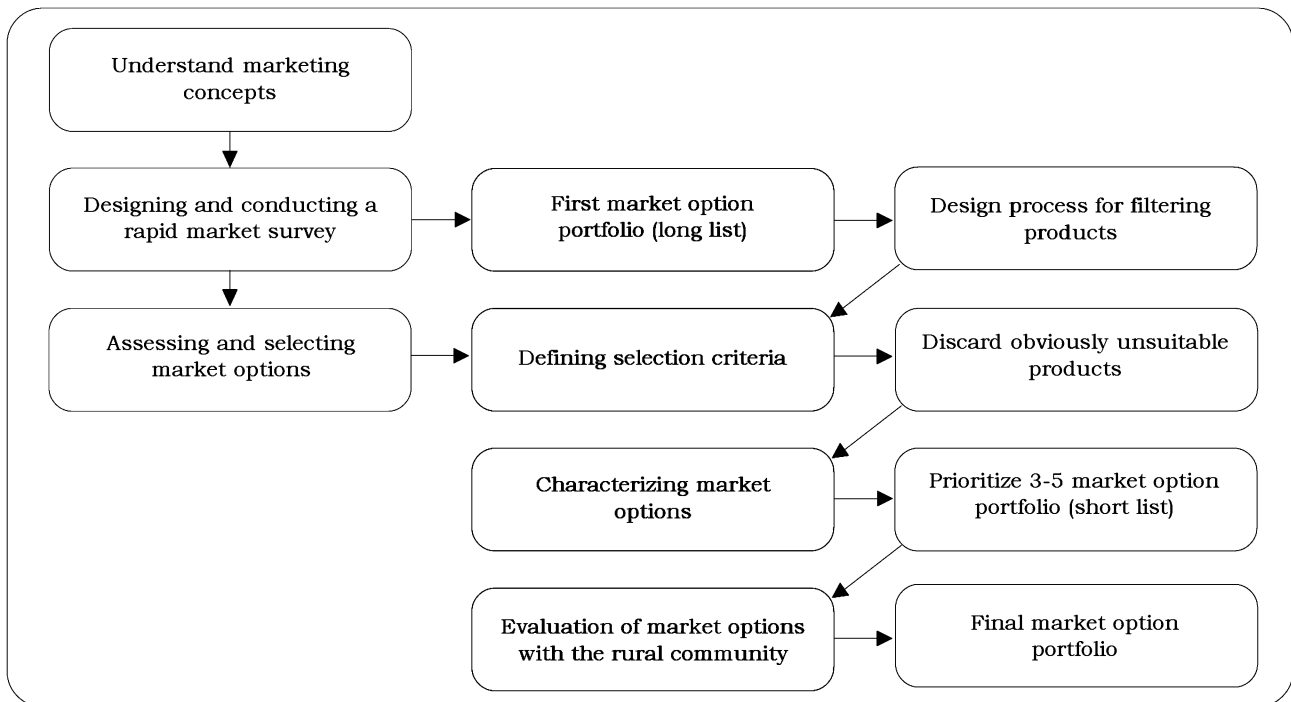
reference to collective marketing within a group.

- (ii) Evaluate market options for new products to encourage diversification, with an emphasis on higher value goods.
- (iii) Evaluate the market options for value added products, so that service providers can assist farmers in shifting from raw to processed goods.

In each case, critical marketing information is gathered on products and buyers to gain a better understanding of product supply and demand characteristics. It is important to clarify from the beginning that the purpose of this market opportunity identification method is **not** to replace existing smallholder crops, products or production systems, especially those that are critical for food security, but rather to offer options for increasing farmer income through increasing market competitiveness, diversifying products or identifying more lucrative markets. This is important given the relatively small risk-taking capacity of most smallholder rural producers.

The Guide's General Structure

The guide is divided into a series of stepwise sections which can be used by the service provider to facilitate market linkage for smallholder producers.



Section 1. Marketing Concepts and Forming a Market Research Team

The guide starts by explaining key concepts that are useful when designing a market opportunity identification (MOI) process for smallholder rural producers in a given area. These concepts include the marketing function, market research, the social and economic context of smallholder rural producers, basics of the production chain³ concept, basics of rural agroindustry, Ansoff's product-market growth matrix, and key macro food consumption trends. The guide also explains how research teams can be organized to support the participation of smallholder rural producers.

Section 2. Designing and Executing a Rapid Market Survey

Survey objectives and strategies are initially defined to evaluate preferred scales of market analysis including local, national, and even regional/international markets. The guide explains how to design research instruments and how to develop a questionnaire or checklist. Potential market options are discovered through gathering secondary and primary data from a range of market sources. This work will develop a "long list" of market options.

The options in this list will be based on market demand and the type of "research strategy"⁴ that was selected by the market research team in consultation with farmer group(s) prior to undertaking the rapid market study. Depending on the suggestions of the local community and previous resource assessment, a "research

3. The terms production chain, market chain, supply chain are used synonymously, to refer to the business links that allow the flow of goods, services and finances between producers, intermediaries and consumers. The market chain is differentiated from the value chain in the sense that business transactions and investments in production chains are mainly conducted on an informal basis, whereas value chain approaches focus on strengthening business relationships and product quality standards between market actors.
4. "Research Strategy" is a term used in this text to define a product or group of products, such as cereals, pulses, temperate fruits, livestock, that are identified by farmers as products which they would like to learn more about in terms of their market potential. Generally a "product group" is based on what farmers are already producing or are interested to invest in due to a local comparative or competitive advantage in the selected project area. The "product group" is used so that market studies ensure data on specific products is collected as part of the market survey.

strategy" may require a focus on specific product group(s), such as livestock, non timber forest products, agroindustrial products, or handicraft products.

The rapid market survey will generate a "long list" of potential products with market prospects. However, this list is likely to be too long for more detailed studies. Therefore a first level of discard is applied to this first product portfolio.

Filter 1. Obvious discards

The first level of discard removes products that are not suitable for further consideration. In this case, the research team will review the list of products that have been included in the product portfolio, prior to any further systemization or collection of information, to eliminate products that clearly cannot be grown in the area for agronomic or environmental reasons. This will include products that are unsuitable for smallholder producers, that require too high a level of investment, sophisticated production methods, or are culturally or socially unacceptable.

Section 3. Assessing and Selecting Market Options

This section deals with establishing a series of evaluation criteria by which the "long list" of market options identified in the previous phase, can be distilled down to an objectively verified "short list" that will be reviewed by the farmer group. The discard process is based on feasibility, business attractiveness, viability on small farms, risk and contribution to production sustainability. The three levels of product filtering are listed below and schematically represented in Figure 1.

Filter 2. Market Option Characterization

The second level of discard is based on an objective analysis of agronomic, agroindustrial, livestock, commercial and economic characterization. Summary tables/matrixes are used to systematize information based on economic characteristics, marketing requirements and profitability.

Filter 3. Final Evaluation of Market Options with the Rural Community

The final selection of products is based on producer preferences. This process can be done for mixed groups or through a series of meetings with producers being associated according to their wealth ranking so that investment options can be made according to the levels of risk that producers want to take on.

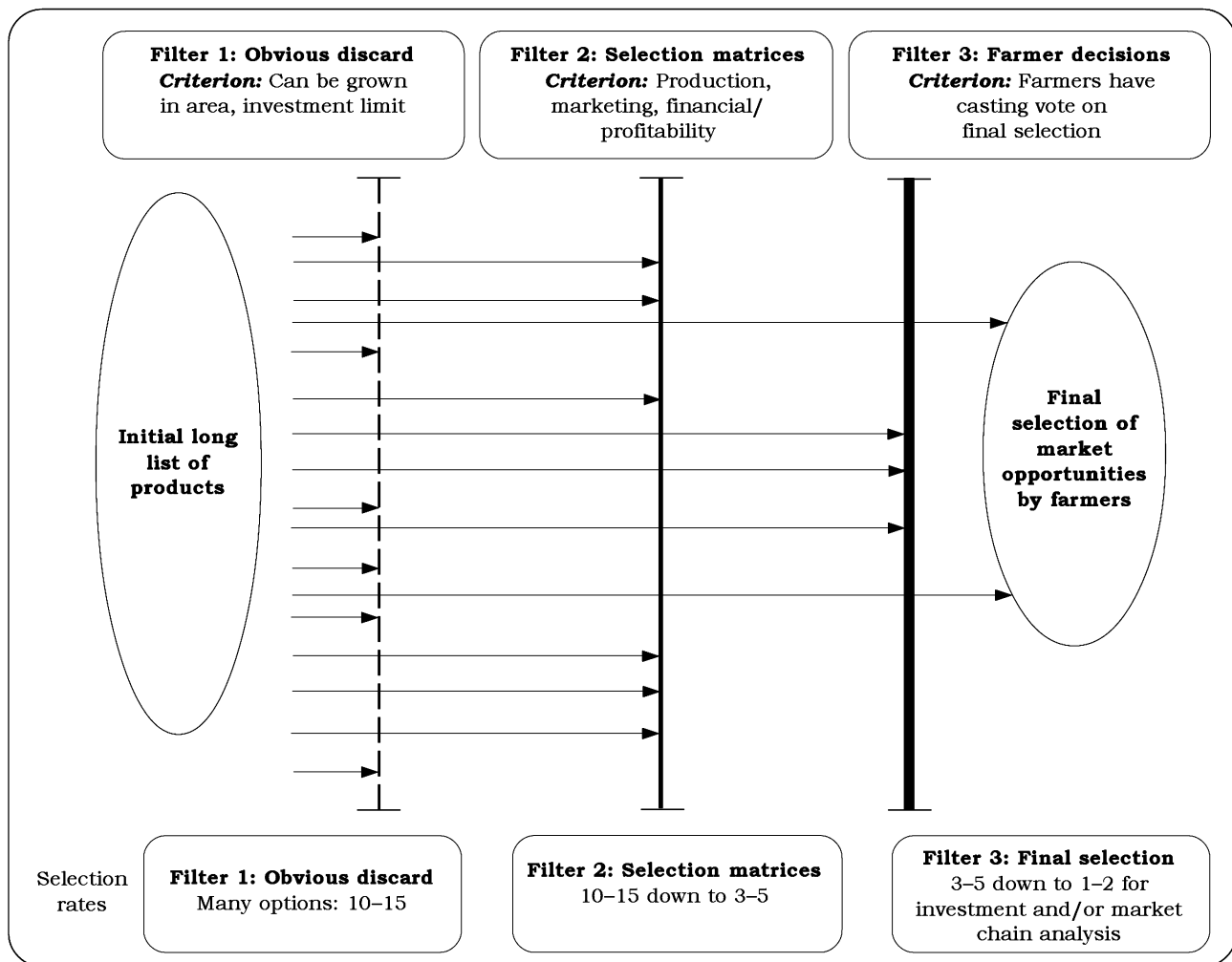


Figure 1. Selection of market options based on three levels of selection/discard.

SOURCE: Adapted from Abele et al. (2004).

How to Use this Guide

This guide is for rural development practitioners (professionals and technicians) in the public and private sectors, who are dedicated to research, development or training. The guide can be used to facilitate field work or as a training material. The guide contains exercises, practices and a glossary to facilitate training processes. This guide could also be used by high school, college and university professors teaching subjects related to agricultural sciences, rural development, agroindustry, and participatory research.

Use of content and level of participation

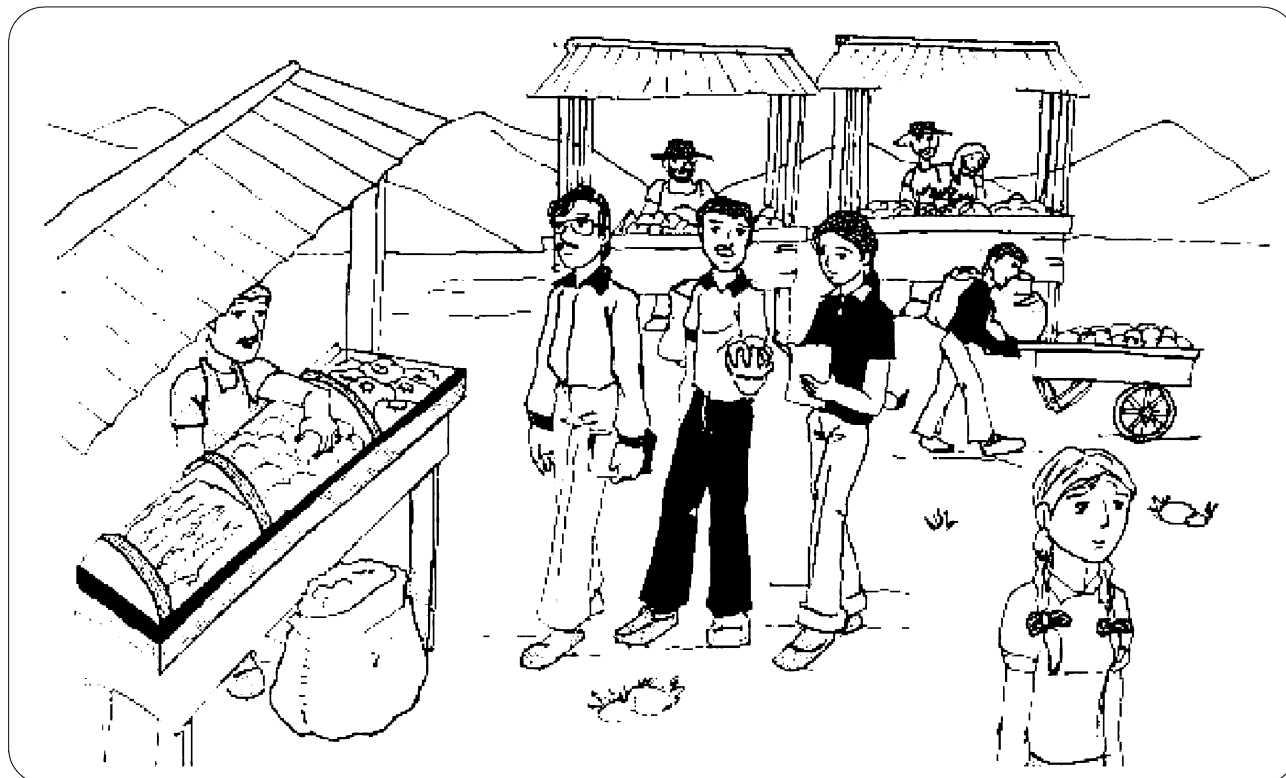
This guide is designed for use in its entirety, because it describes a logical process. The first section provides important concepts that can enrich the subsequent research and analytical process. The second section, the Rapid Market Survey, generates the first product portfolio,

while the third section provides a two-stage screening procedure to select an appropriate market product for smallholder producers. The execution of the complete methodology will result in a solid data that can be used for sound business decision making that will reduce risk.

The full process can take several weeks to implement, analyze and formulate a report. In the case of timing or funding constraints, the process can be reduced and some parts such as the Rapid Market Survey, can be executed with a lesser degree of participation and include fewer market visits. Although a higher degree of participation by farmers will either increase costs or take more time, we believe that this is warranted as the local actors will gain new marketing skills through a “learning by doing” interaction. The service provider should discuss and negotiate this practical element with the client groups so that information is gathered within an agreed resource allocation.

SECTION 1

Marketing Concepts and Forming a Market Research Team



General Objective

To gain a better understanding of the key background concepts to marketing and how to apply this knowledge in planning a market opportunity identification study.

Specific Objectives

After completing this section of the guide, the reader or trainee will be able to:

- Understand marketing basics and the marketing mix.
- Recognize the social and economic context of smallholder rural producers.
- Be aware of the major trends in food consumption.
- Grasp the basics of a market chain.
- Understand how to assess risk, related to products and market growth strategies.
- Establish a research team to plan and execute the market study.

Orienting Questions

1. Why are most smallholders in developing countries finding it difficult to compete in the marketplace?
2. Describe a possible route travelled by a banana from a small farm to the final consumer.
3. Make a list of five products that can be derived from potatoes, and for each product describe the type of processing that would be required.
4. What modifications can you think of, related to your personal or family's food consumption trends in the last 10 years?
5. Describe possible growth strategies for a project area in terms of products offered and markets targeted.
6. Why do you think it is important to include representatives of smallholder rural producers in the team that will plan and execute a market opportunity identification process for them?

1.1. Marketing Basics—What is Marketing?



This section of the guide presents theory and concepts useful for members of a research team, when planning and executing a market opportunity identification study. The information is especially pertinent for service providers who lack a solid business and marketing background. The following theory and concepts aim to enrich the research process. ***If you already have a good understanding of marketing, skip this section and go to Section 2.***

In today's ever more commercial world, success in the marketplace is based upon the ability of individual producers and companies to offer new and improved products at ever more competitive prices. They should also develop and maintain an expanding base of long term customers. Within this environment the marketing function is a powerful business tool. It is used to identify, quantify and meet the needs, wants and desires of people, people like you.

Marketing is often described as the “delivery of customer satisfaction at a profit”, however, there are many elements to the marketing function. As consumers have become more discerning, marketing has also become a more sophisticated area of research and social

interaction. As markets have become a vital element of our lives, attitudes towards marketing have changed and business management has become a more central part of the supply of goods and services. The emphasis of marketing has also changed dramatically over the past 50 years taking on new priorities to meet changing consumer needs. Whereas business's in the 1950-60's focused on production, changes in consumer attitudes and purchasing patterns, meant that greater emphasis was required in the area of product quality to retain customers. Sales teams during the 1970s-80's adapted from the “hard sell” and reaching new customers, to placing more attention on understand how buyers needs, attitudes and trends affect buying patterns, with new products being developed to suit consumer trends. Most recently greater attention has been placed on social marketing in order to retain customers, based on their desire for products that are environmentally sustainable, have greater food safety and are not based on exploitative working conditions.

This rapid evolution in marketing has been driven by the need to remain competitive in the marketplace, to attract new customers with the promise of better value and retain existing customers, by delivering long term satisfaction.

The role of marketing is therefore not only to capture “our hearts and minds” today, but also to identify what we will be needed tomorrow.

Due to the increasing exposure to marketing, and its concerted effort to sell things to people, there are differing views of marketing ranging from “an essential component of sound business practice” to “a fraudulent activity used to persuade people to buy goods they don’t need at inflated prices”. Like it or not, marketing is an ever more pervasive element of our daily lives. According to Kotler and Armstrong (2001), marketing is defined as “a social and managerial process by which individuals and groups obtain what they need and want through creating and exchanging products and value with others”. The process providing goods and services that are essential to function or simply improve people’s well-being.

There are two distinct categories of need that marketing aims to service. The first area includes basic physical requirements, such as food, clothing, shelter and safety; social needs, related to belonging and affection; and individual needs for knowledge and self expression. The second area includes wants or desires, which go beyond immediate requirements for basic human operations and social interactions. Desires are a seemingly unlimited set of ideas, products, services that people seek in order to satisfy perceived need. The main limitations to satisfying perceived needs are the resources to pay for them. Whichever category, the consequences are similar in the marketplace, in that, when wants are supported by the ability to pay, these wants can be translated into demands.

If we consider products and services as benefits, consumers will choose products and services that provide them with the best value for money. As value is based on an individual’s estimation of satisfaction, there are many degrees of fulfilment when making a purchase, and decisions are based on a multitude of cultural, ethical, moral, climatic and wealth related dimensions. To address the value principle in an exchange, producers and marketing agents have developed a mesmerizing range of quality, price and emotionally loaded options. Even in the case of buying what may seem to be an innocuous pair of sports shoes; consumers face an incredible range of options. Given the choice, at one end of the spectrum

some consumers will seek a simple pair of unbranded shoes that will provide the necessary protection for playing a sport at low cost. Whereas at the other end of the spectrum, other consumers will select the latest “Nike” sports shoes, endorsed by a world renowned sports hero; these shoes apparently offer more than the regular shoe, they will provide ultimate levels of protection, comfort, luxury and equally important they offer the less tangible but highly valued added aspects of style, glamor and peer status. Therefore marketing is also based on the idea of matching a range of products at different price-value levels with consumer needs, desires and their ability to pay.

Given this somewhat globalized, view of marketing, how does this relate to smallholder farmers located in remote rural settings? Perhaps at first glance, not much, however, when we analyze the situation of smallholder farmers, we recognize that they have all the same elements of a commercial company. Farmers have valuable assets in their land and location, they have knowledge about what is grown or produced in their locality and they have access to labor and natural resources. As with any other business, they produce a range of goods and services for others in the community and they know what the community likes to buy, in general, and have an idea of what they can afford. Therefore farmers make decisions on what they produce to meet local conditions, using the resources that are available to them.

Although farmers may face difficulties in regard to infrastructure, social organization, market access and income levels, **all** farmers sell a proportion of their goods and services. Therefore all farmers have a sales and marketing challenge and could benefit from increasing their knowledge about marketing functions and how to engage in the marketplace.

This guide aims to assist service providers to gain a better understanding of the marketing options and relationships that a selected farmer/client group can develop in order to sell their goods and service more profitably and on a more sustainable basis. Given this introduction, the first rule of marketing for smallholder farmers is to:

Produce what you can sell, rather than trying to ***sell what you have produced***.

Whilst, this appears to be obvious advice, to achieve this goal in the agricultural context means that farmers and service providers need to know what consumers are demanding in the marketplace and how the laws of demand and supply affect prices, price trends, volumes being sold, and what is required to meet these market opportunities.

The marketplace generally operates on the laws of demand and supply with the basic principle that as supply increases, prices fall and vice-versa. To make informed decisions, clients (farmers, processors and traders) need to know how their production fits within this law in the marketplace.

We must clarify our terminology with the following definitions:

- **Supply:** the quantity of products that producers can offer for sale.
- **Demand:** the quantity of products that the consumers can buy.

Although the law of supply and demand appears to be simple, in reality the dynamics of the marketplace are extremely complicated. This section aims to provide some insight into the many factors that affect conditions within the market. However, before we consider these factors, let us further define what marketing encompasses.

The marketing function is one of the main business activities of an enterprise, it can be defined as “a business activity that focuses on identifying and satisfying market needs, through a profitable and socially responsible production and supply of products in the form of goods and/or services” (Kotler and Armstrong, 2001). This broad definition encompasses market research, new product development and the planning and execution of marketing strategies.

Marketing plans or strategies often refer to the marketing variables or the marketing mix (Table 1). In many marketing reference books, the marketing plan is based on what is commonly known as the four, or more recently the five, Ps: product, price, place, promotion, policy.

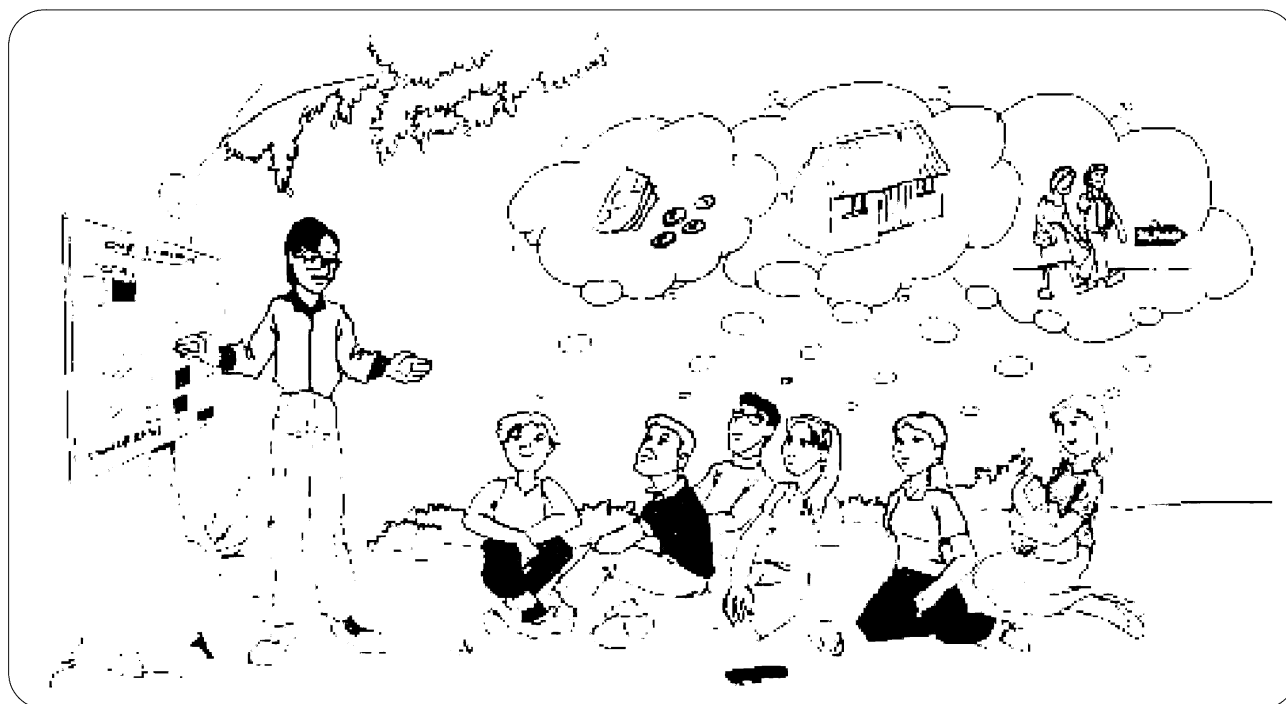
Marketing variables are aspects that are under the control of the enterprise and managed to obtain the desired response from the marketplace. The marketing plan is used by the enterprise team to design and implement a marketing strategy, and this aspect is generally the key component to any business plan.

The methodology in this guide includes components of market research, business and market analysis, and financial profitability models. The rapid market survey is an example of market research. Readers who are interested in more detailed information with regard to the marketing topic should consult marketing textbooks; those by Kotler and Armstrong are highly recommended.

Table 1. Marketing variables or the marketing mix.

Marketing variables	Definition	Aspects of this variable include
Product	Everything that we sell. That which can satisfy a need or a want; includes material objects, services, persons, places, organizations and ideas	Variety, quality, design, characteristics, brand, packaging, sizes, services, guarantees
Price	The monetary value that a seller seeks from a buyer	Price lists, discounts, price margins, credit conditions
Place	Distribution and marketing channels A series of independent organizations involved in the process of allowing the consumer or industrial user to use or consume the product or service	Market sales points, spatial coverage of market sales points, locations within markets, inventories of products, transportation channels
Promotion	The aspect of the mix that consists of convincing or persuading the audience of the quality or features of the products or services offered by the organization	Promotion includes advertising, personal sales, trade and consumer promotions and public relations)
Policy	Developing an enabling political and administrative environment, such that smallholder rural businesses can develop in a sustainable manner	Local policy, national policy and international policies related to business development, entrepreneurship and trade

1.2. Understanding the Context of the Smallholder Rural Producer



Traditionally, smallholder rural producers in developing countries of Latin America, Africa and Asia have focused their efforts on producing sufficient amounts of food to support their families and thereafter to sell small amounts of surplus. This subsistence approach is risk adverse and whilst it can assist a community to avoid famine, it is not a rapid ladder out of poverty. It was hoped that with time, the farming community would progress from a focus on food security into more commercial farming systems; however, for many farmers in the developing world this has not happened. The majority of farmers in developing countries perpetuate system of low input, low output, low income.

Despite their production potential, smallholders confront serious constraints in profiting from their resources due to lack of investment in basic infrastructure, limited access to new technologies and services and unfavorable government and global policies. Major global trends are also rapidly changing the rural economic environment and communities need to devise ever more innovative ways of using their labor, resources and skills to take advantage of new business opportunities.

In many cases, current socioeconomic trends will continue to marginalize increasing numbers of smallholder rural producers with particularly negative effects on those that are least organized and distant from markets. To address these changes, rural communities are adopting various strategies, including agricultural extensification, intensification, diversification and using a combination of on and off-farm activities to achieve a living wage. When these options fail, communities fall into chronic poverty situation and increasingly under or unemployed youth are migrating from poor rural areas into poor urban areas.

Some of the key trends that are affecting the marketing environment for smallholders include:

Population growth

One of the more positive trends for agricultural produce in developing countries is due to rapidly rising numbers of people, who create increasing demand for volumes of agricultural products and agricultural support services.

Globalization

The effects of market liberalization across the world coupled with innovations in finance,

communications and transport, has led to opportunities for global trade of products and services. This new global market is having profound effects on how business is done, with players from across the world now competing within local, regional and international markets. To remain competitive in this environment requires strategies that increase efficiency and this is generally achieved through increasing economies of scale. One of the major effects of globalization has been a shift in market power away from the producer end of the market towards the wholesalers and this has placed great pressure on the market prospects for smallholders.

World trade negotiations

The World Trade Organization (WTO) was designed to support greater equity of trade across nations. However in the agricultural sector, there has been limited success in opening new markets in the industrialized countries for rural producers in the developing world. Attempts in the 1980's, to develop international commodity agreements failed when importing countries opted out of these protocols. Alternative channels such as Fair Trade⁵ show promise but have been slow to have widespread impact. New trade initiatives such as, EBA⁶ and AGOA⁷, which offer zero or reduced tariffs from LDCs⁸ have not been exploited effectively as most developing countries lack the finances and infrastructure to access these new market options. The latest failure of the WTO Doha round has led to an impasse between developing countries who want more access to markets and industrial countries who are maintaining their subsidy system to support their farming community.

Longterm decline in commodity prices

Real prices of commodities have steadily declined over the past 100 years. This downward trend has also accelerated with the

5. Fair Trade = A small segment of the global market in which socially-sensitive traders and consumers offer higher prices and better conditions to poor smallholders and other marginalized actors in the chain.
6. EBA-EU = Everything But Arms initiative, waives tariffs for virtually all products for least developed countries.
7. AGOA-African Growth and Opportunities Agreement, offers tax exemption for fibre products into US markets.
8. LDCs least developed countries, DCs developing countries.

collapse of the commodity agreements in the 1980's and the effects of globalization. Commodities from the mid 1990s have been trading at all time low levels. The effect of these low prices has had a seriously negative impact on economic growth in many developing countries, particularly those most dependent on the trade of a narrow range of primary commodities, such as coffee, tea, rubber, rice and milk.

Market formalization and the rise of the supermarket

At the same time that global markets have become more liberalized, the food markets in the industrialized countries of Europe, North America and Asia have maintained a steady shift from informal to formalized market channels. The formal markets are characterized by standardized branded products and the use of integrated marketing, logistics and financing processes. The "rules of the game", in terms of product types, methods for production, processing, procurement and payment are typically set by international supermarkets, such as Carrefour, Tesco and Walmart. The goods and services offered by these modern market chains are closely tied to the lifestyles of urban consumers who want year round access to high quality, trustworthy goods, at consistent prices. Similar principles apply to other modernized food outlets, such as fast food restaurants, hotels, institutional buyers, tourism and travel companies, essentially all markets, where international food standards are in demand.

Food safety regulations

Consumers and processors are increasingly demanding agricultural products with greater quality, safety and traceability. Demands for health foods, particularly fruits and vegetables, are increasing and the market for organic products continues to show growth, above 20% per annum. However, trends even in these markets indicate that mainstream producers are increasing their production size to supply larger retail markets. Traceability issues offer some producers an opportunity to protect particular genetic, location- or process-based products, through appellation schemes, but there can be considerable cost implications to such identification systems.

Food consumption trends

In addition to the global trends there are specific trends to food consumption that researchers

should be aware of when seeking new options for farmers. This knowledge can help identify market opportunities for both traditional and new potential products.

Convenience products

As a result of urbanization and increased female employment, consumers are increasingly attracted to foods that are practical and quick to prepare. New cooking technologies such as the microwave cooker have stimulated this area. Convenience products are generally processed, or transformed, and are packaged and labelled. Some examples of convenience products are: packaged, dried, refrigerated, pre-cut vegetables for home-made salads, bottled fruit juices, dairy products; beverage, soup and cake mixes; pre-cooked, frozen foods, pre-cooked, frozen meals; packaged snacks; canned food; bottled fruit and vegetables; processed meats, etc.

Consumer demands for healthy foods

Consumers are increasingly aware of the benefits of eating healthy, balanced and nutritious diets, including natural and organic products. The following consumer trends are showing rapid growth:

- Health foods, including fresh produce, dietary fiber, fruits and vegetables.
- In industrialized countries the organic market is growing at 20% per year.
- There is increasing interest in eating low-calorie (light) foods.
- There is renewed interest in natural medicines, based on the use of natural medicinal plants.

Exotic/novelty foods

Consumers in developed countries are showing great interest in exotic tropical products, such as fresh and dried fruits, vegetables, nuts, herbs and spices.

Off-season purchasing

Consumers in developing countries and increasingly in urban areas of developing countries want to buy the full range of agricultural products out of season. This has developed huge demand for food, fiber and flower products, particularly the higher value goods on a continual year round basis.

Ethnic market

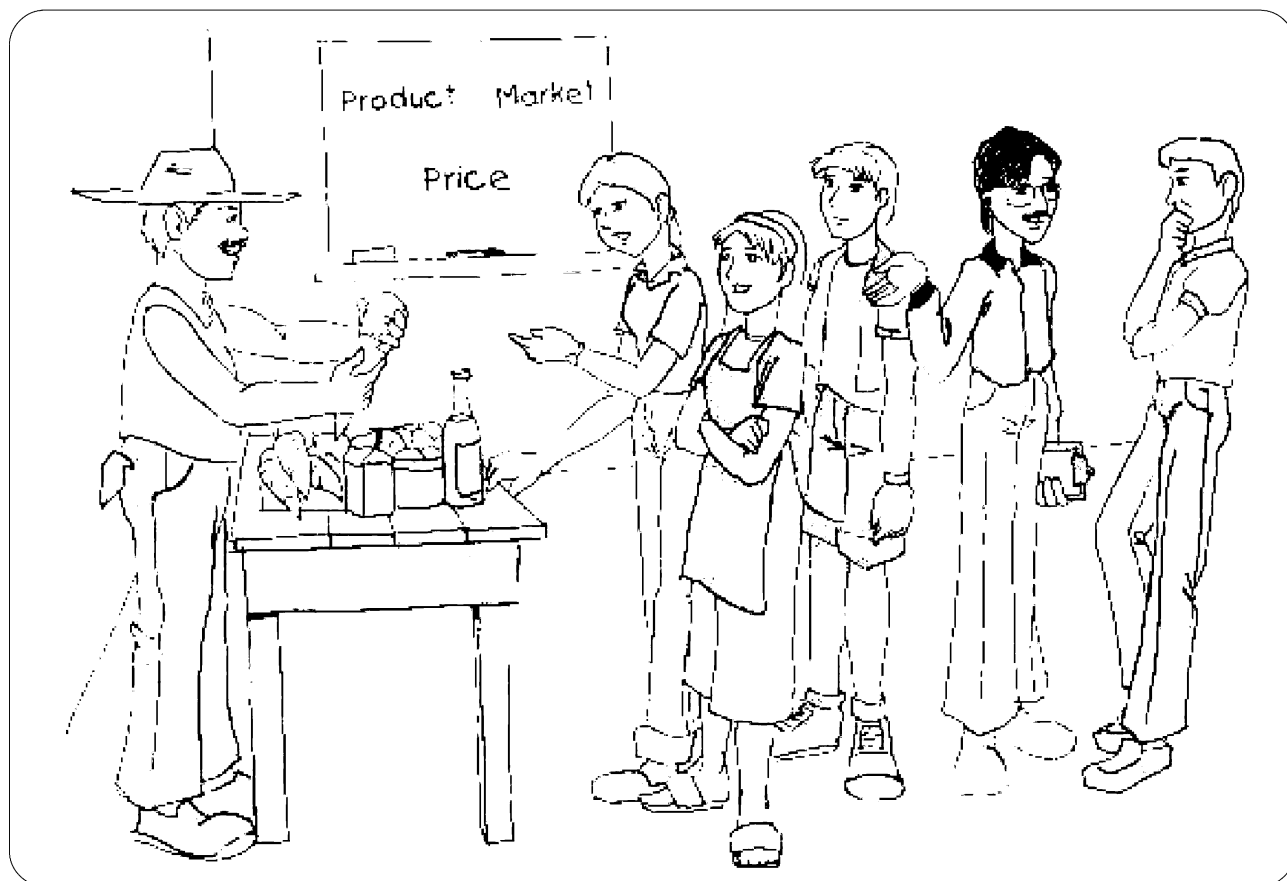
The so-called "ethnic market" is expanding rapidly, stimulated by domestic and international migrations, which means larger numbers of people living in developed countries want to buy their traditional products locally.

New applications

Research into new applications and transformed plant and animal products have opened the possibility of new markets including biofuels, biomedicines, i.e., harvesting chemicals and drugs and bioplastics. In addition, the agricultural industry has shown interest in renewable raw materials, including starch-based products and fuel options, which may have significant effects on the production of traditional commodities.

All of these trends and options offer opportunities for sales of agricultural products and market research teams should be alert to the prospects of smallholder farmers producing for these emerging markets.

1.3. Meeting the Marketing Challenge



Given these changes, it is clear that new approaches need to be used to support communities to take on the opportunities and challenges that result. Strategies to meet the challenges of these changing marketing conditions include initiatives that seek to build the marketing capacity of producer groups and the effectiveness of rural service providers through a bottom-up approach and alternative strategies that seek to build marketing links from corporate buyers with smallholder producers in an equitable manner.

Whichever approach is adopted, the review of macro-trends in the agrofood sectors suggests that rural business development needs to address two major challenges which:

1. Develop competitive rural enterprises at the micro level.
2. Create an enabling policy environment at the macro, meso and micro levels.

To address these rural business challenges, the following strategies are recommended:

- (a) Promote participatory methods that directly involve local chain actors in decision making and develop local capacity for business development and more competitive supply of goods.
- (b) Stimulate collective action and organization of rural economic organizations with a solid business and market orientation.
- (c) Promote intensification, diversification and value adding in rural areas.
- (d) Strengthen the market for rural business development services and its coordination.

The emphasis of this guide is to find ways of identifying market opportunities that are linked with growing high volume and high value markets. The methods will enable service providers and farmers to evaluate market options for existing products and to identify new products. It should, however, be recognized that any change in a marketing system and investment in new market chain options tends to increase risk and therefore it is important to understand the relationship between the potential gains by investing in an identified market, against the potential risks.

1.4. The Market Chain

The market chain refers to the actors and organizations that enable the transfer of goods and services from the producer to the final consumer. A production chain is made up of inter-related links, which are generally based on pre-production, production, post harvest, trading processing, marketing and consumption (Figure 2).

Traditionally, rural development practitioners have placed emphasis on the first link in the chain, i.e., the production phase, because it deals directly with smallholders. Focusing on production has enabled communities to gain food security. Less attention has been given to marketing and this has led to problems with over or under supply of products and lack of project sustainability.

Taking a more systemic approach to the market chain can assist in developing strategies that enable producers to understand their market options more effectively and for interventions to be designed that match product supply with market demand and take into account the roles of the various actors and services that make up a functional market chain.

Having a market chain perspective assists in understanding the types of constraints and opportunities that can be addressed at various points in the system and where investments may have greatest effect, which means thinking beyond the farm level. The market chain generally includes three components.

Market chain actors

These are the people directly involved in the exchange of goods; they include input suppliers, producers, rural traders or assemblers, processors, urban wholesalers, retailers and consumers.

Business development services

These services support business development and enable the marketing process to proceed in an efficient manner. These services include technical inputs from research, such as new production technologies and varieties, finance both formal and informal, information on market conditions, marketing rules and regulations, basic infrastructure such as roads, communication systems and market structures.

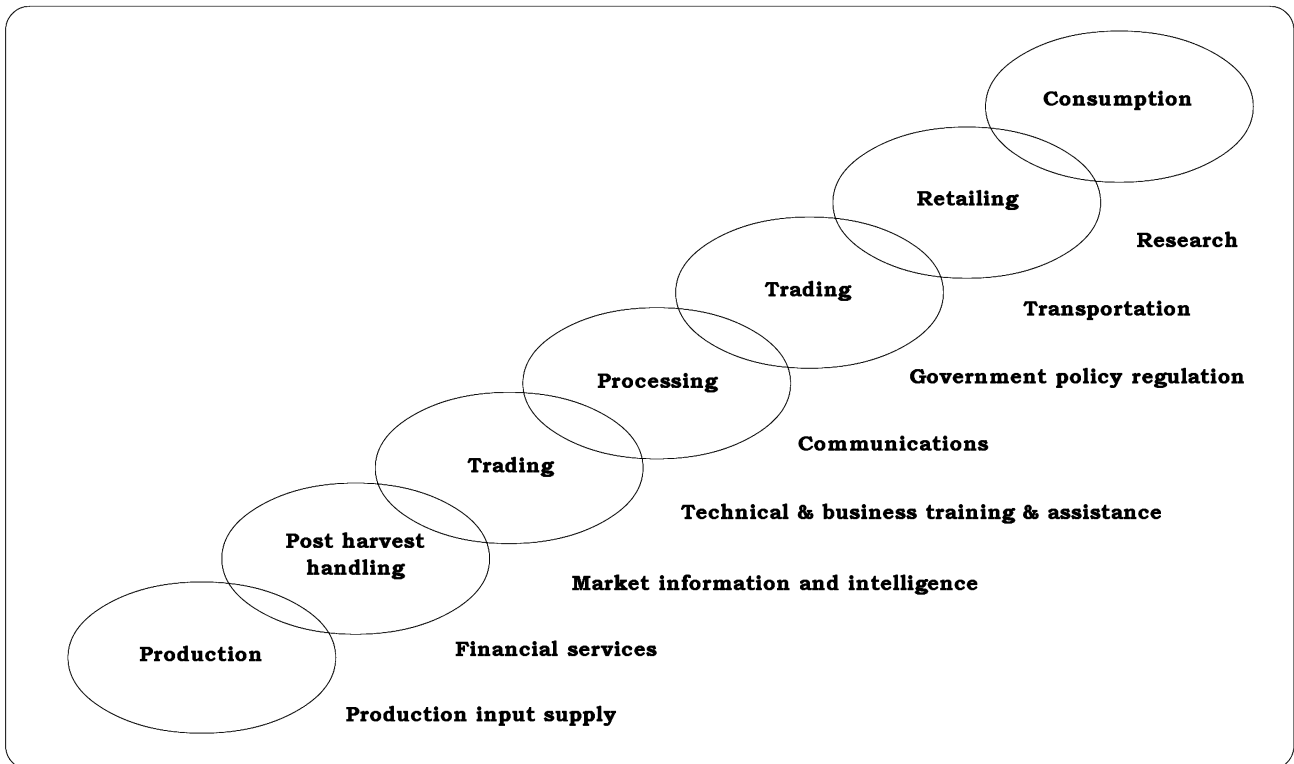


Figure 2. The market chain.

Business organization

A third aspect is the level of organization that integrates market actors and business support services. Business organization throughout the chain refers to the social links between the different actors including informal farmer groups, farmer cooperatives and associations, traders or intermediaries, technical services, processing enterprises, financial services and

retail outlets such as supermarkets, corner stores and wholesale markets.

This extended chain concept is useful because integrating interventions that strengthen market chain actors and local support services is key to improving both competitiveness and business organization, which makes for a more sustainable development.

1.5. Value Addition



This aspect of marketing deals with practices that change or transform a primary product into goods that have additional value. At the simplest level, adding value includes operations such as washing, cleaning, grading, bulking and storage. These processes are generally within the control of farmers groups and attention to these processes can have considerable effects on improving income.

More complicated processing may include ginning, roasting, refrigerating, milling, cutting, mixing, dehydration, cooking and packaging. Higher level value adding involves operations such as extraction, distillation, freezing, fermentation, extrusion and enzymatic processes. These activities are generally undertaken by specialist market chain actors or service

providers. Whilst, some of these functions can be done on-farm, there is often a high investment required to achieve this level of value added.

The promotion of rural agroindustry is important in rural development for the following reasons:

- Agroindustrial products, in contrast to basic commodities, do not exhibit a long-term real-price decline so they are more effective in increasing local income (Figure 2).
- Adding value in rural areas increases local employment and income and has a positive impact on the local economy due to forward and backward linkages.
- Product differentiation is easier for goods that have been processed, transformed, packaged and labelled.

- Consequently, agroindustrial products tend to enjoy a higher profit margin than basic commodities.

As markets become more competitive, it is important to seek ways that taking advantage of value adding opportunities to increase the

incomes of rural producers. Market research teams should be sure therefore to investigate both fresh and processed markets. Value added products can be traditional and already exist in the area or can be new products, which can be processed using new, low cost technologies.

1.6. Marketing Strategies Based on “Risk Assessment”

Given the range of market opportunities, making decisions on the most appropriate products and market types that a farmer group or entrepreneur should target is clearly an important decision. One of the tools to assist in the process of assessing market risk strategies is the Product-Market Growth Matrix, developed by Ansoff (Table 2).

The marketing strategy⁹ is the method that a business or enterprise will use to increase profitability and competitiveness within a marketplace. Selecting the appropriate marketing strategy is important, as the type of product and selection of marketplace will have a considerable bearing on the level of investment, profit and risk. An important role of the service provider/NGO or market facilitator, working with rural producers or entrepreneurs, is to gather sufficient information to be able to match a suitable level of risk with the assets, skills and business opportunities of the client.

Based on two variables, product and market, the matrix proposes four main product-market growth strategies, as explained below.

1. *Market penetration* means increased sales of products to current market segments,

9. Marketing strategy based on the Ansoff matrix is a plan for engaging with a specific type of product and market type. There are four types of marketing strategies in this context, which offer increasing levels of profits that are associated with increasing levels of financial risk.

without changing the product offered. This can be achieved by reducing prices, maintaining price but improving quality, improving distribution and increasing promotion.

2. *Market development* means identifying and developing new market segments for current products. These new market segments can be represented by institutional markets, other geographical areas including export markets or buyers using the product in new ways.
3. *Product development* refers to the offer of innovative products, new products for the region, or modified products to current market segments. Products do not necessarily have to represent an innovation, but can be existing products that are improved or packaged and labelled differently.
4. *Diversification* is the production of new products for new markets.

Each of these growth strategies represents a different risk level. Risk is an essential aspect to consider when working with smallholder rural producers, because they tend to be risk-averse due to their weak economic context. Risk increases in direct proportion to the level of change. For example, the market penetration strategy implies the lowest risk level because it demands the least change, the diversification strategy signifies the greatest risk because it requires most change. According to the Ansoff matrix, risk increases from strategies 1 to 4 as indicated in Table 2. However, it should be noted that risk is always present in business and

Table 2. Product-Market Growth Matrix (Ansoff, 1957).

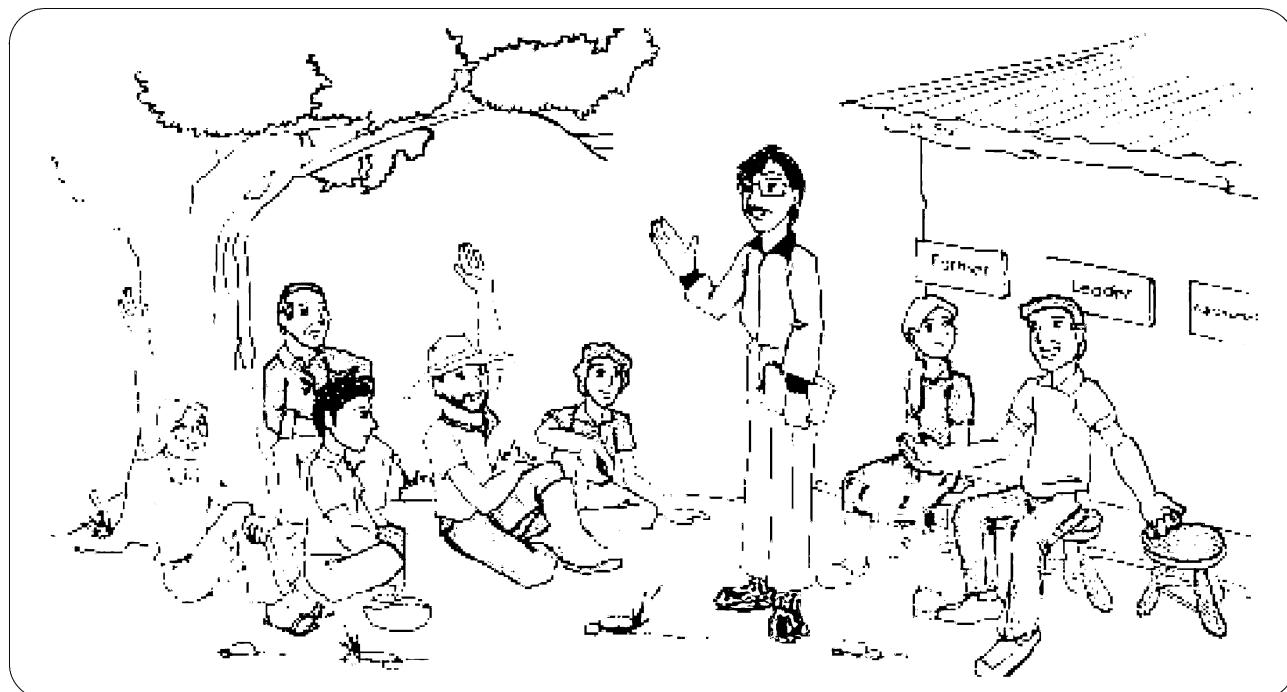
	Existing products	New products
Existing markets	1. Market penetration	3. Product development
New markets	2. Market development	4. Diversification

marketing activities and therefore marketing interventions should seek to gather information so as to manage risk effectively.

The Rapid Market Survey is a process that will identify many new products for a given region,

regarding both traditional and new, potential products. The Ansoff matrix is a simple tool to enable the research team to be in a position to prioritize products based on their level of risk.

1.7. Forming the Market Research Team



The research team conducting the market opportunity identification study can be small, from three to five persons, and should combine one to two technical personnel with two to three representatives of smallholder rural producers from the area under consideration.

The facilitator or coordinator of this team should be a professional with a business and financial background, or a rural development practitioner with basic training in business topics. This background is essential given the objectives and content of the market opportunity identification procedure.

Smallholders should be in the team for several reasons.

- It is important to have the point of view of the rural producers as they are the clients of the research. They should participate in decision making when selecting and

discarding market options, because they are the investors and may have a different rationale or “way of thinking” compared with a technical person.

- The research team will gain more credibility from the rural community if the final research results are presented by equals or friends, and not by technical people.
- Commitment from the rural community will be enhanced if they are aware that two or three of their equals are participating in the research team. In this manner, the probability of implementing research results will increase.

The members of the research team should be able to speak, read and write fluently, as this will be required during the research procedure. Personal business or sales experience will be an asset. The rural community should be aware of these requisites ahead of time, if they decide to select their representatives in the research team.

Exercise 1.1

Mapping an Extended Product Chain

Objective

- The trainee will be able to identify key links, actors and organizations, functions, price formation and local support services along a selected production chain.

Instructions for the Facilitator and Trainees

1. Form groups of four participants, by area if possible, and select a coordinator.
2. Choose a product or product chain from the area with which at least one member of the group is well acquainted.
3. The group can use the Worksheet for this exercise. The Worksheet has two parts: the upper section (A) can be used to map the production chain and the matrix appears in the lower part (B).
4. Information for this exercise is found in Section 1.3.
5. In Worksheet A, the group will draw (using symbols, figures and arrows) the production-to-consumption route of a selected product. The map or route should include the different chain links, plus the actors and main functions in each chain link. If the group has sufficient information, price formation along the chain can also be mapped.
6. In Worksheet B, the group will complete the matrix with information on the chain links, functions, actors and organizations, and local support services (informal and formal).
7. When finished, the group will copy the map and matrix onto large sheets of papers or onto a PowerPoint presentation, so that their work can be seen by all the participants in a plenary session.
8. The group coordinator will present the results in a plenary session.

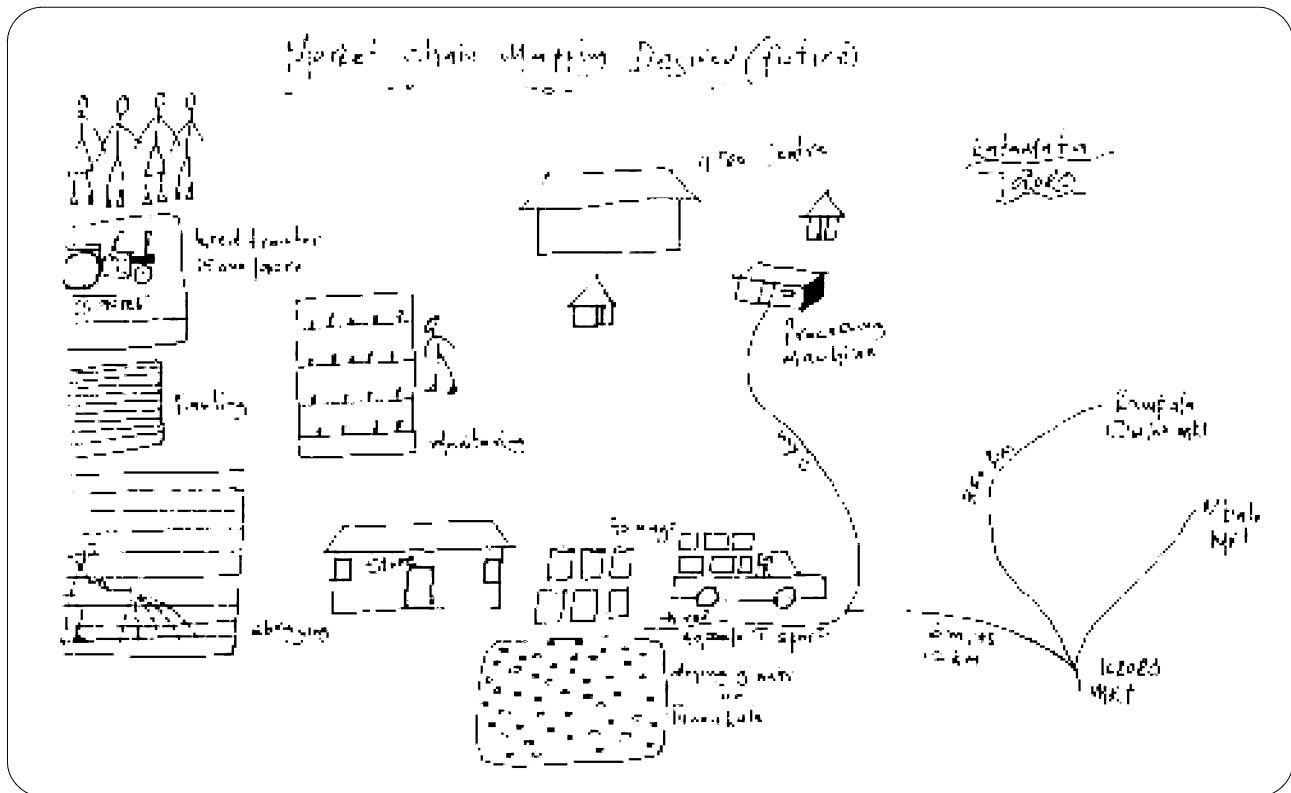
Resources needed

1. Section 1.3 of the guide.
2. Worksheets A and B for Exercise 1.1.
3. Paper and pencils.
4. Flip chart or overhead projector and transparencies.
5. Magic markers or markers for transparencies.

Time required: 1.5 hours.

Exercise 1.1

Mapping an Extended Product Chain – Worksheets A and B



Production Chain Matrix

Production Chain: _____ Area: _____

Chain link	Functions	Actors and organizations	Local support services

Exercise 1.2

Visioning a Value-Added or Processed Product

Objective

- If a trainee does not have information on a value added/agroindustrial product s/he will be able to use “visioning” to provide an outline of a possible agroindustrial products derived from a basic commodity and then think of its corresponding use, markets and the type of processing required. As an example, sausages from pigs.

Instructions for the Facilitator and Trainees

1. Form groups of four participants, by area if possible, and select a coordinator.
2. Choose a basic commodity or staple food product from the area with which at least one member of the group is well acquainted.
3. The group can use the matrix in the Worksheet for this exercise.
4. Information for this exercise is found in Section 1.4.
5. The group will complete the matrix in the Worksheet with a list of potential agroindustrial products (real or imagined) derived from the chosen commodity, together with its corresponding use, target market and required processing or transformation.
6. When finished, the group will copy the matrix in a large paper or transparency, so that their work can be seen by all of the participants in a plenary session.
7. The group coordinator will present the results in a plenary session.

Resources needed

1. Section 1.4 of the guide.
2. Worksheet for Exercise 1.2.
3. Paper and pencils.
4. Flip chart or overhead projector and transparencies.
5. Magic markers or markers for transparencies.

Time required: 1 hour.

Exercise 1.2

Visioning a Value-Added or Processed Product – Worksheet

Agroindustrial Product Matrix

Basic commodity: _____

Area: _____

Derived agroindustrial product	Use	Target market	Processing required

Exercise 1.3

Defining Market Growth Strategies for a Project Area

Objective

- The trainee will be able to use the Product-Market Growth Matrix or the Market Risk Matrix to define possible growth strategies in a area, based on existing and potential agricultural and agroindustrial products.

Instructions for the Facilitator and Trainees

1. Form groups of four participants, by area if possible, and select a coordinator.
2. Choose an area or region with which at least two members of the group are well acquainted.
3. Make a list of the main three agricultural or agroindustrial products in that area.
4. Then make a list of the principal two geographic and industrial markets for the regional products selected in Point 3.
5. The group can use the matrix in the Worksheet for this exercise.
6. Information for this exercise is found in Section 1.5.
7. The group will complete the first matrix and the second Product-Market Growth Matrix in the Worksheet. In the latter matrix, the group will place a short list of existing and potential agricultural and agroindustrial products in each of the four growth strategies. The group will attempt to complete both matrices based on real information and logical decisions, but may invent or formulate information as required.
8. When finished, the group will copy the matrix onto a large paper or PowerPoint, so that their work can be seen by all of the participants in a plenary session.
9. The group coordinator will present the results in a plenary session.

Resources needed

1. Section 1.4 of the guide.
2. Worksheet for Exercise 1.3.
3. Paper and pencils.
4. Flip chart or overhead projector and transparencies.
5. Magic markers or markers for transparencies.

Time required: 1.5 hours.

Exercise 1.3

Defining Market Growth Strategies for a Project Area – Worksheet

Preliminary Matrix

Area: _____

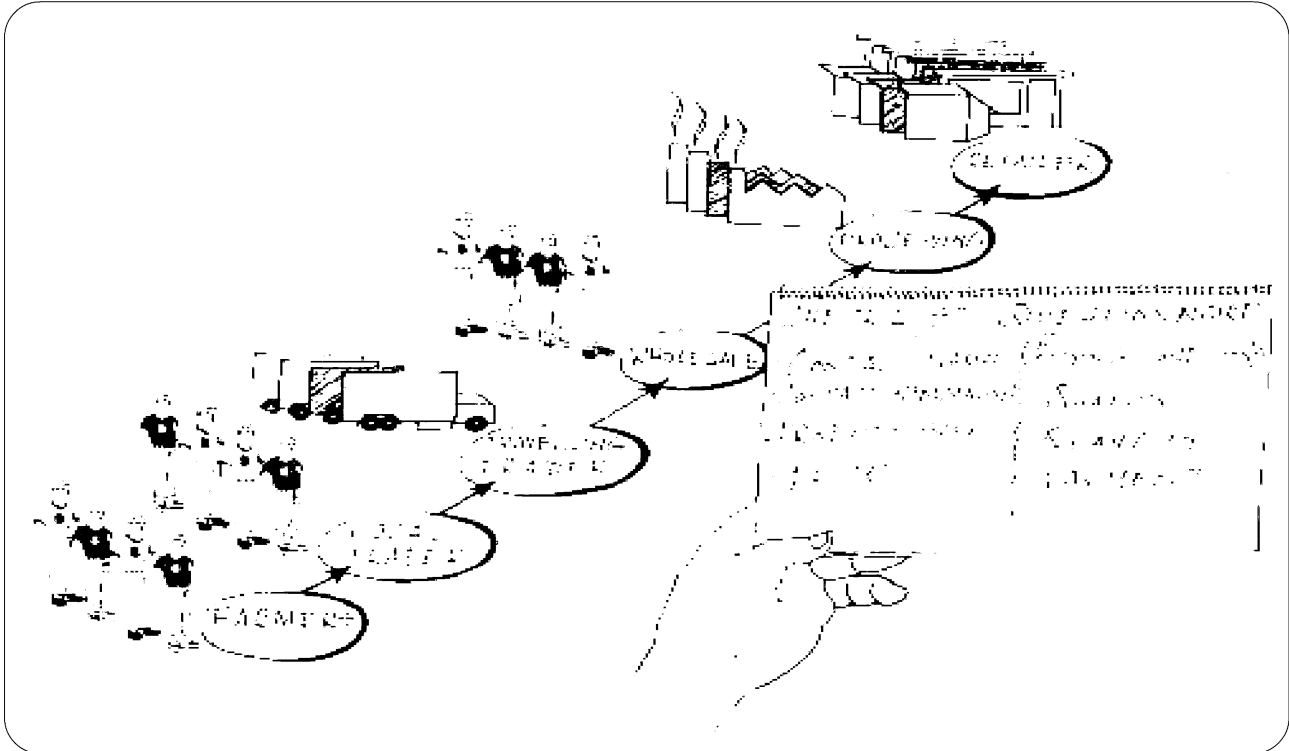
Three most important products in the area	Two most important markets for the area's products
1	1
2	2
3	

Proposed Regional Growth Strategies

	Existing products	New products
Existing markets	Market penetration Products:	Product development Products:
New markets	Market development Products:	Diversification Products:

SECTION 2

Designing and Conducting a Rapid Market Survey



General Objective

After studying this section, the participant will be able to facilitate or coordinate a market research team. This team will then plan and execute a Rapid Market Survey for a given area or region, with the participation of smallholder producers. At the end of the process, the service providers should be confident in identifying markets for other stakeholders, and the client group should have the ability to conduct their own future marketing studies.

Specific Objectives

The participant will be able to:

- Explain the objective and strategies of a Rapid Market Survey.
- Describe the aspects to be considered when developing a research plan.
- Determine the number of research tools needed.
- Define the key research questions for the survey.

- Develop a questionnaire.
- Explain how to collect primary and secondary information.
- Explain how to obtain the first product option portfolio.
- Explain how to organize the Rapid Market Survey report.

Orienting Questions

1. What is the purpose of market research?
2. How can we focus market research in an area-based approach?
3. Who should perform market research for a given area or region?
4. Can secondary information be sufficient for a Rapid Market Survey?
5. What essential information is needed to sell or market a product?
6. What kind of information can traders and retailers provide on products they sell?

2.1. Defining Market Research Objectives



Market research is used to identify **current** market trends and opportunities. This type of research is often associated with large commercial companies, but the method is also of great value to rural development agencies, rural communities and farmer organizations interested in playing a more effective role in the marketplace. This section focuses on how to develop a market research plan that is appropriate to the economic conditions and capacities of smallholder farmers client group, with a focus on service providers working alongside farmers.

The typical sequence of events to develop market research is as follows:

- Define objectives.
- Establish a market research plan.
- Collect secondary information.
- Evaluate gaps in information and collect primary data.
- Process data.
- Analyze and interpret results.
- Prepare final report.
- Provide feedback to clients.
- Make amendments to report based on feedback.

The objective of a Rapid Market Survey is to identify **market opportunities** for a client

group living in a defined area. This type of study includes methods to identify produce that is in highest demand, and also to study products that are known, and are of interest to the producer groups. The information gathering should target their needs and abilities, and provide sufficient information to enable them to make sound decisions on which products should be selected for enterprise development plans.

Client selection

One of the most important decisions in any marketing or business support activity is to clearly define the clients and their needs. The service providers must have total clarity regarding who the work is being done for, the socioeconomic status of the client(s), and what is expected of the client group when the work has been completed.

Role of the service provider

This methodology has been developed to be led by a service provider. The aim of following this process is first to enable the staff of a service provider, such as an NGO, a government extension officer, researcher, etc., to build their own marketing competency and, through participatory means, to pass on these skills to the client group.

Area selection

The starting point for this method is the selection of a defined area of operation. An area can be small, i.e., a village or scaled up to a country. Options therefore include a:

- Village or community.
- Cluster of villages (or parish).
- Cluster of parishes (or diocese).
- Smallest administrative/political boundary.
- Agroecological zone.
- Watershed or Market shed.
- Country.
- Region

Why take an area-based approach? The advantages of a defined area of operation include:

- Linking a spatial demarcation of intervention to a specific community or local administrative geographic area assists in focusing information gathering and analysis.
- Better targeting can allow the service provider to take into account special needs groups, such as existing associations of farmers, women's groups, orphans' groups, food insecure farmers, etc.
- An area, assists with establishing a spatial reference for baseline analysis and subsequent impact analysis.

- To foster partnerships with other service providers and local government who are generally bound by a geographic area.
- To link local assets and comparative advantages to the geographic zone, and particularly to appreciate the range of possible products and value adding possibilities that could be achieved within the target zone.

Size of the area

Decisions in regard to the size of the area being analyzed are generally based on resources such as budget, time, and coverage of the service provider. This method was designed for market identification within a localized area, so that more participatory methods can be applied with a farming community. This method can however be applied to a cluster of districts, national or international markets. As a general rule, the level of participation will decrease as the territorial size increases and the duration of the exercise will increase with size.

Whilst the area defines the agroenterprise intervention zone, the reader should appreciate that marketing chains, investment links and information flows go beyond this area (Figure 3). The key point is that the market opportunities being investigated are dependent on the possibilities of a particular area, and on the requests of the target community.

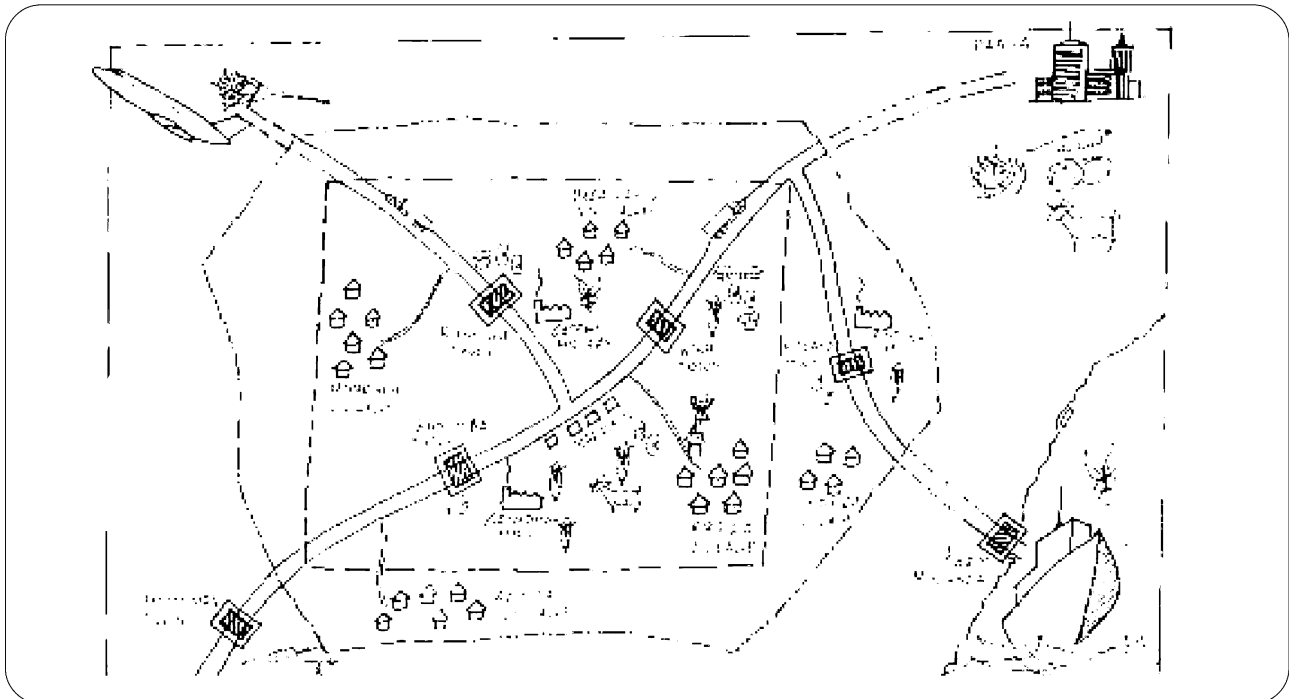


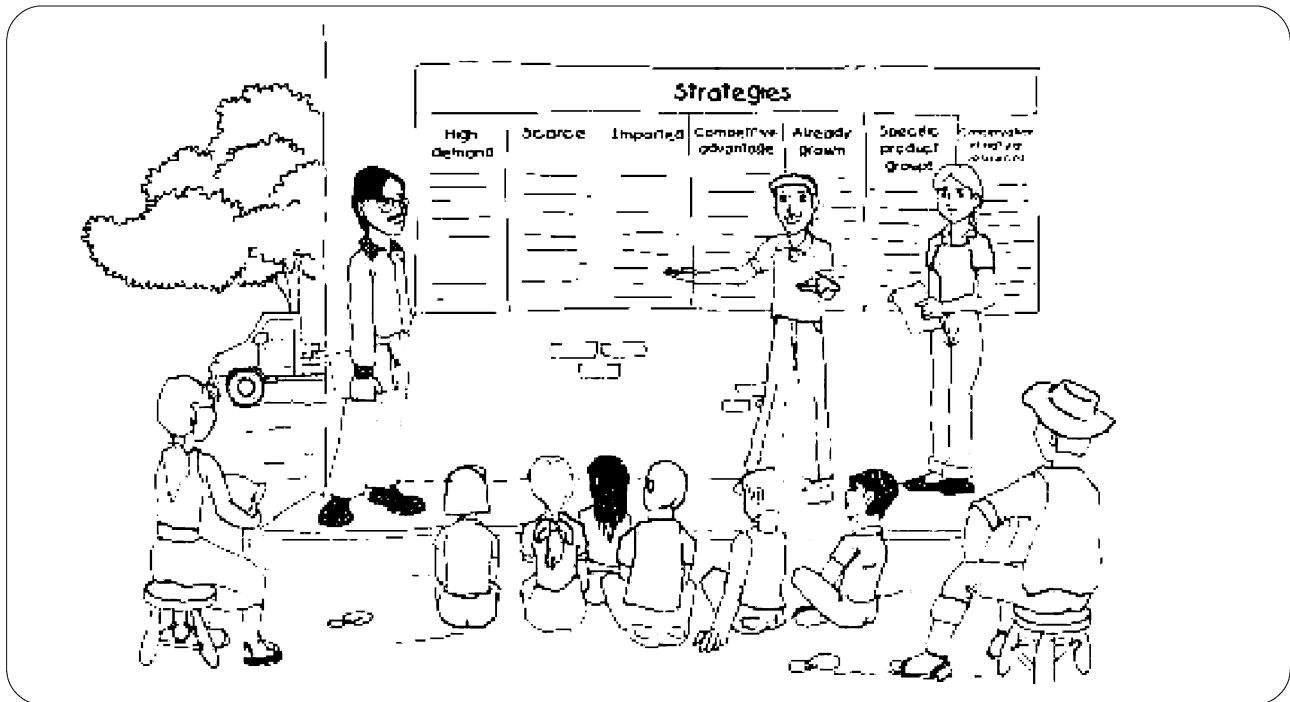
Figure 3. Market links extend beyond the intervention area.

Basic data set

The minimum information set that the research team should determine per product includes, buyers' contact details, product price, price trends according to season, minimum volume/

consignment being purchased, terms of sale, (cash, cheque, credit, mix), minimum quality requirements, frequency of supply, packaging requirements, level of interest of buyer in working with client farmer groups.

2.2. Defining Market Research Strategies



Once the client group and areas have been selected, the next task is to establish research strategies for gathering information to prioritize products based on (i) market demand, and (ii) specific interests of the client group. Products can include agricultural crops, livestock, forestry, handicrafts, and agroindustrial products. These products can be existing or new products for the region of interest.

To evaluate products this method uses “research strategies” to guide the analysis and collection of market information. The following list provides examples of research strategies.

1. Products in high demand.
2. Products in scarce supply.
3. Products being imported into the area.
4. Products which have a competitive advantage over others in this area.
5. Products being grown by farmers.
6. Specific product groups, such as fruits or vegetables.

7. Products associated with the conservation of natural resources.

The first two “research strategies” are recommended for all studies. This approach will enable the survey team to gather information based on market demand. When using these research strategies, the outcomes or product lists that are created will be unknown. This approach is particularly useful to encourage **diversification**.

The other research strategies aim to investigate market characteristics for known products or product groups that farmers are interested to learn more about, as they have an interest in investing in these products themselves. In some cases, an external investor may also want to focus the market study into a specific area of interest.

To limit the workload, the research team should concentrate on one or two research strategies

and limit the number of products within each strategy, before developing the research plan. The following section provides greater detail on the rationale for each research strategy.

Identifying products in high market demand

This research strategy is perhaps the most important and is particularly useful in developing ideas for diversification and innovation at the farm level. When evaluating demand (which may be highly variable), the market team should take care to capture information about specific events that influence demand, such as seasonality, or cultural events, such as “turkeys at Christmas”. Market growth for a product is usually measured as a percentage of annual increase in sales for a product; this percentage is compared to the local annual population growth rate to classify it as high, medium or low. Growth can be high (more than 6% per year), intermediate (from 4% to 6%), low (from 0% to 2%, which is similar to population growth rate). Some interviewees may find a percentage concept difficult to understand. Therefore, the interviewers may need to resort to low, medium and high categories based on volume numbers, i.e., numbers of items, sacks, truckloads, bought and sold.

The research team should concentrate efforts on detecting products with a high or intermediate growth. This type of growth is usually characteristic of innovative products or of traditional products that respond well to current trends in consumer habits and industrial preferences.

The research team should focus on studying growth rates for product categories that are appropriate for smallholder rural producers in the area under consideration. Products such as fruits, vegetables, livestock- and fish-derived (meat, dairy products, etc.), fresh and processed roots and tubers and basic grains should be considered. If pertinent, biodiversity-related products such as spices, aromatic and medicinal plants, essential oils and natural colorants should also be taken into account.

This research strategy offers the opportunity to “open the box” and think freely. The team should take all options into consideration. As this strategy may throw up products that are

unknown or less known to the group, the research team needs to concentrate on collating the necessary information on buying conditions as these can highlight important areas of challenge for the client group.

Identifying products in scarce supply

A product may be scarce because demand has outstripped product supply, it may be “off-season” at the time of market analysis, or the product may suffer from problems such as diseases, pests, and drought. Although these products can represent an opportunity, identifying the underlying causes is important because these can be related to high investment needs, such as irrigation to overcome drought.

It is important to examine when product shortages occur during the year. Some products present consistent annual shortage patterns. If available, the research team should consult price series to identify these possible patterns. In months of shortage, product prices increase and off-season production can be a good market opportunity for the area.

In this strategy, the research team will identify products with supply constraints and, as in the previous strategy, researchers should focus their efforts on product categories that are currently important, or viable, for smallholder rural producers in the area under consideration.

Why are strategies 1 and 2 considered to be important?

As indicated in the first chapter, we believe that an important strategy for smallholder producers is to seek ways in which to diversify their income streams. Farmers and service providers can be highly conservative in selecting business options. This is normal, given their limited investment capital and aversion to risk.

However, there is also ample evidence to show that if farmers continue to rely on traditional products they will remain poor. Therefore if farmers and their service providers are to find new income areas, it is most likely that they will need to try new marketing options. Strategies 1 and 2 are ways in which farmers and service providers can start to gather information on possible avenues for developing new business options that are based on **market demand**.

Traditional products being grown by farmers

This strategy refers to products already existing in the target region. This strategy can also be considered as a pilot approach to test the marketing approach and in many cases, especially for the poorer, more remote farmers, the first round of enterprise development can focus on improving the marketing of existing products.

Analyzing known products is also something that appeals to farmer groups, as the farmers are familiar with these products and have more confidence in applying new ideas to current practices. This is sensible as there is often a great deal that can be done to improve value, through simple methods such as grading, bulking and improving business relations with traders.

Products imported into the area

Substitution of imports can represent a good growth strategy for an area, given that local production usually represents savings in transportation and post harvest losses. Tropical, mountainous, regions generally offer different climates at various altitudes which can be exploited to grow a range of products that may otherwise be imported.

For this strategy, the research team should first prepare a list of key products that are being imported and which can be produced in the area. This type of information can be obtained using secondary information in agricultural wholesale centers, government statistics or by interviewing key informants. Afterwards, demand trends will be examined as well as purchasing requirements.

Products that enjoy a comparative or competitive advantage

The difference between a 'comparative' versus a 'competitive' advantage is that the former term includes only the biophysical aspects of a area, such as climate, soils, roads, location, etc., whereas the latter also comprises the human and social factor (local knowledge, skills, organization). In this guide we refer to 'competitive advantage', which combines human, social and organizational factors with the region's biophysical characteristics. The inhabitants of a region will have a competitive advantage when its products offer higher

quality, a lower selling price, or a unique differentiating characteristic.

The research team needs to develop a list of products that have a competitive advantage and may require the support of an expert for this. Examples include exotic, native products (fruits, medicinal plants, nuts, and raw materials) found in an area that are not produced in neighboring regions. In this case, the presence of a comparative advantage is clear, but only after the effective intervention of the human and social capital, will it really become a competitive advantage.

Smallholder rural producers have the potential of reaching competitive advantages for some labor-intensive agricultural products, that can only be grown in high altitude locations such as fruits, vegetables, spices, medicinal and aromatic plants, roots and tubers, organic products or fibers. For example, 80% of fruit production in Colombia is estimated to come from smallholder rural producers (Asohofrucol, personal communication, 1998). Competitive advantages may also exist for woven fabrics, handicrafts, and other similar items.

Specific commodity groups, i.e., cereals, fresh fruit and vegetables

This strategy is designed for service providers who are working on projects in which an agreement has already been made on which commodities or products will be developed. In many cases, large development projects focus on 3-5 products or commodities that require support in terms of productivity and market linkage.

Under these conditions, the farmer group and service provider should develop marketing studies that focus on ways to increase value and income through sales of the selected commodity. This may include investigating processing options and sales into industrial applications for the product.

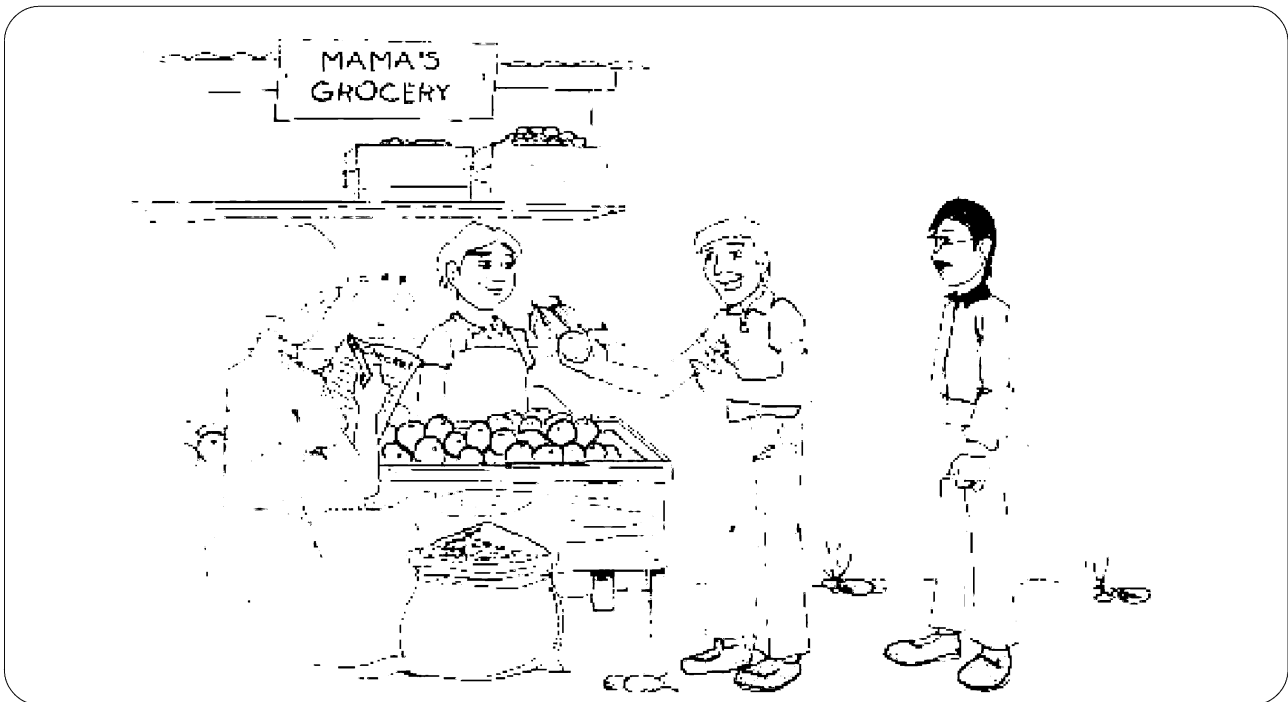
Products associated with conservation of natural resources

This strategy is closely related to natural resource management. A large percentage of smallholder rural producers worldwide inhabit fragile ecosystems such as hillsides and tropical rainforests, where the probability of erosion and environmental degradation is high. If products directly or indirectly related to conservation

(e.g., live barriers, grasses and cover crops) are available and represent a market potential, then the adoption of conservation practices by smallholder rural producers is viable. Many production systems have been proposed in the past, but their economic feasibility is generally not well studied.

To implement this strategy, a list should be made of the products directly or indirectly associated with the conservation of natural resources. For example, if the community prefers live barriers of forage grass, the local or regional demand for related products, such as milk and dairy products, should be studied.

2.3. Developing a Market Research Plan



Once the strategies have been defined and selected, the research team should proceed to plan the market opportunity identification survey, as shown in Figure 4. This includes the

collection of both secondary and primary market information.

Secondary information requirements

Secondary information is data that already exists. This information is usually cheaper to collect than primary data and provides a means of prioritizing where there are gaps that should be filled by direct primary data gathering. A serious effort to gather secondary data can save considerable time and effort, as previous studies may have undertaken the work that you want to do.

Secondary information is especially important when studying the larger, national, regional and international markets, especially in the case of selling into developed countries. In most cases, localized market information will not be available. Researchers should aim to collect

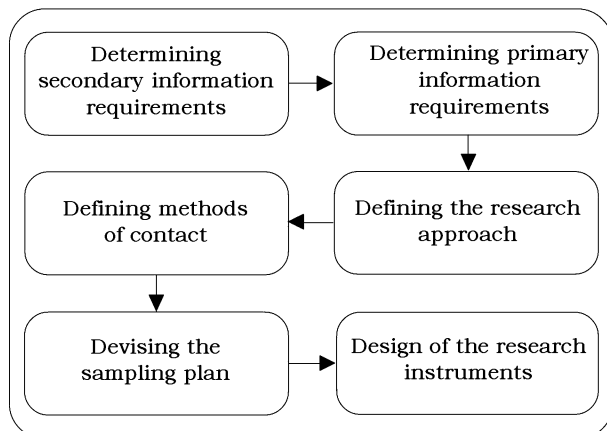


Figure 4. Planning steps for a rapid market survey.

only the most up to date information because market processes are dynamic and information grows old rapidly. As a rule of thumb, market trend information should not be more than 2 years old. A list of possible sources of secondary information is given in Table 3.

Furthermore, secondary information related to price series at either the wholesale or retail level should be sought for target products. Such series can be used to determine the degree of stability of a product's prices, essential information for the smallholder rural producer who, because of his/her economic fragility, may have low risk capacity. Monthly price series can also suggest times of scarcity, when prices tend to be higher.

Primary information requirements

Although secondary information contributes greatly to market surveys, markets are dynamic and therefore primary information is essential to understand current market conditions. Primary data is gathered directly from people involved in the area of research. In the case of market research, primary data is collected from key informants, i.e., people that are actively engaged in the market chain or providing business service providers and key observers. Key observers are those people who are knowledgeable about the market chain of interest but are not actively involved in any business operations.

Table 3. Sources of secondary information.

Local market	<ul style="list-style-type: none"> • Market information centers (telecenters) • Wholesale supply centers and marketplaces • Local development agencies • Nongovernmental organizations (NGOs) • Trader associations • Local governments • Local press • Private-sector companies • Internet • Service providers, local consultants
Domestic market	<ul style="list-style-type: none"> • Information centers of wholesale supply centers and marketplaces • Chambers of Commerce • Development agencies • Trade associations • National, departmental, provincial, or municipal governments • Press, specialized and standard publications, and journals • Private-sector companies • Internet • Consultants
Markets in neighboring countries	<ul style="list-style-type: none"> • Foreign trade agencies • Agencies promoting exports • Chambers of Commerce • Development agencies • Trade associations • Press, specialized and standard publications, and journals • Private-sector companies • Internet • Consultants
Markets in developed countries	<ul style="list-style-type: none"> • Foreign trade agencies • Agencies promoting exports • State agencies of developed countries • Development agencies • Chambers of Commerce • Trade associations • Press, specialized and standard publications, and journals • Private-sector companies • Internet • Consultants

Research approach

Surveys are used to gather market information using either structured or semi-structured surveys. Structured surveys use questionnaires with lists of questions that are asked in the same sequence and manner for all interviewees. This approach is preferred for large quantitative studies but usually require statistical analysis for interpretation.

Semi-structured surveys or checklists, consisting of a list of topics that need to be covered by the interviewer, are more often used in qualitative studies. Checklists are flexible as they allow the interviewer to direct questions according to the replies. Generally people provide more commercially interesting information if they are interviewed in this less formal manner.

Recommendation

For first time survey work, interviewers should prepare a more structured questionnaire, which should be pre-tested. As interviewers gain experience and confidence, the team can shift to the use of less structured checklists.

Methods of contact

Information can be requested by traditional mail, electronic mail, phone, or in person. The two last alternatives are recommended. A mailed questionnaire is inflexible and the reply rate is relatively low. Phone interviews can be a good way of contacting those who cannot be accessed in person. Personal interviews are the best method of contact. Interviews can be conducted individually or as a group. Individual interviews are recommended when more sensitive information is required, such as commercial data on prices and volumes of sale. When interviewing people about sensitive information, it is recommended that this type of interview be on a one-to-one basis. Group interviews are also useful and these types of interviews are particularly effective when attempting to evaluate less sensitive data at the community level.

Sampling plan

Because the Market Opportunity Identification Survey is rapid, it does not focus on contacting consumers directly but rather on surveying a limited number of well informed actors in the marketing channels and from industry. When

designing the sample, the following decisions must be made:

- (a) Who should be interviewed (sample unit).
- (b) How many people should be interviewed (sample size).
- (c) How will they be selected (sampling procedure).

Selection can be done at random among the entire population (probability sample) or among people from whom it will be easy to obtain information (convenience sample). A specific number of people from different categories or groups (quota sample) can also be interviewed.

For our purposes, the sample should consist of a list of contacts that includes local and district/provincial traders, wholesalers and retailers in wholesale supply centers, heads of purchases for supermarkets at the district or national level, officials of agroindustries and other companies, and retail stores. If contacts are few and relatively close to each other, then all can be interviewed. But if they are numerous or distant, then a representative sample should be chosen; for this case, a quota sampling procedure is recommended.

The research team may, for example, decide to contact, in the area covered by the survey, all of the supermarket chains, five processing enterprises, 10 corner stores, 10 traders, and 15 market retailers. Identifying pertinent population segments can stratify the quota sample; for example, corner stores can be categorized according to income level of the neighborhoods where they are located.

In addition, a list of contacts for obtaining relevant secondary information should be made. The list usually includes public or private sector officials involved in foreign trade, export promotion, or economic development; staff of pertinent trade associations; and chambers of commerce.

Identification of key informants and observers

Within any community there are often well known people that have a major stake or knowledge about the production and trade of a particular product. The research team should identify these personalities before starting a survey. These people can be a rich source of

information, but equally importantly, these people can guide the research team to other people to accelerate data gathering. Ideally the research team should identify “key informants” at each stage in the market chain.

Focus groups

This type of interview is used typically to interview communities or farmer groups, or specific types of consumer groups. This method is cost-effective but requires good facilitation skills, as the person undertaking the interview has to be able to work with numbers of people. The focus group is particularly good for gathering information on issues such as:

- Production and post harvest technologies and practices.
- Seasonality.
- Access to inputs and services.
- Local buyers/market channels.
- Organization of farmers.
- Trends in local prices.
- Major changes/innovations.
- Trends in production and marketing,
- Key constraints in production, post harvest and marketing.

The focus group approach does not work well with market chain actors or key informants. For these market actors, questionnaires or checklists are more effective.

Designing questionnaires/checklists

The questionnaire and interview checklist are basic tools for a market survey. A questionnaire consists of a series of carefully prepared questions in a logical sequence, which the interviewee should answer. A checklist is a less formal guide to questioning an interviewee. Some basic rules for both approaches include:

- Questionnaires and checklists/survey tools should have a name or title identifying it, for example, ‘Questionnaire for Bean Trader’, and a code if necessary, e.g., Q1BT.

- Survey tools should be separated into sections that can be clearly identified. Sections may correspond to (i) specific products/marketing topics (Table 4), and (ii) survey strategies (Table 5).
- The first part of a survey tool should identify the contact or source of information; his/her position; the company’s name, address, phone and e-mail; date of interview; and name of interviewer. This information is not only important for data processing but also for monitoring the survey.
- All survey tools should include questions with respect to basic purchasing conditions, such as quality requirements, quantity purchased, frequency of purchase, prices, required varieties and packaging.
- Sufficient space should be left below the questions so that the interviewer can write the answers.
- The questionnaire should include precise instructions in **bold type** to avoid confusing the interviewer. Sometimes **Yes** or **No** questions will help the interviewer determine whether he/she should skip a question or set of questions.
- All the tools should be pre-tested with at least two contacts before the full survey is carried out.

Developing questions

As this maybe the first time that you are designing a questionnaire, it is important to remind the research team to have the objectives of the survey clearly defined and then build lists of questions to ensure that information can be gathered to answer major issues.

The teams should be aware that there are no preliminary product lists for Market Strategies 1 and 2. This means that in these two cases, the questions have to be formulated with no product in mind. In contrast, Strategies 3 to 7 have preliminary product lists, and therefore questions can be prepared for a specific product. The team should work to develop a series of questions that are simple and logically

Table 4. Initial survey questions to establish contact information.

	Section 1: Information on contact and interviewer
Name of person interviewed	
Position in market chain	
Business name	
Contact information	
Interviewer(s) date	

Table 5. Key questions for each research strategy.

Market research strategy	Key questions		
	What is the annual growth in demand?	Is it ever scarce? When? Why?	Which are the purchase conditions?
1. Products in high demand			
2. Scarce products			
3. Selected existing products (e.g., <i>blackberries</i>)			
Buying conditions	Highest demand Product 1	Scarce supply Product 1	Blackberries
Price			
Volume of sales			
Quality			
Source			
Minimum purchase			
Would you be interested in buying beans from a farmer's group	<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no

ordered. This is not difficult, but **neither is it as easy as one may think**. When planning a questionnaire, make the questions short, simple and to the point.

Examples of how to formulate and test questions are proposed in this section. The first questions in an interview should define who you are interviewing, their position in the market chain and their contact information (Table 4). This information is essential to know where the information is coming from and may be useful later for any follow up.

Subsequent questions should be developed to answer key issues in the survey. In Table 5,

questions have been developed for detecting products in high demand and scarce products. The questions may be asked for categories of products (such as fruits and vegetables) or specific products (such as banana, beans, or maize flour).

In Table 6 more detailed questions have been developed to evaluate specific quality aspects for grains, fruits and vegetables. The research team should be aware that quality requirements are more stringent for fresh produce to be sold directly to final consumers, than for products to be used as raw materials for transformation in agroindustries.

Table 6. Quality aspects of grains, fruits and vegetables.

Grains	Fruits	Vegetables
<ul style="list-style-type: none"> • Moisture content • % broken • % insects • Color • Odor • Milling yield 	<ul style="list-style-type: none"> • Size • Color • Pest damage • Disease damage • Maturity • Cleanliness • Freshness • Juiciness • Sweetness or Brix grade 	<ul style="list-style-type: none"> • Size • Color • Pest damage • Disease damage • Cleanliness • Maturity level • Freshness

The information in Table 7 presents a practical layout for questions (in matrix format) to identify the key purchasing conditions or requirements for products of interest. This matrix is more convenient and easier to use for the interviewer.

Based on the needs of the survey, the team should compile a list of the most useful questions to develop the survey tool. The following sections provide information on questionnaires and checklists:

Questionnaire

In this type of research tool, questions may be open or closed. Open questions allow the interviewee to answer the question with his or her own words. Closed questions include all possible responses to the questionnaire, which are chosen by the interviewee. Examples of closed questions are those of multiple selections or of scoring against a scale. Questionnaires with closed questions are easier to process, but open questions are widely used because it is impossible to anticipate all possible answers to questions. In general, questions should be easy to understand, so wording has to be kept simple. An example of a simple questionnaire developed for a supermarket produce manager is given in Box 1.

Checklists

Interview guides/checklists are used in unstructured surveys, which seek to direct the interview according to the replies. They usually

consist of a list of issues that the interviewer should cover, but with few details. This tool allows great flexibility and is very useful for qualitative surveys, and for extracting sensitive information through a more informal process. See Table 8 for example of a marketing checklist. In this case, formal questions are condensed into vital information needs and then summarized to a mental reminder of the area of questioning to pursue. When interviewers have gained experience, the research team can use only the points in the shaded left hand column to lead the discussion.

It may be necessary to prepare different tools (either questionnaires or checklists), for each type of actor to be interviewed. For example, interview checklists may be more practical for traders, while short questionnaires should be prepared for heads of purchases of supermarket chains and food-processing companies or agroindustries.

Planning matrix

To assist the research team to develop specific survey tools for specific contacts, a matrix can be developed as an aid for determining the number and types of questionnaires or interview guides required for the Rapid Market Opportunities Survey (Table 9). Before building this matrix, the research team should prepare a list of products for investigation according to a selected research strategy and a list of types of people that should be interviewed.

Table 7. Matrix format for a questionnaire on purchase conditions.

Product	Purchasing conditions or requirements - 1			
	Required quality aspects	Preferred variety of product	Preferred presentation or packaging	Unit purchase price

Product	Purchasing conditions or requirements - 2			
	Method of payment	Minimum volume purchased per supplier	Preferred frequency of purchase	Minimum acceptable supply continuity

Box 1

Questionnaire for a supermarket produce manager

Section 1. Information on contact and interviewer

1. Person interviewed: _____
 2. Position: _____
 3. Business name: _____
 4. Interviewer(s): _____
 5. Which agricultural products do you trade in?

<input type="checkbox"/> Fruit	<input type="checkbox"/> Vegetables	<input type="checkbox"/> Red Meat	<input type="checkbox"/> Poultry	<input type="checkbox"/> Dairy
<input type="checkbox"/> Spices	<input type="checkbox"/> Processed	<input type="checkbox"/> Cereals	<input type="checkbox"/> Fish	<input type="checkbox"/> Other
- Name others: _____

Section 2. Strategy 1: Products showing a good growth rate in sales

- 6a. Was the volumes of sales of ____ (example product) ____ in your business?

<input type="checkbox"/> Greater	<input type="checkbox"/> Equal or	<input type="checkbox"/> Less than last year
----------------------------------	-----------------------------------	--
- 6b. How would you describe the changes in sales?

<input type="checkbox"/> Small change	<input type="checkbox"/> Medium change	<input type="checkbox"/> Large change
---------------------------------------	--	---------------------------------------

Do you know why demand has changed?
7. Which products have had the highest increase in demand?

a. _____	b. _____
c. _____	d. _____

Section 3. Strategy 2: Products in scarce supply but in high demand

8. Do you find difficulties in obtaining any particular _____ products?
9. If yes, what specific product(s) are in scarce supply?

a. _____	b. _____
c. _____	d. _____
10. Why is this product (or these products) scarce? (keep in same order)

a. _____
b. _____
c. _____

The columns in Table 9 indicate the research strategies and the rows indicate the contacts that should be interviewed. This matrix is useful to help the research team visualize which contacts should be interviewed for each strategy. The research team should aim to gather information with the least number of questionnaires or checklists.

The research team should be aware that some contact types, such as traders and wholesalers, will probably have information on only a limited number of products, because they tend to

specialize. Other contact types, such as heads of purchases for supermarkets and marketplace retailers will probably have information on a wide range of products.

This implies that the latter contact types would be ideal interviewees for Strategies 1 and 2. In the case of processing firms, if they market a wide range of products, they will be able to provide information on many different products. However, this will not always be the case, since some processing firms specialize in one or two products.

Defining and Conducting a Rapid Market Survey

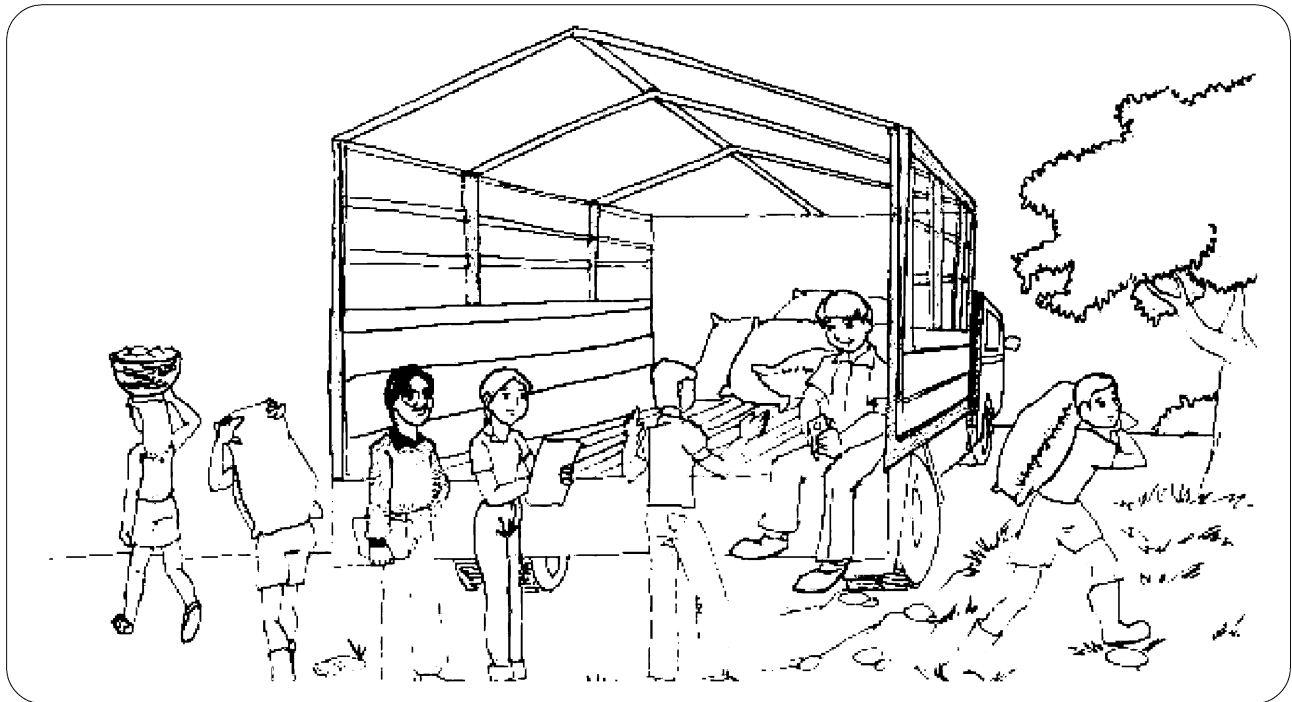
Table 8. Market survey checklist.

Topic checklist	Subtopics/Information required	Questions/Comments
Personal information	Name Physical address Telephone	For established firms try to get a business card or mobile phone no. for purposes of future reference
Type of business	Value addition Physical functions Experience	How does the respondent add value along the market chain? Does he change the form of product (processor)? move the product (transporter) or store the product (wholesaler) or is he a retailer or consumer . Is there vertical integration ?
Demand	Quantity Type of buyer Seasonality Variety Consumer Preferences Price data	<ul style="list-style-type: none"> • Quantity sold normally, e.g., per day, week • To whom do you sell? • Are there changes in volume of sale over time? • Are there different varieties? • If so, what is their respective demand/preference? • What is the price variation per variety? • Are there changes in prices over time? • If so, what are the reasons? • What are key problems in selling your products?
Supply	Source by area Source by type of person Price Quality	<ul style="list-style-type: none"> • Which are your supply areas (geographically)? • From whom do you buy? • From where do you buy? (meeting pt.) • What is the current price for the top three varieties? • Does the price change over time? If so, why? and how? • Do you have problems getting products? If yes, describe
Quality	Perishability Post harvest issues	<ul style="list-style-type: none"> • What is the quality of products along the chain? • What is the shelf life of the products?
Storage	Quantity Time Storage problems	<ul style="list-style-type: none"> • How much do you usually store? • For how long? • Do you have any storage problems? • Do you experience storage losses?
Grading and sorting	Grading incentive	<ul style="list-style-type: none"> • Do you grade or sort? • Do better grades fetch higher prices?
Market information	Sources Spatial arbitrage	<ul style="list-style-type: none"> • Do you get market info? (e.g., on prices) • If so, from whom and how? • Are there large price differences between markets at a given time?
Price formation	Market power	<ul style="list-style-type: none"> • Who determines the price? • How is the price determined? • If firm/individual is a price taker, find out why
Institutional and legal framework	Associations	<ul style="list-style-type: none"> • Do you belong to an association? • Are there any market regulations? If so, which are they and how do they affect your business?
Market structure	Competition	No. of sellers <ul style="list-style-type: none"> • Is there price competition? • Is there non-price competition? If so, how (interlocking markets)?
Credit availability	Sources and type	<ul style="list-style-type: none"> • Are there any credit institutions? • Do you use them? • What are their rates of interest?

Planning matrix to determine research tools.

contact	Research survey strategies						
	1. Products in high demand	2. Products in scarce supply	3. Products that are traditionally grown by clients	4. Products imported into the area	5. Products in which the region has a competitive advantage	6. Products commodity groups, low value/high value	7. Products support N activities
or en							
ural le centers							
laces: lers and							
f es for arkets							
rocessing ies							
store							
osks or							
nd							
endors							

2.4. Collecting Market Information



Once the survey tool has been designed and tested, the next step is to gather information. This process should begin with gathering relevant secondary information. Based on this information, the primary data collection can focus on information gaps.

Sources of secondary information

There are many sources of secondary information as indicated in the list below. General information on issues such as national production statistics can usually be obtained through agencies such as the Ministry of agriculture or statistics. Market information centers and wholesale markets are usually good sources for obtaining price series data. Economic and agricultural publications and agricultural and livestock and economic sections of newspapers can be good sources of information on market trends and new product options. In some cases, hiring a consultant to help acquire secondary information may be justified, especially if the target product is related to a specialty market or is traded in overseas markets. A full list of contact points for gathering secondary information is given in Table 3 (page 29).

Sources of secondary information

- Chambers of Commerce.
- Development agencies.
- Local development agencies.
- Local governments.
- Market information centers/telecenters.
- National, departmental, provincial, or municipal governments.
- Nongovernmental organizations.
- Local press.
- Press, specialized and standard publications, and journals.
- Service providers, local consultants.
- Trade associations.
- Trader associations.
- Wholesale supply centers and marketplaces.
- Consultants.
- Internet.
- Private-sector companies.

Collecting primary data

Collecting primary information is like being a detective. The process of data collection means that the researcher needs to behave like an analyst during the study and not be a passive enumerator. The researcher needs to consider what the client is trying to define, to focus on identifying options that are in demand. This requires that market chain actors are

considered to be the experts, who hold vital information.

As the process is rapid, the researcher needs to gather minimal amounts of information, but also be rigorous, ensuring that information from one interview is confirmed through questioning other chain actors. The researcher also needs to be flexible and be prepared to investigate new areas as they arise. The researcher therefore needs to listen carefully to the answers from interviewees, be prepared to challenge answers if they seem inaccurate or inconsistent with other answers and at the end of each day to review the information and piece together the separate responses to build an idea of the market opportunities.

Traders

Traders are often considered to be exploitative middle men in the market chain, who are unwilling to give accurate information and make it their practice to cheat innocent farmers when buying goods. This is generally not the case, most traders are interested in discussing their business and generally offer farmers a fair price. Due to their position in the market chain, they are an especially good source of information.

The research team should make particular efforts to interview traders in both rural and where possible urban centers. However, the

research team should be aware that generally operate very early in the morning and generally have limited amounts of time for questioning. Interviews with traders should be short and to the point. Key areas of information to collect from traders are related to market trends, demands for specific varieties, quality parameters and major constraints to sales. Interviewers should also determine how payments are made to farmers and any services that the traders provide to the farmer groups. Traders may also be able to explain why some farmers or farmer groups are more successful and provide information relative to interesting opportunities for new enterprises.

Wholesale supply centers and marketplaces

These locations are key sources of information because they concentrate many actors such as wholesalers and retailers, selling a wide range of products. Actors in these sites tend to pay cash and their quality demands are not too strict. In these strategic sites, data collection for the research team should focus on three main objectives:

- To visit central information centers (if they exist, they are usually located in the market's administrative office), to obtain secondary information to identify either products with high and intermediate demand growth or scarce products, and on the other products related to Strategies 3 to 6.



- To obtain monthly price-series data for several years if possible, which may be available in such central information centers. This monthly price information will help identify the degree of monthly price variability and to determine annual patterns of low and high prices for individual products of interest.
- To interview wholesalers and retailers operating there, to identify products with high and medium demand growth and scarce products, and with respect to products corresponding to Strategies 3 to 6.

Purchase centers for supermarkets

These sites can provide considerable amounts of useful information because supermarkets retail a wide range of products. In particular, supermarkets are excellent sources of information for identifying high-growth products or products in scarce supply, and in general, for all of the research strategies.

However, the research team should be aware that supermarkets generally do not pay cash to suppliers, can take several weeks or months to make payments, and may request special discounts from suppliers to cover promotional costs. Methods of payment have important implications for smallholder rural producers: (a) they will need working capital, and (b) they will need other sources of income while they wait for supermarkets to pay them. In addition, supermarkets tend to be more demanding with respect to product quality and presentation.

Heads of purchases are very busy people, and the research team will usually need to ask for an appointment well in advance. There may be several heads of purchase in the supermarket chain; each one specializing in a different product category. For example, purchasing of fruits and vegetables is generally the responsibility of one person. The fruit and vegetable head of purchases should be contacted, as these products offer good income prospects for smallholders.

In this case, the use of a questionnaire is recommended to facilitate collection of data on many products. However, questionnaires for heads of purchase of supermarkets will tend to be long. In this case, the research team should explain, and if necessary, make more appointments.

Several categories of agricultural and rural-sector related products sold in supermarkets are listed below:

- Basic grains sold in bulk or packaged.
- Fresh fruits and vegetables.
- Fresh meat and fish.
- Dairy products.
- Fresh and dried herbs and spices.
- Flowers.
- Handicrafts.
- Flours and starches.
- Canned and bottled fish, meat, fruits and vegetables.
- Bottled products.
- Frozen and refrigerated products.
- Rural agro-industrial products.

Agroindustries and food-processing companies

Industrial entrepreneurs are another excellent source of current market information for all survey strategies. The research team should be aware that processing firms are interested in buying low-cost, second- or third-grade agricultural products that cannot be sold as fresh produce. This is important because a often used and highly successful marketing strategy for smallholder producer organizations is to sell first-grade products to more demanding clients such as supermarkets that will pay premium prices and second-grade fresh produce to marketplaces and third-grade products to industrial processors. In this way, all produce can find a market, over an optimal range of cost-quality parameters.

If the survey is directed only towards local companies, the research team may be able to cover the entire population being sampled. If the market survey coverage is broader, a quota sample will have to be selected in accordance with the products of interest for the market survey. Local companies can use raw materials, including fruits, vegetables, grains, milk, meat, cereals, roots, tubers and vegetables, from smallholder producers.

The research team must identify the most suitable person to interview. If the company is small, the ideal person may be the owner, general manager, or marketing manager. If the company is intermediate in size or large, then it is better to contact the head of purchases. These companies handle a great deal of

confidential information and the interviewer must guarantee that all information given to him/her will be handled confidentially. Interviewees may be unwilling to provide information on sales volumes, but it is even more important to obtain information on annual growth rates of sales for their products and on basic buying conditions.

Other industries and retail stores

The preliminary product lists for Strategies 3 to 6 will include a wide range of products that will surely lead the research team to contact many sorts of companies and stores. For example, in a market opportunities identification survey conducted in south-western Colombia, a candle factory, flower shops, dairy industries, and frozen fruit-pulp producers were interviewed. These sales outlets were not considered in the initial survey plan, but were found to offer interesting market opportunities. Hence, another important aspect of the study is that the research team needs to be flexible and follow up on new leads as they arise.

Tips for collecting primary information

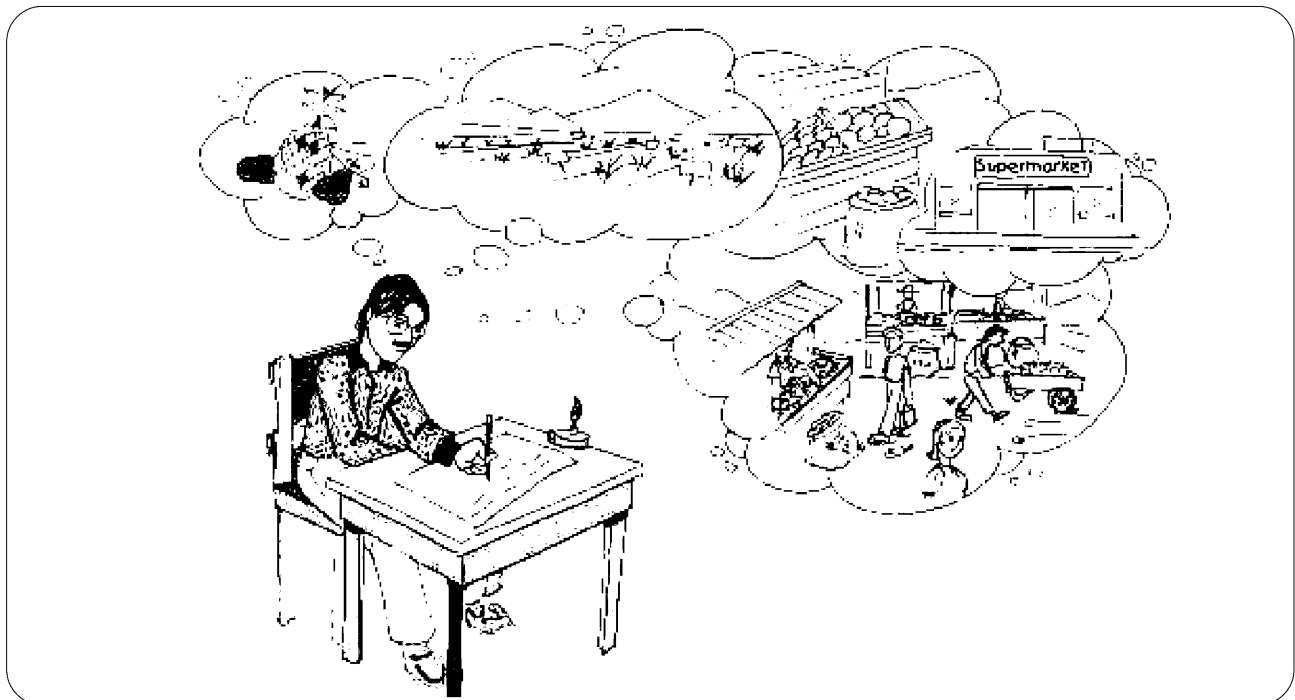
- Begin all interviews by introducing yourself and your organization. Where possible, interviewers should make appointments with contact people, then confirm and keep them. Appointments can be made by phone.
- Interviewers should introduce themselves and have a formal letter using stationery of the organization executing the survey. This may not always be necessary but is helpful to identify and empower the interviewer. The letter should also inform of the survey's objectives and emphasize that all information will be handled confidentially.
- Interviewers must be informed of the survey's objective and be familiar with the research tools developed.
- Interviewers should be dressed respectably and give the interviewee their full attention. Switch off mobile phones and be professional at all times.
- No more than three reliable people are needed to gather this information, with the support, if necessary, from one consultant. In most cases 2 people are better, one to ask questions and the other to record answers. Small teams are not threatening and can gather more sensitive information more easily than having larger groups.
- For specific data gathering, do not interview more than one person at a time. Focus groups do not work with traders or business people, particularly when dealing with commercial data, such as prices and volumes of trade.
- Interviewers should be flexible and be clear about the purpose and timing of the interview and stress confidentiality.
- Be friendly and relaxed, use humor and ask simple and clear questions, avoid influencing or suggesting replies.
- Follow a logical sequence, avoid leading questions.
- Ask most sensitive questions last.
- Be prepared to listen and learn, and try to engage the respondent
 - don't be afraid to challenge the accuracy of the information provided.
 - use diagrams to assist discussions.
- Investigate new areas of interest as they arise.
- Use the information from one interview to improve the next interview.
- Interviewers must make sure that contacts specify units, such as product type, weight, volume, and time units clearly.
- Where possible, interviews should not be too long, although this may be, on occasion, unavoidable. An interview lasting 30 minutes is long. If it's likely to take longer, the interviewee should be previously informed and the interviewer may request that the interview be conducted in two sessions.
- At the end of each day, the research team should discuss the major findings and write up a short summary sheet from each interview to facilitate data analysis and preparing the report.
- **Supervision:** Of interviewers is optional, depending on the degree of confidence that exists. The facilitator should accompany the research groups on their first interviews and to discuss the results with the group on completion of the interview.
- **Timeframe:** The rapid market survey is designed to be a short-term project. However, the time taken to complete this task depends upon the amount of strategies, products and client groups that are involved. We suggest that research team should aim to spend at least 2-3 days in preparing and testing the questionnaires.
- **First time:** The first time that a survey is conducted, and especially if the team

includes a high degree of participation between farmers and service providers, we recommend that you start by focusing on a local market. Do not make the first survey interviews too complicated.

Start by developing your survey using only research strategies 1 and 2, plus **one** other

strategy. The selected additional strategy should have a limited number of products not more than 5. As a trial run the number of contacts should also be limited to 5 types of informants. Within each interview category, limit the number of interviews to 5 for each category. Given this level of information gathering it should be possible to complete the survey.

2.5. Analyzing Data and Preparing Product Option Report



After collected primary and secondary data, the next task for the research team is to analyze the data and provide the first set of market options to the clients for their comments and further insights.

Data processing

The information gathered for the Market Opportunities Identification Survey will be located in several questionnaires and interview guides, and will probably include many responses to open-ended questions. The research team will have questionnaires completed by traders, wholesale supply centers, supermarkets, agroindustries, retailers in marketplaces, corner stores and other types of shops. There will also be documents, articles and data on different products and export

opportunities. These considerations indicate the qualitative nature of the study, which makes it difficult to process the data using a computerized statistical package such as SPSS.

Therefore it is recommended that the research team, led by its coordinator, undertake manual processing of the information. The research group is well prepared for this task as they understand the survey objectives and collected the data. The information should be organized by product and market type to facilitate data processing and analysis. Information on opportunities for domestic and export markets should be separated.

First level of data analysis

The information obtained from the survey can be classified into four categories:

- A “long list” of market opportunities for the area in the domestic market and, if included in the initial survey objectives, also for export markets.
- A description of trends in market demand, including the estimated annual growth rate.
- Information on the months of scarcity and the reasons for this situation.
- A summary of the basic purchasing conditions.

Determining the first market option portfolio

The initial synthesis of data will lead to a “long list” of products and it is recommended that the research team reduce this list down to a *maximum of 10 market options* to keep the subsequent work at a manageable level.

To reduce the long list down to a manageable number, selection criteria should be developed to enable the team to discard options in an objective but rapid manner. Selection criteria can include issues such as:

Selection criteria to reduce long list of products

- Local knowledge to produce the product.
- Access to local technical support.
- Investment costs to establish the product.
- Costs and availability of inputs.
- Time from planting to first harvest and payments.
- Estimated rate of market growth.
- Fit with current production systems.
- Local marketing capacity of the product.
- Level of competition from larger growers.
- Market price volatility.
- Fit with local culture.

The research team can propose additional or different criteria, and use templates as shown in Table 10 to evaluate options. The opinion of the smallholder rural producers in the research team is very important when grading the market options. The market options with the lowest total scores should be discarded. Having obtained the 10 market options as the main output of the Rapid Market Survey, the research team can now proceed to prepare the first product option report.

Product option report

The structure for the product option report can be organized by market type and strategy as indicated in Table 11. Note that the products corresponding to Strategies 1 and 2 are not determined beforehand, but are identified during the Market Survey. In contrast, the products of Strategies 3 to 7 are chosen beforehand.

The matrix proposes two reports, one focused on the local market and the other on the international market, if this has been included. Each report is divided into sections containing information on product options for the research strategies studied. These include the list of market options and the basic purchase conditions. As the report can be long, an executive summary should be prepared with the most important conclusions in accordance with the Market Survey’s objectives and original strategies.

Contents, and drafting of the report

Below are suggestions on content and drafting of the final report:

- Organize the report into clear sections.
- Only include information relevant to the objectives and strategies.
- Where possible, detail the information on products representing a marketing opportunity for the targeted region.
- Summarize as much as possible, and avoid being repetitive. Use matrixes and tables.
- Make sure your report has a title page, a table of contents, an executive summary, a bibliography and a list or directory of contacts or buyers.
- Specify the dates on which fieldwork was performed.

Present information in a consistent manner, for example, matrices should have the same format.

- A summary of the final report in PowerPoint will be very useful for presenting the results.

Defining and Conducting a Rapid Market Survey

Table 10. Screening procedure for the initial set of market options.

Market option	Screening criteria					
	Competitive advantage	Availability of local knowledge	Estimated growth rate or scarcity level	Fit with current production systems and markets	Estimated level of investment	Total score
	Max: 5 Min: 1	Max: 5 Min: 1	Max: 5 Min: 1	Max: 5 Min: 1	Max: 5 Min: 1	
Product 1						
Product 2						

Table 11. Suggested structure for the rapid market survey's final report.

Components	Part 1: Domestic markets		Part 2: International markets	
	Section A: List of market options and reasons for inclusion	Section B: Demand trends, supply constraints and purchase conditions for each market option	Section A: List of market options and reasons for inclusion	Section B: Demand trends, supply constraints and purchase conditions for each market option
Report 1 <i>Strategy 1:</i> Products in high demand	Section A: List of market options and reasons for inclusion	Section B: Demand trends, supply constraints and purchase conditions for each market option	Section A: List of market options and reasons for inclusion	Section B: Demand trends, supply constraints and purchase conditions for each market option
Report 2 <i>Strategy 2:</i> Scarce products	Section A: List of market options and reasons for inclusion	Section B: Demand trends, supply constraints and purchase conditions for each market option	Section A: List of market options and reasons for inclusion	Section B: Demand trends, supply constraints and purchase conditions for each market option
Report 3 <i>Strategy 3:</i> Traditional products	Section A: List of market options and reasons for inclusion	Section B: Demand trends, supply constraints and purchase conditions for each market option	Section A: List of market options and reasons for inclusion	Section B: Demand trends, supply constraints and purchase conditions for each market option

Exercise 2.1

Determining Research Tool Requirements

Objective

- The trainee should be able to determine the different research instruments and formats required to obtain primary information in the Rapid Market Survey.

Instructions for the Facilitator and Trainees

1. Form groups of four or five, preferably by region, and name a coordinator.
2. Suppose that you are conducting a Rapid Market Opportunities Identification Survey for a given region and that you have to determine the number of tools (questionnaires or checklists) required to execute all seven strategies. Assume that the products lists for Strategies 3 to 7 are as follows:
Strategy 3. Traditional products: beans, maize, pigs.
Strategy 4. Imported products: lettuce and cabbage.
Strategy 5. Products in which the area has a competitive advantage: roses.
Strategy 6. Products related to a commodity group: soybean, apples, blackberry.
Strategy 7. Products related to soil conservation: dairy products.
3. Use the tool matrix as an aid to determine the types of contacts that you will need to interview for each of the six survey strategies.
4. Decide for each type of contact, whether you need a questionnaire or checklist.
5. Decide for each type of contact, whether the tool serves one or more strategies.
6. Think and write down the different tools you need in the tool matrix. See the Worksheet.
7. Then, in the Worksheet list the tool formats with their respective description. Make sure that the list of tools meets the needs for all strategies.
8. Write details of the Worksheet onto a large piece of paper or in PowerPoint, for presentation in a plenary session.

Resources needed

- Section 2 of the guide.
- Worksheet for Exercise 2.1.
- Paper and pencils.
- Flip chart or PowerPoint projector.
- Magic markers or markers for the transparencies.

Time required: 2 hours.

Exercise 2.1

Matrix to Determine Research Tools – Worksheet

of contact	Market research survey strategies					
	1. Detect products with high or medium growth in demand	2. Identify products that are scarce	3. Study demand for traditional and biodiversity products	4. Study demand for products that are imported into the area	5. Study demand for products in which the region has a competitive advantage	6. Study demand for products associated with natural resource management
rs or emen						
ultural sale rs						
etplaces: salers etailers						
s of ases for markets						
processing anies						
r store er						
s and ers						

Exercise 2.1

Determining Research Tool Requirements – Feedback

There can be many different answers to this exercise, and all can be correct. Contact types like supermarkets and wholesale centers that work with many products can be interviewed for several strategies. Some contact types, such as agroindustries and traders, who are usually specialized in one or two products, can be interviewed with respect to fewer strategies. Agroindustries purchasing fruits and vegetables should be contacted for Strategies 1 and 2. Note that some tools are directed to a single strategy or product. As a rule, checklists are used more with traders and wholesalers.

Tool no.	Questionnaire (Q) or interview guide (G)	Type(s) of contact and/or product(s)	List strategies included in tool
1	Q	Heads of purchase of supermarkets	All
2	Q	Agroindustries: fruits and vegetables	Strategies 1, 2, 3 and 6
3	Q	Agroindustries: dairy products	Strategy 4
4	Q	Flower shops (retailers)	Strategy 6
5	G	Traders and wholesalers: fruits	Strategies 1, 2 and 6
6	G	Traders and wholesalers: vegetables	Strategies 1, 2, 3 and 6
7	G	Traders and wholesalers: flowers	Strategies 1, 2 and 5
8	G	Agricultural wholesale centers	Strategies 1, 2, 3, 4, 6 and 7
9	G	Marketplace retailers: fruits	Strategies 1, 2 and 6
10	G	Marketplace retailers: vegetables	Strategies 1, 2, 3 and 6
11	G	Marketplace retailers: flowers	Strategy 5

Exercise 2.2

Questionnaire to Study Product Purchasing Conditions

Objective

- The trainee will design a simplified questionnaire for identifying key purchasing conditions or requirements for a given product of interest.

Instructions for the Facilitator and Trainees

1. Form groups of four or five trainees and name a coordinator.
2. The group should examine Tables 7-11, which provide topics for key questions directed to studying buyer requirements.
3. The group will select both a product and a type of contact for the simplified questionnaire.
4. The group will prepare complete questions for the eight topics in the matrix columns, and make sure that the questions are easily understood, and keep vocabulary as simple as possible.
5. All questions should be open-ended, except for the question on method of payment and frequency of purchase, which can be closed. Therefore the group will think of appropriate response options to close the two questions.
6. Write the complete questions in the Worksheet for this exercise.
7. Afterwards, transfer the Worksheet content onto a large piece of paper or transparency to present in a plenary session.

Resources needed

- Section 2 of the guide.
- Worksheet for Exercise 2.2.
- Paper and pencils.
- Flip chart or PowerPoint projector.
- Magic markers.

Time required: 1.5 hours.

Exercise 2.2

Developing a Simplified Questionnaire to Study Product Purchasing Conditions – Worksheet

no.	Topics	Questions
1	Required quality aspects	
2	Preferred variety of product	
3	Preferred presentation or packaging	
4	Unit purchase price	
5	Method of payment	(closed)
6	Minimum volume purchased per supplier	
7	Preferred frequency of purchase	(closed)
8	Minimum acceptable supply continuity	

Exercise 2.2

Developing a Simplified Questionnaire to Study Product Purchasing Conditions (Mango) – Feedback

no.	Topics	Questions
1	Required quality aspects	(a) Which is the list of key quality requirements for the mangoes that you purchase? (b) Is that all?
2	Preferred variety of product (optional)	(a) Which mango varieties do you buy? (b) Which variety do you prefer?
3	Preferred presentation or packaging	What presentation or packaging to you demand from your mango suppliers?
4	Unit purchase price	(a) Which is the unit of purchase for mangoes? (b) At what price per unit are you currently buying?
5	Method of payment	(closed) What is your method of payment for mangoes? a. For cash. b. After 1 week. c. After 2 weeks. d. After 1 month. Other: _____
6	Minimum volume purchased per supplier	Which is the minimum volume of mangoes that are you willing to purchase per delivery from a given supplier? Please specify the units
7	Preferred frequency of purchase	(closed) Which is your preferred frequency of purchase for mangoes? a. Every day. b. Every 2 days. c. Once a week. d. Every 2 weeks. e. Once a month. Other: _____
8	Minimum acceptable supply continuity	Which is the minimum acceptable supply continuity expected from a given supplier?

Practice 2.1

Observing Product Categories in a Supermarket

Objective

- The trainee will observe the variety, characteristics and will make an inventory of selected agricultural and agroindustrial product categories sold in a supermarket.

Instructions for the Facilitator and Trainees

1. Form groups of four or five trainees and name a coordinator.
2. Each group will be assigned one of the following product categories:
 - Basic grains sold in bulk or packaged.
 - Fresh fruits.
 - Fresh vegetables.
 - Flours and starches.
 - Canned fruits and vegetables.
 - Bottled fruits and vegetables.
 - Refrigerated products.
 - Frozen products.
3. Trainees will place special attention to the product's packaging, label, brand and origin (if applicable).
4. Each group will make an inventory of the products in the category assigned to them, using the format in the Worksheet for this practice.
5. Each group will transfer the Worksheet format into a large paper or transparency.
6. The coordinator will present findings in a plenary session.

Resources needed

- Worksheet for Practice 2.1.
- Permission from the supermarket's administration to visit the store.
- Transportation to and from the store.
- Note cards and pencils.
- Flip chart or overhead projector and transparencies.
- Magic markers or markers for the transparencies.

Time required: 3 to 4 hours.

SECTION 3

Assessing and Selecting Market Options



General Objective

After studying this section, the reader or trainee will be able to assess, characterize and select market options for a given area, with input from the rural community.

Specific Objectives

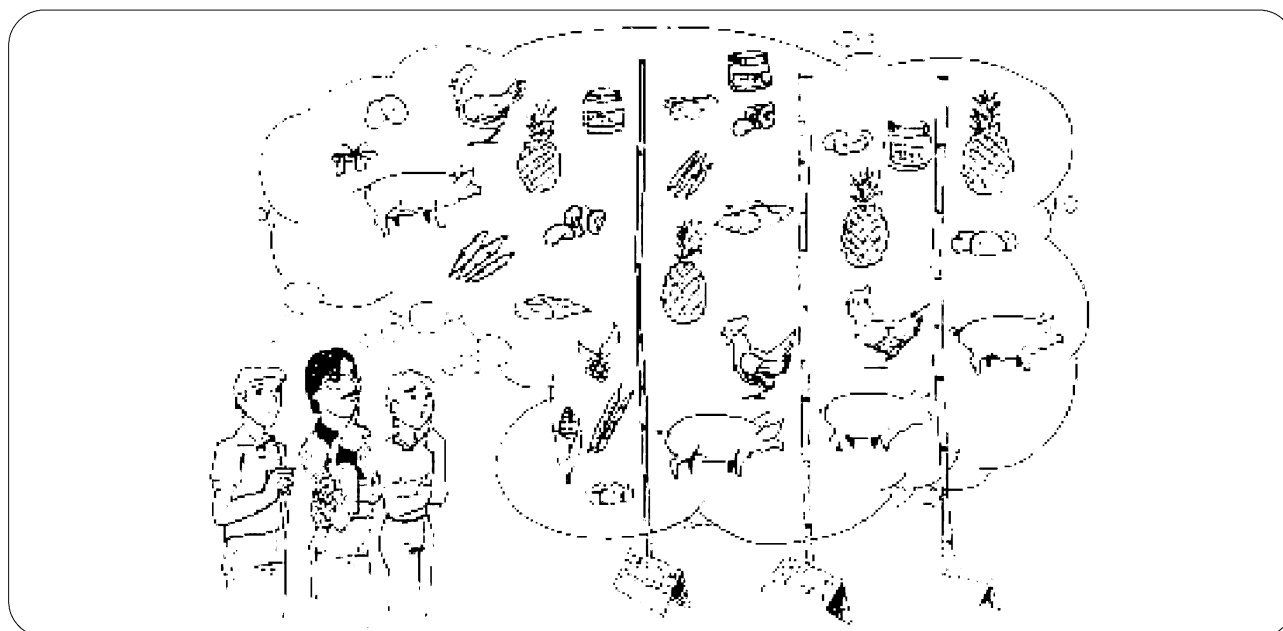
The reader or trainee will be able to:

- Establish appropriate evaluation criteria for screening market options.
- Design and prepare characterization matrices for screening market options.
- Use a profitability model and interpret the results.
- Explain valid reasons for discarding market options.
- Conduct a final evaluation of market options with the rural community.
- Design instruments to evaluate market options.

Orienting Questions

1. What are the main social and economic differences between smallholder rural producers and large, commercial rural producers?
2. Why is it important to take social and economic profiling into consideration when designing a marketing strategy?
3. What aspects make a crop or product more attractive to a smallholder rural producer?
4. What types of information should be gathered to determine whether a crop or product is feasible and economically attractive for smallholder rural producers?
5. In what ways can the rationale or point of view of a technician or rural development expert differ from that of a smallholder rural producer?

3.1. Establishing Appropriate Evaluation Criteria



The previous section presented a method for identifying a “long list” of products with market potential through a Rapid Market Survey. The “long list” of products was then reduced to those options considered more appropriate for smallholder producers. This first method, however, did not prioritize the remaining market options.

This section provides an objective method for comparing and prioritizing across different types of products, such as crops and livestock, or forest and processed products. This method also enables the research team to adjust the selection criteria to meet the needs of clients at different wealth levels or groups having different skills and assets. The ability to make these types of decisions is achieved by comparing standardized information about different products that has been organized into structured tables or matrices, based on their (i) agronomic, (ii) livestock, agroindustrial, (iii) marketing and (iv) financial performance.

In summary the selection process has three elements:

(i) Obvious discards based on overriding constraints. This method removes products that are clearly unsuitable for the client group, for reasons such as: product cannot be grown in the area, initial investment too high, time to first payment too long, etc. This

first filter can be used to reduce numbers of potential products from 20+ down to 5-10, which are more difficult to discard and need to be studied in more detail. This is a rapid process undertaken through consensus selection and discard by the marketing team.

This method was described in Section 2 of this guide.

(ii) Discards based on the comparison of standardized data. This process collects detailed information on the (i) production, (ii) marketing and (iii) financial performance of products to enable different types of options, i.e., “apples and pears” to be compared in an objective manner. This process will reduce the 5-10 promising products, down to 2-3 products for discussion with the client groups, i.e., the investors.

(iii) Preference of the producers. This final selection process is made by the client group based on a discussion of options with the research team. The client group have the casting vote on which is the most suitable option. This final process should reduce the product focus down from 2-3 options down to 1 product for subsequent development and investment into a new or improved agroenterprise.

This section deals with the last two selection methods. Much of the information required, especially the marketing information, will have

been collected through the Rapid Market Survey; however, this characterization phase will require additional information, related to agronomic, livestock, agroindustrial and financial aspects.

In the final stage, results for the most promising market options are presented to the rural community by the research team. The salient characteristics of each market option are described to the rural audience (with the aid of summary sheets), and then a sample of smallholder rural producers proceed to rank by preference. This procedure is based on 'concept testing', a method commonly used in the fields of market research and new product development. **The final product portfolio is the main output of this guide.**

Defining selection criteria

Having made the first evaluation and selection of products, the research team begins the second and more detailed analysis of the product options. In this stage, selections can include more detailed evaluation criteria such as:

- Feasibility of the product in the economic context of smallholder producers.
- Attractiveness of the market option from a business and financial perspective.
- Contribution to, or at least, lack of, harmful effects on production sustainability.
- Potential impact in terms of numbers of rural producers that could benefit from support to a market option, through increased income and employment.
- Potential for value addition.
- Ability to achieve marketing gains within a short-term period.
- Maturity of private sector actors for this product.
- Compliance or fit with the social and cultural context and traditions.

Feasibility in the social and economic context of the smallholder producer

Smallholder producers can be distinguished from large and intermediate scale producers because they have less land, smaller risk capacity and less working capital, less access to infrastructure, support services, credit and use of family labor. The market options selected, therefore, must be relatively simple to implement, the technological level should be low to intermediate, and initial investment and production costs should be affordable.

The application of this criterion is closely related to official local policy regarding rural development, because the feasibility of a rural business or production project will depend on the availability of local basic infrastructure and support services, including business coaching, technical assistance and credit. In this case, we assume that the government or service provider will offer modest support to the smallholder rural production sector.

Attractiveness from a business and financial perspective

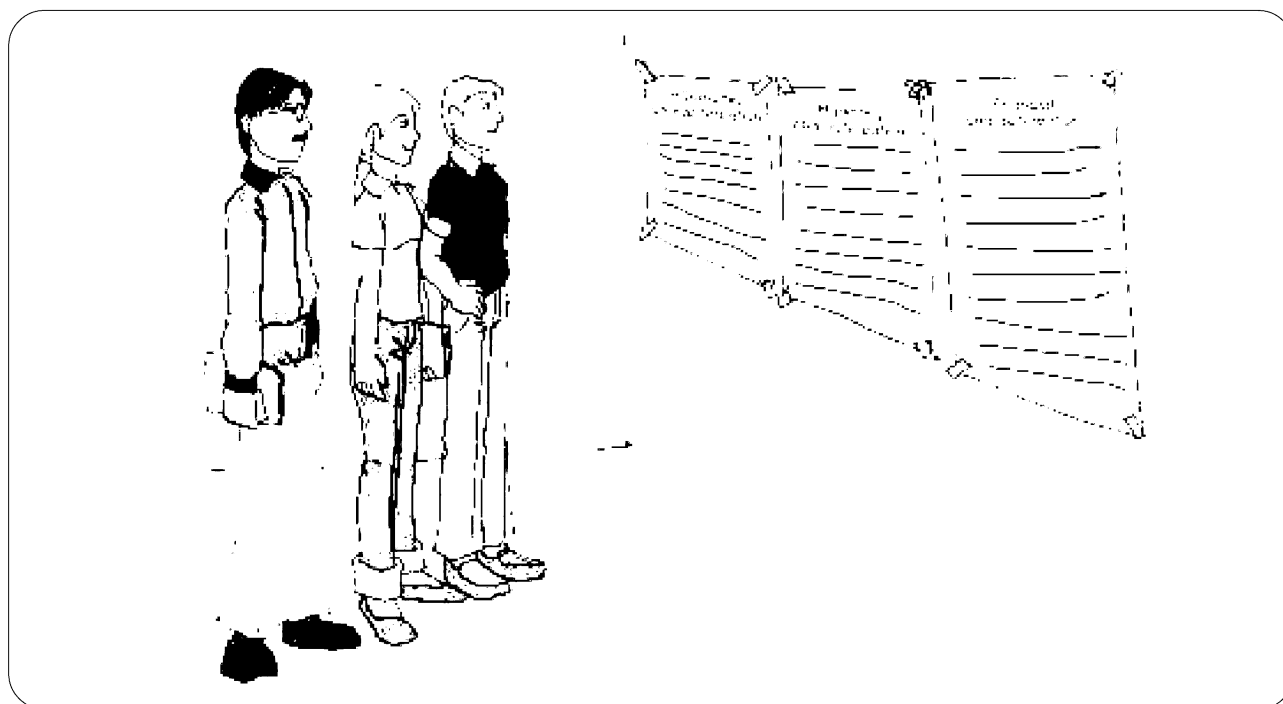
Smallholder rural producers can be segmented according to their degree of market orientation; (i) commercial producers who sell all they produce; (ii) semi-commercial producers, who consume and sell what they produce; and (iii) near-subsistence producers, who consume most of their produce. This method is focusing on the needs of the first two categories of smallholder producers, i.e., those who sell a percentage of their production. We believe that these groups require particular support, as their future economic prospects will be related to their ability to engage in markets more effectively.

Regardless of the degree of commercialization, all small farm and business enterprises have many points in common. They (a) sell products and/or services, (b) use and manage human resources, including family labor, (c) use natural resources, raw materials or inputs to generate products, (d) make investments and (e) demand support services, such as technical assistance and credit, and are (f) linked into business networks. Consequently, when selecting market options, it is essential to characterize options from a business viewpoint and analyze opportunities with a view to matching market options with client profiles, i.e., risk against levels of assets, skills, competitiveness, growth trends, profitability levels, degree of price stability, purchasing conditions, competition (quantity, type and strategies), etc.

Contribution to production sustainability

A high percentage of smallholder rural producers live in hillside areas and in humid tropical lowlands, both fragile ecosystems that are highly susceptible to degradation. Therefore, studying the possible impact of the market options relative to sustainability is important.

3.2. Characterizing Market Options Using Summary Matrices



The second level of analysis is based on the collection of pertinent information related to product options based on their agronomic, livestock, agroindustrial, marketing and economic characteristics. To enable comparisons to be made, this information is summarized into data tables, hereafter termed “matrices”.

Matrices facilitate the comparison of different market options, there are three basic matrices, (i) production, (ii) marketing and (iii) financial. In testing of this guide, it was found that clients were also working with livestock and processed goods, and therefore, the production matrix was divided into agronomic, livestock or agroindustrial, to taken on these additional option types.

This characterization process has many similarities with the pre-feasibility analysis commonly used for business projects. Pre-feasibility analysis focus on determining technical, economic, managerial, environmental and social requirements for the success of a given project. After identifying these project parameters, a key output will be to conclude if the project is viable. Likewise, market-option characterization will provide many inputs for the development of future

business plans, a key activity for market chain strengthening¹⁰.

Proposals for these matrices are explained below. The research team should feel free to change and improve these matrix models. Once characterized, market options can be assessed according to the defined criteria.

Agronomic characterization

Agronomic characterization is used to determine whether a given market option is viable according to biophysical conditions of the target region, under smallholder conditions. For example, if a region were characterized by low-fertility soils, developing agricultural alternatives requiring fertile soils may be difficult or expensive. If a region has limited rainfall and lacks infrastructure for irrigation, then production alternatives must be adapted to this climatic situation. The data requirements in Table 12 present an agronomic characterization matrix. The research group should fill in these data boxes for each product. Some components of the matrix are explained on next page.

10. The development of new enterprise planning and integration into competitive market chains is the topic of the next, or third module of the Participatory and Area-based Approach to Rural Agroenterprise Development.

Table 12. Agronomic characterization matrix.

Market option	Complete cycle (years)	Pre-production cycle (months or years)	Technical demand (low, average, or high)	Soil requirement	pH	Water requirement (mm/year)

Altitude requirement (m.a.s.l.)	Labor requirement	Planting period	Need for irrigation (yes or no)	Major pests and diseases	Planting density (no./ha)	Annual yield (t/ha)

Complete cycle: is the cropping period from planting to when productivity falls below 30% of the crop’s maximum production potential. For short-cycle crops such as maize and beans, the complete and pre-production cycles are the same.

Pre-production cycle: is the cropping period from planting to when productivity reaches at least 30% of the crop’s maximum potential.

Technical demand: indicates whether the crop is tolerant (low), or requires improved technology, considerable management, and a high level of inputs (high).

Labor requirement: is the number of mandays¹¹ required per year or per cycle. It is used to determine if the market option is labor-intensive, or not.

Need for irrigation: indicates whether the crop requires irrigation to reach production potential.

Some sources of information on crop agronomy include institutions involved in training and/or technical assistance; agricultural publications such as books, technical guides, and technical journals; key informants (people with specialist knowledge/experience), for example, producers; and professionals within the

agricultural sector. Different regions may have to be visited to gather information on experiences with targeted crops, or experts can be contacted to provide such information.

Also, secondary information available on planting density and productivity frequently refers to experiences of large commercial producers or experimental farms, which practice input-intensive agriculture. Accordingly, for production on small farms, information should be obtained from the producers themselves, or estimated as a percentage of commercial yields, even to as low as 10% or less, depending on the yields of the rural economy. In this way, false expectations of profitability are avoided.

Livestock characterization

This matrix is used when the market option consists of livestock production, including cattle, poultry, turkeys, pigs, sheep, rabbits, guinea pigs, or fish, such as tilapia in small water tanks. Table 13 presents a model of a livestock characterization matrix. Some components of this matrix are explained below.

Market option: is the principal product of the livestock enterprise, such as live animals, meat, milk, eggs, etc.

By-product: is a secondary good that is derived from the production of the principal product; for example, organic fertilizer, skins, gelatin, etc.

Installed capacity: is the maximum number of animals that can be sold in a given unit of time.

11. Manday = One man working 8 hours.

Assessing and Selecting Market Options

Table 13. Livestock characterization matrix.

Market option	By-products	Technical demand (low, average, or high)	Capacity	Number of breeders	Period of growth

Nutritional system	Inputs	Main pests and diseases	Infrastructure and equipment	Working capital required	Investment	Annual sales

Number of breeders: refers to the number of animals used for reproduction purposes to generate young animals. If the livestock system is meant to purchase young animals externally, this must be specified.

Period of growth: place the time between conception and birth and also the time required from birth until the animal has reached the appropriate selling weight.

Agroindustrial characterization

As agroindustrial products tend to be more complex than agriculture, the agroindustrial matrix is very useful to gather, organize and synthesize necessary information. Table 14

presents an agroindustrial characterization matrix. Some of its components are explained below.

Market option: is the reason why the agroindustrial plant is established.

By-product: is generally a residue generated during the operation of obtaining the main product. Agricultural by-products can be sold also, and are commonly used for animal feed or as organic fertilizer.

Conversion factor: is a ratio or proportion that indicates the amount of raw material required to produce a given unit of the principal agroindustrial product. For example, in the

Table 14. Agroindustrial characterization matrix.

Market option	By-products	Raw materials	Other inputs	Technical demand (low, average, or high)	Conversion factor

Capacity	Machinery and equipment	Method for quality control	Working capital	Investment	Annual sales

case of the dried-cassava agroindustry, the ration 2.5:1 means that 2.5 kg of fresh cassava roots *are needed to produce one kg of dried cassava chips*.

Installed capacity: is the maximum volume that can be produced in an agroindustrial plant in a given period; generally the period used is one month or one year.

Working capital: refers to the amount of cash, in addition to the initial investment needed to operate the agroindustry (infrastructure, machinery, equipment, etc.). Working capital is used to finance the variable costs and fixed costs¹² of producing or purchasing a product that is sold. When the company receives payment for these products, the working capital returns to the company, and so on. The working capital requirement is a function of the variable cost and fixed cost per unit of product produced, the sales volume and the method of payment.

Marketing characterization

A great deal of marketing information will have been gathered in the previous stage, the Rapid Market Survey. Market information includes

12. Variable costs are those that vary directly with the volume produced; for example, raw material, packaging, or fuel. Fixed costs are those that do not vary with the volume of production, but remain relatively stable, such as administration expenses.

data on trends in product demand, competition, product characteristics, markets and purchasing requirements of clients. Table 15 presents the marketing characterization matrix. Some matrix components are explained below.

Current marketing: indicates whether the targeted region already produces and sells the mentioned product.

Competitors: describes the number, types and strategies of the potential competition in the business related to the market option.

Type of client: specifies the kind of buyer identified for the market option. Services to the client explains whether the client offers some type of service to his suppliers, such as credit or technical assistance.

Scope of market: specifies whether the market is local, regional, national, or export.

Growth of demand: classifies the market option according to its estimated annual growth rate. It is high if this parameter is above 6%; medium if it's 4% to 6% and low if it's 1% to 3%.

Minimum volume purchased: is the least amount purchased per delivery by the buyer. This information is key for smallholder rural producers, who generally offer smaller amounts of products.

Table 15. Marketing characterization matrix.

Market option	Current marketing (yes or no)	Competitors (number, types and strategies)	Type of client	Services to clients	Scope of market
			SM = supermarket FI = food industry I = industry Res = restaurant	TA = technical assistance Cr = credit	L = local R = regional N = national Exp = export

Growth of demand (high, medium, or low)	Minimum volume purchased	Quality requirements (high, intermediate, or low)	Packaging requirements	Delivery requirements	Business relationship
				PA = delivered at zone PW = delivered at warehouse	AG = agreement PA = partnership CO = contract

Quality requirements: rates the level of quality demanded, as high, medium or low; it should also specify key quality aspects demanded by the buyer.

Packaging requirements: indicates whether the client wants the product to be delivered in some type of presentation or packaging; for example, a plastic or cardboard box or in bags.

Delivery requirements informs: whether the client wants the product to be delivered to the farm, warehouse, or marketplace, etc.

Business relationship: describes the type of commercial relationship that the client is willing to establish with rural producers. Three types exist: (a) an informal 'agreement' whereby satisfactory product quality, price, and volume effect the negotiation; (b) a 'partnership', which is more formal, and implies greater commitment between both parties; and (c) a 'contract', which is a formal relationship supported by a legal document. A commercial relationship can evolve from one type to another.

Financial characterization (profit)

Assessing the profitability of a market option is one of the most important selection criteria for comparing products for smallholder rural producers. This selection process provides a standard way to compare different types of products and to evaluate risk. Economic characterization reveals (a) conventional financial parameters such as investment level and profitability, and (b) financial ratios which can be chosen and designed according to client needs.

Although smallholder rural producers may have different rationale or perspectives to that of a typical businessman, they are undoubtedly interested in increasing their income. Income generation is now considered a key strategy for improving both well-being and food security of farm families. In addition, the promise of profitability is a great motivator for collective action among smallholder producers, involving the creation of economic organizations and marketing activities.

Evaluating the profitability of small agroenterprises is probably the most demanding piece of work for the research team. To undertake this task effectively, the team will need to gather appropriate data and may need to develop financial profitability models. This

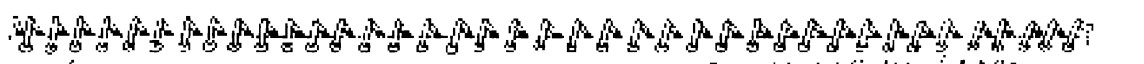
will require some mathematics or the use of a computer. The team must ensure that the information they are providing to clients on profit is accurate and the facilitator should ensure that all calculations are performed correctly. Much of the information gathered at the market can be used in the analysis of profit, but production costs will need to be determined with the client group.

Basic profit/margin analysis: The simplest method to evaluate and compare profitability of different product within an enterprise is by using methods such as gross margin analysis, net margin, or cost-benefit analysis. "Gross margin" is the final income paid to the producer after all production costs have been subtracted from the sales income (see example in Figure 5 and Table 16). Gross margin can also be presented as a percentage that is calculated by first subtracting total variable or direct costs from total sales income. This result is then divided by total sales income. Net margin is calculated similarly, but fixed, or indirect costs and marketing costs and variable or direct costs are subtracted from the total sales income. This result is divided by total sales income to give a more accurate idea of the actual profit.

These methods require some practice in order to get accurate figures and it should be noted that in many cases farmers, who do not have records of their production costs, are likely to guess and often overestimate costs and underestimate incomes. In many cases, smallholders do not cost their labor or that of family labor. Therefore, the team may need to make some assumptions in regard to a standard labor costs that should be applied across all products, based on mandays to produce the product. Take great care not to overestimate costs and be aware that farmers tend to inflate costs, so, the research team will need to interview several clients, individually, to gather accurate information.

One of the limitations of the gross margin analysis is that it only provides profit over one season and is therefore of most use for annual crops. The evaluation of profitability over a longer period will require more complicated forms of profit analysis. This may, however, be required as some enterprises only show profit after 2 or 3 years.

Multi year financial models: To develop financial models that provide information on



 GROSS MARGIN ANALYSIS FOR CLIMBING BEANS IN UGANDA / ACRES

Costs/acre	Shillings	Notes
Land preparation	40,000	Animals hired for ploughing.
Seeds	24,000	New variety
Planting	5,000	
Staking - Supports	80,000	240,000 for staking materials but will be used over 4 seasons
Weeding x3	15,000	Used mainly family labor Some costs not included
Fertilizer	25,000	
Pesticides	6,000	
Labor for harvesting	18,000	
Packaging	1,000	
Transport to market	5,000	
Market fees	1,000	
TOTAL COSTS/ACRE	200,000	
Harvest Kgs	1,200	
Market price / Kg	750	
INCOME	900,000	
GROSS MARGIN	700,000	

Figure 5. Profitability analysis: "gross margin" for beans in Uganda.

profitability over a number of years, information from both production and/or processing systems needs to be identified or proposed. To simplify the explanation, production systems and financial profitability models will be discussed in two parts. The part on financial models will also explain basic profitability concepts, such as the Financial Rate of Return (FRR) or Internal Rate of Return (IRR), and Net Present Value (NPV). The Glossary also contains many business and financial definitions.

The use of the FRR or IRR and NPV parameters are recommended for all agroindustrial projects and, in perennial crops, when the project life is 3 or more years. To make this evaluation easier, CIAT has developed a software, RentAgro, that facilitates the development of financial profitability models for all types of products. RentAgro acts as a bridge between the user and an electronic worksheet, requesting data from the user step-by-step, while internally constructing the financial model. This allows users with little knowledge of electronic

worksheets and scant business and financial background to prepare accurate financial models and work out profitability parameters and ratios. This software will be available in Spanish and English and can be downloaded from both language versions of the Web site (Spanish: www.ciat.cgiar.org/agroempresas/espanol/inicio.htm; English: www.ciat.cgiar.org/agroempresas/ingles/index.htm).

RentAgro also assists users in the calculation of the amount of working capital required, interest payments, and in the execution of sensitivity analyzes. It may also be comforting to know that most spreadsheets such as Lotus 1-2-3 and Microsoft Excel also have pre-programmed macros that can be used to calculate profitability parameters such as IRR and NPV, with detailed help guides and tutorials.

The outline in Table 17 presents a proposed economic characterization matrix. The research team can design its own financial ratios. Economic variables are explained on next page.

Assessing and Selecting Market Options

Table 16. Profitability gross margin analysis for cassava processing in Ghana.

Analysis of profitability			\$ per annum	\$ per ton of product	% of revenue
Operating costs - variable					
Raw material - \$25/ton			21,060	62.50	54
Fuel - \$650 per machine per year			1,300	3.86	3
Direct labor			4,536	13.46	12
Transport from field	3	per ton	2,527	7.50	6
Packaging	2	per dry ton	674	2.00	2
Transport to market	9.5	per dry ton	3,201	9.50	8
Subtotal variable costs			33,298	98.82	85
Operating costs - fixed					
Management (\$150/month)			1,800	5.34	5
Shed lease			72	0.21	0
Drying facilities			122	0.36	0
Blade			42	0.12	0
Maintenance of machines			500	1.48	1
Subtotal fixed costs			2,536	7.53	6
Subtotal operating costs			35,835	106.35	91
Contingency - 5%			1,792	5.32	5
Total operating costs			37,626	111.66	96
Capital costs			850	2.52	2
Total annual costs			38,476	114.19	98
Annual revenue			39,200	116.33	100
Profit (loss) before tax			724	2.15	

SOURCE: C. Collinson, NRI economic analysis.

Table 17. Financial characterization matrix (\$ = national currency).

Market option	Level of technology (high, medium, or low)	Price stability (high, intermediate, or low)	Pre-production investment (\$ thousands/ha)	Break-even point	Average no. of workdays per year (\$)
Sales per workday	Cash flow per workday (\$)	FRR without financing (%)	FRR with financing (%)	NPV without financing (\$ thousands)	NPV with financing (\$ thousands)

Level of technology: is used to classify the market option according to the technological complexity needed to develop it.

Price stability: classifies the market option according to its price stability index, which is equal to the standard deviation of a deflated

series of at least 18 monthly prices. Agroindustrial products exhibit prices that are more stable than those of unprocessed fruits and vegetables.

Pre-production investment: is an estimate of the funds needed until the crop's first harvest, or the first livestock sale, or the introduction of the agroindustrial product into the market.

Breakeven point: can be expressed as either the sales volume in units or currency, in which total income is equal to total production costs, or the sum of variable and fixed costs. At this point, the enterprise has neither profits nor losses. Clearly in terms of cash flow, this is important as it means the project is no longer consuming investment capital.

Average no. of workdays per year: is the estimated number of workdays required during the project's life, and divide it by the number of years of the project.

Sales per workday: is a ratio that calculates the total value of sales during the project's life divided by the total amount of wages.

Cash flow per workday: is another ratio that estimates total cash flow or net margin during the project's life, divided by the total number of workdays.

FRR without financing: refers to the Financial Rate of Return (FRR), a common profitability parameter similar to the Internal Rate of Return (IRR) that is calculated by the financial model. In this case, the FRR is an absolute measure of profitability because it excludes financial costs.

FRR with financing: is the same previous parameter, but including credit costs.

NPV without financing: refers to the Net Present Value (NPV), a similar profitability parameter that is calculated by the financial model and excludes financing expenditures.

NPV with financing: is the same previous parameter, but including financing costs.

Proposing appropriate production and processing systems

The definition of realistic production and processing systems, related to the market options, is required to develop financial profitability models. The selection of the

appropriate technological level depends on several factors, such as crop requirements (i.e., its hardness), soil and climatic conditions of the targeted region, socioeconomic conditions of the smallholder rural producers, and market requirements. For example, if a market option such as a high value fruit or vegetable is being proposed for a buyer in the fresh market who is demanding strict quality conditions, the use of chemical or organic pesticides will probably be essential.

Sources of information on this topic include key informants such as small- and medium-scale rural producers and processors, rural agroindustries, professionals of the agricultural and agroindustrial sectors, institutions involved in agricultural and agroindustrial training and technical assistance; and publications, such as guides and technical journals. Where possible, however, smallholder production and processing systems should be based on primary information, such as field observations and interviews with smallholder producers and processors, sometimes, it maybe necessary to visit other regions where the target product is being grown by other smallholder producers and processors.

If only secondary information is available, the research team should be aware that crop data on planting density, amount of inputs, and productivity will often refer to trials conducted on experimental farms or by large commercial producers, who practice input-intensive agriculture. These figures must therefore be adapted to the reality of the rural economy, meaning that the use of inputs and productivity will be lower. Moreover, sophisticated technological components should be avoided and emphasis placed on inputs already being used in the target area.

Yields per unit area of crops can vary widely. A useful exercise for determining an intermediate yield parameter is to write down the minimum and maximum yields for each production item. For example, a crop grown with high-input technology may yield up to 30 times more than a crop under semi-subsistence conditions. However, the idea is to propose production systems that will produce yields of an intermediate level on the production scale.

A similar situation occurs with agroindustry, where conversion factors (amount of raw material needed to produce a unit of the

agroindustrial product) in smallholder processing units are usually less efficient than in larger, more sophisticated agroindustrial plants. The research team will also need to define production capacity, investment level (infrastructure, equipment, machinery and supplies), inputs and labor requirements, conversion factors, and by-products.

The information obtained during this technological exploration process also helps complete both the agronomic and agroindustrial characterization matrices. Appendix 1 contains a special format that can be used to facilitate the collection and organization of information pertinent to the production system. This format comprises five parts:

- Part 1. Identifies the product and the technological level, and estimates productivity.
- Part 2. Documents the activities carried out before and during planting.
- Part 3. Specifies the number of applications or repetitions of each task during production.
- Part 4. Documents the rates of each different type of input applied per plant or per tree.
- Part 5. Provides a timetable of production activities.

Developing financial models

Once the production and processing systems are defined, the models of financial profitability can be developed, using an electronic worksheet, such as Excel, or with the aid of RentAgro, the user-friendly profitability software developed by CIAT's Agroenterprise project.

The objective of the financial model is to calculate profitability parameters such as the

FRR, IRR, NPV, or gross and net margin so that the research team can classify the market options in profitability categories (high, medium, low, negative). *This financial categorization is more important than obtaining precise profitability parameters.* The financial information generated by the model is transferred to the economic characterization matrix.

Theoretical information

Many profitability parameters exist, but one of the most common is the Internal Rate of Return (IRR), which has two versions: the Economic Rate of Return (ERR) and the Financial Rate of Return (FRR). For the purposes of this guide, the second one is used because the FRR includes the entrepreneurial viewpoint, together with market prices and costs. The FRR is defined as the interest rate that discounts a series of annual cash flows in such a way that the present value of the series is equal to the initial investment (Figure 6).

As shown in Figure 6, the investment for this example project is assumed to cover 4 years. In Year 0, an investment is made and each year this investment generates a cash flow, positive or negative, which is represented by the net profits or losses. However, the value of money depends on the 'time' variable; that is affected by inflation, i.e., \$100 now will cost more than \$100 within 2 years. Therefore, the series of cash flows should be discounted towards Year 0 to compare their value with the initial investment. As expressed in the previous definition, the value of the initial investment and the present value of the cash flow should be equal.

The rate of discount or interest rate used to discount the series of cash flows is the same FRR. For the project to be economically appealing to the investor, the FRR should be greater than the opportunity cost of capital or money. The

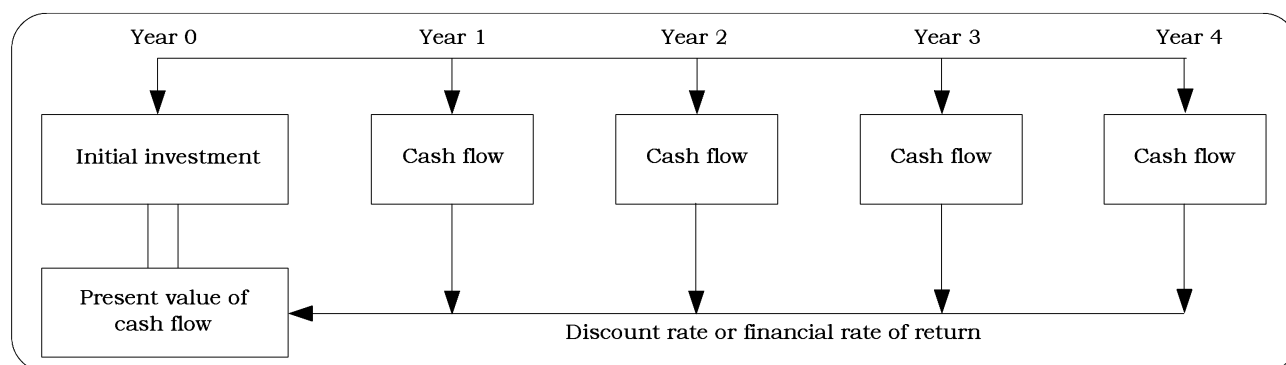


Figure 6. Graphic interpretation of the financial rate of return.

opportunity cost of capital is the interest rate that the financial system recognizes for savings; for example, fixed time deposits (FTD), that are placed into a bank, or the rate of inflation. If the FRR is lower than the opportunity cost of capital, then the investor is better off leaving his/her money producing income in a bank account or other investment option in the financial system.

The NPV is another profitability parameter that is commonly used, and is related to the FRR. The NPV is the value in Year 0 of the series of cash flows that is discounted, using an interest rate equal to the opportunity cost of capital. For a project to be financially appealing to an investor, the NPV should be greater than the initial investment. If it is smaller, then the investor is better off leaving the money in the financial system to produce income.

Financial models may or may not include inflation. If they do not, then they are deflated models and, in this case, the FRR should be greater than the opportunity cost of capital minus the annual rate of inflation. Depreciation should not be considered when calculating the FRR because this item does not represent a cash disbursement. When estimating profitability, depreciation is only considered when calculating the amount of taxes to pay; producer associations or cooperatives are usually exempt from taxes.

To summarize, the FRR and the NPV are the most suitable parameters to analyze the profitability of medium- and long-term projects (e.g., from 3 to 20 years). For short-term projects (from 1 to 24 months), other parameters can be used for financial analysis; for example, the time needed to recover the initial investment (payback), gross margin or a cost-benefit analysis.

Assumptions: To simplify financial models, two unusual assumptions are made in this procedure, that the planted area is one hectare and that the crop is planted as a monocrop. Small producers are known to plant in lots smaller than 1 ha because of the lack of land and working capital. They also usually plant crops in association, as a strategy to reduce risk and increase the regularity of cash flow. These assumptions do not reduce the validity of the models because the exercise does not aim to provide precise financial parameters, but as a means to classify different market options according to 'levels of profitability'.

Components of the financial model: The information given in Appendix 2 presents a typical financial model for a given crop, as it would appear on the computer screen. The model consists of five main parts, namely: prices, quantity matrix, costs and income matrix, analysis of profitability without financing and analysis of profitability with financing.

The prices section includes information on amount and breakdown of the initial investment, the cost of the different inputs used the cost of the daily wage and sale prices of different product qualities offered to the market. The quantity matrix quantifies the elements of investment, inputs, workdays and production volume. The costs and income matrix uses information from the two previous matrices to develop a simplified financial statement, similar to a profit-and-loss statement, to obtain the series of annual cash flows.

The component 'profitability analysis without financing' contains the formulae used to calculate the different parameters and financial-statement ratios. The FRR and the NPV are estimated using the series of annual cash flows. Other financial ratios, already described in Table 17 (financial characterization matrix), are also calculated. The component 'profitability analysis with financing' is similar, but credit cost is included.

The financial model described can be used for agroindustrial products, but this will be more complicated because it will have to model the processing technology adequately. A separate section will be needed for parameters such as conversion factors, capacity utilization and input requirements. RentAgro can be used for developing financial models for agroindustrial projects.

Preparing and using the financial model: The financial models are executed on electronic spread-sheets and organized in components. The electronic sheets consist of cells, where figures, formulae, or functions are keyed in. All cells in the financial model should be linked so that any change of a figure or formula will change the financial parameters estimated by the model. For example, if the sale price of a product increases, then the FRR should increase automatically.

The financial model serves many uses, but above all, it can be used to estimate levels of profitability and other financial parameters of

interest. It can also help carry out sensitivity analyses, which aim to determine which variables affect a given financial parameter, the most. A third use is to estimate minimum sale prices and maximum purchase prices. Finally, financial models serve as support for decision-making on credit and strategies to reduce production costs.

N.B.: We appreciate that for some users this section may appear difficult and we know that many people avoid difficulties, in the hope that it will not be important. Unfortunately, the finance side **is important**, but help is at hand and you should think about the following options if this part has made you nervous.

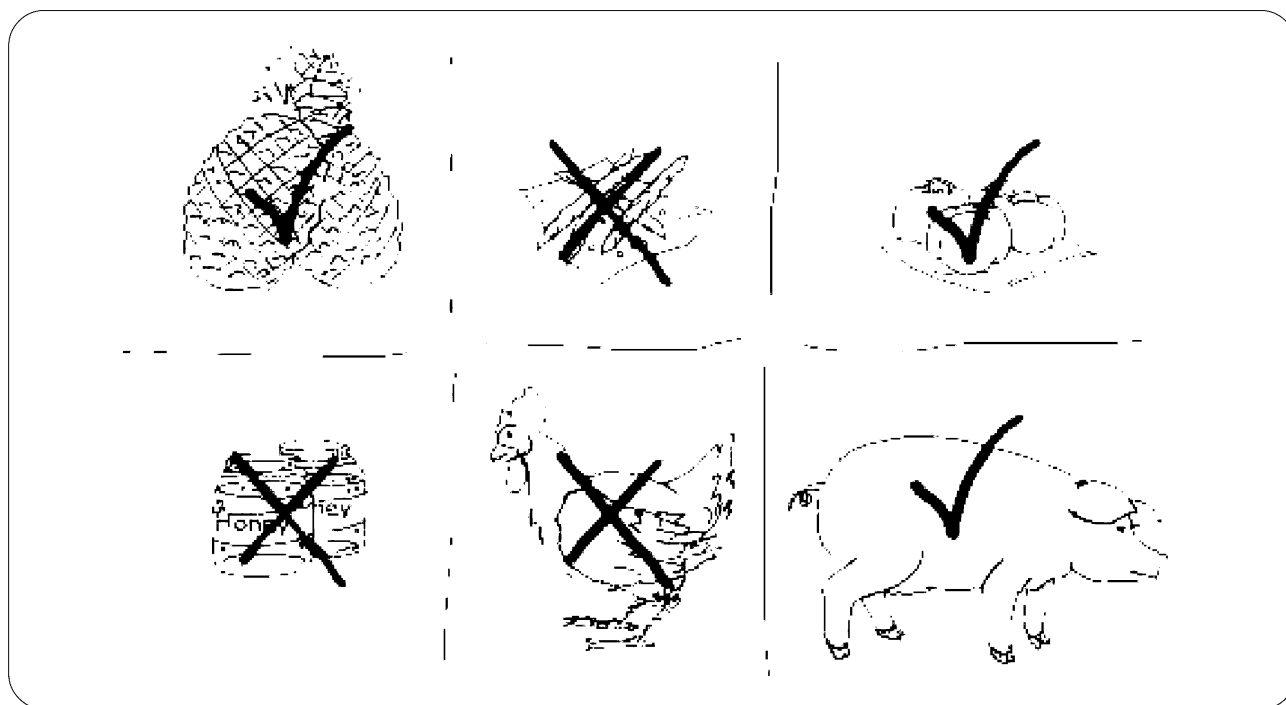
- Ask for assistance from friends or other service providers if this section seems too difficult. For the uninitiated, the terms NPV, fixed costs, etc., can appear as a new and incomprehensible language. It is at first, but there are several ways of doing this type of analysis and any accountant, business college student or local bank clerk

will be able to explain the basic concepts to you.

- Microsoft Excel has special copy and paste calculations in their tools section that you can use to do this analysis.
- Rent-Agro is a CIAT RAeD product that has been specifically designed for use by people who do not have business skills, and this can be downloaded from our Web site free.
- If this financial model is too detailed for your needs in which case you can adapt this section and simply compare gross margin analysis, based on required costs and expected sales values, to compare options for different products based on a standard unit area of production or unit of investment. For projects and enterprise options that are one season activities, gross margin analysis may also be the only financial analysis that is required.

If you are still in doubt, visit the CIAT Rural Agroenterprise Development Web site for examples and exercises ([www.ciat.cgiar.org/ agroempresas/espanol/inicio.htm](http://www.ciat.cgiar.org/agroempresas/espanol/inicio.htm)).

3.3. Defining the Second Market Option Portfolio



Based on the information generated by the characterization of market options and considering the three evaluation criteria originally proposed, the research team can use

the information to prioritize and discard some products. All options that do not respond to one of the evaluation criteria should be discarded, thus increasing the probability of proposing

market options that are really attractive for small producers. To illustrate this issue see “discard” options below:

- When the level of profitability is negative or null.
- When the technology or infrastructure is too sophisticated, expensive, or not available in the region.
- When the required soil and climatic conditions do not exist in the region.
- When the initial investment is too high for most smallholder producer associations.

- When the market option is demonstrated to have detrimental effects on the environment.
- When the sale price shows high fluctuations throughout the year.
- When the market demands quality levels that are exaggerated or too strict for smallholder rural producers.

Those market options not discarded can then continue to the next and final stage of the marketing opportunity identification methodology: the final evaluation of market options by the rural community.

3.4. Final Evaluation of Market Options by the Rural Community



Objectives

- Review decision criteria of smallholders for selecting new products and use these criteria in selection processes.
- Summarize and present information in easily understood formats so that that smallholders can understand the information, discuss and make informed decisions on appropriate products.
- Evaluate opportunities for segmenting smallholder producers and hold separate meetings to allow for different groups to select products according to their needs, skills and risk management strategies.

- Set up facilitated meetings to rank and select products for investment into agroenterprise projects.

Local input into preparing information for product selection

To ensure that important perspectives of the smallholder’s are taken into account, it is useful to discuss investment criteria with them prior to summarizing data. This will allow the views of the clients to be taken fully into account when preparing the information to be presented. In a survey conducted in hillside areas of southern Colombia, smallholders indicated that their

most important criteria when selecting a crop for planting were:

- The producer knows the crop and has experience cultivating it.
- The crop is adapted to the region and is hardy.
- The crop has a short or intermediate growth cycle.
- Product prices are stable.
- The product has a market and an attractive profit.

These criteria were used in the presentation of data and whilst this was useful in Colombia, the research team should prepare themselves based on local ideas.

Preparing summarized product information

Having gathered and assembled the product information and discussed key selection criteria with representatives of the client groups, the next task is to present the product options to the smallholder producers. This process is made easier by presenting the information to smallholders in a simple summarized form, using “flip charts” or “product cards”. In some cases, farmers may not read well, and therefore information should be as pictorial where possible.

Designing product cards

The product card should be designed to achieve a balance between ease of comprehension and informative content. A simplified scheme of a product card prepared in Colombia is presented in Figure 7. This card refers to a crop, but the product card scheme or format can be used for any livestock, forest, and agroindustrial product, with variations in content.

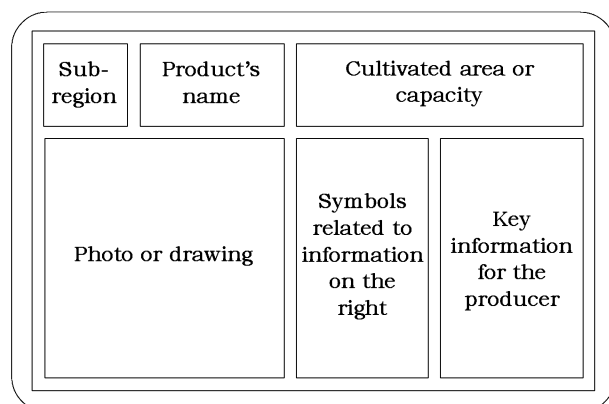


Figure 7. Format of a product card with information on a market option.

The product card consists of two main sections. The first section is for identification, where a photo or illustration and the name of the product appear. The second section is informative and contains data related to degree of adaptation, production cycle, annual yield, investment expenses (including number of workdays) and profitability.

All of this information is taken from the characterization matrices. A drawing or symbol accompanies each type of information. To facilitate the handling of data and comparison, planting area is standardized to the local unit of measure, such as a monoculture plot of 1600 m² in the case of Colombia, but this unit can be varied according to local measures, such as an acre or hectare. The later is a typical cultivated area, in the context of smallholder producers in the region. An example of a product card used in Colombia is presented in Figure 8.

Using flip charts and plenary discussions

An alternative method is to present the product information on flip chart. The image in Figure 9 shows Robinah Nyapendi, discussing the results from a market opportunities identification process in Kampala, Uganda. The product information is written onto large sheets, in English but this could also be in a local language if required.

Segmenting smallholders to tailor selections to local needs

Within a project area, it is likely that there will be smallholders with different skills, assets and business goals. These different categories of producers are termed a “segment” which refers to a group of similar people. Typical marketing segments include, rural/rich, rural/urban poor, infants, women, young people, old people. All of these segments have different marketing strategies that aim to meet their particular needs. To take local variability into account, and avoid the temptation to apply one selection process or outcome to all farmers, the facilitating organization should explore the possibilities of presenting the information to different smallholder segments. This will enable different groups to make decisions based on their degree of market orientation, level of well-being, type of economic activity, investment possibilities and local conditions. When this exercise was conducted in Pucallpa, a hillside







K Z - A	Uchuva (TM) Cape gooseberry (<i>Physalis peruviana</i>)	Fruit 640 plants	Unit of land area (1600 m ²) – Monocrop	
			Information	
			 <p>Adaptation Whether the option tolerates drought, pests and lack of fertilization.</p>	<p>Regular More than 800 to 1200 mm</p>
			 <p>Cycle Time between planting and first harvest.</p>	<p>6 months</p>
			 <p>Yield Amount of product produced per year.</p>	<p>3200 kg or 6400 pounds</p>
			 <p>Expenses until the first harvest What is spent in inputs and wages.</p>	<p>\$763,000; no. of mandays: 53</p>
			 <p>Profit Amount of money free for every Col\$100 spent.</p>	<p>\$66</p>

Figure 8. Product card for *uchuva* (cape gooseberry).

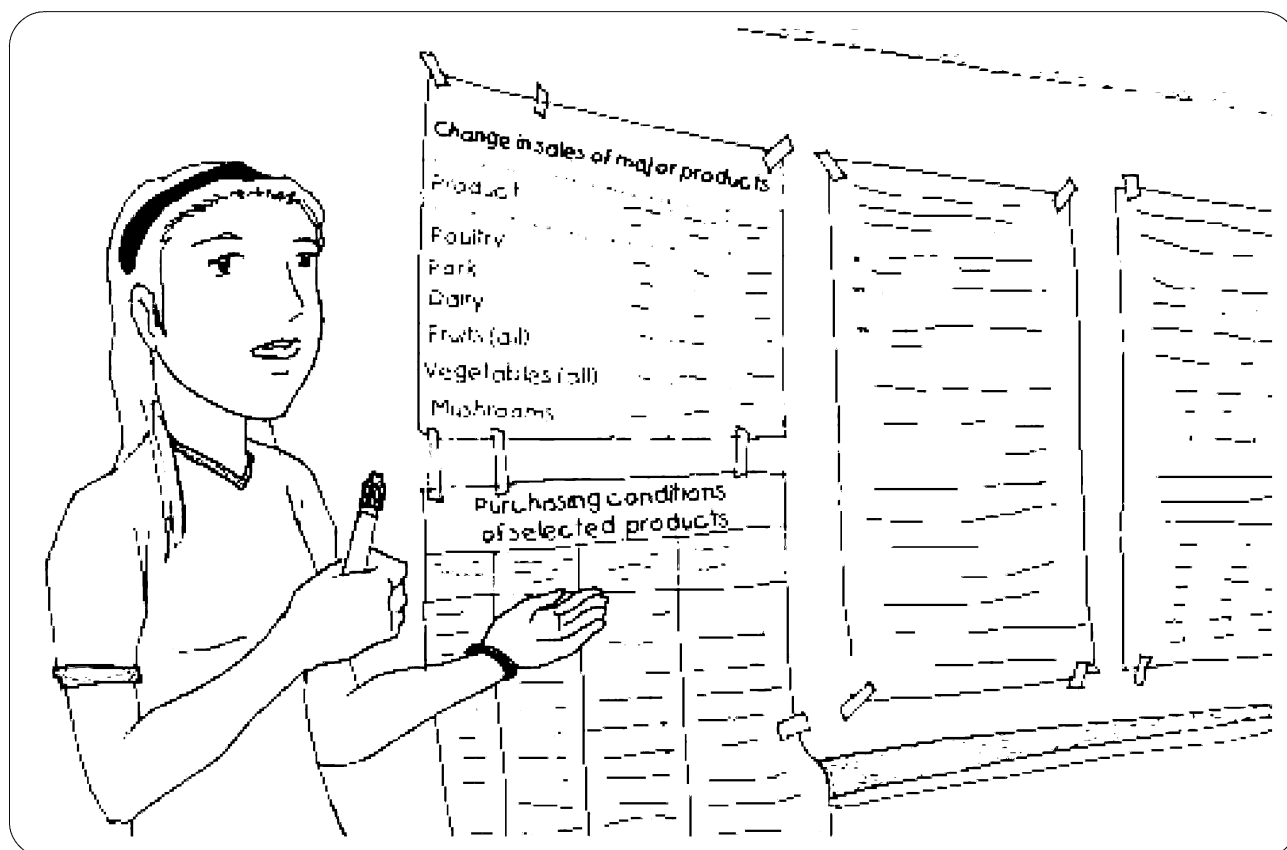


Figure 9. Market facilitator, discussing product options with farmers.

site in southwestern Colombia, smallholder producers were classified according to their degree of market orientation. Three categories were established: (i) commercial, (ii) semi-commercial and (iii) subsistence. Producers can also be classified by level of well-being into high, intermediate and low. In a study carried out in 1996 by CIAT, the strong correlation between level of well-being (wealth) and degree of market orientation was confirmed.

Product evaluation by subregion

In some cases, such as hillside areas, where farmers produce in the valley bottoms, mid slopes and at high altitude, certain market options are not viable in all areas. In this case, each subregion, or climatic zone, may require its own portfolio of market options. If possible, a list of at least 3 to 5 products should be prepared for each subregion.

For example, the same market options cannot be offered to producers located at widely different altitudes (e.g., 1800 versus 1100 m.a.s.l.). In the case of lowland areas, such as the Amazons, riverside farmers may differ from roadside farmers in their requirements for market options. However, several crops or market alternatives may be common to several subregions.

Planning and conducting evaluation meetings

This part describes how to plan an evaluation meeting (Table 18), and offers a checklist (Table 19) of the necessary resources. Depending on the variability of the area being

supported, product evaluation meetings can be planned for the entire region or for each subregion of the targeted region separately. Each meeting should be carried out with a minimum of 20 producers, representing all producer categories proposed.

The meeting will require two to three people, capable of performing one or more of the following tasks:

- Act as facilitator of the event.
- Present market options.
- Answer business and technical questions about market options.
- Interview and fill out preference format (at least three people).

Process for ranking product preferences

After discussing the product options, the meeting participants need to rank and select products. The prioritization and selection of a product option can be achieved by a show of hands, or by placing pebbles onto images of the selected product. After selections have been made, these should be thoroughly discussed before a final decision is made to proceed to investment.

In Colombia, products are typically selected by organizing product cards in order of preference. After the presentations on the market options, the invited smallholder producers are asked to separate the cards into three groups, good, bad and intermediate, according to their preferences. The producers are then asked to order the

Table 18. List of activities for planning and conducting an evaluation meeting.

- Prepare everything beforehand and wait until most of the invited producers have arrived to start the meeting, which usually lasts 3 hours. Preferably, the meeting should start at 10:00 a.m. or at 2:00 p.m.
- The meeting should be facilitated by one of the research team members.
- Begin the meeting with a general introduction, the facilitator should take time to explain the results of the product research findings, covering background information and assumptions.
- The facilitator should then present each market option and explain the product card. Use any other type of material that you consider appropriate. You can use posters, photos, opaque or overhead projectors, or PowerPoint for the presentation. If possible, take physical samples of the products.
- After presenting each product, leave enough time for questions and answers.
- Explain how each participant should rank the product cards (market options) that he/she has received. You can use photocopies of the product cards.
- On an individual basis, each participant then organizes his/her set of product cards.
- Participants are then grouped by type of producer, and the options ranked again.
- Give some sort of feedback to the producers for all their work and time.
- Thank the producers for their collaboration and invite them to refreshments or a light meal.
- Those producers who were promised transportation are taken back.

Table 19. Checklist for conducting an evaluation meeting.

Add a tick when done	Resources
	1. Human resources
	1.1 A representative sample of rural producers
	1.2 A facilitator for the meeting
	1.3 A presenter of market options
	1.4 One or two consultants of market options
	1.5 Three interviewers
	1.6 One or two drivers with vehicles
	2. Infrastructure
	2.1 A sheltered meeting place, with electricity and projection facilities
	2.2 Tables and chairs
	2.3 Bathrooms
	3. Tools
	3.1 Three sets of full-color product cards for interviewers
	3.2 Photocopies of product cards to hand out to producers
	3.3 Answer formats
	3.4 Pencils
	3.5 Badges for producers
	3.6 Samples of products
	4. Materials and equipment
	4.1 Opaque, overhead, or slide projector
	4.2 Flip chart and magic markers (optional)
	4.3 Adhesive tape
	4.4 Gasoline-powered electric generator if no electricity in area
	4.5 Light meal, snacks, or refreshments
	4.6 If necessary, black cloth or paper to darken the room

product cards within each group. When they have finished, they are asked why they placed certain cards in the first (most preferred) and last (least preferred) positions. Finally, to determine the “ideotype” or concept of ‘ideal product’, the producer is asked what condition is missing in the alternative he/she has chosen to improve it even more.

Appendix 3 presents the format used in this exercise. The interviewer is responsible for filling out the format. The category or type of producer should be properly identified. This procedure should be implemented with individual producers and by type of producer. Materials required are a set of product cards per producer, and answer sheets and pencils for interviewers.

Scheduling evaluation meetings

Planning evaluation meetings involves the adequate scheduling of activities. Meeting sites should have the minimum services and equipment necessary, and should be easy to access for both organizers and producers. Because each meeting will require considerable coordination and solid logistic support, no more than one meeting per week should be programmed where required. One meeting should be planned per subregion, and representatives of all categories of smallholder rural producers should participate. The producers should be invited 1 week in advance, and a reminder sent 1 or 2 days before the scheduled date.

Inviting the smallholder rural producers

To increase the likelihood of success at the meeting, the facilitator or local agent should make sure that a representative sample of producers and farming communities is invited, from each subregion. Where mixed groups are being invited, producers representing each of several predetermined categories should be clearly identified, using either data from previous surveys or key informants, in each selected farming community. The sample should include women. The same number of people per type of producer should be invited; for example, if each meeting is going to be carried out with 21 producers, then seven producers per category should be invited.

Data processing and analysis

After the meetings, the completed preference-ranking formats will be available, at both the individual level and by type of producer (Appendix 3). These formats contain information that should be processed and analyzed. Calculations should be done manually at the meeting.

Information should be presented by subregion, in different tables that show frequency and percentage of occurrence. These parameters refer to the number of times a market option was classified in the ‘good’ group or in first place, or in the ‘bad’ group. Frequencies and percentages are presented for the entire sample for each subregion and also by type of producer. Titles of suggested tables are listed on next page.

Assessing and Selecting Market Options

For individual ranking by subregion, the following titles can be used:

- Number of times the option appears in the 'good' group (overall and by type or segment of producer).
- Number of times the option appears in first place (overall and by type of producer).
- Reasons for choosing the first two options (overall and by type of producer).
- Reasons for choosing the most preferred option (overall).
- Number of times the option appears in the 'bad' group (overall).
- Number of times the option appears in the last two places, that is, is least preferred (overall).
- Reasons for rejecting the last two options (overall).

- What the preferred option lacks to be an "ideotype" or ideal type (overall).

For group ranking by subregion and producer type, these titles can be used:

- Most preferred options.
- Reasons for preference.
- Least preferred options.
- Reasons for rejection.

Data presentation

The information in Table 20 shows an example of the final selection table or presentation format. By organizing information in a series of tables, the initial objectives of participatory evaluation are met, that is, to determine the preferences and decision criteria of rural producers by subregion and by segment or type of producer.

Table 20. Example of a table used to present results of an evaluation meeting.

High altitude zone	Number of times classified in 'good' group							
	General	%	Commercial	%	Semi-commercial	%	Subsistence	%
Blackberry	17	100	6	100	6	100	5	100
Naranjilla	15	88	6	100	5	83	4	80
Native strawberry	11	65	5	80	2	33	4	80
Cauliflower	6	35	3	50	2	33	1	20
<i>Uchuva</i>	6	35	2	33	3	50	1	20
Anthurium	5	29	0	0	1	33	3	60

3.5. Defining the Final Market Option Portfolio

After processing the evaluation formats and organizing the results in summary tables, the research team can identify which market options were preferred and which were rejected, with the corresponding reasons. The options rejected by most smallholder producers should be discarded.

By now the market-option portfolio obtained after the Rapid Market Survey, has been screened three times:

- (i) Obvious discards are removed by the analytical team.

- (ii) A maximum of 10 products has been screened or refined after the characterization process.
- (iii) The final evaluation with the rural community will produce a market option portfolio with three to five products.

At this stage, the only remaining products are those being considered suitable for investment by specific smallholder segments. These are the products that you will now develop into new enterprise activities.

3.6. Preparing the Final Report

The final report is a document that aims to make explicit the results of the final participatory evaluation with the rural community, in terms of the original objectives. It must also provide background information and indicate work methodology. Results can be presented in two ways:

1. As a text document, making reference to different tables included in Appendix 1.
2. As a combined text and table document that includes a section on conclusions and recommendations. In addition, the different instruments and formats can be included as appendices.

To illustrate, the table of contents of the final report prepared for the final participatory evaluation of market options with the rural community, conducted in the hillsides reference site of Colombia was as follows:

- I. Prologue.
- II. Acknowledgements.
- III. Executive Summary.

1. Background.
2. Objectives.
3. Methodology.
4. Results.
 - 4.1 Preferred options.
 - 4.2 Reasons for preferring them.
 - 4.3 Options rejected.
 - 4.4 Reasons for rejecting them.
 - 4.5 "Ideotypes" or ideal products.
 - 4.6 Conclusions and recommendations.

Appendix 1. Tables numbers.

Appendix 2. Cards of the most preferred products.

Appendix 3. Questionnaire used.

Appendix 4. Guidelines for final market-option evaluation meetings.

This final document should be held by the facilitating organization and local research teams as a record of how the process was conducted and results. The final selections should now be developed into an investment option.

3.7. Preparing for Enterprise Development

At the end of the rapid survey and evaluation of products with client groups, the research team will have selected specific products and discussed options for investment with clients. As part of the market survey work, the research team will also have located interested buyers and collated information on buying conditions. In many cases, this is sufficient information to begin the process of establishing a new business venture, by applying this information to new business relations such as collectively marketing, higher volumes of higher quality produce to a new buyer.

At this stage, there are several new issues to consider, and in many cases new market opportunities are associated with considerable increases in quality, volume, distance to meet more attractive buying conditions and prices. To engage in such markets, smallholders generally need to make changes in production systems, varieties, planting times, and very

commonly will need to make plans for group or collective marketing in order to increase sales, volumes.

All of these issues require a degree of organization and the smallholders working with the service providers need to consider how best they can address some of these issues. Some important areas to discuss include:

- (i) Are the smallholder producer groups already sufficiently interested and or motivated to test market sales of one of the identified market products, based on current results?
- (ii) Do the groups have sufficient financial capital to invest in one of the new enterprise options that the market studies have revealed?
- (iii) If not, can the group obtain credit from a local service provider, micro-credit organization or do they need to start a savings and loans scheme.

- (iv) Do the conditions set by the buyers require any significant changes from the group in terms of new selling strategies such as collective marketing, i.e., selling produce as a group as opposed to selling small amounts of produce as individuals?
- (v) Is the existing group structure appropriate to meet the new buying conditions now? Or will the group need to consider upgrading their organizations, and or linking to other groups in order to enter the new market?

If after discussions with the service providers, a smallholder producer group(s) is interested to pursue a new market opportunity, and would be interested to invest their time and resources into building a new business relationship, then we advise that the new team continue onto the next step in CIAT's Agroenterprise Development Strategy. Depending on the strategy selected, the farmer group should work with the most

3.8. Conclusions

Undertaking the Market Opportunities Identification method is a major step towards shifting towards a market orientation for smallholder producers. The skills gained through the rapid market survey and the subsequent analysis of market options is an extremely useful learning process, not only for the service provider but especially for the representatives from the rural community, who can begin to use these skills in their future business plans.

Although this first marketing evaluation is only the starting point in a series of methods used in successful enterprise development, it provides a sound basis to start engaging in marketing and for developing skills in systematic information gathering, analysis and decision making. These are all vital skills for the subsequent stages in agroenterprise development.

Depending on the assets and capacities of the clients, the different groups will have opted to focus on either upgrading of existing crops or diversification into new, higher value product options. However, in both cases, the next steps in planning for enterprise investment will focus

appropriate skills set outlined in one of the following guides from the Agroenterprise Development series:

- Strategies to Improve the Competitiveness of Market Chains for Smallholder Producers.
- Evaluating and Strengthening Rural Business Development Services.
- A Market Facilitator's Guide to Participatory Agroenterprise Development.
- Collective Marketing for Smallholder Producers.

The service providers, research team and representatives of interested smallholder producer groups, should evaluate which methods are most appropriate in their next steps and then begin the process of upgrading their skills and investing in more lucrative agricultural opportunities.

on similar aspects which evaluate their current practices and examine what needs to be improved, changed or expanded in order to supply identified market options.

In virtually all cases, areas to focus on for upgrading from existing market options to more attractive market linkages, will include upgrading basic stages in the production to sales process including improvements in the following areas:

- (i) Organization at the farmer level.
- (ii) Marketing options and trends.
- (iii) Finance.
- (iv) Technology.
- (v) Pre-production.
- (vi) Production.
- (vii) Post harvest.
- (viii) Expansion and better business relations.

These issues are the basic components contained in the other CIAT Agroenterprise Guides and we hope that these methods and tools will further assist you in your future agroenterprise development plans.

Exercise 3.1

Agronomic Characterization of a Crop

Objective

- The trainee will fill out an agronomic characterization matrix for a crop considered important in the region.

Instructions for the Facilitator and Trainee

- Form groups of four trainees and name a coordinator.
- Choose a crop that is important in the area and on which one or more members of the group has good agronomic knowledge.
- Use the agronomic characterization format appearing in the Worksheet for this exercise.
- Relevant information for this exercise is found in Section 3.2 (page 55). If some data are unknown, the team should make an intelligent assumption.
- Once finished, the group will copy the format on a large paper or transparency for presentation in a plenary session by the group's coordinator.

Resources needed

- Worksheet for Exercise 3.1.
- Section 3.2 (page 55) of the guide.
- Flip chart or overhead projector and transparencies.
- Paper and pencils.
- Magic markers or markers for transparencies.

Time required: 1.5 hours.

Exercise 3.1

Agronomic Characterization of a Crop – Worksheet

Agronomic Characterization Matrix

Market option	Complete cycle (years)	Pre-production cycle (months or years)	Technical demand (low, average, or high)	Soil requirement	pH	Water requirement (mm/year)

Altitude requirement (m.a.s.l.)	Labor requirement	Planting period	Need for irrigation (yes or no)	Major pests and diseases	Planting density (no./ha)	Annual yield (t/ha)

Exercise 3.2

Marketing Characterization of a Product

Objective

- The trainee will fill out a marketing characterization matrix for a product considered important in the region.

Instructions for the Facilitator and Trainee

1. Form groups of four trainees and name a coordinator.
2. Choose a product that is important in the area and which one or more group members are familiar with.
3. Use the marketing characterization format appearing in the Worksheet for this exercise.
4. Relevant information for this exercise is found in Section 3.2 (page 58). If some data are unknown, the team should make an intelligent assumption.
5. Once finished, the group will copy the format on a large paper or transparency for presentation in a plenary session by the group's coordinator.

Resources needed

- Worksheet for Exercise 3.2.
- Section 3.2 (page 58) of the guide.
- Flip chart or overhead projector and transparencies.
- Paper and pencils.
- Magic markers or markers for transparencies.

Time required: 1.5 hours.

Exercise 3.2

Marketing Characterization of a Product – Worksheet

Marketing Characterization Matrix

Market option	Current marketing (yes or no)	Competitors (number, types and strategies)	Type of client	Services to clients	Scope of market
			SM = supermarket FI = food industry I = industry Res = restaurant	TA = technical assistance Cr = credit	L = local R = regional N = national Exp = export

Growth of demand (high, medium, or low)	Minimum volume purchased	Quality requirements (high, intermediate, or low)	Packaging requirements	Delivery requirements	Business relationship
				PA = delivered at zone PW = delivered at warehouse	AG = agreement PA = partnership CO = contract

Exercise 3.3

Agroindustrial Characterization for a Processed Product

Objective

- The trainee will fill out an agroindustrial characterization matrix for a product considered important in the region.

Instructions for the Facilitator and Trainee

1. Form groups of four trainees and name a coordinator.
2. Choose an agroindustrial product (processed or transformed) that is important in the area and which one or more group members are familiar with.
3. Use the agroindustrial characterization format appearing in the Worksheet for this exercise.
4. Relevant information for this exercise is found in Section 3.2 (page 57). If some data are unknown, the team should make an intelligent assumption.
5. Once finished, the group will copy the format on a large paper or transparency for presentation in a plenary session by the group's coordinator.

Resources needed

- Worksheet for Exercise 3.3.
- Section 3.2 (page 57) of the guide.
- Flip chart or overhead projector and transparencies.
- Paper and pencils.
- Magic markers or markers for transparencies.

Time required: 2 hours.

Exercise 3.3

Agroindustrial Characterization for a Processed Product – Worksheet

Agroindustrial Characterization Matrix

Market option	By-products	Raw materials	Other inputs	Technical demand (low, average, or high)	Conversion factor

Capacity	Machinery and equipment	Method for quality control	Working capital	Investment	Annual sales

Exercise 3.4

Designing a Product Card

Objective

- The trainee will develop a product card for a given agricultural, livestock, forest, or agroindustrial product that is important in a given region.

Instructions for the Facilitator and Trainee

1. Form a group of four trainees and name a coordinator.
2. Choose a product that is important in the region and on which one or more members of the group has good knowledge.
3. Use the product card format appearing in the Worksheet for Exercise 3.4.
4. Pertinent information for this exercise is found in Section 3.4 (page 67) and in Figures 7 and 8.
5. If some data are unknown, the team should make an intelligent assumption.
6. When finished, the group will copy the format onto a large paper or transparency for the presentation in a plenary session by the group's coordinator.

Resources needed

- Worksheet for Exercise 3.4.
- Section 3.4 (page 67) and Figures 7 and 8 of the guide.
- Flip chart or overhead projector and transparencies.
- Paper and pencils.
- Magic markers or markers for transparencies.

Time required: 1.5 hours.

Exercise 3.4

Designing a Product Card – Worksheet







Format for Product Card

The worksheet is a large rounded rectangle containing a grid of five smaller rectangular boxes. The top row consists of three boxes: a small square on the left, a medium rectangle in the middle, and a wide rectangle on the right. The bottom row consists of three boxes: a large square on the left, a medium rectangle in the middle, and a medium rectangle on the right.

Exercise 3.4

Designing a Product Card – Feedback

Each group will present different product cards, depending on the crop selected. An example developed for the Colombian case is given.

<p>Mid-altitude zone</p>	<p>Fig tree Fruit tree 46 trees 2 harvests</p>	<p>1600 m² – Monocrop</p>	
		 <p>Adaptation Whether the option tolerates drought, pests and lack of fertilization.</p>	<p>Regular Water: 700 mm</p>
		 <p>Cycle Time between planting and first harvest.</p>	<p>2 years</p>
		 <p>Yield Amount of product produced per year.</p>	<p>640 kg</p>
		 <p>Expenses until the first harvest What is spent in inputs and wages.</p>	<p>Col\$770,000; no. of workdays: 28</p>
		 <p>Profit Amount of money free for every Col\$100 spent.</p>	<p>Col\$35</p>

Exercise 3.5

Preparing a Timetable for Final Evaluation with a Rural Community

Objective

- The trainee will prepare a timetable for the final evaluation meeting of the market options with the rural community.

Instructions for the Facilitator and Trainee

1. Form groups of four trainees and name a coordinator.
2. The groups will use the format appearing in the Worksheet for Exercise 3.5. The number of activities appearing in the format is merely a suggestion.
3. Under the 'Date' column, the group should begin with Week 1 and continue to work in terms of weeks. Some activities may take more than one week. Several activities can be carried out simultaneously and the order is important because some activities are prerequisites for others.
4. The groups should first prepare a draft timetable before copying it onto the worksheet format.
5. Pertinent information is found in Section 3.4 of the guide.
6. The group will prepare a transparency with the completed Worksheet.
7. The coordinator of each group will present the group's work in a plenary session.

Resources needed

- Worksheet for Exercise 3.5.
- Section 3.4 of the guide.
- Overhead projector and transparencies.
- Paper and pencils.
- Markers for transparencies.

Time required: 2 hours.

Exercise 3.5

Preparing a Timetable for Final Evaluation with a Rural Community – Worksheet

no.	Activity	Person responsible	Termination date
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

Exercise 3.5

Preparing a Timetable for Final Evaluation with a Rural Community – Feedback

Timetables can vary, but it is important to list major activities in the correct order. Activities 15-17 (shaded) are the same for each meeting. The others are general activities.

no.	Activity	Person responsible	Implementation time
1	Ensure funding of final evaluation of market options	Coordinator	Week 1
2	Establish work teams	Coordinator	Week 2
3	Subdivide targeted region	Team	Week 2
4	Select market options per subregion	Team	Week 2
5	Collect information on options	Team	Week 3
6	Define smallholder producer categories	Team	Week 4
7	Select sample of farming communities	Team	Week 4
8	Conduct survey on smallholder producer's decision criteria	Team member	Week 5
9	Prepare survey report	Team member	Week 6
10	Design and prepare product cards	Team	Week 8
11	Define evaluation meeting sites	Team	Week 8
12	Plan evaluation meetings	Team	Week 8
13	Prepare invitation cards for meetings	Team member	Week 9
14	Train relevant personnel	Team	Week 9
15	Invite smallholder producers	Team member	Weeks 10-13
16	Coordinate logistics of the meetings	Team	Weeks 11-14
17	Conduct evaluation meetings	Team	Weeks 12-15
18	Process and analyze data	Team	Week 17
19	Prepare final report with conclusions	Team	Week 19

Practice 3.1

Survey of Decision Criteria for Crop Selection

Objective

- The trainee will identify key decision criteria of small producers when selecting a crop for planting.

Instructions for the Facilitator and Trainee

1. Form a team of four trainees and name a coordinator.
2. Worksheets no. 1 and 2 include interview guidelines and a format for reporting.
3. Pertinent information to this practice is found in Section 3.4.
4. This practice takes 2 days, divided into three sessions, as follows:

Planning session

- If not done already, the team will choose four farming communities that are representative of the region and define smallholder producer segments or types.
- Then, follow through with the interview guidelines or questionnaire, which is the research tool to be used with rural producers. Remember the objective of the survey of decision criteria.
- During the interview try to corroborate the type of producer being interviewed. Remember to use simple language.

Fieldwork session

- A sample of eight producers is interviewed in a single farming community. The sample should include all types of producers.
- One team member can conduct the interview, while another completes the format. (If necessary, a farming community can be served by more than one team.)

Reporting and presentation session

Each team prepares a report and its coordinator will present it in a plenary session.

Resources needed

- Transportation to and from the rural area.
- Refreshments.
- Worksheets no. 1 and 2 for Practice 3.1.
- Section 3.4 of the guide.
- Flip chart or overhead projector and transparencies.
- Paper and pencils.
- Magic markers or markers for transparencies.

Time required: 2 days.

Practice 3.1

Survey of Decision Criteria for Crop Selection – Worksheet no. 1

Interview Guidelines for the Survey on “Smallholder Producers’ Decision Criteria for Selecting Crops for Planting”

1. Greet the producer and explain the objective of your visit, for example:

‘Good morning (or Good afternoon), we are from Organization and we would like to know whether we could talk to you about a subject that really interests everybody.’

2. Ask a question to corroborate the type of producer, such as:

‘Do you sell most of what you produce or do you use it yourself?’

Note: This question is pertinent only if it were decided that smallholder producers should be classified according to their degree of market orientation (commercial, semi-commercial, subsistence).

3. Write down the producer’s name, the type of producer he/she is, the farming community, and the name of the survey group.

4. Ask about selection criteria used to choose traditional crops, for example:

‘What aspects do you think about when choosing a traditional crop for planting?’

5. Write down the answers.

6. Ask about selection criteria when choosing new crops, for example:

‘What aspects do you think about when choosing a new crop for planting?’

7. Write down the answers.

8. Thank the producer for his/her collaboration.

Practice 3.1

Survey of Decision Criteria for Crop Selection – Worksheet no. 2

Report Format for the Survey on “Smallholder Producers’ Decision Criteria for Selecting Crops for Planting”

Group:

Farming community:

Number of producers interviewed:

no.	Decision criteria to select traditional crops	Frequency	%
1			
2			
3			
4			
5			
no.	Decision criteria to select new crops	Frequency	%
1			
2			
3			
4			
5			

Differences found in criteria among producer types:

Practice 3.1

Survey of Decision Criteria for Crop Selection – Feedback

This is an example of a final report:

Survey on “Smallholder Producers’ Decision Criteria for Selecting Crops for Planting”

Group: no. 5

Farming community: La Torre

Number of producers interviewed: 8

no.	Decision criteria to select traditional crops	Frequency	%
1	Knowledge/expertise	8	36
2	Does not require inputs/easy to plant	5	23
3	Short or intermediate growth cycle	4	18
4	Stable price	3	14
5	Has a market	2	9
no.	Decision criteria to select new crops	Frequency	%
1	Does not require inputs/easy to plant	8	32
2	Good price	6	24
3	Has a market	5	20
4	Short or intermediate growth cycle	4	16
5	Stable price	2	1

Differences found in criteria among producer types:

Subsistence producers were more interested in hardy, short-cycle crops.

APPENDIX 1

Format for Preparing a Production System for a Crop

Product: _____

Technology: _____ Low _____ Intermediate _____ Optimal

Total cycle: _____ Production cycle: _____

Is irrigation necessary? ____ Yes ____ No

Planting density: _____/ha

Range of productivity:

Low: _____ t/ha High: _____/ha

Estimate for low technology: _____ t/ha

Estimate for intermediate technology: _____ t/ha

1. Initial investment

2. Pre-planting and planting

Days required to:

- () Prepare the land _____
- () Place posts, trellises, and fastenings _____
- () Prepare the seedbed _____
- () Make holes _____
- () Design plot, dig holes and plant _____

Others:

- () _____
- () _____
- () _____

3. Production activities (applications)

Activity	no. of applications per month (or year)									
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
Weed control										
Fertilization										
Organic										
Chemical										
Foliar										
Lime amendments										
Pruning										
Irrigation										
Sanitary control										
	Insecticides									
Fungicides										
Others										

4. Inputs

Activity	no. of doses per plant (or tree) per month or year								
	0	1	2	3	4	5	6	7	8
Fertilization									
Organic									
Chemical									
Foliar									
Lime amendments									
Sanitary control Insecticides									
Others									

5. Production activities (timetable)

Activity	Scheduling within program (month)				
	0-1	1-2	2-3	3-4	4-5
Weed control					
Fertilization					
Organic					
Chemical					
Foliar					
Lime amendments					
Pruning					
Irrigation					
Sanitary control					
Insecticides					
Fungicides					
Others					

APPENDIX 2

Financial Profitability Model for a Product: Example of Lulo (*Naranjilla – Solanum quitoense* Lam.)

Main details

Date: February 1996

Calculation of internal rate of return: 1 ha

Product: Naranjilla (lulo), not hardy and is well known

Technology: Intermediate

Planting density per hectare: 2,200 plants

Wage per workday: 5,500 Colombian pesos

Pre-production period: 12 months

Model's time span: 3 years

Part 1. Unit costs and prices.

Item	Unit	Value (Col\$)
• Investment		
Pond and accessories	Unit	300,000
Seedbed	Unit	50,000
Hoses	m	300,000
Fumigator	Unit	70,000
Tools	Unit	5,000
Plastic baskets	Unit	7,200
• Inputs (placed on site)		
Ca + P ('calfos')	kg	91
Chicken manure	kg	70
Fertilizers	kg	430
Green manure	kg	75
Foliar fertilizers	lt	3,587
Insecticides	lt	5,500
Fungicides	kg	7,000
Traps	Unit	300
• Prices		
First grade	kg	1,400
Second grade	kg	750
Transport costs	kg	50

Part 2. Quantity matrix.

Item	Unit	Month				Total
		0	0-1	1-2	2-3	
• Investments						
Pond and accessories	Unit	1				
Seedbed	Unit	1				
Hoses	m	130				
Fumigator	Unit	1				
Tools	Unit	10				
Plastic baskets	Unit	25				
• Labor						
Preparing the land	Workday	15	0	0	0	
Preparing the seedbed	Workday	5	0	0	0	
Laying out, digging holes, and planting	Workday	42	0	0	0	
Weed control	Workday	0	30	15	15	
Fertilization	Workday	11	33	33	33	
Sanitary control	Workday	10	10	10	10	
Debudding	Workday	0	15	15	15	
Watering	Workday	0	30	20	20	
Harvesting	Workday	0	14	69	69	
Cleaning and selection	Workday	0	5	23	23	
Packaging	Workday	0	1	6	6	
Total labor	Workday	83	138	191	191	602
• Amounts of inputs						
Ca + P ('calfos')	kg	660	0	0	0	
Chicken manure	kg	1,320	880	880	880	
Fertilizers	kg	0	44	44	44	
Green manure	kg	1,100	1,100	1,100	1,100	
Foliar fertilizers	kg	0	4	4	4	
Insecticides	kg	8	5	5	5	
Fungicides	kg	0	2	2	2	
Traps	Unit	110	0	0	0	
• Yields						
First grade	70% kg	0	1,120	5,600	5,600	
Second grade	25% kg	0	400	2,000	2,000	
Losses	5% kg	0	80	400	400	
Total	100% kg	0	1,600	8,000	8,000	

Part 3. Cost and income matrix.

Item	Month				Total
	0	0-1	1-2	2-3	
1. Investments					
Pond and accessories	300,000	0	0	0	
Seedbed	50,000	0	0	0	
Hoses	39,000	0	0	0	
Fumigator	70,000	0	0	0	
Tools	50,000	0	0	0	
Plastic baskets	180,000	0	0	0	
Subtotal 'Investments'	689,000	0	0	0	689,000
2. Variable costs					
a. Labor	456,500	756,667	1,049,833	1,049,833	3,312,833
b. Inputs					
Ca + P ('calfos')	60,060	0		0	
Chicken manure	92,400	61,600	61,600	61,600	
Fertilizers	0	18,920	18,920	18,920	
Green manure	82,500	82,500	82,500	82,500	
Foliar fertilizer	0	15,783	15,783	15,783	
Insecticides	44,000	27,500	27,500	27,500	
Fungicides	0	14,000	14,000	14,000	
Traps					
Subtotal 'Inputs'	278,960	220,303	220,303	220,303	939,868
c. Transportation to city	0	76,000	380,000	380,000	836,000
Total 'Variable costs'	735,460	1,052,969	1,650,136	1,650,136	5,088,702
3. Administrative costs					
Administration ^a	73,546	73,546	127,014	127,014	
Technical assistance ^b	50,000	50,000	50,000	50,000	
Subtotal 'Fixed charges'	123,546	147,697	177,014	177,014	625,270
4. Total operational costs (2+3)	859,006	1,200,666	1,827,150	1,827,150	5,713,972
5. Subtotal 'Investments' + 'Operational costs' (1+4)	1,548,006	1,200,666	1,827,150	1,827,150	6,402,972
6. Sales					
First grade	0	1,568,000	7,840,000	7,840,000	
Second grade	0	300,000	1,500,000	1,500,000	
Total 'Sales'	0	1,868,000	9,340,000	9,340,000	20,548,000

- a. Administration expenditures are calculated as unit percentage (10%) of investment in labor and inputs.
- b. Three levels of costs for technical assistance are proposed: crop is hardy and well known: \$25,000; crop is hardy and new, and crop is not hardy but is well known: \$50,000; and crop is not hardy and is new: \$150,000.

Part 4. Cash flow without financing and calculation of profitability.

Financial parameters

Item	Month				Total
	0	0-1	0-2	2-3	
Net flow	(1,548,006)	667,334	7,512,850	7,512,850	14,145,028

Financial rate of return:	67.09%	Minimum acceptable: 12%
Net present value:	7,730,642	Minimum acceptable: 0
Discount rate:	12%	
Pre-production investment ^a :	2,548,561	
Ratio of sales to no. of workdays ^b :	34,114	
Ratio of cash flow to no. of workdays ^c :	23,484	
Average no. of workdays per year ^d :	201	

- Total amount of investments in assets and required expenditures during pre-production period.
- Sum of sales obtained per paid workday during complete cycle.
- Sum of cash flow per paid workday during complete cycle.
- Average no. of workdays per year.

Part 5. Cash flow with financing and calculation of profitability.

Item	Month			
	0	0-1	1-2	2-3
Flow without credit	(1,548,006)	667,334	7,512,850	7,512,850
Financial plan ^a	2,548,561	0	(1,587,659)	(1,587,659)
Net flow with financing	(2,548,561)	1,667,889	5,925,191	5,925,191

Financial rate of return:	48.18%	Minimum acceptable: 12%
Net present value:	5,821,582	Minimum acceptable: 0
Discount rate:	12%	

- Unit deflated interest rate assumed to be 16% per year.

APPENDIX 3

Format for Ranking Market Options

Producer: _____

Code: _____ Area: _____

Interviewer: _____ Date: _____

Good market options

Name of option	Order	Explanation of first two positions
		1.
		2.

Moderately good market options

Name of option	Order

Poor market options

Name of option	Order	Explanation of last two positions
		Last
		Penultimate

Can the option you like best be made even better? Yes _____ No _____

If yes, what do you think would make it even better?

If no, why can't it be made better?

Glossary

Ad valorem

Latin expression that means 'according to its value'.

Advertising

Any form of marketing communication in the paid media.

Agent

A channel institution which represents one or more suppliers for a fee.

Aggregate value

The result of a post harvest or processing activity, in this case, at the rural level, that can vary in complexity from levels I to III. Level I refers to simple operations such as washing, cleaning, clearing, roasting, classification, baling and storage. Level II includes more complicated processes such as cooling, milling, cutting, mixing, dehydrating, cooking and canning. Level III operations are more sophisticated, such as extraction, distillation, freezing, fermentation, extrusion and enzymatic processes.

Agri-business

Involves the manufacture and distribution of farm supplies, production operation on the farm and the storage, processing, and distribution of farm commodities and items made from them.

Agricultural extensification

Using more land or animals to increase agricultural output.

Agricultural intensification

Increased agricultural output from increased productivity or yield per unit of land.

Agricultural or livestock product

Product with little aggregate value.

Agroenterprise

A business or firm, typically small-scale in nature, often based on a rural location that produces and sells agriculturally based products or services.

Agroindustrial product

Product with some degree of aggregate value, in this case, at the rural level.

Annual cash flow

For the financial model, this represents the net gain or loss generated by the project. The series of these flows is used to calculate financial parameters.

Appellation

System by which a product is legally protected to support marketplace differentiation based on its place or origin or method of processing.

Arbitrage

The simultaneous purchase and sale of a commodity in two different markets to take advantage of differences in prices of that commodity in the markets.

Asset

Items of money value owned by a business or person, including items such as land, buildings, machinery, tools, etc.

Average no. of workdays per year

The total number of workdays required during the duration of the project divided by the number of years of the project.

Barter

The direct exchange of goods and services between two parties, often without cash considerations.

Benchmarking

The process of comparing the company's products and processes to those of a competitor or leading firm in other industries to find ways to improve quality and performance.

Biodegradable products

Products made from biological materials that break down within a relatively short period of time when disposed of or left to degrade under natural conditions. These products are not considered harmful to the environment as they break down into non noxious products.

Biomedicines

Medicinal products produced from plants and animal products.

Biophysical and socioeconomic profile

A brief document that summarizes the physical, social, economic, and institutional aspects of a given region under study.

Biotechnology

New area of biological science pertaining to propagation, transformation and the recombination of genetic materials that is conducted in controlled, sterile conditions. This technology often uses sophisticated non traditional methods for enabling genetic propagation and genetic manipulation is used to produce genetically modified organisms, (GMO's).

Brand

A name, term, sign, symbol, logo, phrase intended to identify the goods or services of one seller, which differentiates them from those of competitors. A recognized brand is one which has strong customer loyalty.

Broker

A channel institution which puts a specific buyer(s) and seller(s) in contact with one another in one or more commodity(ies) or service(s) with a view to achieving a sale or benefit.

Budget

An amount of money set aside to cover the total cost of a communication campaign or other marketing activity.

Business Development Service (BDS)

Any business or business entity that offers information and activities in the marketing system that facilitates a second business thereby improving its operational and pricing efficiency. In some cases the term BDS is used to capture all of those business services other than financial services, such as input supply, processing, advisory services.

Capital

Productive resources, (goods) that are available, as a result of past human decisions, to produce other want-satisfying goods.

Ceteris paribus

Holding some variables constant, whilst letting specific variables change.

C.I.F.

A contract of sale "cost, insurance freight" of the documents of title, not the goods, whereby the buyer is under an obligation to pay against the shipping documents irrespective of the arrival of the goods.

Closed questions

Questions that include all possible answers, of which one or several will be selected by the interviewee. Examples of closed questions are multiple choice and rankings.

Collective action

Term used to describe group activities, used to increase economies of scale.

Collusion

Process through which traders artificially fix prices above the price they would achieve in a situation of perfect competition.

Commercial phase

Stage of an integrated production project that follows a successful pilot phase. The operational scale is expanded according to the estimated demand potential.

Commodity

Product for sale in the marketplace. Term originally coined to differentiate products that were essential, termed *utilities*, with new products such as coffee and cocoa that was considered to be exotic and desirable. Nowadays, commodities tend to be used for products in high volume trading.

Comparative advantage

Competitive condition of an individual, organization, or region that allows it to offer a product or service of better quality or at a lower price than others. Or one country enjoying a lower production ratio (input to outputs) than another country under total specialization.

Comparative analysis

Comparing the same set of statistics within a category of one country with another for the purpose of estimating potential demand.

Competition

A product, organization or individual, in either the same or another category which can be directly substituted one for the other in fulfilling the same needs or wants.

Competitive strategy

The adoption of a specific target market and marketing mix stance in the marketplace.

Convenience sample

Procedure in which sample components are selected according to the ease of obtaining information.

Conversion factor

The ratio or proportion relative to the amount of final products, or by-products, obtained from a given unit of raw material. For example, if we obtain 0.4 kg of dried cassava chips from each kilogram of fresh cassava roots, then the conversion factor would be 0.4.

Cooperative

A collection of organizations or individuals, pooling their resources in order to gain commercial or non-commercial advantage in buying, selling or processing goods and/or services.

Customer satisfaction

The extent to which a product's perceived performance matches a buyer's expectation. If the product's performance falls short of expectations, the buyer is dissatisfied. If performance matches or exceeds expectations, the buyer is satisfied or delighted.

Decision-making criteria

In the context of this manual, these refer to aspects that the small rural producer takes into account when selecting a crop to plant.

Demand

The quantity of products that the consumers can buy.

Differentiated product

A product that has undergone some form of value addition to distinguish it from other similar products, through means such as grading, sorting, packaging, branding, specialized marketing such that it attracts a higher price and targets a more specialized market.

Discount

A reduction in price on purchases during a stated period of time.

Discount rate

The interest rate used to convert a series of annual flows to a single present value (year 0).

Distribution

Marketing variable that defines the channels through which the product or service reaches the client.

Distribution channel

An institution through which goods or services are marketed, giving time and place utilities to users.

Diversification

Business growth strategy to produce new products for new markets.

Dumping

The selling of goods or services in a buying country at less than the production unit price in the selling country, or the difference between normal domestic price and the price at which the product leaves the exporting country.

Duty

The actual custom duty based on an imported good either on an *ad valorem*, or a specified amount per unit or combination of these two.

Economic rent

Return in excess of opportunity cost, often enabled through political protection.

Effective cash flow per workday

The sum of cash flows during a project's life is divided by the total number of workdays.

Effective market demand

When needs and desires are supported by the ability to pay.

Elastic supply

A supply elasticity coefficient of more than one indicates an elastic supply, the percentage increase in supply being greater than the percentage increase in price.

Entrepreneur

Person who organizes resources to produce and market goods and services.

Evaluation criteria

In the context of this manual, the aspects analyzed when selecting or discarding elements, as in the case of market options. The criteria used are feasibility for smallholders, attractiveness as business, and contribution to production sustainability.

Exchange

The act of obtaining a desired object by offering something in return.

Exchange rate

The ratio of exchange of one currency to another.

Exporting

The marketing of surplus goods produced in one country into another country.

Financial rate of return (FRR)

An interest rate that discounts a series of annual cash flows in such a way that the present value of the series is equal to the initial investment.

Firm

A decision-making business entity that uses resources hired from households to produce goods and services for sale to households or other consuming units.

Fixed costs

Costs that do not vary with production volume and remain relatively stable, for example, administration and surveillance.

F.O.B.

A contract of sale "free on board" whereby the seller undertakes to place the goods on board a named ship at a named port and berth and carry all charges up to delivery over the ship's rail.

Focus group

A small sample of typical consumers (or an interest group) under the direction of group leader who elicits their reaction to stimulus such as an advertisement, an idea, a question or concept.

Foreign exchange

Facilities' business across national boundaries, usually expressed in foreign currency bought or sold on the foreign exchange market.

FRR with financing

The FRR calculated and including financing expenditures.

FRR without financing

The FRR calculated as a parameter of net profitability because it excludes financing expenditures.

Futures option

A legally binding contract to deliver/take delivery on a specified date of a given quality and quantity of a commodity at an agreed price.

Gatekeepers

People in the organizations buying center, or point in a market chain, who control the flow of information to others.

Global products

Products designed to meet global market segments.

Globalization

The integration of international transport, finance and communications systems and services to enable transnational trading of goods and services.

Gross domestic product (GDP)

The value of all goods and services produced by a country's domestic economy in one year.

Gross margin

Accounting term equivalent to sales minus variable costs. It can be expressed as a percentage or as a sum of money.

Gross marketing margin

The sum of all marketing costs plus profits.

Gross national product (GNP)

The market value of all goods and services outputted by residents of a country in one year including income from abroad.

Growth rate

The growth in the sales of a product that is measured as a percentage of annual increase of demand. Growth can be high (more than 6% per year); average (4%-6%); low (1%-3%, and similar to the population growth rate); null; or negative.

Hedging

A mechanism to avoid the risk of a decline in the future market of a commodity, usually by entering into futures markets.

Horizontal integration

The combination of two or more enterprises or firms operating at the same point in the market chain.

Human capital

The educational investment that improves the knowledge and productivity of people.

Human need

A state of deprivation that can be addressed or reduced by a product.

Human wants

The form that a human needs takes as shaped by culture and individual personality.

Ideotype

The concept that small rural producers have of an ideal product. It is used in participatory evaluation.

Income elasticity measurements

A description of the relationship between the demand for goods and changes in income.

Income elasticity of demand

The responsiveness of quantity purchased to a 1% change in income, *ceteris paribus*.

Income per capita

The market value of all goods and services outputted by a country divided by the total number of residents of that country.

Inelastic supply

Products that have a supply elasticity between zero and one the supply elasticity is considered to be inelastic. The percentage change in supply is less than the percentage change in price.

Inflation

A condition where demand outstrips supply or costs escalate, affecting an upward change in prices.

Information system

A system for gathering, analyzing and reporting data aimed at reducing uncertainty in business decision making.

Innovation

An idea, service, product, or technology that has been developed and marketed to a consumer who perceive it as novel or new. It is a process of identifying creating and delivering new product or service values that did not exist before in the marketplace.

Input markets

Markets where inputs such as seeds, tools, fertilizers, agrochemicals are sold, generally through specialized dealers that only trade in input supplies.

Integrated production project

Rural development project that takes into account the system elements of the targeted product, for example, agricultural and livestock production, post harvest handling or processing, marketing and entrepreneurial organization. Important project components are research and development.

Interest

The charge made for borrowed money. The rate at which we discount future economic goods.

Interest rate

The price of borrowed money.

Intermediaries

Distribution channel firms or persons, that help to find the customer or make sales to them, including bulking agents, wholesalers and retailers that buy and resell goods.

International products

Goods or services seen as having extended potential into other markets.

Joint ventures

An enterprise in which two or more investors share ownership and control over property rights and operations.

Key informants

Active and leading members of the market chain.

Key observers

People who are knowledgeable about a market chain but are not directly involved in the business operations of the market chain.

Letter of credit

A method of international payment whereby the buyer instructs his own country bank to open a credit with the seller's own country bank specifying the documents which the seller has to deliver to the bank for him/her to receive payment.

Level of technology

Degree of technological complexity needed to adequately develop a crop. It is similar to 'technical requirement'.

Levy

A tax imposed by government, to meet a specific objective.

Licensing

A method of foreign operation cooperation whereby an organization in one country agrees to permit a firm in another country to use the manufacturing, processing, trademark, know-how or some other skill provided by the licensor.

Local products

Goods or services seen only suitable in one single market.

Logo

Symbol or emblem used to identify a specific product and for marketing purposes to differentiate a specific product from similar items.

Mark of origin (appellation)

System by which producers and processors can legally register their products such that no other producers or processors can use this name, title or logo, unless they produce the product within a legally recognized area or territory and use specifically laid down methods of production and or processing.

Market

The group of consumers, industries and institutions who can buy a product or service.

Market chain

Term used to describe the multiple market channels through which a product or service moves until reaching the consumer.

Market development

A business growth strategy to identify and develop new market segments for current products. New market segments can comprise new clients, institutional markets, other geographical areas, and export.

Market efficiency

A comparison of the value of output to the value of inputs used in the marketing process.

Market entry

The way in which an organization enters foreign markets either by direct or indirect export or production in a foreign country.

Market holding price

The charging of a price at what the market can bear in order to hold market share.

Market information services (MIS)

People, equipment and procedures to gather, sort, analyze, evaluate and distribute needed, timely and accurate information to marketing decision makers.

Market mix

The set of controllable tactical marketing variables including: product, price, place and promotion, that a firm blends to produce the response it wants in the target marketplace.

Market opportunity

A given product or service presenting high growth or for which the levels of demand exceeds supply, and an organization or region can produce profitably.

Market penetration

A business growth strategy to increase the sale of products in current market segments without changing the product offered. This can be done by lowering prices, enhancing promotion and increasing distribution.

Market positioning

The adoption of a specific market stance, leader, challenger, follower, flanker or adopter, *vis a vis* competition.

Market research

Entrepreneurial discipline that not only identifies market trends and opportunities but also reveals the opinions and preferences of clients and consumers. Data are obtained by consulting primary and secondary information sources.

Market segment

A group of consumers who respond in a similar way to a given set of marketing stimuli.

Market segmentation

Dividing a market into distinct groups of buyers with different needs, characteristics or behavior, who might require separate products or marketing mixes.

Market speculation

A marketing strategy whereby buyers hold stocks of a product in the hope that prices will increase so that they can maximize profits when they decide to sell. Physical speculation requires that a lot or amount of produce is purchased and stored. There are costs associated with storage and for a speculation to be profitable, the final sales value must be more than the costs of storage.

Market shed

The area that covers production, processing and marketing of a product.

Market supply

The quantity of products that is offered for sale.

Marketing

A business activity that focuses on identifying and satisfying market needs through a profitable offer of products and services.

Marketing costs

Agricultural marketing refers to the activities involved in taking a product from the farm gate and delivering it in the form, at the time and to the place that the buyer requires. Such costs are therefore incurred through handling, transport, storage, processing, packaging, market fees, risk management, brokerage, export handling and others.

Marketing process

The process of analyzing market opportunities, selecting target markets, developing a marketing mix and managing the marketing effort.

Marketing strategy

The marketing logic by which the business unit hopes to achieve its marketing objectives.

Media

Any paid for communication channel including television, radio, posters, etc., thus providing an immediate idea of the microregion's system.

Middleman

Person who trades in goods, a buyer and seller of goods and services.

Net margin

Accounting term equivalent to net gain, that is, sales minus both variable and fixed costs.

Net marketing margin

Excludes normal marketing costs, thereby providing a measure of the profit realized. Net marketing margins may however also include the remuneration of the trader or processor's labor, in which case it is not an exact profit indicator.

Net present value (NPV)

The value in year 0 of a series of annual cash flows generated by a project if discounted using an interest rate equal to the opportunity cost for capital.

Niche marketing

Adapting a company's offerings and products to more closely match the needs of one or more subsegments where there is often little competition.

Non tariff barriers

Measures, public or private, that cause intentionally traded goods or services to be allocated in such a way as to reduce potential real world income.

NPV with financing

The calculated net present value, but including financing expenditures.

NPV without financing

The calculated net present value, but excluding financing expenditures.

Nutraceuticals

Products that have medicinal/pharmaceutical and or nutritional value, that are derived from plant or animal products. Examples include high iron producing beans, bananas that contain insulin.

Open questions

Questions that allow the interviewee to answer in his or her own words.

Opportunity cost

The value of other opportunities given up in order to produce or consume any good.

Opportunity cost of capital

Interest that the financial system acknowledges for savings, for example, the interest for fixed-term deposits.

Option

A bilateral contract giving its holder the right, but not the obligation to buy or sell a specified asset at a specific price, at or up to, a specific date. Type of financial instrument that gives the holder the right to buy or sell futures contracts.

Output markets

Markets where harvested products are sold—these are the more traditional assembly, wholesale and retail markets.

Packaging

Activities involved designing and producing the container or wrapper for a product.

Participatory

Adjective that refers to anything that takes the viewpoints of users, beneficiaries, or partner organizations or projects into account when making decisions.

Participatory evaluation

Methodology, inspired by concept tests used in product research, which allows small rural producers to express their preferences for market options presented to them.

Patenting

Legal mechanism used to protect products from being copied by other entrepreneurs. The patent scheme usually lasts for a designated period of time, 10 years, after which time the scheme either elapses or the inventor or owner provides evidence of innovation to renew the patent to protect the value of the given intellectual property.

Penetration price

The charging of a low price in order to gain volume sales conducted under conditions of little product uniqueness and elastic demand patterns.

Physical distribution

The act and functions of physically distributing goods and services including the elements of transport, warehousing and order processing.

Pilot phase

Strategy to minimize the risks involved in commercializing an integrated production project. Entrepreneurial activities are carried out on a small scale, but under real market conditions.

Place

All the company/firm activities that make the product or service available to the target customer.

Pre-production cycle

Period of a crop between planting and 30% of the crop's maximum production potential.

Pre-production investment

The amount of money spent before the first crop is harvested.

Price ceiling

The maximum price which can be charged bearing in mind competition and what the market can bear.

Price elasticity of supply

Is defined as a measure of the percentage change in quantity supplied in response to a percent change in price. A supply elasticity of 0.4 for cotton in the short run means that the quantity supplied increases 0.4% for a 1% increase in the price of cotton.

Price escalation

The difference between the domestic price and the target price in foreign markets due to the application of duties, dealer margins and/or other transaction costs.

Price floor

The minimum price which can be charged bounded by product cost.

Price stability

Degree of variability of product prices, which can be measured with an index equivalent to the standard deviation of a deflated series of at least 18 monthly prices.

Price

The amount of money charged for a product or service, or the sum of the values that consumers exchange for the benefits of having or using a product or service.

Primary data

Data which is collected and generated as part of a survey. Unpublished data from individuals or organizations.

Primary information

In market research, this is the information obtained firsthand by using several communication methods, for example, personal interviews and group sessions.

Probability sample

Procedure in which the elements of a sample are chosen at random.

Product

Anything that can be offered to a market for attention, acquisition, use of consumption that might satisfy a want or need. It includes physical objects, services, persons, places, organizations and ideas.

Product card

A format that is especially designed for participatory evaluation. Each format comprises a card that represents the concept of one market option. The cards are then organized according to preferences of small rural producers.

Product development

A business growth strategy for offering new or modified products to current market segments. The products can be improved or differently packaged or labelled.

Product strategy

A set of decisions regarding alternatives to the target market and the marketing mix given a set of market conditions.

Project

A series of activities planned and carried out to achieve an objective within a defined period of time and with predetermined resources.

Promotion

Activities that communicate the product of service and its merits to target consumers and persuade them to buy. The offer of an inducement to purchase, over and above the intrinsic value or price of a good service.

Quality

The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.

Quota

A specific imported amount imposed by one country on another, when once filled cannot be exceeded within a given time. When a quota is in force, the price mechanism is not allowed to operate.

Quota sample

Procedure in which a specific number of elements of each group or segment of a given population is included in the sample.

Relationship marketing

The process of creating maintaining and enhancing strong value laden relationships with customers and other stakeholders.

Research and development

Entrepreneurial term that refers to two complementary activities that must be carried out for product development. It encompasses research on markets, products and processes; development of brands and packaging. Research and development is an important component of integrated production projects.

Retailer

A channel institution which acts as an intermediary between other channel institutions and the end user and who usually breaks bulk, charging a margin for its services.

Rural agroindustry

Economic activity that generates aggregate value for agricultural and livestock products in the field.

Sales per workday

Total value of sales during the project's life, divided by the total number of workdays.

Sample

A part or segment of a population selected as representative of the targeted population.

Sample unit

In market research, the contact person.

Sampling procedure

Method used to choose a population sample.

Secondary data

That data which already exists in other texts. Published accessible data from a variety of sources.

Secondary information

In market research, this is the information obtained secondhand, that is, from documents or Internet.

Sector

Relates to the all activities under the mandate of one government ministry, such agriculture, health, education, justice.

Sensitivity analysis

Study that uses a profitability model to determine those variables that most affect a given financial parameter.

Services

Activities, benefits or satisfactions that are offered for sale.

SMS

Short message service, text used to transfer information via mobile phones.

Speculation

The purchase or sale of title to goods or financial obligations in the expectation of favorable price movements.

Standardization

Same goods or services marketed in either product, distribution or advertising form, unchanged in any country.

Strategic business unit

A self contained grouping of organizations, products or technologies which serve an identified market and competes with identified competitors.

Strategic plan

A plan that describes how a firm will adapt to take advantage of opportunities in its constantly changing environment, thereby maintaining a strategic fit between the firms goals and capabilities and its changing market opportunities.

Structured survey

Research tool consisting of a questionnaire that is applied to all interviewees alike.

Subsector

A part of a sector, which can mean, within agriculture that a subsector focuses on one area, such as grains, fish, livestock, etc., or can be more detailed to all that relates to one particular commodity, such as the maize, rice, cassava, beef subsectors.

Substitutes

Two different goods or resources between which a choice is made to satisfy human wants (or to produce a product).

Super Brand

A product that has world renowned reputation, for providing customer satisfaction and delight, e.g., the soft drink Coca-Cola, the NIKE sports shoe.

Support services

In the context of this manual and of rural development, these are sustainable or permanent complementary services that facilitate the dynamics of the economy and rural organizations. These services include savings and credit, technical assistance, commercial information, transportation and communications.

Sustainability

Permanence of any condition, for example, the productive capacity of the agricultural sector. It is also applied to the continued existence over time of any economic activity or organization.

System

A series or grouping of related or connected elements so that they form a unit or a whole.

Tariff

An instrument of terms of access normally the imposition of a single or multiple excise rate on a imported good.

Technical requirement

Term indicating the characteristics that a crop needs to cope with the prevailing soil and climatic conditions of a targeted region, for example, whether it is hardy and tolerant, or whether it requires sophisticated technologies and large amounts of inputs for its successful production.

Test-market

A business strategy to minimize risks when a new product or service is being introduced. It consists of releasing it into a restricted market to assess the degree of success.

Timetable

A tool to plan and organize projects that defines the sequence of activities, their duration and the person or institution responsible for activities.

Total cycle

Period of a crop between planting and the point where productivity decreases to below 30% of the crop's maximum potential.

Traceability

System by which a product is tagged, such that it can be traced from source of origin to final user. This process may become mandatory in formalized food markets.

Trademark

Legally recognized name, symbol or title, which can only be used for marketing purposes by the originating or owning company.

Transaction

A trade between two parties that involves at least two things of value, agreed upon conditions, a time agreement and a place of agreement.

Transaction costs

Transaction costs relate to the non-price costs of making a commercial exchange. These are expenses incurred in finding someone to trade with, time spent negotiating a deal and the costs involved in ensuring that contracts are honored, all fall under the general category of transaction cost.

Type of producer

Classification of small rural producers according to a given variable of interest, for example, the degree of market orientation or level of well-being.

Unstructured survey

Research tool consisting of a series of interview guidelines that allows the interviewer to question interviewees and direct each interview according to the answers given.

Value

The consumer's assessment of the product's overall capacity to satisfy his or her needs.

Value added

The contribution to final produce value by each stage in the production, delivery and marketing process. Also, includes transformation processing of goods from primary to final state offered to a consumer.

Variable costs

Costs that vary directly with the volume produced, for example, raw materials, packaging and fuel.

Vertical integration

The linkage of firms (enterprises) in different stages of producing and or marketing under the ownership of a single firm.

Wholesaler

A channel institution which purchases and sells in bulk from either original suppliers and/or other channel intermediaries, charging a margin for its services.

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and

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