

Marketing Compost

A Guide for Compost Producers in Low and Middle-Income Countries



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Key terms

Compost The product of controlled biological decomposition of organic matter into a humus-like, odourless product with soil-conditioning properties and varying nutrient value.

Chemical fertiliser An agricultural input largely intended to provide plant nutrients without any soil-conditioning properties such as 'NPK' fertiliser (nitrogen, phosphorous and potassium).

Competitive edge Something about your product/service, which is particularly attractive to the customer, such as a low-price for good quality, free delivery and convenient location.

Humus The component of soil consisting of decomposed vegetable matter, which gives soil its water and nutrient-retaining properties.

Manure Animal waste (e.g. cow dung, chicken droppings). Often relatively rich in plant nutrients. Usually matured prior to land application.

Market segment A group of consumers/customers with similar characteristics and requirements.

Marketing environment External factors and forces, some of which are uncontrollable, which present both opportunities and threats to a business.

Organic waste Decomposable matter, including vegetable waste (peelings, spoiled market produce), waste food and garden waste (e.g. grass clippings, dead plants).

Prospecting The process of identifying and assessing potential customers.

Soil conditioner A product which enhances the water and nutrient retaining properties of soil.

Value/cash markets Customer groups purchasing small quantities of a product at a higher price (e.g. householders buying 10-kg compost bags).

Volume/bulk markets Customer groups tending to buy large quantities of a product at a lower price (e.g. farmers buying truckloads of compost).

Qualitative data Relates to opinions and perceptions, e.g.: how? why?

Quantitative data Relates to countable data, e.g.: how many? how much? how often? where?

1 Introduction

For many years, businesses, municipalities and NGOs around the world have successfully produced large volumes of high-quality compost. Compost offers greater benefits to society and the environment than a can of soft drink or the latest mobile phone, but unlike these it does not enjoy a ready market. It is often considered to be dirty, and it lacks an immediate benefit to people. Of course, compost is a valuable agricultural input which can improve the condition of soil and reduce the need for chemical fertilisers. Despite these qualities, selling compost remains a challenge and some producers cannot even give it away. Lack of markets has caused many businesses to fail.

Composting can be approached in two main ways.

- ▶ The solid waste management approach, wherein composting is a way of treating organic waste within the solid waste management system. Compost is seen as a by-product.
- ▶ The marketing approach, wherein composting is a way of producing a valuable product that can be sold. Compost is the core of all activities.

The marketing approach focuses on producing and selling a high-quality product. In contrast to the solid waste management approach, it is driven more by customer demand than material supply. However, a successful marketing approach to composting will usually result in all solid waste management objectives being met.

This guide describes a marketing approach to composting, and is intended to help compost producers run more viable initiatives by unlocking the value of their product. The handbook does not cover everything there is to know about marketing, but starts from basics and introduces the key principles and techniques. These include understanding the 'marketing environment', identifying appropriate target customer groups, and developing and promoting products to suit the market.

The term 'composting business' is used throughout as an all-encompassing description of NGO as well as public and private sector composting initiatives. This reflects the assumption that all initiatives at least need to shift their product from their premises, and that most want to cover their costs or make profit through the sale of compost. Thus, they have the basic character of a business.

There is no single solution to compost marketing: every situation is different. Therefore, the handbook presents a mix of contextual theory and hands-on tools and ideas for your business. It focuses on some of the problems frequently encountered in low and middle-income countries and ways to overcome them. Although this handbook is about marketing compost made from organic urban waste, many of the principles are universal.

Studies conducted in India have revealed that because marketing approaches are rarely applied, many composting businesses have failed to realise their potential. This is not attributed to a lack of interest or business-mindedness, but simply to a lack of available information. In India, the marketing approach is ideal for guiding compost ventures towards sustainability and profitability. Richardson, 2002

Sources of information

Much has been written about marketing, and most literature focuses on high-income countries. The authors have drawn heavily on this body of literature but combined it with information and case studies from low and middle-income countries. All literature consulted is listed in the literature section.

Key messages

- ▶ customer satisfaction is of key importance;
- ▶ there is no magic solution to compost marketing, but applying principles can increase the chances of success;
- ▶ compost is generally not a product with a ready-made market, however, worldwide experience indicates that it is possible to develop one;
- ▶ investing time in identifying and analysing your market can yield important returns for your business;
- ▶ the packaging and image of your products to target markets is vital for success;
- ▶ the basis for success is a consistently high-quality product with clear specifications. It will sell better and yield returns;

- ▶ marketing is not a one-off task: it is crucial to invest regularly in marketing, in developing products and in refining the selected strategy;
- ▶ demonstration projects proved to be one of the most successful marketing strategies to conquer new markets.

Target audience

This handbook is of relevance to a wide range of individuals and organisations, including:

- ▶ entrepreneurs and private investors intending to fund, set up or manage a composting plant;
- ▶ local authorities wanting to invest in or operate organic waste composting plants as an option for sustainable waste management;
- ▶ contractors managing composting plants; and
- ▶ staff of donor organisations funding and planning composting projects.
- ▶ No prior understanding of marketing compost is necessary.

Structure

Marketing is not a clear-cut 'linear process' and various aspects are interdependent. For example:

- ▶ product development is dependent on and driven by the choice of target markets;
- ▶ your location may determine the markets available to you or you may choose your location in order to target a certain market;
- ▶ target customers may affect your pricing decisions or high production costs may require you to focus on a wealthy market.

Although marketing is presented as a series of sequential steps in this handbook, it is important to apply these flexibly and to keep revisiting certain areas. The first two chapters of this handbook provide background information and introduce the broad concepts of marketing and composting.

The book is structured around five key areas:

- ▶ The marketing environment
- ▶ Market assessment
- ▶ Product, positioning and location
- ▶ Product pricing
- ▶ Key principles of promotion

2 Background

2.1 What is marketing?

Marketing is about identifying and targeting customers and succeeding to sell products that satisfy customers at a price and in sufficient quantity to ensure the success of a business.

The aims of marketing are to:

- ▶ understand and assess the external environment that affects your business. This includes external forces such as legislation, environment, technology, and competition;
- ▶ identify appropriate target markets and develop good relationships;
- ▶ satisfy customers by offering appropriate products at the right price;
- ▶ communicate the benefits of products to stimulate demand;
- ▶ ensure the sale of products at a price and quantity that ensures viability and profitability.

Customer satisfaction is central to marketing and is the key to successful business. Marketing recognises that customers are free to make purchases from anywhere in the marketplace. Marketing principles can help a business maximise the chances of acquiring a slice of the market.

Too little effort spent on determining whether or not customers find a product attractive or are willing to pay for it will often result in costly products without any market appeal. Adapted from Alexander, 2003

The following diagram illustrates the components of the marketing process.

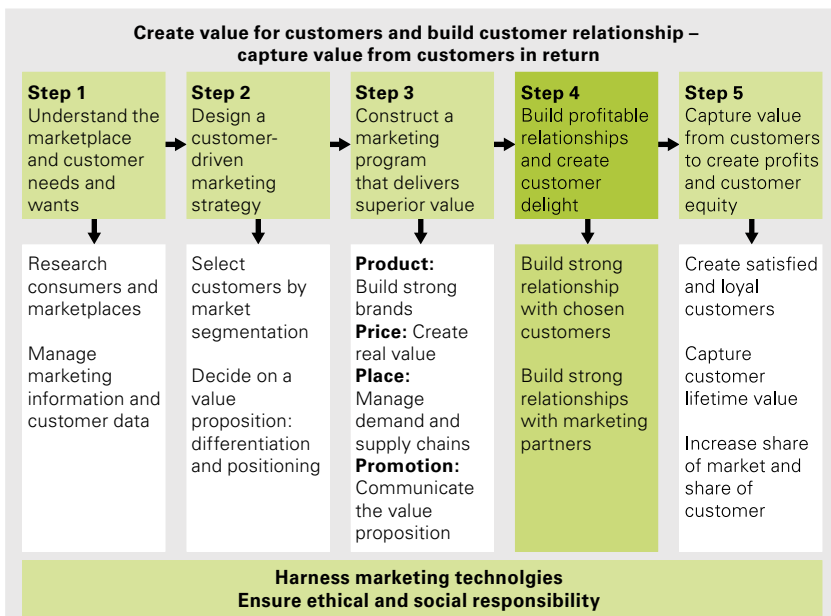


Figure 2.1: Marketing Process after Kotler et al. (2006): Principles of Marketing

The 'Marketing Mix'

Marketing professionals focus on four main parameters to attain a successful marketing strategy: Product, Price, Place, and Promotion. These are the so-called "4 Ps" of the marketing mix. The following section and Figure 2.2 provide more details on what they are and how they can be useful.

The four Ps of the marketing mix

Product: Relates to features, benefits, quality, packaging, presentation, but also to service and abstract messages such as image or principles.

Example: Compost is produced from organic solid waste and is, hence, an environmentally friendly and high-quality product. Compost is high in organic matter and, therefore, an important soil amendment for agriculture and horticulture.

Price: Dependent on your customers' financial circumstances, on compost demand and on the prices of competing market products. However, it is also determined by your production costs and expected profit margin.

Example: Compost has to compete with chemical fertilisers and other natural manures. The market price will have to reflect customers' willingness to buy compost and cover production costs.

Place: Relates to the accessibility of your product by customers, e.g. location of your business, distribution network etc.

Example: You decide to market the compost via a retailer who has already established a distribution network for other agricultural products. Customers can purchase the compost locally at low transport costs.

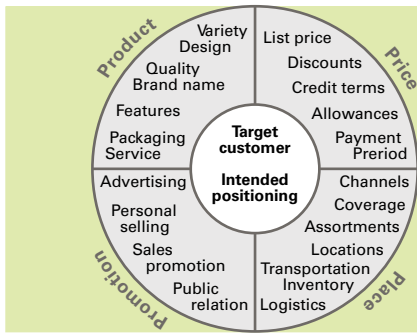


Figure 2.2: The four Ps of the marketing mix (adapted after Kotler et al. 2006)

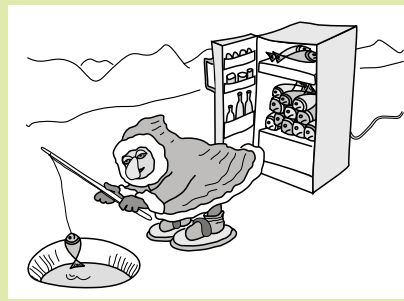


Figure 2.3: Marketing and ethics: Selling refrigerators to Eskimos?

Promotion: Informs your customers about the benefits of using compost, building awareness and overcoming negative attitudes or perceptions to ensure the sale of your product.

Example: Your compost has an official quality label. The customer opts for your product as he/she trusts the label or is aware of your company's good reputation.

Marketing and ethics

For some, selling a freezer to an Eskimo may be the ultimate in great marketing, but convincing people to buy a product they do not need has no place in ethical marketing. Marketing is not always used as a force for good, and aggressive marketing is seen by some as a modern-day evil. Marketing approaches are sometimes used to convince customers to buy a product they do not want - or even need - which is of little utility and has a short life. Some products, such as cigarettes, may even harm the consumer, while others simply waste consumers' money and the world's resources. Marketing also promotes competitiveness. This can sometimes be positive, but small businesses can be particularly vulnerable to large companies monopolising markets and forcing them out of business. So what place do ethics have in the marketplace?

The basic marketing concept holds that success depends on knowing the needs and wants of target markets and delivering the desired satisfaction better than competitors (Kotler et al. 2006). However, it is possible for marketing to go beyond profit and customer sales alone, and to consider the long-term social and environmental implications of business.

A composting business can consider consumer interests by delivering a high-quality and safe product. It has the potential to improve and transform waste management in low-income countries, thus benefiting society as a whole. It also provides an opportunity to create decent and dignified livelihood opportunities. Although good quality compost can be a genuine asset to many, it is important that people's expectations are realistic, and that they are properly

Successful compost marketing in Sri Lanka

By contrast, government and NGO projects have failed to establish markets for their product. This led to such an overwhelming stock of compost that some have had to cease production or even close down. The government had not considered marketing, and the NGO did not have the capacity to invest in marketing activities. Ali, 2004

informed about its use and limitations in order for them to make an informed choice.

What about ethical competition? In many countries, markets for compost are untapped or underdeveloped. There is room for new businesses to emerge and coexist with other producers. Moreover, competition itself can be turned into an opportunity: joining forces to lobby for supportive legislation, sharing distribution infrastructure or even sharing marketing through Compost Associations.

Finally, sound social and environmental principles at the heart of your business can be a powerful sales asset for your product, as markets around the world become increasingly concerned with ethical consumption.

2.2 Why is marketing important for compost producers?

Marketing is just a jargon-filled discipline and only tells you what you already know. Gartner (no date)

Although many people are sceptical about marketing, in fact it underpins most successful businesses. It helps ensure investments are worthwhile and identify appropriate products for achievable markets.

Improving the image of compost

Although compost is a highly effective soil conditioner, which can reduce the need for chemical fertilisers, it does not enjoy a ready-made market. A number of factors account for this fact, including:

- ▶ lack of awareness and knowledge on how, how much and when to use compost;
- ▶ misunderstanding about what compost is (e. g. expecting it to behave in the same way as a chemical fertiliser);



- ▶ concerns about the quality of compost made from organic urban waste – sometimes based on negative associations or past experience;
- ▶ the inclination of many farmers to focus on optimising their yield within a short time;
- ▶ competition with chemical fertilisers, similar low-cost products like manure or products perceived to be the same (e.g. raw waste);
- ▶ high transport costs relative to product value, as compost is often produced far from its market;
- ▶ unfair regulations and policies (e.g. subsidies for chemical fertilisers) hindering the composting approach.

Barriers to overcome when promoting compost in India

A report from India illustrates some of the basic problems faced when promoting compost. In contrast to chemical fertilisers, the use of compost is not considered respectable, but instead an 'old-fashioned' product as it has to be used in large quantities and is relatively slow-acting. The Indian Government promotes the use of chemical fertilisers through regular campaigns and via subsidies and incentives.

Composting is not widely pursued by the formal sector, as it is bulky, transport over long distances is expensive and its marketability limited. In short, it is not perceived to be as attractive or convenient a product as pellet chemical fertiliser.

Finally, the report suggests that the chemical fertiliser industry may be trying to defame compost, for example by informing farmers that it causes pest damage and spreads disease. Adapted from Mehta in Hart and Plumiers, 1996

Consequently, compost benefits are little known or appreciated, and when compost is made from organic waste, it is often stigmatised. Marketing can help a business overcome these attitudes and barriers, as well as identify and develop markets for compost, as illustrated by the following case from Sri Lanka.

Successful compost marketing in Sri Lanka

In Sri Lanka three composting ventures (a business, a university and a community project) have succeeded in securing good markets for compost for different reasons:

- ▶ the business invested heavily in a skilled marketing team, which worked over many years to develop the market;
- ▶ the university has come to an arrangement with an agricultural company, which buys, handles, markets and transports all the compost.
- ▶ communities found a local market, and generated demand by word of mouth and demonstration projects.

An essential part of business planning

It is essential that any prospective investor (public or private-sector) considers marketing as part of the feasibility assessment. Market research can help you understand your position in the marketplace, your potential customers and your competitors. A market analysis may reveal that you have a market ready for your product as it is. It may identify that you need to make changes to your strategy and production in order to secure a market. Sometimes, however, it will reveal that there is no market for your product. Knowing this before investing can save you the losses of a failed business.

Marketing should not be seen as a one-off activity or something just for new businesses. Markets can change over time, and your business will need to use marketing to keep abreast of (or better still, ahead of) changes and ensure you are targeting the right people with the right product and promotion, at the right price.

A particular need in low and middle-income countries

Revenue from sales of compost is particularly important in low and middle-income countries where subsidy and tipping fees are much less readily available than in Europe or the United States. In Europe, composting plants charge a fee to all commercial enterprises dumping waste (e.g. tree surgeons and gardeners), which is slightly lower than the cost of dumping waste in landfills. This is backed up by legislation, which encourages (or makes compulsory) the recycling of 'green waste'. Therefore, in some cases compost can be given away free because tipping fees cover all costs. Nevertheless, these composting plants are increasingly selling their products, as the market for 'eco compost' develops. Few such situations exist in low and middle-income countries, so costs need to be covered by sales, generated through marketing.

2.3 What is compost?

Anyone concerned with marketing compost must have a good basic understanding of the product, its uses and methods of production. This chapter briefly sets down some definitions, and outlines some of the ways compost can be made from urban organic waste.

Why make compost from waste?

Urban waste consists of many elements including inert material (sand and soil from street sweepings), recyclable material (such as metal, plastic, paper, and glass), hazardous substances (toxic chemicals and healthcare waste) and in rare instances human waste. However, in many low-income countries as much as 60–70 per cent of household waste is biodegradable, including vegetable peelings, waste food and garden waste. Vegetable markets and the food processing industry also produce large quantities of organic waste. Composting is an important element of sustainable solid waste management as it offers a way of processing the biodegradable waste fraction. Composting reduces the amount of waste to be transported and disposed of, thus also reducing negative effects to the environment.

What is compost and how is it used?

Compost is the product of a controlled aerobic decomposition of organic matter. It is a stable, dark brown, soil-like material. Contrary to popular belief, mature compost does not smell bad; it can smell as fresh as a forest floor. Sometimes the process of making compost may, however, result in smells of rotting-waste, although careful management will minimise these.

Compost contains important plant nutrients (e.g. nitrogen, potassium and phosphorus), though usually not as much as animal manure or chemical fertilisers. It can also contain a range of beneficial minerals and is rich in humus and microorganisms beneficial to plant growth.

Mistaken identity of compost

Compost is sometimes mistakenly referred to as ‘manure’ or ‘fertiliser’, though it has completely different characteristics.

► Manure is generally understood to be animal waste such as chicken droppings or cow manure. It contains nutrients and some organic matter. It is a strong fertiliser that can damage young plants.

- ▶ Chemical fertilisers usually consist of concentrated plant nutrients. For example “urea” is a nitrogen fertiliser and “DAP” is a phosphorus fertiliser. Neither has any soil conditioning properties.
- ▶ Compost is a soil-like substance with a moderate nutrient content slowly released over the cropping period. Thus, it is most useful for its soil conditioning properties.

Depleted soils have too much inert material (sand) and too little humus (decomposed vegetable matter). Humus acts as a sponge, holding water and nutrients. Amending soil with compost replaces humus, thus increasing the capacity of soil to absorb and retain nutrients and water, and reducing the need for chemical fertilisers. Indeed, where land is carefully managed, with soil structure maintained by compost and a range of nutrients supplied through the application of manure, chemical fertilisers are rendered unnecessary. This is one of the underlying principles of organic farming, as increasingly practised by farmers around the world.

Key benefits of using compost

- ▶ Improves soil structure, creating a better plant root environment
- ▶ Supplies significant quantities of organic matter
- ▶ Improves drainage of soil and reduces erosion
- ▶ Improves moisture holding capacity of soils
- ▶ Improves and stabilises soil pH
- ▶ Supplies a variety of nutrients
- ▶ Supplies the soil with beneficial micro-organisms

Alexander, 2003

Quality

Customers expect the compost they buy to be of high quality, effective and safe to use. Producing consistently high-quality compost is the key to better prices and marketing success. Quality is determined by a number of factors, but most of all by input materials. It is essential to ensure that raw materials are not contaminated (e. g. with chemicals or heavy metals) and that the final product does not contain dangerous or unsightly products, such as needles, shards of glass or pieces of plastic. This topic is further discussed in Section 5.2.

How is compost produced?

Compost is produced through controlled aerobic decomposition of organic matter by microorganisms. Microorganisms thrive in a moist, warm environment with an abundance of organic matter and air. If conditions are too hot, cold, wet or dry, the composting process will be compromised. Through their activity, the microorganisms generate heat, which can kill pathogens and denature weed seeds. Turning compost, though not always necessary, can help ensure that all organic matter has been exposed to high temperatures during production.

Composting can be undertaken at a very small or very large scale. Some producers have a series of decentralised production units, while others have a single centralised facility. The composting process can take as little as two months, though compost is ideally matured prior to use, which takes up to three or four months. In cold weather, high altitudes or very dry conditions, the composting process may slow down or even stop.

There are many different methods of making compost. They range from a simple pile or 'windrow' to complex fully automated plants. The following box briefly presents some examples. Some issues relating to compost production and quality are discussed in Sections 5.2 and 5.3. For further information on methods of making compost, refer to the General Composting Literature section in Chapter 10.

It is assumed that selection of appropriate of technology, availability of organic waste, climatic considerations, and water supply will have been considered in your feasibility assessment. Understanding your market is a complementary aspect of the feasibility assessment.

Further information on composting technologies and how to set up a composting scheme is provided in the book Rothenberger et al. (2006) *Decentralised Composting for Cities of Low and Middle-Income Countries*. This book can be downloaded for free at www.sandec.ch.

Composting methods



Photograph: Jonathan Rouse

Barrel composting (Dhaka, Bangladesh)

This barrel is installed in a low-income area in Dhaka, Bangladesh. It receives organic waste from four families. The compost produced is of high quality as the waste is uncontaminated. It is sold to a local NGO.



Photograph: Johannes Paul

Vermi composting (Bais City, Philippines)

Vermi composting predominantly uses worms rather than microorganisms to digest the waste. Raw materials are spread daily in thin layers and cannot be piled very high, so the technique requires much more space than other methods. Worms are also more sensitive to temperature and contamination than microorganisms. The advantage of vermi-composting is the high nutrient content and public acceptance of the product.



Photograph: Silke Rothenberger

Pit composting (Pune, India)

Biodegradable waste is placed in shallow pits and left to decompose for several months. This method is very simple and often practised in public parks or domestic gardens. In rainy conditions, it is susceptible to water logging.



Photograph: Silke Rothenberger

Pile composting (Jordan, Palestinian Territories)

In Arab countries, various types of waste, such as animal manure, saw dust, straw, and agricultural waste are piled in layers and covered with soil and plastic. The pile, which remains untouched for about ten months, undergoes slow decomposition under anaerobic conditions. The decomposed material is applied to the field prior to planting.



Photograph: Jonathan Rouse

Manual windrow composting (Dhaka, Bangladesh)

A windrow with a triangular cross-section is a convenient way of piling in long rows organic matter for composting. Windrows can make fairly efficient use of space and make compost turning relatively easy. In the case illustrated, windrows are turned manually to allow sufficient air supply. The aerobic condition allows the compost to mature within three months.



Photograph: Silke Rothenberger

Mechanical windrow composting (Luxor, Egypt)

This system is comparable to manual windrow composting but is operated at a larger scale as mechanical equipment is used. Mixed waste is screened prior to composting. The organic waste, piled onto long windrows, is turned frequently by a machine.



Photograph: Jonathan Rouse

Compost chute (Sri Lanka)

In this compost chute in Sri Lanka, waste is fed at the top. As more waste is added over a period of a few months, mature compost emerges at the bottom. Other techniques require rotating drums or several conveyor belts.



Photograph: David Kuper

High-tech aerated static pile composting (Bali, Indonesia)

Instead of manual or mechanical turning of the compost, in this case the pile remains unturned. Air is forced through the material by pipes using a mechanical ventilator. In Europe, the piles are additionally covered by a geo-textile to reduce moisture losses.

2.4 Basics of market research and marketing

Marketing requires research on customers, opportunities, competitors, and products. High-quality market research will take time and cost your business money, however, it is an investment that pays dividends in the long run. This section presents an overview of important aspects of market research, some of which are more comprehensively covered further on.

Who should undertake market research?

Internal staff or marketing specialists can conduct market research. Internal staff should have a thorough knowledge of the product and business, but may lack specific marketing expertise. However, one clear benefit of using existing staff is that they are already on the payroll. Marketing specialists, on the other hand, will have to be contracted, but they can offer specialised marketing knowledge as well as impartiality. If they are not compost specialists, they are best suited to providing support to the internal staff in market research. Many composting companies employ an agronomist or agricultural engineer with marketing training.

Linking the business with the market

A composting plant in Mysore, India, employs several agricultural engineers who advise farmers in rural areas. This direct contact allows the employees to assess farmers' demand patterns, their needs, and experience in compost use.

Grüschow Entsorgungs- und Umwelttechnik, a German company, also employs an agricultural expert who is in direct contact with the farmers and feeds back information to the production manager. Furthermore, the company has signed a consulting contract with a regional research institute to support the development of new products which comply with local legislation.

You will need to decide who undertakes market research based on your business resources. Some of the tools described in this section require considerable skills. As an alternative to hiring a marketing specialist, your organisation may choose to seek training, or enter into partnership with another organisation experienced in market research.

Marketing requires careful planning

Most market researchers don't need more information, they need better information. Alexander 2003

Market research requires careful planning. It is vital to ensure that only relevant data are collected, from relevant people, in an efficient manner. Before embarking on any research, carefully consider what you need to find out. What questions will you ask and of whom? What is your budget, and how can expenditure on marketing be kept low? Collecting irrelevant or unnecessary data will waste time and money, and make analysis much more difficult.

Particularly for small businesses, cost saving is a high priority. There are many ways of keeping costs low, particularly by:

- ▶ making use of existing data and research; and
- ▶ carefully planning your own research to avoid wastage.

There are various strategies for collecting information on potential compost markets. The most common sources are secondary data (existing reports, statistics, articles etc.) and primary data (that collected from scratch). Both methods can generate two types of data: qualitative or quantitative. Both types of data are important to understand the market for your products.

Secondary data collection

Since it is possible that some market research has already been conducted, it is well worth consulting it before embarking on your own. This can be an important way of saving time and money. Secondary data should be relevant for your local condition: data from other cities or even countries may have limited value because of the diversity of conditions. Secondary sources of data include:

- ▶ maps;
- ▶ population data (e.g. income levels, interests, spending on gardening);
- ▶ statistics on chemical fertiliser use;
- ▶ price lists for fertilisers or manure;
- ▶ data on nurseries and farms in the area;
- ▶ studies assessing the use of manure or compost on farms;
- ▶ magazines, newspapers and newsletters associated with nurseries, agriculture and even home-gardening;
- ▶ brochures of fertiliser companies and other composting businesses; and
- ▶ relevant publications by local universities.

Data collection in the Palestinian Territories: The NGO 'Palestinian Wastewater Engineers Group' (PWEG), wanted to conduct a survey among farmers. As they were not familiar with the sector, they looked for a suitable way of accessing farmers. Agricultural supply shops where farmers frequently came to buy pesticides, fertilisers, seeds or mechanical equipment turned out to be an ideal location. PWEG conducted some interviews in partnership with the shopkeepers who were then asked to continue the interviews themselves. This strategy saved the small marketing team a lot of time. PWEG developed two different questionnaires –one for compost users and one for compost producers. Annex 4 contains one of these questionnaires.

Quantitative Data	Qualitative Data
<p>Quantitative data reflect information that can be counted. Questions seek to quantify issues.</p> <p>Typical questions include:</p> <ul style="list-style-type: none"> ▶ <i>How many</i> farmers are located within a radius of 20km from my location? ▶ <i>How many</i> nurseries exist in this city along the main roads? ▶ <i>How much</i> fertiliser do they apply? ▶ <i>How much</i> compost could they apply? ▶ <i>How often</i> do they apply? ▶ <i>Where</i> (at what distance) are other potential customers located? 	<p>Qualitative data reflect opinions and perceptions. This information provides insight into customer preferences and behaviour. It helps you design your product and marketing strategies.</p> <p>Typical questions include:</p> <ul style="list-style-type: none"> ▶ <i>Why</i> do farmers choose this product? ▶ <i>What</i> do farmers consider to be the most appropriate product for their purpose? ▶ <i>For what</i> is compost used? ▶ What are the advantages/disadvantages? ▶ <i>What</i> features must compost/fertiliser have? ▶ <i>How and when</i> do farmers use compost/fertiliser?

Table 2.1: How to assess quantitative and qualitative data

Data can also be collected directly from NGOs, trade and agricultural organisations, local and regional research institutes or municipal departments.

Secondary data sources can provide a preliminary overview of the market environment. However, they will not be perfectly tailored to your information needs, and their accuracy may be difficult to guarantee. Also, information will not be unique: one of your competitors may have already benefited from the insights so you will not have the 'knowledge advantage'.



Primary data collection

There is no substitute for face-to-face contact for really understanding the attitudes, perceptions and needs of a customer.

If you want to generate unique data, suited exactly to your needs, you will have to undertake primary data collection. This is well suited to gauging the interest in your specific product, assessing willingness and ability to pay and understanding attitudes towards compost in general.

Researchers may use various tools, including:

- ▶ **Informal discussions.** These can take the form of visits to individuals and businesses to discuss compost and its use. Such discussions need not follow a list of questions, but researchers should keep in mind key areas for discussion (e.g. level of knowledge about the use of compost, quantities required etc.). This is a resource-intensive option but allows direct contact with existing or potential customers. Observation can be a useful way of corroborating findings from discussions.

- ▶ **Questionnaires.** These can be administered by post, e-mail, the Internet, in person or even by telephone. Questionnaires are a relatively expensive option and can require considerable human resources, skills and time for analysis. This method can also be less effective due to low response rates, and may be inappropriate for certain groups (e.g. illiterate respondents).

- ▶ **Focus group discussions.** These can be a highly effective method of collecting information from a group of individuals. A focus group usually involves a facilitator and about ten participants. Discussions may be quite free but centred on particular topics by the facilitator. For example, a group of nursery owners or a group of farmers could be invited to a discussion.

Focus groups are particularly useful for in-depth investigations on attitudes and perceptions. They are not so useful for collecting quantitative data. It is important to bear in mind that opinions expressed by a focus group may not

represent those of the population at large. Conducting and analysing focus group discussions require skills and experience.

Who should you consult?

Just as one carefully chosen spoon of food will let you know how a dish tastes, a carefully selected sample will tell you about your market.

Adapted from Kotler et al. 2006

Before embarking on any market research, you need to categorise your subjects into segments (cf. Section 4.1) and then select a representative 'sample'. For instance, if your household market consists of middle and high-income households, your sample should reflect this.

Selecting a group of people to interview requires some thought, as it is easy to 'bias' data by choosing a non-representative group. If you want to find out about willingness and ability to pay for compost among nurseries, you will not only ask wealthy nursery owners, as it is likely that their response will not be representative of all nurseries. Smaller, poorer nurseries should also be consulted, as their financial status may be very different and they could also be a viable market for your business.

The number of people consulted is termed 'sample size'. By making your sample size too large, you will waste time and money collecting and analysing unnecessary data. On the other hand, if you consult too few people, your findings may not be representative. Defining the adequate sample size is a science of its own. However, the following table provides a rough guide to the number of individuals or companies to be interviewed to draw a reliable conclusion.

Total number of target group (market segment)	Low sampling error	Medium sampling error	Still acceptable sampling error
100	50	50	49
250	152	110	70
500	217	141	81
750	254	165	85
1000	278	164	88
2500	333	182	93
5000	357	189	94
10 000	370	192	95
50 000	381	195	96

Table 2.2: Overview of representative sample sizes for surveys (adapted from Barlett et al. (2001) and Rothenberger et al. (2006))

Data collection examples

Household survey

From statistics you know that about 500 households are located in your neighbourhood and you would like to assess their need for compost in home gardening. You choose to interview 40 to 50 households, including wealthy and middle-income households. This provides you with fairly representative data of all households.

Market sector survey

According to the register of companies, there are 50 nurseries in town. You realise there is no need to visit all of them, so you randomly select 10 nurseries of varying size and location, which you visit to conduct interviews. You contact the manager to arrange your visit, and to ensure that the person responsible for purchasing compost will be present during discussions. The information provided allows further evaluation of the overall market size.

Farmers' attitudes

You want to learn more about farmers' perceptions and needs. You visit a village and ask farmers to meet as a group to discuss their farming practices with respect to fertiliser use and seasonal patterns. They give you one hour of their time and a lot of useful information. In return, you offer them a 50 per cent reduction on their first compost purchase.

Once you select a representative sample, you will need to carefully determine exactly whom you wish to interview. The following example illustrates the importance of this step.

Choosing appropriate respondents

A small composting business wishes to conduct market research among local householders to assess their interest in the product. They pay visits to homes in the evenings and briefly interview the head of each household. Although they had carefully developed the questionnaire and spent time analysing the data, they realise that they had interviewed the wrong people. In these households, the head of the household generally has no interest in gardening and simply pays the gardener a monthly salary for his work. They should have interviewed the gardener to understand his attitude and views on compost, the products he currently uses and his budget. This mistake costs the business time and money.

Remember that participants in any research have a right to confidentiality. Be sure to explain the purpose of the research and ask permission to use and record their responses. Participation in any research should be voluntary.

Asking questions

It is important to phrase questions in such a way that they do not influence the response. Questions can be posed in different ways to reveal different information as illustrated in the following examples:

- ▶ **Open questions** reveal general information and indicate how much the person knows about the issue. *Example: Can you tell me about the difference between compost and manure?*
- ▶ **Closed questions** are more restrictive and allow mainly “yes” or “no” or one clear answer focusing on a topic. They can be useful when you need to generate quantitative data, (i.e. numbers to analyse: 70 per cent say ‘yes’, 30 per cent say ‘no’). *Example: Do you think compost is more beneficial to plants than manure? These closed questions are often followed by an open question asking “Why” or “How”.*
- ▶ **Leading questions** can influence the answer of the person asked. They should be avoided except when used in gentle provocation, as individuals will oppose a leading question only in case of strong objections. *Example: Compost is much better than manure, isn’t it?*
- ▶ **Alternative questions** give a choice of answers and preferences. *Example: For your seedlings do you prefer a soil mixture with compost or with manure?*

Open questions invite people to express their considered opinions in their own words. People tend to respond more honestly to open questions than to closed or leading questions. It is also more difficult to answer an open-ended question if it has not been properly understood, whereas answering a closed question only requires a simple yes or no.

Designing questionnaires

Questionnaires will be designed differently depending on whether you are collecting quantitative or qualitative data. However, all questionnaires need to be pilot tested, and the following factors must be considered in their design:

- ▶ Does the flow of the questions work (i. e. are they in a logical order)?
- ▶ Are the words understood? Are they too difficult, too simple or ambiguous (e. g. confusion between compost and chemical fertiliser)?
- ▶ Do the response categories in quantitative surveys capture all options?
- ▶ Is there any cultural sensitivity in relation to specific questions? Could any questions be offensive?
- ▶ Are the questions interpreted in the same way by different respondents? (This is referred to as reliability).
- ▶ Do they measure what they are supposed to measure? (This is referred to as validity).
- ▶ Are the questions answered in the same way if repeated with the same respondent? (This is referred to as reproducibility).

Adapted from WHO, 2008

The time at which questions are asked can make a difference to the data you collect. Just as the supply of raw materials to your composting plants is seasonal, so are some markets. If you ask a householder how much compost he uses in summer, he may give a different figure than if you ask him the same question in winter.

Data analysis and reporting

There are many sophisticated pieces of software on the market to help with analysis, but it is probably unnecessary for most composting businesses to invest in these. By keeping your research simple and relevant, your analysis should remain fairly simple. A calculator or common spreadsheet programme (e. g. Excel) will often be sufficient for analysing quantitative data.

Present your findings in a way you and your colleagues can understand now and in the future. Prepare a full report containing tables, figures and comments and prepare graphs and charts to summarise data. Graphs and charts can be particularly useful for making impressive presentations to investors for your business. The report will be an important tool for monitoring and evaluating your business and marketing efforts.

3 The marketing environment

So far, we have introduced the concept of marketing, considered why it is important for compost businesses and described some of the main research methods. This section is concerned with the first marketing step, i.e. understanding the marketing environment.

Composting businesses operate within a highly complex and dynamic environment, which is largely impossible to control and often difficult to predict. It is important for a business to understand the marketing environment, as it can present a multitude of opportunities and threats. The following table summarises the external factors and forces of the marketing environment.

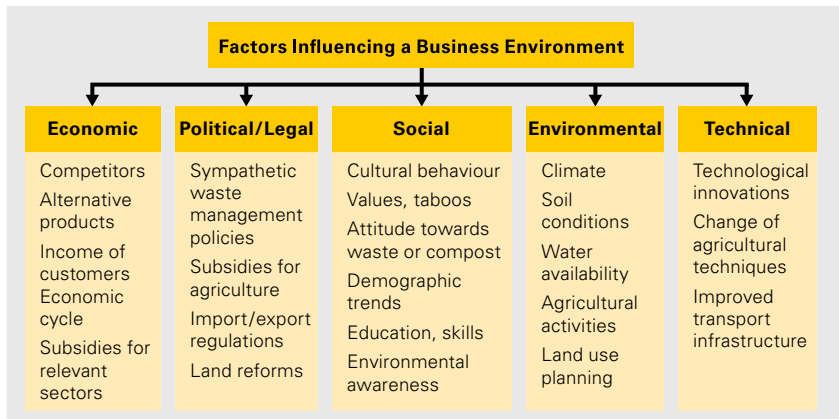


Figure 3.1: Factors influencing a business environment. These factors are hardly ever static but constantly changing. They may affect your business directly or indirectly

Understanding the marketing environment should not be viewed as a one-off activity. Since the environment may be constantly changing, it is imperative for a business to keep abreast of changes.

Some elements of the marketing environment are discussed hereafter in more detail. Others, such as people’s attitudes, perceptions and awareness, are discussed in Chapter 4: Market assessment.

3.1 Competition

Competitors are the other businesses offering compost or other products used in a similar way, such as topsoil, manure or fertiliser. Businesses must always consider their competitors as a potential source of information, threats or alliance.

Typical competing products for compost are:

- ▶ fertile topsoils mined and transported to the end user (peat, red soil etc.);
- ▶ chemical fertilisers;
- ▶ animal waste (chicken manure, cow dung etc.);
- ▶ raw municipal refuse;
- ▶ human faecal sludge (from pit latrines and septic tanks) and wastewater sludge;
- ▶ nutrient-rich waste from industrial processing (neem cake, brewery and distillery waste); and
- ▶ mined decomposed landfill material.

Competitors can be seen as a source of information on what works and what does not. They can guide you towards (or away from) certain choices about products and customers. They can even present you with an opportunity to collaborate, for example, sharing distribution networks.

You need to assess what products and businesses will compete with you. Consider if there is room in the market (i.e. a sufficient number of customers) for you to sell compost to the same market segment as your competitors. Could your business offer something unique, such as better value, higher quality or convenience to customers? If not, you may consider offering a different product or simply targeting different market segments.

A historical and prospective view on the environment can also be illuminating. For example:

- ▶ Have any other businesses tried composting locally before? Did they succeed or fail, and why? What is different about your business?
- ▶ Are any businesses planning to set up in the future and, thus, become competitors?
- ▶ Is any legislation emerging which could support or threaten your venture?
- ▶ Are your neighbours likely to copy your idea and become your competitors?

3.2 Legislation

Policies, regulations and laws can affect decisions about your composting plant location, method of production, target markets and so on. Some legislation restricts composting: for example, EU laws addressing prevention of diseases dictate that food waste from canteens or restaurants must be heat-treated prior to composting or composted in enclosed areas, with no vector pathway to transmit disease (EC-Ordinance No. 1774/2002). This means that many composting plants only accept garden waste. Other forms of legislation support composting. For instance, local authorities in India are bound by the Municipal Solid Waste (MSW) Rules 2000 to prevent organic fraction from being landfilled. Composting is one of several official treatment options for organic waste. This has a supporting function for new composting ventures, and municipal authorities may provide land or support new businesses in market development.

EU policy driving commercial composting in the United Kingdom

There are currently two driving forces behind composting in the UK. The first is obviously to compost for environmental reasons to reduce the use of chemical fertilisers and to slow the rate at which landfills are being filled.

The second driving force is the European Union Landfill Directive. If the UK (or any other EU Member Country) fails to achieve the targets to reduce the total quantity of landfilled organic material, they are subject to fines.

Enviros Consulting, 2006

Regulations and legislation relating to composting vary from country to country. Prior to starting a composting project, the laws and regulations likely to influence the project need to be examined thoroughly to avoid delays or even cancellation of the project. If necessary, seek advice from a lawyer, NGOs, agricultural or business associations, agricultural research institutes or the municipal authorities.

The following are a selection of laws and regulations which can affect composting businesses:

- ▶ Environmental laws – may include legislation supporting or limiting waste recycling and reuse.

Enforced environmental laws as an opportunity in Jordan: *In the past, farmers in the Jordan Valley used untreated chicken and cow manure as organic fertiliser. The hot and humid conditions favour fly breeding, thus causing unbearable conditions for neighbouring residents. Particularly tourists visiting the Dead Sea area – an important source of income for Jordan – complained about the nuisance. In 2007, the Ministry of Environment introduced a bylaw prohibiting the use of untreated manure and forcing farmers to look for alternative fertilisers. Compost, which was not competitive in the past, has become a viable alternative. The market potential is estimated at about 400 000 tonnes per year. Existing compost producers are trying to develop this large new market before new competitors catch up.*

- ▶ Solid waste management rules and regulations – may support waste recycling and reuse.
- ▶ Land use regulations and urban planning strategies – may include regulations regarding the construction and operation of waste treatment plants. In some cases, the setting up of such plants in residential areas is prohibited.
- ▶ Agricultural laws – may regulate how agricultural waste is reused (e. g. quality certificates, reuse limitations, pollution control). Check the policy related to subsidies for chemical fertiliser use.
- ▶ Trade laws and regulations – you may have to register the product if you want to market compost.
- ▶ Regulations governing organic farming – particularly important if you want to focus on export-oriented fruit and vegetable cultivation.

How NGO activity can influence legislation

Waste Concern, an NGO based in Bangladesh, began composting a number of years before any solid waste management legislation was in place. Thanks to their practical activities, the NGO gained considerable experience in solid waste management. Since it always maintained close contact with municipal and environmental authorities, its efforts, research and practical experience actually helped shape the policy now in place.

Impact of international standards at local level

International standards can also impact the market. One business in Sri Lanka was producing high-quality compost but was unable to sell it to organic tea plantations – one of the largest compost users. The various international organisations issuing organic certificates to plantations do not allow application of urban waste-derived compost for quality reasons. The standards of such compost are considered too difficult to ensure because of the possibility of contamination.



The role of subsidies

Subsidies are often linked to national policies from which compost businesses can derive benefits or disadvantages. In India, since chemical fertilisers are subsidised, they are far cheaper (at least in the short run) than compost and, thus, reduce the competitiveness of compost producers, as these are excluded from the subsidies. However, subsidies can support compost producers if, for example, local authorities allot compost producers some of the savings achieved from reduced landfilling costs as a result of composting activities. In Sri Lanka, many compost producers feel that the introduction of such a subsidy would revolutionise the business and make them profitable.

3.3 Opportunities and threats

Analysing opportunities and threats is an aid to understanding the marketing environment. It involves taking each element of the market environmental in turn and considering the direct and indirect opportunities and threats. These can then be ranked according to:

- ▶ the significance of their potential effect;
- ▶ their imminence – how soon they will have an impact; and
- ▶ the degree to which it is possible to react, either to maximise benefits from an opportunity or minimise the effects of a threat.

Revisit Figure 3.1: Factors influencing a business environment. The diagram can be used to help structure your opportunities and threats analysis. Consider the following questions:

- ▶ How have each of these factors affected you in the past? How have they affected your decisions? Which have led to success, and which have caused you problems?
- ▶ How could you transform threats into opportunities? For example, people's preference for cheap manure may be a threat. However, this indicates

an awareness of the need for organic matter, which could be turned into an opportunity for your business.

- ▶ How can you react to other threats, such as responding to changing legislation?
- ▶ How can you capitalise on opportunities?

You may find it helpful to express your historical and future opportunities and threats assessment in a matrix similar to the one below. The left-hand side is concerned with the past, the right-hand side with the future. Writing down your thoughts will enable you to consult them in the future.

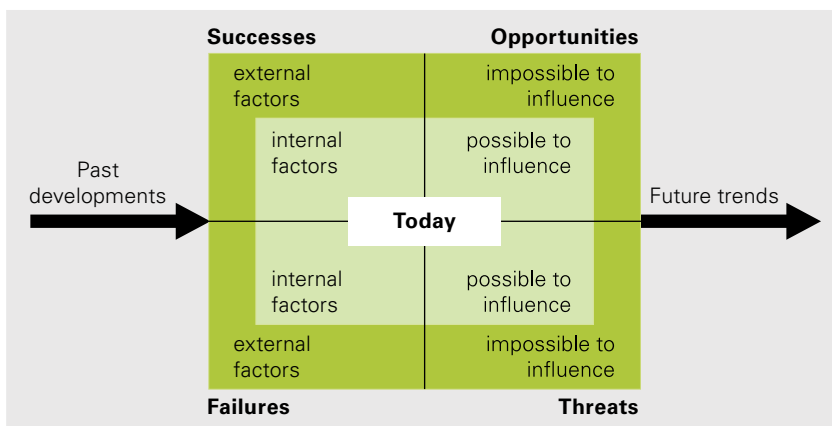


Figure 3.2: Matrix to evaluate success, opportunities, failures or threats for your business or project. List all the factors influencing your current project in the matrix

Examples of opportunities and threats

- ▶ Technological innovations: These can strongly influence your project. Technical development can create new opportunities. Sound and appropriate technology can help ensure a high-quality product and long-term success of your initiative.
- ▶ Climate: The climate may already have caused your composting project to fail (e.g. heavy rainfall saturating the composting windrows). Although you cannot change the prevailing climatic conditions, you can adjust your technology, for example by roofing your composting site or providing a drainage system.
- ▶ Competing products: Cow dung or poultry manure may compete with compost, especially if they are abundantly available at a low price. Such competing products pose a considerable threat. In such instances it may be difficult to in-

fluence the market unless you are able to provide compost at a lower price or convince customers of its higher quality.

- ▶ Import regulations: These cannot be controlled but can offer an opportunity. Where fertiliser or compost imports are restricted or difficult, locally produced products have a better chance on the market.

4 Market assessment

So far, you have studied the marketing environment and should have acquired a better understanding of how competition, legislation, standards, and subsidies influence your business. Now we turn attention to target customers. What do you need to know about them?

Since customers make or break any business, satisfying them is central to marketing. This section deals with developing a detailed understanding of markets and customers in order to target them and win them in the long-term for your business. It describes what makes a customer; how to categorise them; and how customer attitudes, perceptions and willingness and ability to pay affect your business.

Market assessment demands gathering information from current and potential customers on a range of topics.

4.1 Segmenting your market

The market for compost is diverse, ranging from farmers with seasonal bulk requirements to domestic gardeners wishing to purchase a small but steady supply of compost year-round. Segmenting provides a way to categorise your customers into groups with similar characteristics and requirements. Markets can be segmented according to:

- ▶ occupation (farmers, nurseries, estate developers, gardeners etc.);
- ▶ location (rural / urban);
- ▶ purchasing power / ability to pay (large cash crop farms vs poor rural farmers);
- ▶ crop type (food, non-food);
- ▶ frequency of compost purchase (frequent, perennial, seasonal);
- ▶ scale of demand:
 - ‘bulk’ or ‘volume’ markets demanding large quantities but not willing to pay high prices; and
 - ‘cash’ or ‘value’ markets paying higher prices but requiring less compost.

‘Scale of demand’ can be a useful first step in categorising the market segments. Some examples relating to each market are given in Table 4.1 below. This list is not exhaustive and your research may reveal many more.

Bulk/Volume market	Cash/Value market
<ul style="list-style-type: none"> ▶ urban and peri-urban agriculture ▶ nurseries rural agriculture ▶ viticulture (wine) ▶ green space management (parks, zoos, sport arenas) ▶ forestry ▶ landfill rehabilitation, mining rehabilitation ▶ fertilisers/distribution company ▶ municipalities 	<ul style="list-style-type: none"> ▶ horticulture (flowers and trees) ▶ home gardening ▶ vegetable gardening ▶ hotels and company premises ▶ landscaping, land development ▶ fertiliser companies (retailers) ▶ industrial use (biofilters)

Table 4.1: Typical bulk and cash markets for compost or products containing compost

Beware of treating segments as homogenous when they are actually diverse. For example, the segment of ‘farmers’ may need to be further divided into:

- ▶ large-scale cash crop farmers;
- ▶ smallholders; and
- ▶ organic farmers.

Each may have very different characteristics, needs, attitudes, knowledge, and financial status.

Market segments in Karachi, Pakistan

Over the years, Waste Busters have developed a niche in three market segments.

- ▶ 50 per cent of the compost market goes to high-value crop growers, such as vegetable and fruit farmers, horticulturists, flower growers, and landscapers. Compost is considered more environmentally friendly than raw cow dung or other manure.
- ▶ 30 per cent of the compost market is home gardens where the compost is sold through nurseries in small bags.

- ▶ 20 per cent of the compost market is landowners with problem soils (e.g. salinity). Compost is used to improve the soil. Compost is sold in bulk (1500Rs/ton) or in small bags (15Rs/kg) for home gardens.

Adapted from Ali, 2004

Present market

It is usually less expensive to make current customers happy than it is to find new ones. Alexander, 2003

Market segments are usually dealt with in two groups: current and potential. If you are still planning your composting business, you will not have any current customers, so you will focus on potential customers from the outset. If your composting business is already established, you will hopefully already have some customers.

List your current market segments in a table and describe and quantify your customers. This will provide a first comprehensive overview of your current market. Table 4.2 below contains some examples and basic information. A blank version of the table is included in Annex 2.

Your current customers will only remain loyal if they continue to feel satisfied with your product. Asking your customers the following questions will help assess their level of satisfaction, as well as build your relationship with them. Your response will hopefully result in increased customer satisfaction.

Key questions with regard to current customers:

- ▶ Are your customers generally satisfied or dissatisfied with the compost?
- ▶ What do customers think of the quality of the compost?
- ▶ What problems have customers had with the compost?
- ▶ What improvements would your customers like to see in your product?

Potential for expansion:

- ▶ Is each of your present market segments 'saturated' (i.e. are you selling to everyone in the segment as much as they want/need)?
- ▶ Which segments of your present market could be expanded?

Segment	Description and geographic location	Volume	Frequency of demand	Number of customers in this segment	Comments (e.g. location, income, reliability, payment terms etc.)
<i>Farmers</i>	Rural agriculture, farmers hesitate to apply compost	High	Seasonal / annual demand	600	Considerable distances – transport implications. Low ability to pay, reliable demand. Low value but high-volume segment.
<i>Cash crop farmers</i>	Several farms (tea, banana) in the urban vicinity. High demand but also high quality requirements	High	Seasonal - twice a year	5	High ability to pay, expect high quality and delivery in time.
<i>Nurseries</i>	Mostly urban or peri-urban flower or plant growers	Medium	Frequent demand	60	Often a local market. Medium ability to pay, reliable market but considerable competition, including from homemade compost.
<i>Real estate developers</i>	Urban customers require compost as soil substitute for landscaping in different areas	High	Irregular but high demand at one time	5	Require delivery on demand; check estate development announcements to identify new projects.
<i>Middle/high-income households</i>	Private gardeners in urban vicinity using compost for vegetables or flowers	Low	Not strongly seasonal, though peaks during spring	1000	Local market, high ability to pay and repeat custom / simple distribution via retailers or pick up. High price segment.

Table 4.2: Describing the present market by segment - some hypothetical examples from ‘Town X’

Potential market

The potential market is the market of tomorrow, comprising:

- ▶ those who want or need compost but do not know about it or are not convinced of its benefits;
- ▶ those who are buying compost from a competitor; and
- ▶ those who still use competing products such as cow manure or artificial fertiliser.

Identifying your potential market segments (known as 'prospecting') begins with brainstorming. The following questions may focus your ideas:

- ▶ What conventional customers could you reach which you have not already?
- ▶ What new/future uses of compost can you foresee, and who would be the users?
- ▶ Which groups are most willing to try new ideas? Which can afford to take risks and which are risk-averse¹?

New-customer prospecting in Germany

A compost producer wanted to assess the market in housing development areas. He knew a family that moved into the new area. When the family decided to develop its garden, the producer provided them with a free truck-load of compost-amended top soil (delivered on a Saturday afternoon when all new house owners were in their gardens). Neighbours, who saw the truck with the logo of the company, became interested. The first orders for compost-amended top soil were placed with the company even before the truck returned to the plant.

Grüschow, 2006

The marketing principles presented in this handbook apply as much to current customers as to new customers. Make a list of potential customers similar to that for current customers in Table 4.2.

¹ This issue is described by the 'adoption curve'. Cf. Kotler et al. (2006), p 160 for more details. It suggests that 'Innovators' and 'Early adopters' are those taking the risk of pioneering the use of a new product.

4.2 The customer

What makes a customer?

A customer is someone who wants or needs your product and is willing and able to pay for it. The following table presents a range of scenarios, indicating whether the customer needs or wants your product, and whether he is willing and able to pay for it. The last column indicates whether or not the scenario comprises a market.¹

Scenario	Need	Want	Able \$\$\$	Willing \$\$\$	Market ?
1. A rural farmer needs and wants to buy compost to improve the very poor soil quality of his fields. However, although he thinks the price is reasonable, he is simply not able to pay for the product, as he is too poor.	√	√	x	√	x
2. A wealthy householder uses compost for growing flowers in his garden. He wants compost but has no great need for it: his plants can grow without it and he can afford chemical fertilisers. He nevertheless purchases compost.	x	√	√	√	√
3. A nursery owner needs compost for healthy plant growth and wants to buy some on a monthly basis. He is a successful businessman and is able to pay the price, but considers it too expensive compared to cow manure. He is therefore not willing to buy it.	√	√	√	x	x
4. A tea grower is not convinced of the usefulness of compost but has been advised that since his soils are degrading, he needs to add organic matter as soil conditioner. He is able and willing to pay for compost.	√	x	√	√	√
5. The government wishes to expand organic farming and subsidises compost use. Farmers are hesitant to use compost but are able to buy it as the government provides loans.	√	x	√	√	√

Table 4.3: Matrix for customer assessment (Adapted from Ali, 2004)

¹ Of course, customers must also know about your product, be convinced of its benefits and be able to access it. These important issues are dealt with later in this handbook.

Willingness and ability to pay

A compost producer in South-East Asia said ‘customers are willing to pay for our compost because of our proven performance, quality assurance, reliability, and transparent pricing policy’.

Table 4.3 reveals that customers must always want or need your product and be both willing and able to pay for it.

Ability to pay is related to people’s financial situation, including their income and access to credit. It may also be related to seasonal flow of finance, or even decision-making power. Ability to pay is a relatively fixed figure, although providing credit or flexible terms of payment can increase it.

Willingness to pay is a more flexible concept, as it is partly dependent on priorities and perceptions. It reflects the appreciation for a product rather than a real market price. Willingness to pay can increase through education, but can also be damaged by bad reputation. In Section 2.2 we deal with a list of reasons why marketing is of particular importance to composting businesses. Many reasons relate to quality concerns, competition with other products and stigmatisation of waste-derived compost. Since these factors affect people’s willingness to purchase compost, they need to be well understood and tackled through marketing. These issues are also vital for pricing decisions discussed in detail in Section 6.2.

The following diagram illustrates the willingness and ability to pay relative to production costs for four scenarios, described below.

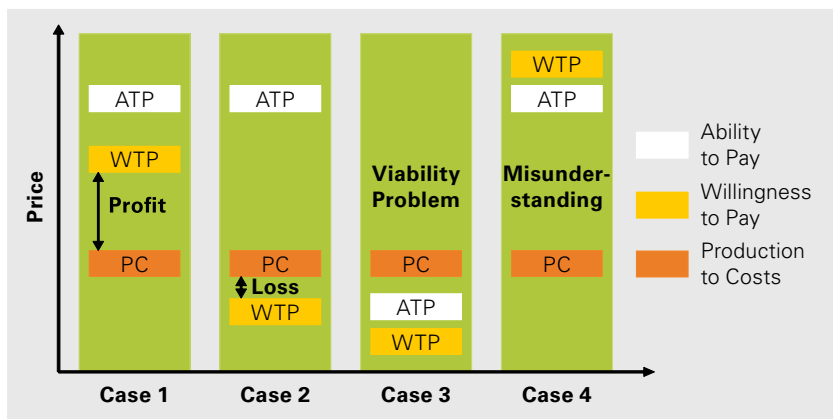


Figure 4.1: Evaluation of willingness and ability to pay

Case 1: If willingness to pay is higher than production costs and compost is priced accordingly, the business is likely to make profits.

Case 2: Willingness to pay is lower than production costs but the ability to pay is high. This indicates a lack of appreciation for the product. Find the reasons and improve willingness to pay by promotional activities and education.

Case 3: Ability to pay must be higher than production costs; otherwise it will be impossible for your business to ever cover costs through sales alone. If customer ability to pay is below production costs, either reduce the costs or look for new customers and other income opportunities (e.g. subsidies).

Case 4: Data suggesting that willingness to pay exceeds ability to pay should be viewed with caution. In such a case, respondents have either not understood the question or have accounted for some other factors in their answer (e.g. subsidies).

Key considerations for willingness and ability to pay

- ▶ Are customers willing to pay the present price of compost?
 - Why/why not? Understanding the reasons can help you understand how to increase customer willingness to pay, i.e. education, promotion etc.
 - What would make them more willing to pay for compost or willing to pay a higher price?
- ▶ How easily are the customers able to pay the present price of compost?
 - Knowing what customers are able to pay can help you develop products or product units (quantities) affordable to specific segments.
- ▶ Are customers able to purchase as much compost as they want at this price?
 - If customers are limiting the amount they purchase because they are unable to pay the price, your business could benefit by lowering the price and, thus, increase sales.

Farmers' willingness but inability to pay in Bangladesh

A market assessment in Bangladesh revealed that organic farmers, who require regular compost supplies for their land, are one of the largest potential markets for compost. Many farmers are keen to switch to organic methods because of the premium prices fetched by organically grown produce. They also face health problems associated with the use of chemical fertilisers and spiralling costs, as the quality of their land deteriorates and requires more chemical inputs year after year.

During the first year, a farmer switches to organic farming and requires a very large quantity of compost to improve soil quality. However, this first year can prove more expensive than buying chemical fertilisers for a whole year. Despite savings for subsequent years when less compost is required as the condition of the soil improves, this first year can prove too great a barrier for many farmers. It is a major disincentive to the adoption of organic practices in Bangladesh.

Ali, 2004

Farmers' willingness and ability to pay in Nepal

The NGO ENPHO conducted a market survey among farmers to evaluate their willingness to pay for compost. During a group discussion, the farmers expressed their willingness to pay up to 4–5 NRs/ kg for compost. A comparison with a previous study (2004) revealed contradicting results at first glance. Here, farmers were willing to pay 0.5 NRs/kg for compost – a price far below the current production costs. However, these farmers also stated that they buy raw material for their own compost production at 1.2 NRs/kg. Accounting for a 60 % volume loss during composting and production costs, these farmers pay up to 4 NRs/kg for their own compost. Consequently, effective promotion could turn this ability to pay into willingness to pay.

Frömelt, 2007

4.3 Understanding your market better

It is necessary for you to acquire a detailed understanding of your market. Some information can be obtained from secondary sources, but you really need to spend time talking directly to customers; these hold the answers to the key questions you should be asking.

This section introduces some of the key questions you need to ask in order to develop profiles of your market segments. The list of questions below is only a guide; questions need to be adapted for your own customers and compiled into a coherent questionnaire. Annex 4 offers two examples of such questionnaires.

Geographical

- ▶ Where are your customers located?
- ▶ Do they have means of transport (i.e. can they collect compost themselves)?
- ▶ How can they access your compost?

Uses

- ▶ What do customers want or need from compost?
- ▶ How will they use it?
- ▶ Why do they want compost?

Quantity

- ▶ How much compost will they use and how often?
- ▶ Is the market limited by the number of customers, cost or supply of compost? (i.e. do people buy as much as they can afford or as much as is available?)
 - If compost is limited by supply, how much would the customer like to buy?

Quality

- ▶ What quality do customers require?
- ▶ Why? (e.g. aesthetics or safety for food crops)
- ▶ What types of input materials are acceptable? (e.g. agricultural waste, urban waste, sewerage sludge, human waste)

Attitudes and perceptions

When assessing a market segment, consider customer attitudes toward compost.

- ▶ Do customers know about compost? Do they want it or feel they need it?
- ▶ What are customers' expectations and perceptions of compost?
- ▶ Do customers consider it a worthwhile form of recycling organic waste or a dirty waste product?

These topics are revisited in more detail when we consider product, pricing and promotion.

4.4 Quantifying market demand

We are now beginning to understand the range of market segments. We now need to quantify how much compost is required by each segment, and consider the business' ability to provide it. Demand is measured in terms of financial value based on volume per year. Data can be collected from representative groups in each market segment. The following two examples illustrate calculations of current and potential demand for two hypothetical market segments.

1. Market segment: 'Farms around Lucknow'

How many farmers buy compost?	5 farmers
How much compost is required per acre per year?	5 tonnes
What is the size of the farms?	20 acres
Compost price/tonne?	2 \$/tonne
[Total current market for this segment] =	1000 \$/y
[Number of customers] x [tonnage purchased per year]	
x [tonnage price]	

This indicates the market value of this market segment in \$/year.

2. Market segment: Nurseries in Banani District, Dhaka

This example illustrates different ways of assessing demand.

How many nurseries are in this area?	15 nurseries
How much compost is required per nursery per year?	30 tonnes/y
How much compost are nurseries willing and able to buy each year?	10 tonnes/y
Compost price/tonne	1.5 \$/tonne
[Total potential market for this segment] =	
<i>either:</i> [Number of nurseries] x [tonnage required per year]	
x [tonnage price]	675 \$/y
<i>or:</i> [Number of nurseries] x [tonnage nurseries willing and able to buy each year]	
x [tonnage price]	225 \$/y

The first figure is the size of your potential market if you can convince all nurseries to purchase as much compost as they require. The second lower figure indicates the existing market.

When demand has been calculated for each of the current and potential market segments, they can be added to obtain an indication of the overall market demand.

Three other important considerations include:

- ▶ Trends: Are the market segments expanding or reducing? (i. e. is the number of customers in each market segment buying compost increasing or decreasing?)
- ▶ Seasonal dependence: Is demand for compost seasonal or steady in each market segment? (e. g. compost used for mulching during winter or planting seedlings during the dry season?) Do your data reflect a particular season?
- ▶ Seasonal payment: Can farmers pay at time of purchase or only after harvest?

Seasonal demand for compost in Tanzania

Studies in Tanzania have revealed that compost demand varies seasonally:

- ▶ Nurseries raising trees and flower seedlings need compost year-round: particularly during the dry season so that the trees and flower seedlings are ready for sale during the long rainy season.
- ▶ Growers of vegetables and potted ornamental plants use compost year-round, but demand is higher during the rainy season.
- ▶ Flower gardens and crop farms require more compost during the rainy season.
- ▶ Farmers in the flood areas need more compost during the dry season.

Adapted from Eawag/Sandec, 2002

4.5 Profiles of market segments

You can now consolidate the information collected for each market segment into profiles as shown below. Further examples and a blank table are provided in Annex 3.

Customer Group: Horticulture/Nurseries

<i>Geographic location</i>	Urban and peri-urban area, frequently along road sides and on vacant plots.
<i>Attitudes and perceptions</i>	Compost is well known and understood, so perceptions are realistic and nursery owners are well informed.
<i>Uses</i>	Compost is used as soil substrate and potting mixture for container plants such as trees, flowers, ornamental plants, and seedlings.
<i>Quantity</i>	Compost alone is not recommended for use as soil substrate, however, mixed with sand or soil it gives an excellent potting mix. Potting soil typically is amended with 5–40 per cent compost (by volume).
<i>Quality</i>	Seedlings require well-matured and finely sieved compost. Less mature compost can be used as mulch for adult plants.
<i>Ability to pay</i>	This customer segment usually draws a regular but not necessarily high income from a continuous and reliable market. Thus, the ability to pay is assumed to be average.
<i>Willingness to pay</i>	Willingness to pay is dependent on the level of awareness and knowledge on how to use compost. Self-made compost by the nurseries or animal manure may compete with your product and reduce willingness to pay.
<i>Purchasing behaviour</i>	Seasonal fluctuations in purchase are generally expected.
<i>Competing products</i>	Self-made compost, animal manure, peat, subsoil.
<i>Estimated potential</i>	X numbers of nurseries have been identified in the city. The annual demand of a nursery is estimated at Y tonnes of raw compost. Data is based on local business statistics and own observations. (Multiply the X value with the average of all Y values).

4.6 Targeting market segments

You have now segmented your market and developed detailed market profiles, including scale of demand, seasonal dependence, attitudes, and quality requirements. You should now be able to make an informed decision about which segments your business can serve well and thus, which markets to target.

It is usually an advantage for a business to target marketing towards a limited but diverse number of market segments (e.g. bulk markets: farmers and real estate developers, and cash market: domestic users). Your product, price and location are likely to be better suited to certain segments than others. Being selective in your targeting operations means you focus your energy and resources on segments most likely to result in sales. Many businesses find it useful to focus on a mixture of bulk and cash markets as a strategy to secure a steady and reliable market, i. e. mitigate risk.

Remaining flexible

Although you can now make informed choices about which segments to target, but your decisions need not be final. As you think more about your product, market position and pricing, you may have to refocus. Also, markets are not static; in time, new opportunities may arise or existing ones cease to be profitable.

This does not mark the end of your market research, as further information about your customers is required to develop effective promotional strategies. It is also important to review and update the market study frequently (e. g. every year).

5 Product, positioning and location

So far, you have assessed the market environment and understood the trends, competition and legislation affecting your business. You have also conducted market research and identified potential target market segments. The next step is to determine what your business can offer the market. What will you produce, how will it appeal to your customers, and how will they access it?

5.1 Defining your product

Compost is a diverse product and it would be wrong to consider all compost as the same. Variation in raw materials, plant management, processing, and presentation result in many product variations, including:

- ▶ grade: Very fine to very coarse;
- ▶ maturity: Raw or mature;
- ▶ form: Natural, powdered or pelletised;
- ▶ moisture content;
- ▶ nutrient levels: Negligible to enriched depending on input material, production method and processing;
- ▶ quality: Ranging from low quality with incidence of shards of glass/plastic or contaminants (e.g. heavy metals) to certified high quality products; and
- ▶ packaging: None for bulk collection or small bags for domestic use.

Marketing can help define, adapt and refine your product for the needs of the market. Market analysis may reveal that there is a ready-made market for the type of product your business most naturally produces. On the other hand, it may reveal significant markets, untapped by competitors requiring a different type of compost (e.g. fine grade in small bags rather than coarse in bulk). Remember that since markets are dynamic, it is vital to regularly assess them and make changes to products if necessary.



Product positioning and branding

Before designing a new car, a manufacturer will identify a section of the market with known opportunities, in which the car will have a competitive edge. The car will then be designed with a particular market in mind; e.g. young families looking for a spacious budget car. The product must have a specific 'position' in the market.

It is important to ensure that there is a place for your compost in the market, or that a 'niche' can be carved out, for example, by promotion or education. To understand your product's position, consider the following questions:

- ▶ What exactly is the product you are making?
- ▶ How can your product be used? Is it particularly suited to certain uses?
- ▶ What is special about the product? Does it have a unique selling point or a competitive edge?
- ▶ How does your product compare with that of competitors? Can you offer greater value either by lowering the price or offering more?

'Branding' is the name, term or symbol that identifies your product. Some market specialists believe that what you call your product is the single most important product decision you make. Consider famous brand names such as fast food chains or car manufacturers. You may associate the name with a logo or catchphrase, and have a certain attitude towards that product or company. A company always aims to establish positive associations with its brand.

It can be difficult for customers to assess compost quality, so branding is imperative. Brands are an easy way for people to identify your product. Once satisfied with the product, they will look for the same brand again. As your reputation grows and improves, your brand can be a useful way of ensuring customers return to you for their compost. Compost can be branded with the name of your company or compost or a logo. You should always use a brand name on your packaging, leaflets and promotional material.



Various compost brands
Photograph: Sandec

Developing a range of products

Different market segments will want different things from compost. Developing a range of products, a ‘product line’, can be a useful means by which to access different segments. For example, a car manufacturer rarely focuses all its efforts on a single model but develops a range of cars each suited to a different market segment. In addition to a budget car for young families, they may build an executive sporty car for wealthy businessmen. This way, they capture sales by appealing to different market segments. This strategy is also valid for compost producers.

Enlarging target market in the Philippines

A compost producer in the Philippines supplies mainly large fruit plantations with compost produced from agricultural waste. However, he developed a different range of products to enlarge his customer base, including:

- ▶ bulk compost as soil amendment;
- ▶ very mature compost as nursery media; and
- ▶ vermi-compost as high value compost product for households.

This diversity increased his overall sales.

While developing a range of products can be beneficial, it is advisable to keep the number of different products to a minimum. Having too many products can increase your production costs, and confuse customers.

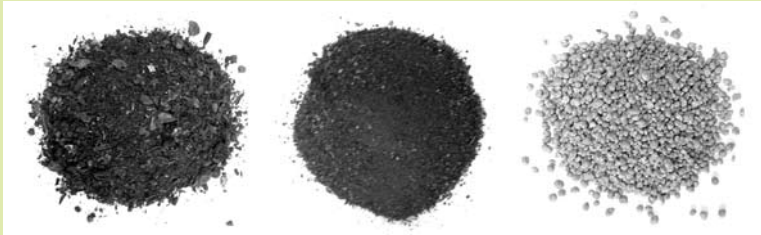
Enriched compost versus natural compost

Compost has a natural nitrogen content of 1–2 per cent, which is low compared to chemical fertilisers or even animal manure. To compete with such products and to meet customer requirements, compost can be enriched with additives (e.g. urea, potash or poultry manure) to obtain a balanced NPK ratio. However, prior to enriching compost, a detailed market demand analysis

should be conducted to ensure regular sales, as enrichment may require quite high investment and production costs.

Nutrient-enriched compost in Bangladesh

Waste Concern promotes the sale of nutrient-enriched compost. It sells in bulk mature coarse compost with 2 per cent nitrogen content to a fertiliser manufacturing company (Map Agro). The company grinds the compost and blends it with different additives to modify the NPK content to the different needs of farmers. The granulated compost still contains up to 50 per cent compost but resembles chemical fertilisers farmers already know.



Photograph: Sandec

Mature compost, ground compost and enriched/granulated compost

Some experienced compost makers object to the idea of enriching compost. They claim that the product confuses the customer and complicates the task of correctly applying these two very different agricultural inputs (fertiliser and compost). While compost is often applied before planting crops, chemical fertilisers are applied during crop growth.

We do not enrich the compost because for us it is economic nonsense to dilute a high-density product in terms of nutrients (chemical fertiliser) with a lower density product (compost). Also, since compost and chemical fertiliser have different purposes, it would complicate a well-scheduled application of both materials. Compost Producer in the Philippines, 2006

5.2 Quality

A satisfied customer will tell one friend, but a dissatisfied customer will tell ten!

Quality is the most important factor for ensuring satisfied customers and continued sales. In some countries, farmers using low-quality compost on their land have been dismayed at, or even injured by, contaminants such as glass shards or even needles. Low quality compost can also contain invisible contaminants such as toxic compounds or heavy metals, which may affect the farmers and consumers in the long run and pollute groundwater. Compost quality can be categorised into visible and invisible criteria as shown in the following table.

Visible criteria: Customers can assess	Invisible criteria: Customers cannot assess
<ul style="list-style-type: none"> ▶ Colour ▶ Smell ▶ Visible foreign matter (plastic, glass, wires) ▶ Degree of maturity assessed by colour and smell 	<ul style="list-style-type: none"> ▶ Nutrient content (NPK) ▶ Degree of maturity in terms of chemical constituents ▶ Suitability for plants (pH, salt content) ▶ Inactivation of weed seeds ▶ Presence of pathogens ▶ Heavy metal content

Table 5.1: Quality criteria for compost

Visible criteria are generally easier to control during production than invisible criteria. Since the customer is not in a position to assess the most important compost quality criteria (e.g. nutrient content) by its appearance, he has to trust the information provided by the producers. Ways to gain customer confidence include intensive process monitoring and quality control conducted by independent laboratories. A compost quality label can also generate customer confidence. This could be introduced and awarded by an independent regional or national organisation acting as a control institution.

Cultural and religious taboos related to raw compost materials:

Beware that in some societies the use of raw materials such as sewage or faecal sludge in composting is taboo. In Arab countries, most farmers refuse to use compost made from sewage sludge for religious reasons; they insist on compost produced from agricultural waste.

Despite these attitudes, many farmers use imported compost without realising that it contains a high fraction of decomposed sewage sludge not indicated on the bags. This fact can be an advantage in promoting locally produced compost complying with religious and cultural beliefs.

When we started composting, we collaborated with the Agricultural Research Institute of the Regional Chamber of Agriculture. We asked them to analyse our products. The tests were quite expensive, but because the reports are trusted they are central to our relationship with customers. It was a good investment. Grüschow, 2006

Different markets have different quality requirements. However, all compost sold must maintain national or international standards relating to pathogens, toxic chemical and heavy metal contamination. These are more measures of safety than quality. Figure 5.1 provides some examples of different quality requirements.

Quality	Market	Customers
Excellent High nutrient content, mature, fine grade, no weed seeds or visible foreign matter	Value & Volume Markets	Nurseries, Farmers, Householders, Parks
Poor Low nutrient content, coarse, presence of weed seeds and foreign matter	Volume Markets	Farmers, Forestry
	Niche Markets, Volume Markets	Landfills Land Reclamation

Figure 5.1: Compost quality requirements for different markets

Though many may consider the absence of heavy metals to be the most important quality factor, your product will often be judged by appearance alone. Remember this when deciding on how to present your product.



Quality depends more on the raw materials used and production management than on the type of technology applied. Figure 5.2 summarises the implications of using raw materials from different sources.

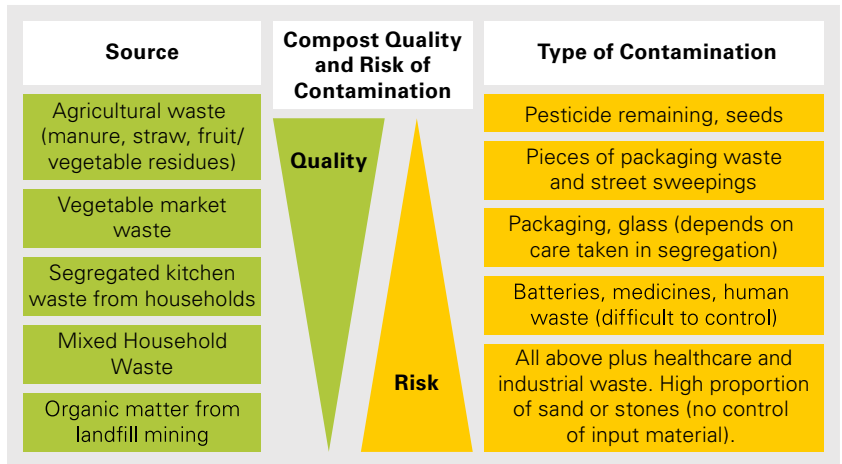


Figure 5.2: Input materials determine compost quality

Use of high-quality raw materials generally produces a high-quality compost. The more inhomogeneous and polluted the raw material is the more effort is required for sorting, process management, staff training and monitoring to achieve an acceptable product. However, investment in management and quality control should pay dividends.

Since compost from municipal solid waste (including from carefully segregated waste) is sometimes considered dirty, customers have been found to be more concerned by the overall quality and effectiveness of the product than its feedstock.

Ensure processes are in place to prevent contaminated raw materials from entering the production process. You could perform spot checks of input material to guard against batteries, healthcare waste etc..

Quality assurance in Dhaka, Bangladesh

Waste Concern recognises the importance of producing consistently high-quality compost. One of the advantages of selling their finished compost to MAP Agro is the fact that MAP owns compost grinding and cleaning machinery. Their machines reduce any glass shards to harmless powder, separate metal and remove polythene using an air sorter. This process is time-consuming, but farmers consider it important so it is a necessary investment. Heavy metal contamination is another issue for farmers. It can only be controlled by carefully selecting raw material for composting. According to sample tests conducted on Waste Concern's compost, contamination levels were lower than those allowed in India (no standards existed in Bangladesh at the time of testing). This can be attributed to the sorting of waste prior to composting. Of course, the raw materials for compost made from domestic waste may vary considerably day-to-day. Frequent tests are advisable (e.g. quarterly).

Adapted from Ali, 2004

Consistency

It is better to produce a consistently mediocre product than a product whose quality is inconsistent. Alexander, 2003

Achieving consistency is vital and will affect the range of markets available to you, the price and your customers' confidence in your production process. Customers want to be sure of what they are buying and what to expect on future visits.

Standards and certificates

Compost producers have a responsibility (sometimes a legal obligation) to ensure that compost produced will not cause any long-term damage to the environment nor pose any health risks to humans. Some countries have their own compost standards, developed by ministries or even national compost associations.

In some countries there are no policies or standards regulating the use of organic waste or composting related markets. In such instances a compost business has a duty to act responsibly to ensure the quality of the compost, and the wellbeing of those who produce and use it.

Even if your country does not have its own current compost rules and quality standards, various national standards are available as guidance. If followed these could be referred to in promotional materials. Annex 9.1 compares compost standards in a number of countries.

5.3 Meeting demand through production

Marketing is about understanding and stimulating demand for a product. However, if you are stimulating demand, be sure you can meet it with supply.

Composting plants often place their focus on producing compost and then trying to convince customers to buy it. Marketing reverses this approach by having customer requirements determine the production process. Production management centres on meeting demand and producing a consistent high-quality compost.

Key considerations for planning production

- ▶ What volume of compost can be produced in how many days/weeks?
- ▶ Does this meet customers' demand or do customers have to wait?
- ▶ Is sufficient compost storage space available?
- ▶ How is the compost quality monitored? How could it be monitored better?
- ▶ What seasonal variations may arise during the production process? (e.g. supply of raw materials may slow down during winter when fewer vegetables are consumed or the speed of the composting process may increase during warmer periods).

Storage

It is important to separate compost from raw materials to avoid contamination with weed seeds or waste. A farmer would be very dissatisfied if a crop of weeds followed the application of compost. Compost should be sheltered from the sun to prevent it from drying or protected from rain to prevent water logging and nutrient leaching.

Warehousing is important to ensure a reliable and smooth supply, as well as to provide storage during periods of high production or low demand. Inventory management deals with aspects of storing compost including its age and quality, current production rates and future marketability.

The example in Figure 5.3 below describes the problems faced by many composting companies in meeting compost demand. The composting plant illustrated has a compost production capacity of 20 tonnes per month. Compost is supplied to three main customers:

- ▶ **Customer 1** requires either six tonnes a month before planting or two tonnes a month during the growing season.

- ▶ **Customer 2** is a nursery and requires five tonnes a month for frequent seedling cultivation.
- ▶ **Customer 3** purchases large amounts of compost in bulk but only during five months a year.

The black line indicates the composting plant’s stock level. During some months (e.g. January to March) compost accumulates in the stores, while in others the demand cannot be satisfied (e.g. May and June). Obviously it is not possible to have ‘negative stocks’; negative values indicate the volume of sales lost due to insufficient stockpiling. A successful business must account for such seasonal variations during production.

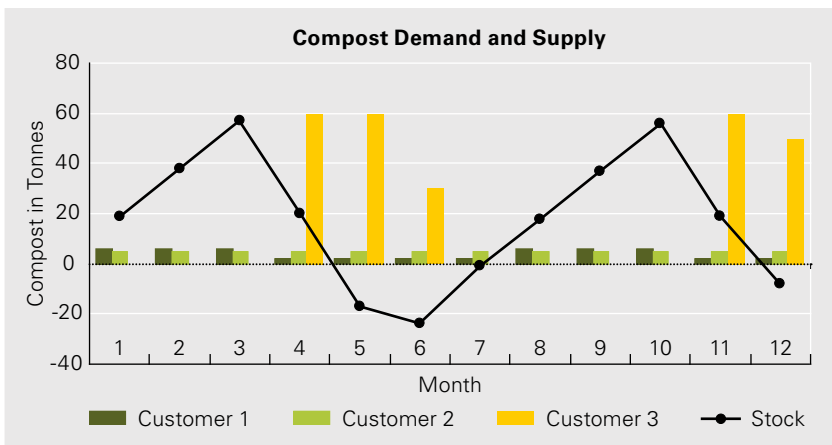


Figure 5.3: Compost demand and supply over one year

5.4 Business location

Many factors influence the decision of where to locate your business, and the decision will invariably be a compromise. Factors include:

- ▶ availability of raw materials;
- ▶ labour supply;
- ▶ land rents;
- ▶ location of competitors;
- ▶ acceptance by neighbours;
- ▶ transport distances and costs; and
- ▶ location of customers (businesses must always be accessible to customers).

The following fictional examples illustrate how the market approach could affect your choice of location:

1. A market assessment reveals a market segment consisting of a medium-volume nursery in a peri-urban area. This could convince you to locate your business close to this market and develop a product, packaging and delivery system suited to nearby nurseries.
2. A market assessment identifies demand among wealthy households in the centre of a town. This convinces you to locate your business in the centre of town and package your compost in small bags to be sold at a premium to this low-volume cash market.
3. You identify market opportunities with a large fruit grower with his own trucks. This prompts you to set up your site near a peri-urban vegetable market and establish your business on a main road, easily accessed by large trucks.
4. You want to add a door-to-door waste collection service to a composting facility. You locate your site in a middle-income residential area where households appear to be willing to separate organic waste and pay for waste collection. You also assess markets in the vicinity (e.g. hotels, nurseries, households etc.).

Location and marketing in Nairobi, Kenya

For some compost producers in Kenya, marketing was difficult as they were located in the centre of informal settlements, accessed only by narrow roads. By contrast, the City Park Hawkers Market composting group, cannot keep up with the demand for its compost. This success is due to the location of the composting plot at the point of sale, where the activity is both highly visible and conveniently accessible to customers, including high-income customers with large, private gardens.

Peters, 1998

The compromise: locating near raw materials or markets?

Bulk markets and raw materials for compost are rarely neighbours. Transporting compost is usually a better option than transporting waste.

Locating compost businesses involves compromise because:

- ▶ most domestic waste is generated in cities, but bulk markets for compost lie in rural areas;
- ▶ land prices in large cities are very high compared with rural areas; and
- ▶ relative to value, the costs of transporting waste or compost are often high.

Influence of transport cost on compost price

The following table reveals the influence of transport costs on the effective compost price in Eritrea. The figures are based on a study of landfill material use by farmers around Asmara.

Distance of Village from Asmara	Cost of Land-fill Material \$/truck load	Transport Cost \$/km	Transport Cost \$/trip	Effective Cost \$/trip
4 km	2.80	2.80	11.20	14.00
16 km	2.80	2.10	33.60	36.40
28 km	2.80	1.90	48.70	51.50
35 km	2.80	1.50	52.50	55.30

Table 5.2: Influence of transport cost on compost price (Sandec, University of Asmara, 2005)

The farmers pay \$2.80 per truckload for the landfill material. This accounts for only 5–20 % of total costs. The results surprised the researchers; they had not expected such long transport distances or the ability of rural farmers to pay these prices. They concluded that the transportation required optimisation.

Defining your market boundaries

The example above illustrates the issue of market boundaries. Transport costs and customers' ability to pay will naturally set the boundary. In some instances, your company's resources may set the market boundary. This is particularly important if you provide free delivery and include the transportation cost in the price.

Composting urban organic waste close to the raw waste source usually puts you close to the household market: lucrative but often low-volume. However, bulk markets are often located far from residential areas, requiring transport of either waste or compost. The relative advantage of transporting compost is its volume and weight: as little as 30 per cent of raw materials used. It is also more hygienic to handle and transport compost than waste. Small towns are an exception; composting plants can be located in peri-urban areas near the sources of raw materials and markets.

Local sales in Bangalore, India

The Kalyana Nagar Residents Association, Bangalore produces up to ten tonnes of compost from 35 tonnes of waste per year from neighbouring households. The compost site is located in a middle-income household area, where some houses have their own gardens. The residents were informed through awareness campaigns of the benefits of compost and are willing to buy it for their gardens. Furthermore, households purchase compost to keep public places green. Hence, the scheme concentrates on the local market, thereby allowing distribution of compost through its own waste collectors.

Peri-urban composting in Khulna, Bangladesh

In Khulna, the second largest town in Bangladesh, the composting plant is located on cheaper land on the outskirts of town, close to the source of raw materials and close to the market.

Creating a market map

You may find it useful to visually depict the location of your business in relation to the sources of raw materials and staff, the transport network and your customers. It can help you target customers and adapt your distribution strategy. Use this tool only if you and your staff are familiar with maps.

- ▶ Buy or draw a map of your city and its surrounding area;
- ▶ Mark the location(s) of your compost production unit(s);
- ▶ Locate and indicate the organic waste sources (e.g. vegetable markets and households);
- ▶ Locate your customers and indicate the distance to your customers. Use different colours for each market segment;
- ▶ Assign demand or quality requirements to each customer; and
- ▶ Compare the demands and distribution costs of the different locations.

Mapping customers, raw materials and distribution

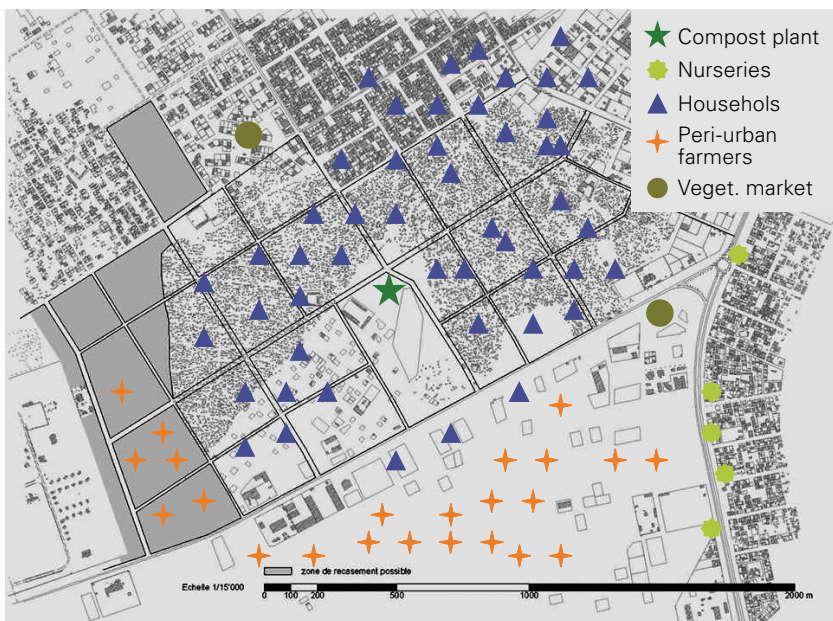


Figure 5.4: Example of a simple map illustrating customer distribution and sources of raw materials

This map illustrates a typical situation in an urban setting and denotes households, farmers, nurseries, and vegetable markets. The decentralised composting plant is located in an urban location surrounded by houses. The organic waste originates from households and a nearby vegetable market. Households buy the compost directly from the plant or from a truck, which drives through the neighbourhood once a month. However, household demand is limited. The nurseries, located along a main road around 2 km from the composting plant, require larger volumes of compost, often at short notice. Since many households buy plant seedlings directly from the nurseries, nurseries could act as retailers for your compost. The peri-urban farmers, located very close to each other along a stream, use its water for irrigation. As their demand is of seasonal nature, a fixed distribution date should be arranged with several farmers to significantly minimise distribution costs. Finally, the vegetable market could serve as a transfer point for compost; farmers who come to the market to sell their products could return from the market with trucks full of compost.

Such a map portrays the combined customer profile sheets developed in Section 4.5 and provides them with a geographic context. Annex 5 contains a map developed for a compost market study in Nepal (full report: www.sandec.ch).

5.5 Distribution channels

A market map can also help optimise transport routes, for example facilitating delivery to more than one household during a single trip. The distribution network should be marked on a separate map to keep the maps as simple as possible.

Figure 5.5 illustrates three common distribution methods: direct distribution, through sales agents (in-house/external), indirect distribution.

Sales agents may include nurseries, retailers at vegetable markets or shopkeepers. Bulk buyers include potting soil producers, fertiliser companies, mining industries, landscapers etc.

Many compost producers claim that selling direct is important because contact with customers provides important feedback for the business and product development. However, retailers can offer benefits to your business because of their specialist knowledge of the agricultural and horticultural marketplace.

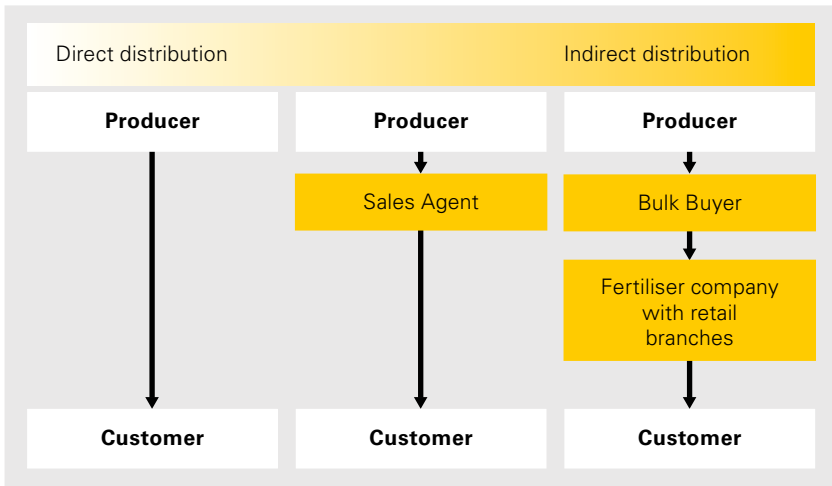


Figure 5.5: Compost distribution models

You need to consider whether retailing compost yourself or using another specialised company is the most appropriate option for your business. The following case study from Bangladesh illustrates some of the pros and cons of direct sales to individuals and distribution via bulk buyers.

Distribution of compost in Bangladesh

Waste Concern produces many tonnes of compost each week in central Dhaka. The market, however, is mostly based in rural areas far from Dhaka. The staff appreciate the importance of marketing in order to shift their product and generate profits. The market for Waste Concern’s compost falls into two main categories:

- ▶ Low-volume sales to individuals. These are often middle-class households purchasing compost for their gardens. Selling price: Tk10/kg.
- ▶ High-volume sales to MAP Agro, a private chemical fertiliser processing company. Selling price: Tk2/kg.

MAP Agro buys around 300 tonnes of compost from the NGO every month. They blend some with chemical fertilisers and sell it to Alpha Industries, an agricultural distribution company.

Although Waste Concern stands to make more net profit from sales to householders, there are various advantages to selling at low-price/high-volume to established agricultural companies. These include:

- ▶ Once the business relationship with the distribution company is established, Waste Concern requires no further marketing. Map Agro is confident that it can sell up to ten times the present volume of compost purchased from Waste Concern. This is an indication of the scale of the compost market and the effectiveness of this arrangement. Using a well-established agricultural outlet also lends credibility to compost as an agricultural product, as it positions it among 'modern' chemical fertilisers, positively perceived by many farmers.
- ▶ No transport, distribution or sales infrastructure is required by Waste Concern (e.g. lorries, regional sales points etc.). Alpha Industries distributes the compost up to 620km from Dhaka, using their existing transport and sales infrastructure. These factors allow Waste Concern to pursue what it does best, i.e. composting. In Bangladesh, this is turning into a successful model that other NGOs may be wise to follow.

Rytz, 2001 and Ali, 2004

Try to plan your distribution methods to be as efficient as possible in terms of investment, time and labour. Review the profitability of different channels from time to time, as well as their convenience to customers. Could you learn anything from your competitors or even collaborate with them in distribution?

Good relations with retailers in Pakistan

A composting plant in Lahore uses retailers to distribute and sell compost. As the retailers are in regular contact with farmers, they can inform the producer of emerging needs and trends in agriculture. This enables compost producers to respond by developing products better suited to the market and thus to generate more business for retailers. Everyone is a winner.

Ul Haq, 2006

6 Product pricing

So far you have developed an overview of the market environment, identified target markets, planned your product and production and considered location. The next step is to develop a pricing system to attract customers and allow you to cover your costs.

Product pricing is a core issue facing all companies. A business needs to coordinate pricing decisions with product development, production, distribution, and promotion. Therefore, much of the information collected for other marketing aspects will contribute to pricing decisions.

Covering costs is essential for a self-sustained business, so product price is partly dependent on production costs. However, many producers will add a profit margin to cover further investments or for technological improvements. The size of this margin is limited by the prices of competing products and by customers' willingness and ability to pay.

Prices can be calculated in a number of ways, each focusing on different factors, such as perceived value or cost of competing products. The most basic method is based on compost production costs and profit. Other approaches are described in some of the further literature and guidance listed at the end of the chapter.

6.1 Production costs and profit

If your business does not have sources of income other than the sale of compost (e.g. waste collection fees, subsidy), the price must equal, or exceed, production costs.

The *unit cost* is the cost of producing one unit (e.g. 1 tonne) of compost. It can be calculated using the following (simplified) equation:

$$\text{Unit cost} = \frac{\text{Production costs (\$)}}{\text{Compost production (tonne)}}$$

Production costs include *variable costs* (which change according to how much compost is produced) and *fixed costs* (costs incurred whether or not compost is produced, such as ground rent). All costs have to be calculated on the basis of a fixed period of time (e.g. one year, half a year).

Examples of variable costs	Examples of fixed costs
<ul style="list-style-type: none"> ▶ raw material ▶ packaging ▶ transport ▶ energy consumption ▶ labour (seasonal) 	<ul style="list-style-type: none"> ▶ rents ▶ regular labour (do not forget to include your own salary) ▶ maintenance ▶ interest on loans ▶ depreciation of investments

Table 6.1: Examples of variable and fixed costs in compost production

According to this method, the price of compost is simply calculated by adding a profit margin to the unit cost. Thus:

$$\text{PRICE} = \text{unit costs} + \text{profit margin}$$

The profit margin depends on the willingness and ability of the market to pay for compost. The case study in Table 6.2 presents a breakdown of costs for a small compost producer in India.

If you feel you cannot cover all your production costs with compost sales, you may consider developing other sources of revenue. Some compost producers generate income through household waste collection services, trading recyclable materials, or through establishing nurseries. Others are exploring income from the Clean Development Mechanism (CDM) or Carbon Trading.¹

Some compost producers, such as local authorities, do not depend on full cost recovery or profit through the sale of compost, as they receive subsidies through municipal taxes. Therefore, they can base their pricing more on customer willingness to pay.

¹ Discussing CDM opportunities is beyond the scope of this book. Interested readers may consult local energy agencies or the wealth of information available online, including: <http://cdm.unfccc.int/index.html>

Item	Cost (\$/tonne compost)
Labourers' wages (12 person/day per ton of finished compost at \$1 per day)	12.00
Biological conversion unit (3kg per tonne of compost at \$2.40 per kg)	7.20
Packaging: 1 tonne of compost requires 25 bags of 40 kg each at 20 cents per bag	5.00
Marketing expenses (including pamphlet and commissions to agents)	6.00
Overheads (including royalty, bank interests etc.)	4.00
Total expenses	34.20
Selling price per tonne	40.00
Profit	5.80

Table 6.2: Compost production costs in India (example)

The overheads and management costs, including bank interest, the fee paid to the municipality, travel costs for sales visits, rent of a small office, stationery, accountancy, and a nominal monthly stipend of \$40 for the manager are relatively fixed and do not increase in line with sales. This business was reasonably profitable after four years. The manager had paid off most of the bank loan, and had also repaid part of the considerable sum he initially invested (Adapted from Harper in Ali, 2004).

6.2 Customer attitudes, needs and resources

Ultimately, only customers can decide if the price is right.

Customer attitudes, needs and resources are critical considerations in setting a price for compost. This is the time to consolidate what you have found out about:

- ▶ how your product rates in the marketplace including quality, reputation and convenience etc. (covered in Section 5);
- ▶ customer willingness and ability to pay (covered in Section 4.2); and
- ▶ customer attitudes towards compost (covered in Section 4.3).

Quality is among the most important determinants of customer attitudes and purchasing behaviour. People will often pay a premium for consistent high-

quality products. You may also find that wealthy customers are willing to pay a higher price for compost if they know it has provided employment opportunities for the poor. A poor farmer, however, may be willing and able only to pay a low price whatever the credentials of the product.

Customers will view your product and price in the light of competition.

Ideally, your product will be cheaper than those of your competitors, and the same or better quality. If your product is the same price or more expensive than those of competitors, then it must have a 'competitive edge'. Your competitive edge may be higher nutrient levels or better quality. Reputation, quality of service, or promoting the product as 'environmentally friendly' could also convince potential customers to favour your product over another.

The following box illustrates how farmers consider more than just the cost of compost when deciding which agricultural products to use on their land.

Relative costs of compost use in Ghana

The following tables present data from a study conducted in Ghana. The first table compares the price per hectare of various chemical fertilisers, based on the price per tonne and recommended application rates to achieve an appropriate dose of nitrogen. Note that although compost is considerably cheaper than NPK fertiliser, because large volumes are required to achieve the same dose of nitrates, it is more expensive for farmers to use and chemical fertilisers.

Material	Price per tonne (\$/tonne)	Application rate (tonne/ha)	Price per hectare (\$/ha)
NPK Fertiliser	188	0.6	125
Chicken Manure	5.2	20–25	104
Teshi Compost (bulk, produced from mixed waste)	4.2	25	130
James Town Compost (bulk, produced from sorted waste)	7.0	25	174

Table 6.3a: Comparison of fertiliser costs related to nitrogen dose (adapted from Hofny-Collins 2006, p. 259 and 260)

The following table compares the same chemical fertilisers, but based on the cost of applying 40kg of phosphorus to a hectare of land. Note that in this in-

stance, applying compost is cheaper than NPK fertiliser, as high-quality composts often contain high amounts of phosphorus.

Material	Price per tonne (\$/tonne)	Input Material needed (tonnes/ha)	Price per hectare (\$/ha)
NPK Fertiliser	188	0.6	113
Chicken Manure	5.2	2.3	12
Teshi Compost (bulk, produced from mixed waste)	4.2	9.5	50
James Town Compost (bulk, produced from sorted waste)	7.0	0.9	6.3

Table: 6.3b: Comparison of fertiliser costs related to phosphorus dose (adapted from Hofny-Collins 2006, p. 259 and 260)

These calculations clearly illustrate the importance of clear messages about the application costs of products, according to a range of criteria. Compost is not valued by customers for its nitrogen but for its phosphorus and organic matter – both medium-term soil improvers. If you convince your clients of these values, you can achieve an appropriate price.

Once you decide on a suitable price, do not stick to it forever. You should adapt to the market and regularly monitor prices and competition. You may also consider occasional promotional periods (e.g. lower prices, 50% extra free) to attract new customers.

6.3 Terms of payment

While some customers are able to pay for their purchases immediately, others may require more flexibility. For instance, households buying 20 kg of compost can pay immediately, whereas a farmer may require a grace period due to limited cash flow. Many farmers need compost early in the season, but can pay for it only when they have cash after the harvest. In these cases, credit may need to be extended to allow them to benefit from compost but pay for it when funds become available. Dealers may also require grace periods to give them time to sell the compost.

Terms of payment depend on the importance and reliability of customers

A German compost producer offers different terms of payment depending on the customer and amount purchased.

- ▶ Farmers usually receive credit with a 30-day grace period. In autumn, farmers face no problem paying on time, but cash flow problems in spring can leave farmers unable to pay immediately. Farmers are valuable customers as they buy most of the compost produced. They are therefore granted payment flexibility.
- ▶ Smaller volume, one-off customers are required to pay cash on receipt of compost. Credit is not extended to smaller customers as it would be difficult to justify chasing debts if necessary.

Grüschow, 2006

The following table summarises the different terms of payment granted to customers. It is important to carefully monitor and control credit and ensure that debtors pay on time.

Terms of Payment		
Direct payment	Credit	
Advance payment Cash payment Invoice payment	Short-term credits Grace period Payment period	Long-term credits Profit-dependent payment
Households, Dealers	Dealers	Farmers after harvesting

Table 6.4: Typical terms of payment for compost purchase

As a general rule, it is better to offer credit to a few bulk customers than many customers buying small amounts. Offering credit or grace periods requires 'working capital' – a sum of money that keeps the business afloat when money is owed.

Working capital requirements in Saonar, India

Investment in equipment and other fixed assets was deliberately very limited to maximise employment opportunities. Nevertheless, since the composting process takes several weeks to complete, a substantial sum has to be invested in 'work-in-progress'. Since sales also tend to be seasonal large amounts have to be kept in stock. The working capital required is further increased by the need to offer generous credit terms to some of the more important customers.

Customers such as Ankur Seeds Limited draw their supplies fairly regularly and settle their accounts promptly. This helps keep cash flowing into the business and offsets some of the other requirements for working capital.

Adapted from Harper, in Ali, 2004

Further information

This handbook only provides an overview of price calculations. The following resources provide more detail:

- ▶ Rothenberger et al. (2006) Decentralised composting for cities in low and middle-income countries – A users' manual: Page 34 provides detailed information on financial analysis of your business. Download from www.sandec.ch
- ▶ International Finance Corporation. The Small and Medium Enterprise (SME) Toolkit is an online resource providing guidance on business planning and marketing: www.smetoolkit.org

7 Key principles of promotion

So far you have come to understand how to produce and deliver a product which meets your target customer requirements at an attractive and viable price. But how do you tell your customers about your product? The next step is promotion.

The purpose of promotion is to stimulate demand. It is particularly useful for turning 'ability to pay' into 'willingness (or even keenness) to pay'. Promotion involves:

- ▶ building awareness in the market about your compost;
- ▶ telling your customers about the benefits of using compost;
- ▶ informing customers about the quality and characteristics of the compost;
- ▶ telling customers how to use compost; and
- ▶ encouraging customers to buy your compost as opposed to that of your competitors.

This chapter presents a range of strategies for effective promotion. It outlines various communication tools and presents some practical promotion ideas.

The box on page 80 presents promotion approaches used by a compost producer in India.

Promotion strategy in Saonar, India

The manager of a composting plant in Saonar had to overcome several barriers before he could establish his product in the market. For many years, farmers in the area had been making excessive use of chemical fertilisers and struggle to afford the initial capital required to switch to organic practices. Furthermore, he faced competition from another well-known brand.

The manager used a number of strategies to overcome these difficulties.

- ▶ He sells his compost at the very competitive price of \$40 per tonne. This is just \$5 more than its production cost, but less than half the price of his main competitor.

- ▶ The compost is marketed locally in convenient 40 kg bags.

- ▶ About 20 per cent of the total sales are made direct to farmers by Mr Bhalarao himself. He personally visited the farmers and personally explained to them the disadvantages of chemical fertilisers and the long-term damage they can do to soils.

- ▶ The remaining 80 per cent of sales are made via agents and agricultural retailers. They distribute pamphlets and receive 20 % sales commission. The retailing company offers free home delivery and cash discounts for prompt payment.

- ▶ Finally, the compost is also sold to farming co-operatives, agricultural universities, government agencies, and plant nurseries.

The manager plans to work in partnership with larger companies in the agricultural supplies market to benefit from their extensive and effective marketing networks and direct contacts with farmers.

Adapted from Harper in Ali, 2004

7.1 Communication: The key to promotion

This section is about how information and positive messages about compost can be communicated to customers to stimulate demand.

Communication channels

There are many ways to communicate with customers, each suited to different segments and marketing budgets. Table 7.1 describes a selection of methods.

Marketing communication methods	
Word of mouth	This is how information about a product is transferred from one person to another. This is often the most important method of disseminating information. However, if your product is unsatisfactory word of mouth can also damage the reputation of your product and business.
Direct contact	Face-to-face selling to the customer allows the seller to discuss the product with customers and react directly to perceptions. Very time-consuming and staff-intensive, but useful for understanding new markets and worth the investment if you want to win new customers. Direct contacts include door-to-door sales, phone calls or mailouts.
Training	Training of potential customers can also be regarded as a face-to-face sales strategy. It is time-intensive but can be a powerful tool in compost promotion. Training farmers on compost application enables them to better understand compost and its benefits, thus convincing them to become customers.
Advertising	Advertising uses mass communication media such as newspapers, television, radio, billboards etc.. It is less time-intensive, however, it should be conducted professionally and can require considerable financial resources. Advertising on own company trucks or on the packaging can also be effective.
Sales promotion	Sales promotions include 'special offers' of reduced prices or even free compost samples. They are intended to encourage and attract new customers. Free compost samples allow farmers to test a product without taking great financial risks. In combination with a training course, this may be a very effective promotion strategy for compost. However, farmers should be informed that free samples are only distributed once, as compost is a valuable product that has to be purchased.
Publicity/ Sponsorship	Good publicity is always important and includes any published material about your business, i.e. press releases, sponsorships or open-day-activities. For example, a compost producer may sponsor the maintenance of a public park.
Exhibitions	Displaying promotion and demonstration products, for example, at trade fairs or in public places.
Identity	Logos, images or catchphrases are a non-verbal form of communication. If properly introduced, people will recognise a logo and feel confident and comfortable when dealing with you as a company.
Packaging	Packaging is an important form of communication, as it combines several of the above methods. Packaging can be used to promote your product, display your logo and present information on your product. It can thus be both attractive and functional. This can be particularly useful for first-time customers.

Table 7.1: Marketing communication methods

A promotion strategy combines some or all elements of this array. The combination will depend on the audience, the message you are trying to convey and, of course, the available budget. Use communication methods wisely, and present clear and consistent messages. It does not pay to confuse customers by presenting them with conflicting information.

Key considerations:

- ▶ Who influences the opinions of your market (e.g. large agricultural businesses, celebrity gardeners)? Can you reach them with promotional messages?
- ▶ What newspapers and magazines do they read?
- ▶ What TV or radio stations do they listen to? Could you advertise on these?
- ▶ What are the other affordable promotional channels?

Who do you want to address?

It is important to have a clear idea of your audience to ensure messages are appropriate. Ensure your messages reach people in a position to respond (i.e. make a purchase). For example, promotional messages may have little impact if directed at farm workers who do not make purchasing decisions. It may be wiser to target farmers or nursery managers with messages.

Each market segment may require a different approach. Some customers may be illiterate and be best convinced by demonstration, while others may like to read about quality control procedures.

Claims and expectations

Raise people's expectations of your product, but in a realistic way. Customers expecting miracles will probably be disappointed and not return!

While raising people's expectations is important for generating enthusiasm, it is essential that your claims are genuine and can be backed up with evidence.

- ▶ If you say it comes from uncontaminated sources of organic waste, how do you ensure this?
- ▶ If you promise consistent high quality, what quality control processes do you have in place?
- ▶ If you say it contains nutrients useful for plant growth, can you provide evidence of this, for example, laboratory test results?

7.2 Promotion in practice

Budgeting promotional activities

There are a number of established methods of deciding how much to spend on marketing. Promotion needs to be seen as an investment, not just an expense. You need to balance affordability with potential returns. For example:

- ▶ Company 1 spends \$200 on printing and distributing a set of black-and-white leaflets, and generates \$800 in sales.
- ▶ Company 2 borrows and invests \$1500 in newspaper advertising and a colour leaflet distributed to wealthy householders. These activities generate \$7000 in sales.

In both examples, the risk of investment paid off. However, any company borrowing funds for promotional activities needs to be sure that the scale of return is realistic. The chance of a good return on your investment depends on customers' attitudes and ability to pay, market size, and – importantly – your ability to meet increased demand.

Carefully consider:

- ▶ what funds are available for promotion;
- ▶ how much different types of promotion strategies cost, and the potential returns; and
- ▶ if no funds are available, what promotion activities can be conducted for free?

Monitoring and evaluation of promotional activities

- ▶ In view of your promotional activities, what is the level of customer awareness of your product?
- ▶ How do your customers find out about your compost? What does this tell you about different communication channels?
- ▶ Do people remember your promotional efforts?
- ▶ What type of promotion was successful and what was ineffective?
- ▶ You should keep revisiting these questions when monitoring and assessing your promotional activities.

You may also be able to learn something from competitors. How do they promote their compost? Which compost or fertilisers are customers most aware of? Why? Promotion can change the reputation of a product or company.

What do you need to work on to improve the reputation of your company over another?

Information and education

Section 2.3 presented and discussed some of the key barriers to using compost. Some were practical issues (e.g. transport costs), but most related to people's attitudes, knowledge and perceptions such as:

- ▶ lack of awareness;
- ▶ lack of information; and
- ▶ misunderstandings about compost (e.g. its nutrient value).

The following case study illustrates these misperceptions in Tanzania.

Identifying the need for information in Tanzania

A market survey in Tanzania asked farmers and gardeners what they felt they needed in order to use compost in the future. Their responses included:

- ▶ access to compost;
- ▶ cheaper prices and loans; and
- ▶ technical advice on how to use compost.

The last point is particularly relevant to promotion. The report goes on to describe the confusion over exactly what compost is and does.

More than 50 per cent of the farmers understood compost to be a fertiliser; simply something to be added to the soil for better plant growth and yield. This can be explained in part by the common confusion between the words fertiliser, manure and compost. Only 14 per cent regarded it to be a soil conditioner, and some understood it to be simply 'any decomposing organic material'.

30 per cent of the individual farmers did not know what compost was or what materials were used in producing compost. 60 per cent of the farmers said they did not know how to use the compost, and many did not know how much to use.

Adapted from Eawag/Sandec, 2002

In such cases, promotion must go beyond a mere exchange of information. If farmers have not even heard of compost, training sessions for farmers or demonstration plots may be necessary for winning their confidence. Such activities can be used to challenge attitudes and perceptions that hinder the

use of compost. They can also correct misinformation and fill knowledge gaps.

Education is a long-term investment but might be crucial in countries where compost is not well known. Children or households require information on how to improve the quality of compost (e.g. waste segregation) or on the benefits of compost as garden soil improver. However, public education often exceeds the capabilities and responsibility of a composting business. It might be worth searching for alliances in the public sector. It is in the interest of many municipalities or Ministries to keep the urban environment clean. Therefore, joint awareness campaigns could improve collaboration with citizens or acceptance of compost.

There is also a case for educating the public. The examples on page 86 show how education can be a joint effort of public and private organisations.

Compost education vs promotion of a compost brand

The *German Compost Association* is financed by its membership fees - mainly private compost producers and municipalities. The services of the Association include countrywide public campaigns on compost benefits. It also represents the interests of its members in political issues (e.g. quality standards or promotion of segregated waste collection in municipalities). The individual compost producers can thus concentrate on the promotion of their compost brands and customer relations.

Brochures and flyers

When preparing literature on your product, consider including the following information:

- ▶ information on how compost can be used and its benefits;
- ▶ nutrient value, organic matter content and other features;
- ▶ photographs (e.g. showing its effect on plant growth); and
- ▶ evidence, such as product test results or quality assurance certificates.

Remember to include your address, telephone number, and details of where and when customers can buy compost (i.e. retail location and business opening hours).

Make sure the language is correct and appropriate for your audience. Different market segments may respond to different information so, tailor your literature carefully.



Photograph: Adrian Sigrüst

Composting course for pupils in Moramanga, Madagascar

In 2006, the Municipality of Moramanga established a pilot composting plant as part of its new solid waste management concept. An open day event was used to raise awareness among the local population and gave people the opportunity to ask questions about the treatment of waste and use of compost in gardens and fields. Additionally, the coordinators offered composting lessons to school children.

Educating children is a long-term objective to increase composting acceptance and promote the use of compost. Children are often more open to new topics and may report their experiences to friends and families.



Photograph: Infostelle Kompost, Lucerne

Composting caravan for public exhibitions

A Swiss promotion group developed a concept for promoting composting in urban areas of Switzerland. The concept is based on “learning by doing” and targets both adults and children. The group purchased an old caravan and equipped it with various teaching materials including posters, a model composting site, games, and a simple laboratory.

The compost caravan is mobile and can be sited in public places (e.g. markets, parks) for a few days. Passers-by can play games or ask questions on composting. The concept requires some initial investment, creativity and, in this case, volunteers who are knowledgeable and enthusiastic about compost.



Photograph: Andreas Frömel

Nursery on a composting site (Nepal)

NEPCEMAC invested considerable effort in ‘greening’ their composting plant in Handigau with trees and flowers. They also established a nursery which uses the compost for their seedlings. The site, which is a practical demonstration of the use and effectiveness of compost, looks attractive to customers who buy compost and flowers from the nursery.

Getting the wording right

The words you use to promote your product can have a strong effect on people's response. One of the mistakes made in compost marketing has been to focus on the waste recycling aspects of compost instead of its benefits to agriculture. For example, some compost producers simply describe their product as:

'A cheap product made from treated waste'

Unless carefully communicated, this message could have negative connotations for some customers. Farmers probably want to feel they are purchasing a valuable and useful product for their land. Households may not like the idea of getting their own waste back for use in their gardens.

Often, the same information about a product can be transformed into a more positive message, for example:

'This compost is a high-quality, valuable but low-cost gardening and agricultural product. It helps preserve our environment by improving the condition of your soil, and by recycling green waste carefully collected from homes and markets. For centuries, farmers have been using compost – a key component of sustainable agricultural practice.'

This may be an exaggerated example, but it serves to demonstrate the various impacts product descriptions can have on your customers.

Keep your messages clear, consistent, concise, and well thought-out. Convince your customers of your unique selling points and competitive edge.

Remember that customers actually want a product to do something for them, to solve a problem, reduce their workload or increase productivity and profitability. Messages must clarify these benefits and reassure the customers that they will see benefits.

Key considerations:

- ▶ Revisit the 'Customer Profiles' developed in Chapter 4, as they contain useful information on willingness and ability to pay, including attitudes and perceptions of your products.
- ▶ What negative attitudes toward compost do you need to address to gain customers? On what positive attitudes can you capitalise?
- ▶ Why do your current customers buy your product, and others not?
- ▶ What characteristic of compost does each market segment really care about? (e.g. environmentally friendly, appearance, colour)?

Seeing is believing: Demonstrating your compost

Some compost makers have found demonstration to be the single-most effective promotional tool as it dispels people's doubts and convinces them to try compost. Again, the demonstration concept needs to be adjusted to the target group and should account for the fact that compost is a long-term fertiliser. The following box presents a range of potential demonstration concepts:



Photograph: Waste Concern

Demonstration site of Waste Concern, Bangladesh

Waste Concern set up a small demonstration site near their composting plant. Visitors directly witness the effects of compost on plants and soil. Additionally, the workers were encouraged to set up a small nursery and use the compost as potting material. Convinced and skilled employees are a strong promotion tool for compost use.

Additionally, Waste Concern offers free compost samples to farmers and provides advice on the use of compost. In return, farmers talk with others about their positive experience with compost.



Photograph: Infostelle Kompost, Lucerne

Distributing seedlings grown on compost

The *Infostelle Compost* in Switzerland launched a compost promotion campaign in several small towns. A group of volunteers planted seedlings in small pots using the compost produced by the community composting sites. The seedlings were given away for free during an exhibition day at a market. The topic raised the interest of passers-by who asked questions on how compost is produced, its benefits and where it can be purchased.

Packaging

The main purpose of packaging is to securely contain a product for transport and sale. Packaging of compost is usually only necessary for 'value' markets such as households, who buy and transport small quantities by bicycle or car. Since bulk markets usually purchase and transport compost in trailers or trucks, they do not require the added expense of packaging.

If you decide to go to the expense of packaging your compost, make sure you get it right.

- ▶ If bags need to be lifted easily, don't make them too heavy.
- ▶ Use suitable materials, and think about the cost of packaging against the selling price of a bag.
- ▶ Ensure your packaging is strong enough: customers do not want to pick up a bag of compost and have it break and spill its content all over their shoes or in the boot of their car.

Packaging can do much more than carry a convenient quantity of your compost. In addition to its basic functions, packaging is an opportunity for you to:

- ▶ attract customers by making your packaging eye-catching;
- ▶ clearly identify yourselves by including the name of your company and logo, and include contact details;
- ▶ provide useful information, for example, about nutrient value and methods of application; and
- ▶ include other promotional messages, such as your product's environmentally friendly image.

Profitable customer relations

Positive relationships with customers, called 'public relations' (PR), are essential for your image. Good PR helps retain current customers and attract new ones. There are a number of simple measures you can take to help nurture these relationships.

Ensure that your composting plant is attractive and accessible to the public. For example, one composting plant in Khulna, Bangladesh was surrounded by flowers grown in the compost produced at the plant. This gave an immediate positive image of the product and people felt comfortable visiting the facility. Other composting sites set up nurseries and retail outlets for compost near the composting plant, thus enhancing the green and clean image of composting.



Photograph: Silke Rothenberger

Breakfast cereal packaging

Cereal manufacturers make excellent use of packaging beyond its basic function. Consider the packaging of breakfast cereals and compare it with the features of a compost bag. It performs a number of important tasks beyond protecting the contents:

- ▶ it is a convenient size for the consumer;
- ▶ it can be stacked in the shop;
- ▶ it is attractive and catches people's eyes;
- ▶ it contains useful information, including nutritional value and promotion slogans (e.g. '30 per cent extra free!'), as well as contact details of the producer in case of complaints.



Photograph: PWEIG

Packaging and information

In the West Bank, many farmers depend on fertilisers and compost imported from Israel. During a market study, many farmers said they did not choose certain brands because they could not read the information, provided only in Hebrew. It left them unsure about the benefits and quality of the product, so they purchased compost providing information in Arabic or English.

In addition, farmers tend not to buy local products because they are devoid of any information on their packaging. Farmers feel reassured by the presence of information which they can understand.

Consider developing a simple 'visitor centre' containing books and magazines relating to composting and agriculture. This provides your business with an opportunity to promote your product and build customer relations, confidence and knowledge.

The importance of accessibility was discussed in Section 5.4. If you want to sell directly to customers, ensure your plant is easy for people to locate and identify (i.e. give clear instructions on a leaflet and install a name board). Also open at times convenient for your intended customers: This may mean opening a little later or at weekends.

Carefully consider which staff member(s) are most suited for dealing directly with the public. Ideally they will be passionate about compost, and highly knowledgeable about the production process, quality, health issues, application rates, benefits to the environment and the economics of use. Promotion may be done by internal staff or by external specialists.

Occasionally, customers will have questions or complaints about your product. If you wish to maintain a good relationship with them, you need to listen and respond. Do not ignore complaints but learn from them. You might consider providing a telephone number specifically for customers to call.

Providing complimentary services

Many businesses stimulate demand for their products by offering additional services, such as delivery services (discussed in Section 5.5) or providing advice and information on compost use. Professional advice to farmers on compost use in agriculture can strengthen relationships. By improving their understanding of the product, you should also stimulate demand and, thus, also increase sales.

Agricultural Extension Officers of Vennar Organic Fertiliser PVT, India

A composting company in Mysore employs 15 Extension Officers who frequently visit farmers in villages and offer advice on the use of compost as a fertiliser and soil amendment. They answer farmers' questions who, in turn, appreciate talking to skilled agricultural engineers. During their visits, the Extension Officers collect information on the needs and concerns of the farmers and report these back to the management. They also take orders for compost.

Eawag/Sandec, 2003

Delivering compost and collecting vegetables in Bangladesh

The main customer segment of Waste Concern is rural farmers. Thanks to their long-term experience with the needs and habits of rural farmers in Bangladesh, and the fact that farmers lack means of transport to get their produce to the urban markets, Waste Concern has developed a new service concept. The innovative service concept uses the trucks delivering the compost for transporting organic vegetables back to the urban markets.

The system has two advantages: Firstly, compost can be sold at lower prices since the truck does not return empty. Secondly, farmers achieve higher prices for produce and market as several middlemen are eliminated.

7.3 Establishing alliances with composting associations

Composting associations all over the world provide information, link compost producers and represent them. They are sometimes involved in lobbying to establish national standards, fairer subsidies on agricultural material inputs or to facilitate cross-subsidies from landfill savings. They also enable compost producers to exchange experience, and can be hubs of information on composting techniques, markets and research.

Compost Associations can also liaise with related professional organisations, for example, agricultural or organic associations. This can help improve relations and understanding between industries. Table 7.2 provides an overview of selected composting associations and their scope of activities.

Aside from these compost associations, many countries also have recycling associations and solid waste management associations. Links with agricultural associations and farmers' associations could also prove useful.

Compost Associations Worldwide	
Composting Council of Canada	The Composting Council of Canada is a national, non-profit, member-driven organisation with a charter to advocate and advance composting and compost usage. It serves as the central resource and network for the composting industry in Canada and, through its members, contributes to the environmental sustainability of the communities in which they operate. www.compost.org
European Compost Network – ECN	This Network is a collaboration of partners, promoting sustainable practices in composting, anaerobic digestion and other treatment procedures for organic residues across Europe. It aims to address the needs of both practical operators and decision-makers. www.compostnetwork.info
German Compost Quality Assurance Organisation (BGK)	The Compost Quality Assurance Organisation (BGK) is independent and neutral. It is concerned only with Quality Assurance and awards an officially acknowledged quality label. www.bgke.de
Kompostforum Switzerland	This Forum focuses on small-scale composting initiatives in Switzerland. The Forum provides information, training and advice to households, neighbourhoods and municipalities as regards motivation of households, compost production and marketing. Thanks to their initiative, almost every municipality has its own compost advisors overseeing hundreds of neighbourhood composting schemes. www.kompost.ch
The Composting Association, UK	This Association is promoting the sustainable management of biodegradable resources. It offers various news services and information on training and quality to its members. www.compost.org.uk
United States Composting Council	The U.S. Composting Council is a trade and professional organisation promoting compost. They recently developed compost analysis methods and compost quality standards. The Composting Council also runs conferences for compost professionals. www.compostingcouncil.org
VKS Switzerland	This Swiss Compost Association comprises 42 medium and large-scale composting sites in Switzerland. The association provides training to members, intensive exchange of experience and quality control. VKS also cooperates with authorities on agricultural, environmental and local matters. www.vks-asic.ch

Table 7.2: Contacts of compost associations worldwide

8 Final words

Applying marketing techniques to your compost business, whether established or just starting out, will take time and commitment. Experience indicates that effort and expense on marketing can often take two or more years to pay off.

Common marketing pitfalls

The following table describes some of the common pitfalls encountered by businesses during marketing efforts.

Marketing pitfalls	
Product	Promise only product features you can actually offer, and design your product around your market, not only a convenient production processes. Remember: A satisfied customer will only tell one person about a product, but an unsatisfied customer will tell ten!
Price	You may try to enter a market with a low-price compost product to win customers from your competitors. However, beware: A low price is often associated with low quality and could damage your reputation. Furthermore, it could be difficult to raise your price at a later date to cover production costs.
Markets and distribution	When first selling compost, concentrate on easily accessible markets. Calculate the exact costs and benefits of your distribution options. It is generally cheaper to hand over compost distribution to an expert than to run your own transport fleet.
Competition	Learn from your competition and, if you cannot easily compete, identify new markets. Also consider collaborating, for example, in distribution and promotional activities.
Promotion	The desire for effective promotion entails the risk of overspending. Choose appropriate promotion activities and concentrate on those that target your specific market segments.

Final comments

We asked a number of composting experts and entrepreneurs from around the world to offer one piece of advice to a new compost initiative looking to identify customers and promote their product. The answers clearly focus on two key aspects: Quality and Communication. The following quotes summarise much of what this book has presented. We hope they will motivate and encourage you as your composting initiatives develop and grow.

On quality...

'Quality is the key! Quality is determined by clean input materials and staff dedicated to their work and educated to run the plant properly.' (Germany)

'Do not promote compost only as an organic fertiliser centred on the nutrient content: promote its soil-conditioning properties.' (Philippines)

'Monitor the product quality to ensure it remains consistent, and ensure that you can always meet supply.' (Bangladesh)

On communication ...

'Demonstrate the short and long-term effects of your product.' (Philippines)

'Meet farmers whenever possible. Learn and improve from their feedback.' (Pakistan)

'Establish networks with large vegetable farms, organic farmer associations and producers of organic fertilisers.' (Philippines)

If you remember nothing else from this handbook, remember the golden rule of marketing:

Always satisfy your customers!

9 Annexes

Annex 1 Compost quality standards

Comparison of selected heavy metal maximum safe levels in Europe and the USA (in mg/kg DS). The table also provides the references to these quality standards.

Country	Quality Standard	Cd	Cu	Ni	Pb	Zn
Austria	Biowaste Ordinance Class A	1	150	60	120	500
Denmark	Agricultural Ministry	0.4	1000	30	120	4000
Germany	Biowaste Ordinance Type II	1.5	100	50	150	400
Switzerland	Federal Ordinance OHW	1	100	30	120	400
The Netherlands	Class "Standard Compost"	1	60	20	100	200
UK	TCA Quality Label	1.5	200	50	150	400
USA	EPA CRF40/503 Sludge Rule	39	1500	420	300	2800

Table adapted from Fuchs et al. (2004)

Further regulations address hygienic requirements (e.g. minimum temperatures during composting process) or organic pollutants, such as pesticides, polychlorinated biphenyls (PCB) and polycyclic aromatic hydrocarbons (PAH).

This table compares compost quality standards for agricultural use of compost in Switzerland, India and Great Britain.

Criteria	Switzerland Association of Swiss Composting Plants (ASCP)	India Indian Institute for Soil Science (04 Task Force)	Great Britain PAS 100 (BSI) and Apex Standard*
Indicators for Maturity/Stability			
pH	< 8.2	6.5–7.5	7.5–8.5*
Organic matter	< 50 %	> 16 % C _{org}	30–40 %
NO ₃ -N/NH ₄ -N ratio	> 2	---	-
C/N ratio	> 21:1	20:1	15:1–20:1*
Dry weight	> 50 %	75–85 %	65–55 %
Decomposition	feedstock unrecognisable, except for wood	dark brown no odour	---
Plant compatibility	planting tests (cress, salad, beans, ...)	---	20 % below control
Respiratory test	---	< 15 mg CO ₂ -C per 100 g TOC/day	< 16 mg CO ₂ /g organic matter/day
Indicators for Nutrients			
Phosphorus (P ₂ O ₅)	> 0.7 %	0.5–0.8 %	25–40 mg/l*
Potassium (K ₂ O)	---	1–2 %	0.5–0.7 %*
Total nitrogen	> 1 % DS**	> 0.8 % DS	0.7–1.0 %
NO ₃ -N	> 40 mg/kg WS	---	15–120 mg/l*
NH ₄ -N	> 300 mg/kg WS	---	1–5 mg/l*
Indicators for Pollution			
Impurities	< 1 %, no visible plastic, glass or metal	< 1 % inert material and foreign matter	< 0.5 % of total air-dried sample by mass
Cadmium (mg/kg DS)	1	5	1.5
Chromium (mg/kg DS)	100	50	100
Copper (mg/kg DS)	100	300	200
Lead (mg/kg DS)	120	300	200
Nickel (mg/kg DS)	30	50	50
Mercury (mg/kg DS)	1	2.5	1
Zinc (mg/kg DS)	400	500	400

* Apex is a voluntary standard launched by UK's three largest waste management firms.

** DS = dry solids

Annex 2 Table to structure market segments

Segment	Description and location	Volume	Frequency of demand	Number of customers in this segment	Comments (e.g. location, income, reliability, payment terms etc.)

Annex 3 Examples of market segment profiles

Customer Group: Wealthy Households	
<i>Geographic location</i>	Urban and peri-urban areas with green spaces and gardens.
<i>Attitudes and perceptions</i>	Compost is known but not used by the households themselves. Often they employ a gardener to look after the plants. Therefore, it may be helpful to target the gardener instead of the household.
<i>Uses</i>	Compost is used as top dressing on flowerbeds, potting material or long-term fertiliser for lawns.
<i>Quantity</i>	Compost is required in rather small quantities and most probably on a seasonal basis.
<i>Quality</i>	Plants and seedlings require well-matured and finely sieved compost.
<i>Ability to pay</i>	This customer segment usually has a high income and can afford alternative fertilisers and soil substitutes.
<i>Willingness to pay</i>	Willingness to pay is dependent on the level of awareness and knowledge on how to use compost. If the garden has a prestigious function, the owner will be more willing to pay for its appearance.
<i>Purchasing behaviour</i>	Seasonal fluctuations in purchase are generally expected.
<i>Competing products</i>	Peat and artificial fertilisers.
<i>Estimated potential</i>	X numbers of households with gardens have been identified in the city. The annual demand per household is estimated at Y tonnes for fine, mature compost. (Multiply the X value with the average of all Y values).

Customer Group: Banana Plantations

<i>Geographic location</i>	Peri-urban and rural areas with good transport connections to airports.
<i>Attitudes and perceptions</i>	Compost is known but the benefits are questioned. Therefore, free samples or a demonstration plot should be considered.
<i>Uses</i>	Compost is used as soil amendment and long-term fertiliser in addition to artificial fertilisers.
<i>Quantity</i>	Compost is needed in bulk and in seasonal patterns.
<i>Quality</i>	Depending on its target application (young plants, preparation of new fields), the compost can have various grades of maturity. In general, the compost should be mature, as damage to any plant must be avoided.
<i>Ability to pay</i>	This customer grows a cash crop and is able to pay for fertiliser and compost.
<i>Willingness to pay</i>	Willingness to pay depends on visible benefits from compost. The positive long-term effects on soil and a reduced demand for artificial fertilisers may be decisive.
<i>Purchasing behaviour</i>	Seasonal fluctuations in purchase are generally expected.
<i>Competing products</i>	Artificial fertilisers and cow dung.
<i>Estimated potential</i>	X hectares of land are used for banana plantations. The recommended annual application rate is estimated at Y tonnes of compost. Data is based on local business statistics, agricultural surveys on fertiliser demand and own observations. (Multiply the X value with the average of all Y values).

Template

Customer Group:	
<i>Geographic location</i>	
<i>Attitudes and perceptions</i>	
<i>Uses</i>	
<i>Quantity</i>	
<i>Quality</i>	
<i>Ability to pay</i>	
<i>Willingness to pay</i>	
<i>Purchasing behaviour</i>	
<i>Competing products</i>	
<i>Estimated potential</i>	

Annex 4 Marketing questionnaires

It is impossible to provide a comprehensive market assessment questionnaire, as compost markets vary according to climate, culture, economic activities, skills, and, naturally, customer segments.

This Annex contains two examples of questionnaires developed during field tests in Nepal and the Palestinian Territories. The teams developed several tailor-made questionnaires for different market segments.

Palestinian Wastewater Engineers Group (PWEG) devised a questionnaire addressing farmers. Responses from this acted as guide to face-to-face interviews. Environment and Public Health Organization (ENPHO) developed another more detailed questionnaire for nurseries in Nepal. These questionnaires should not be used as blueprints but as guidance for developing your own questionnaire.

A. Questionnaire for Farmers (PWEG)

General Information: Name, Profession, Date, Location, Area of cultivated land

1. What do you know about compost?
2. Are you using compost in agriculture? If yes, how often?
3. What is the price of compost?
4. Who is your compost supplier?
5. Do you face any problems with the use of compost? If yes, please explain?
6. If you don't use compost, could you please explain why?
7. What types of fertilisers are you using? (Chemical fertilisers, manure, compost?)
8. What are the costs of the fertilisers used?
9. What is the best fertiliser to apply?
10. How much of which fertiliser do you need per year?
11. Have you ever produced compost? If yes, how?
12. What raw materials do you use in composting?
13. What plants do you cultivate?
14. Do you think the local market needs compost?
15. Additional comments

B. Questionnaire for Nurseries in Nepal (ENPHO)

1. Do you use compost?
2. If yes, where do you buy compost?
3. What are your expectations and perceptions of compost?
4. What is compost for you? (Recycled waste, dirty waste product, a nutrient resource, a fertiliser like manure?)
5. What do people think in general about compost from your point of view?
6. How much land, how many plants do you own?
7. What do you grow? Do you practice organic farming?
8. What do you want/need from compost? Why do you want compost?
9. How will you use compost?
10. How long have you been using compost?
11. What is your total organic matter application per year?
12. How much of each type of organic matter is applied?
13. How much chemical fertiliser do you apply?
14. How much compost do you use and how often?
15. How much compost do you need?
16. Are you able to afford as much compost as you need?
17. Does your demand vary over the year? Has your demand changed over the years?
18. What quality do you require and why?
19. At what price are you buying compost?
20. How easily are you able to pay the present price?
21. If easily payable: Are you willing to pay the present price?
22. What would be the best price?
23. What terms of payment do you prefer?
24. Are there seasonal bottlenecks for compost? If yes, when?
25. Do you have means of transport for compost?
26. How can you access compost?
27. Would you buy from a middleman?
28. How did you get to know about compost?

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Grüschow Entsorgung und Umwelttechnik GmbH, Boldebeck, Germany

This company specialises in the recycling of biodegradable waste, i.e. composting. In addition to its main office in Germany, the company provides solid waste management services and runs composting sites in Egypt and Tunisia. Contact: Uwe Grüschow: info@grueschow-kompostierung.de, www.grueschow-kompostierung.de

Lahore Compost (Pvt) Ltd., Pakistan

Lahore Compost is owned by the large industrial group “Saifgroup” which specialises in investing in financially and socially viable environmental projects. Contact: Dr Ata ul Haq: incap@brain.net.pk

Local Government Bais City, Negros Island, Philippines

This solid waste management scheme, including a composting site, is a joint project between the Local Government Unit Bais City and the German Development Service (DED). In 2001, the government established a solid waste management strategy that facilitates resource recovery and recycling. Contact: Dr Johannes Paul: jp_aht@yahoo.com

Waste Concern, Dhaka, Bangladesh

Waste Concern was founded in 1995 with the motto “Waste is a Resource”. Later, the Waste Concern Group was formed to achieve a common vision to contribute to waste recycling, environmental improvement, renewable energy, poverty reduction through job creation, and sustainable development. It is a Social Business Enterprise (SBE) comprising both “For Profit” and “Not-for-Profit” enterprises.

Contact: A.H.Md. Maqsood Sinha or Iftekhar Enayetullah:
office@wasteconcern.org, www.wasteconcern.org

The practical relevance of this handbook was enhanced by two field tests conducted by NGOs in Nepal and the Palestinian Territories. Without their dedication and detailed feedback, the handbook would contain fewer relevant examples and recommendations. Therefore, a special thanks to:

Environment and Public Health Organization (ENPHO) in Nepal and **Andreas Frömelt**.

ENPHO is an autonomous, non-profit, scientific research and service-oriented NGO established in 1990. ENPHO aims to contribute to sustainable community development by combining research and action through integrated programmes in environmental and public health areas.

Contact: www.enpho.org

Palestinian Wastewater Engineers Group (PWEG) in the Palestinian Territories.

PWEG's main field of expertise and interest is the collection, treatment, disposal, and reuse of wastewater and sewage sludge. PWEG has experience in developmental Water and Sanitation projects with marginalised villages, local councils and municipalities. The work contributes to enhancing the water and sanitation sector in Palestine.

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The marketing studies, elaborated by our partners, are available online from www.sandec.ch and on the homepages of the organisations involved.

We want to thank our external reviewers **Adrian Coad** and **Urs Heierli** for their thorough reading and useful comments.

Thanks also to the Pearce and Tisserand families for their hospitality during research and writing in Dorset and California. This book is dedicated to George and Harry Short who first inspired me to compost. *JR*

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Unlocking the value in compost

The many benefits of compost to agriculture, the environment and society are often poorly understood and little appreciated. As a result, compost producers around the world face great difficulties selling their high-quality products. Some initiatives are forced to close, as their premises become choked with mountains of compost they cannot even give away.

This book is designed to help compost producers in low and middle-income countries run viable initiatives by unlocking the financial value of their product. It draws on techniques usually applied to popular consumer products such as cars and televisions, and adapts them to compost. The marketing approach is presented step-by-step, including sections on how to

- understand the business environment
- identify and quantify your market
- ensure your product and production meet customer needs
- price your product appropriately
- locate your business optimally, and
- promote and brand your product.

The book includes practical advice, templates and inspiring examples of how marketing techniques have been used in composting initiatives around the world.