Seed marketing

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by G. Mumby

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Preface

Increased production of agricultural crops depends not only on the development of higher yielding varieties of seeds but also on the efficiency of the systems available to ensure that these seeds reach the farmer on time. Effective seed marketing is thus an essential component of activities to improve food security.

In recent years there have been moves, albeit fairly hesitant, away from government-run seed marketing organizations towards increased participation by the private sector. This publication is therefore addressed primarily to the private sector, both to existing companies and to new companies being set up to take over seed marketing activities from the public sector. However, it is likely to be just as useful for government owned seed organizations seeking to improve the efficiency of their operations.

The publication is written from the standpoint of a medium to large seed marketing company with national or regional coverage. While smaller companies will clearly not have the financial or staff resources to implement many of the recommendations, they should still find much in the comprehensive coverage to be of interest and use.

The entire range of seed marketing activities is addressed. Methodologies for researching the market are reviewed and approaches to forecasting demand, both commercial demand at the level of the individual company and total national demand, are considered. Ways of best organizing a company's product range to supply demand are then discussed, followed by a review of approaches to seed pricing. The publication then considers seed distribution management, and this is followed by a chapter which reviews techniques of promotion, advertising, extension and demonstration. All of these activities must be planned. A final chapter discusses how best to do this.

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Chapter 1 - Introduction

A definition of seed marketing

Seed marketing should aim to satisfy the farmer's demand for reliable supply of a range of improved seed varieties of assured quality at an acceptable price.

However, the difficulties of organizing effective seed delivery systems, especially to small-scale farmers, have often been underestimated in comparison with the attention given to other seed industry activities. Historically, more attention and resources have been devoted to the physical aspects of seed production and storage than to the difficult organizational issues involved in managing sales and distribution.

Marketing is one of the most important, yet misunderstood, business activities and frequently means different things to different people. To the retailer in the agricultural sector, for example, it is selling seed along with other inputs to the farmer. To the farmer it is simply selling what he produces on his farm. However, whatever the circumstances, a well-defined sequence of events has to take place to promote the product and to put it in the right place, at the right time and at the right price for a sale to be made. Too many people think of marketing solely in terms of the advertising and selling of goods, whereas in reality marketing starts long before the goods exist and continues long after they are sold. Therefore, for the marketing process to be successful:

- the farmer consumer's needs must be satisfied;
- the seed company's objectives must be realised.

Marketing activities

Marketing is not just advertising, distribution or sales but an integrated management process involving employees at every level of a business.

In larger companies marketing will usually form one of the four major management divisions (see Figure 1) together with Research and Development, Production, and Administration and Finance, although the structure and the degree of specialization will depend on the size of the organization. In smaller organizations one person may perform several functions or there may be just one person responsible for marketing and sales.

Marketing activities are traditionally divided on the basis of operational activities, such as sales and distribution, and marketing service activities which include advertising, promotion and market research. Some of the marketing activities that appear in Figure I are described below:

market research and analysis
involves finding out about the seed market through studying the nature of the product, where and by whom it is needed, at which times of the year and why

**forecasting**
entails using marketing information for the purposes of planning and making sound business decisions, such as how many bags of seed will be sold and how much seed should be produced

**new product development**
requires the identification of possible new products (e.g. by plant breeding) or making improvements to existing products, such as by using seed treatments

**product sourcing**
involves licensing varieties and sourcing seeds from own and third-party suppliers

**Figure 1 Typical company organizational chart**

**product management**
concentrates on developing and implementing marketing policy for a seed product or range of products

**advertising, promotion and public relations**
aims to create product awareness, influence farmers' buying decisions, *(PR)* and build up a positive perception of the company

**sales order administration and dispatch**
involves receiving and processing orders, allocating stock and dispatching orders, and maintaining stock records

**stock control and quality assurance**
involves managing the inventory for each class of seed, crop and variety, to ensure maintenance of germination and vigour

**distribution and transport**
entails moving the seeds from the point of production to the point of sale

**sales and invoicing**
the process of making the actual sale and receiving payment for it, i.e. the end result of the marketing activity

**management information**
involves collating and interpreting sales *information* and other information as a basis for monitoring operations and planning future activities

**customer care**
involves after-sales service, dealing with complaints and maintaining customer loyalty

**The marketing mix**

In considering the needs of their customers, companies must think in terms of the *product* itself, the *price* of the product and the *place* where the farmer needs it, while making sure that the existence of the product is known through effective *promotion*. These various components are described in more detail below
Product

The product is the focus of marketing. Although many aspects of the product are not marketing responsibilities (such as plant breeding, seed production and processing), marketing is concerned with the product's attributes and what these mean to the farmer. Such factors include quality, appearance and performance.

Price

Price creates sales revenue and is therefore important in determining the total value of the sales made. Price is really determined by what farmers perceive as the value of seed of a particular variety. It is important to understand how farmers value seed as well as how much they are prepared to pay in relation to the benefit they expect to earn.

Place

The place factor deals with the various methods of transporting and storing seeds and then making them available to the farmer. Getting the product to the right place at the right time depends on the distribution system. The choice of distribution method will depend on market circumstances and the nature of both the seed and the farmer.

Promotion

Promotion is the business of communicating with and influencing the customer. Although the cost associated with promotion can be a significant element in the overall cost of a product, successful seed promotion increases sales so that costs are spread over a larger output.

While increased promotional activity may be a response to competitor activity or a new product launch, it is important to maintain a constant flow of messages to the consumer as well as visibility in the market place.

Mix

Mix is an appropriate word to describe the marketing process as it is a blending of ingredients to fulfil a common purpose. Each ingredient is vitally important and each depends upon the other for its contribution. Different markets will require a different balance of ingredients. The mix should comprise:

- **a time scale**
  a seed company must have a plan which indicates when it expects to achieve its objectives, both in the short, medium and long term

- **strategic elements**
  these will involve the overall development strategy of the company and require considerable judgment and expert) se; such decisions might involve the development of a new seed product range or a new distribution system

- **tactical or medium-term elements**
  the business environment requires constant monitoring; a company should have sufficient flexibility in order to react quickly to changing market circumstances, e.g. in response to competitor activity, which may require changes in pricing and promotional strategies or amendments to marketing plans

- **short-term operational elements**
  these involve predictable everyday decisions such as contacts with customers, organizing advertising
and point of sale material, and planning distribution

Apart from those elements which are under the control of management, there are also a number of environmental factors beyond the control of management. Some of these factors are:

**competition**
the competitors' strengths and weaknesses

**economic**
inflation, interest rates, credit availability, commodity prices, taxation

**legal**
import regulations, seed laws, consumer protection legislation

**demographic & geographic**
regional differences, both physical and cultural

**technological**
mechanization, quality requirements, breeding advances, computerization

**distribution**
the appearance of new outlets, cooperative development, direct marketing
Chapter 2 - Approaches to seed marketing

The purpose of seed marketing

Towards developing plant varieties

Government seed policy

Approaches to seed marketing

Types of seed production and distribution organizations government departments

The purpose of seed marketing

Although governments in developing countries have, in general, succeeded in establishing seed legislation as well as seed production and trading activities, government supply objectives are frequently not met and seed stocks remain unsold.

This may be because the public sector usually operates passive distribution systems, simply stocking outlets from which the farmer can collect seed but often leaving many outlets unstocked or with the wrong varieties. Such systems are not responsive to the needs of the farmer.

However, by introducing a commercial perspective and applying sound management and marketing techniques these passive systems can be transformed into active marketing systems which may prove far more beneficial to the farmer and the supplier. The principle that marketing is about identifying anticipating and satisfying the needs of the farmer, as well as realizing the objectives of the supplier, is fundamental. Even if public sector objectives are not necessarily profit oriented there is no reason why a public organization should not adopt sound management and marketing techniques.

Towards developing plant varieties

Seeds are particularly important in farming systems where resources are scarce since a significant contribution to productivity can often be gained solely from the seed used, independent of other purchased inputs. Thus, the genetic potential of seed largely dictates crop yields and the productivity of other agricultural inputs and cultural practices.

The situation in countries where the seed market is immature is that improved plant varieties are released to farmers mainly through public sector research. In markets which support a mature seed industry, private sector companies are usually the main source of new varieties, with the public sector concentrating on basic breeding and releasing new genetic material rather than finished varieties ready for commercial use.

The degree of public sector involvement in the release of finished varieties reflects both government policy and the extent to which the private sector has developed. While governments may support national breeding programmes, in order to ensure a flow of improved varieties of the major crops, investment by the private sector is also to be encouraged.

The private sector is only likely to become involved if a well-regulated market exists and the products of private research are granted protection through Plant Breeders’ Rights. This is
particularly necessary for inbred crops. Hybrids, and many vegetable crops, have a degree of in built protection as the breeder controls the parent lines. Initially, therefore, private companies will probably begin supplying the seed of the more easily controlled and more profitable hybrid and vegetable crops, leaving the public sector to concentrate on the more strategic, higher volume, non-hybrid crops.

**Government seed policy**

**The role of government**

The role of government should be to create a legislative framework which supports national seed institutions, creates the appropriate economic environment and minimizes government interference in the market. In such circumstances the private sector may be encouraged to play a greater role while guaranteeing the availability of seed of reliable quality to the farmer.

Over the past ten years many developing countries have initiated structural adjustment programmes in order to correct severe domestic economic problems. An important part of these programmes consists of reducing the role of the state in economic activity. One specific area where changes are occurring is in the marketing of agricultural inputs and produce.

The pressure for market liberalization is based on the belief that economic performance will be enhanced by involving the private sector and creating competition. However, private business may not always be able to fill the gap left by departing state enterprises. As a result, it may be necessary to combine professionally managed public operations and private enterprise. In privatizing state seed organizations, for example, there is an added risk that private monopolies are created in the place of state monopolies.

A steadily increasing number of countries is embracing privatization and seed market liberalization as a solution to the under performance of public sector seed supply. But no practical improvement in seed supply will result simply by declaring such a policy. Any such change has to be accompanied by a significant shift in attitude and a willingness to implement change.

**Components of a government seed policy**

National seed policy should aim to guarantee the security of seed supplies and to make available to farmers a range of seeds of improved varieties and of assured quality with a choice of supplier. A formal document on seed policy should cover the areas described below and on the next page.

Policy relating to establishment of a national seed industry should:

- clarify the role and objectives of state seed enterprises;
- recognize that there must be coordination between research, production and marketing;
- establish a private-sector National Seed Association as a means of maintaining contact with government, as a forum for discussion between the members, and as a mechanism for self-regulation (see Figure 2);
- create the conditions necessary to ensure that commercial finance and credit are available for the development of seed production and distribution enterprises.

Seed Acts and statutory controls should consist of:

- primary legislation which takes the form of a Seed Act enabling the Ministry of Agriculture to regulate production, processing and marketing activities, thus providing 'consumer protection' to the farmers;
- seed quality control procedures to cover the field inspection of crops and the analytical
and technical services for certification;
· testing of public and private seed varieties and their release which is ensured by creating a National List (of suitable varieties);
· assuring the freedom to import and export seeds subject to the proper controls.

Seed policy should also create a positive economic environment by:

· removing the barriers to seed trading;
· liberalizing investment and ownership regulations;
· adopting a public sector pricing policy which supports the concept of fair and equal competition;
· supporting agricultural services and promoting the use of inputs, including seeds, through the extension service;
· providing adequate funding to government seed institutions involved in the administration of seed legislation;
· making full use of public sector seed facilities.

**Approaches to seed marketing**

Varieties of seeds distributed through the public sector are usually under the control of state-run organizations although, where private seed companies are established, they usually have access to these public varieties. Seed distribution may be undertaken by public sector agencies, cooperatives or the private sector or, as is often the case, by more than one of these channels at the same time.

**Figure 2 An example of a seed association**

**Objectives**

The Seedmen's Society of Bangladesh has, as its objective, the promotion and encouragement of high ethical standards in the conduct of the Seed Industry.

Within this, other major objectives are to:

1. Protect and represent the interests and activities of members of the seed industry by initiating and influencing decisions which affect them.
2. Encourage the production and use of high quality seeds and to discourage the use of interior seeds.
3. Promote export trade in seeds produced in Bangladesh, and promote Bangladesh as a reliable producer and exporter of high quality seeds.
4. Negotiate and cooperate with appropriate international, national, regional, district and local authorities and organizations in the interest of its members.

**Activities**

Specific activities of the Seedmen's Society of Bangladesh include:

i. Lobbying for relevant legislative change in matters relating to the Seed Industry.

2. Liaison with committees, boards and other organizations including Government and Donors, whose activities effect the Seed Industry, to represent and promote members' interest.
3. Developing, adopting and promoting rules, practices and customs for the Seed Industry and offering arbitration to settle disputes between members.
4. Promoting and encouraging plant breeding and scientific research, extension and the
application of scientific knowledge in the Seed Industry.
5. Facilitate the commercialization of publicly bred cultivars by acting as a representative for public breeders for the production and marketing of seed using licensing of authorities or other such mechanisms.
6. Through its journal, the Bangladesh Seed Industry Magazine, providing specific business, management and topical information to those involved in Seed Industry, together with a means of advertising products and services within the seed trade.
7. Through its regional divisions and groups arranging regular meetings of members.
8. Arranging triennial national conventions.

Direct government involvement on a commercial scale tends to restrict the opportunities for private enterprise. The public sector usually works in such a way as to limit a developing private sector from competing on equal terms through a number of practices, some of which are listed below:

- capital investments are provided by government and donor agencies without the requirement for repayment of loans;
- organizational overheads and working capital charges are not included in seed pricing considerations and any trading losses are written off;
- costs directly attributable to the seed activity are spread through other divisions and thus may not be reflected in the price of seed;
- high volume cereal seed is priced at low levels in an attempt to encourage seed use.

It is desirable that there should be a parallel development of both the public and private sectors in the formation of a national seed industry. If well planned and managed the best interests of farmers will be served and government objectives realized. India is a good example of this parallel development although private business has voiced some concern over the use of subsidies which distort the market.

Types of seed production and distribution organizations government departments

Ministries are normally given the responsibility for seed production and distribution programmes in those countries in which the state is directly involved in the supply of agricultural inputs and where there are no other reliable and effective channels.

The mandate of government departments is usually to serve all categories of seed user. Therefore, they are obliged to supply a diverse range, including seeds of low value grains, to areas of both high and low productivity. Being, in general, non-commercial in nature, government departments tend to be heavily bureaucratic with time consuming communications processes which are not responsive to the needs of the market.

State-owned corporations

Public sector corporations have an independent management and financial structure, albeit underwritten by government. As such they may have some financial autonomy but their operational strategies and approach to pricing are usually determined by official policy rather than by market forces. Management is frequently expected to operate amid conflicting social and commercial objectives, while not losing money. Although profit may not be an actual aim, pricing to achieve full cost recovery should be.

State-owned seed corporations may be integrated plant breeding, production and marketing organizations or simply act as the seed supplier with breeding being part of government-financed research. Distribution may take place through government supply points, direct from seed plants or through private dealers. If a seed corporation is well managed, embracing commercial principles, then the option exists to attract a private sector partner in a joint venture.

Private enterprise

In the seed sector private enterprise involvement can range from international seed companies and national seed businesses to local suppliers working in perhaps just one region of a country. Private businesses should operate within the framework of government seed legislation thus giving the farmer consumer protection.

The distribution of seeds takes place through retail outlets which can receive their supplies directly from the seed producer, through intermediate distributors, or through wholly integrated companies which control all the major functions of breeding, production and distribution and have a complete sales network. Such companies will concentrate their activities in those market segments where there is commercial demand and on those crops which can be marketed profitably, for example, hybrids, vegetables and seeds which are not retained by farmers for replanting.

**Figure 3: Seed industry model**

Cooperatives

The main function of a cooperative is to act on behalf of its member farmers in providing them with inputs and in the marketing of their crops. Individual cooperatives can be members of a single centralized state organization or independent, if owned directly by the farmers themselves. Cooperative groups are well placed to become involved in seed production on an independent or contract basis and can act very effectively as marketing agents.

A good example of an independent cooperative is the Seed Coop of Zimbabwe, the success of which depends on the mutual cooperation between government and the mainly privately owned seed cooperative. The Co-op sells seed at prices which are agreed with government and surplus funds are distributed to members.

Seed producers' associations

Yet another kind of organization is one in which individual seed producers come together to form an association. In the beginning, an association produces improved seed from those crops which are planted by farmers in its immediate vicinity. As the association gains experience and seeks the services of technically competent personnel it may extend the scope of its activities by adding new crops and seeking new markets.
Chapter 3 - Understanding the market

Researching the market

While most organizations possess information on the basis of their own knowledge and experience of the market place, there is a constant need to improve and update this information. The purpose of market research is to find out as much as possible about the market place so that the customers can ideally be given what they want, when they want it.

Market research is just as important for a small seed company as it is for a large national organization. If a small seed company does not have the resources to support one individual to carry out market research, it still needs to devote time and resources for such information to be gathered.

It is obvious that the better the quality of the marketing information the better the quality of the decisions that will be taken. However, there are costs involved in gathering and analysing information, and it is therefore necessary to identify and focus on the most important issues. Seed companies must decide the information that is really needed and set priorities accordingly.

The kind of information that is needed involves finding out not only how large the market is, but also what factors influence farmers in their buying of seeds and the particular varieties they choose. Such information is categorized into:

- *quantitative data* which is factual and considers how big a market is in terms of volume and value, what percentage of farmers buy seed and what share a given variety has. This helps in planning seed production and market development activities;
- *qualitative data* which is about attitudes and opinions, such as why farmers buy seed and how they select a variety. This helps in variety research programmes, seed production planning and in marketing.

Marketing information

The information required to make business decisions and to plan and control seed marketing activities falls under the broad headings of:

- general economic and political factors;
- the market place;
- the company and its products;
- the competition;
- the distributors;
the farmers;
· the traders and industrial users who buy farm produce.

Considering the above headings, the following items are not intended to be an exhaustive list, but a guide to the kind of information required by managers of a seed company and how it might be used. The information required on general economic and political factors includes:

· national economic performance and political indicators;
· agricultural policy;
· seed sector policy;
· seed legislation;
· infrastructure development;
· crop and regional development assistance;
· industrial development in the food sector.

These are factors which should be considered in longer range planning and when making investment decisions. They are important when setting up new breeding programmes, as ten years may elapse before the new products become available.

The following information is needed about the market place:

· size, volume and value of seed required;
· structure, farm size and type and regional differences;
· trends, changes taking place in the market;
· demand;
· seed supply, the volume of seed certified, imports;
· import regulations and duty payable;
· transport;
· geographic and climatic factors.

Such market data are used when creating sales forecasts and making seed production and purchasing decisions. This basic market data is also needed when consideration is being given to new products and markets.

Information required by managers on their company and its products:

· the image and reputation of the company among distributors and farmers;
· satisfaction of the dealers and their customers with the company's products and service;
· aspects of the company's product presentation and service which should be improved;
· the responsiveness of the organization to customers' needs and changes in the market;
· the reason why farmers choose the company's products, e.g. for cost benefits, technical benefits, superior yield;
· new products in the pipeline;
· progress reports on production and processing and stock available for distribution.

Several of the above factors fall into the category of qualitative data. This can be collected by questions to customers and may be used in making changes to the internal organization of the company as well as in planning promotional campaigns. Also included is internal information, such as variety performance and stock availability, which is required by management for day-to-day operations.

Information required about competitor companies includes:

· ownership and organizational details;
· market shares by variety, breeder, distributor;
· new varieties undergoing official trials;
· distribution systems used, number and location of outlets;
· pricing to distributors and farmers, price history, margins and commission, terms of trade;
· promotional activities, extension, product and market support, advertising, packaging;
· number and location of sales representatives and their areas of operation;
· dealers shared with other suppliers and how much they sell from each company;
· responsiveness of competitors to customers' needs and changes in the market.

In a market economy seeds of the same or similar varieties will be available from various sources, allowing customers to choose between different brands. It is therefore important to know as much about the competition as possible since choice is based on many factors, not just product performance.

Seed companies will also require the following information on their distributors:

· the company's distributors and their location;
· methods of communication with the distributors;
· their purchasing pattern and history;
· the level of support they need;
· the factors limiting their purchases of the company's products;
· their financial soundness;
· alternative channels of distribution.

This is operational information that is used to manage and control the channels of distribution and to evaluate alternative methods.

Information needed regarding farmers includes:

· factors which limit or influence their demand for seeds;
· land ownership and who makes the buying decisions;
· banking and credit sources to which farmers have access;
· agronomic problems such as pests, diseases and weeds;
· the leading farmers in the area;
· literacy level;
· availability of transport and in what form;
· sources of information used by farmers.

Customer information of this type helps in market planning and focusing the target of sales and promotion efforts. Such information is also useful to distributors and dealers. Indeed distributors and dealers may be used to collect information on farmers.

Finally, information is required from the buyers of farm produce grown from the company's seeds. This information includes:

· marketing arrangements that exist for farm produce;
· the uses to which the product is put;
· quality requirements;
· quality premiums available to the farmer;
· contract growing systems and whether seeds are supplied or varieties specified;
· developments in the commodity and final products markets, including demand, price and replacement by substitutes.
This will indicate the extent to which the buyer or industrial user influences the farmer's decision to buy a particular seed. Often industrial users provide seed as part of a buy-back contract. Research gives an indication of the strength of the market for farm produce and, therefore, future demand for seed. There are also quality factors which should be understood and incorporated into plant breeding objectives. Examples are barley used for making malt, wheat used for bread making and cotton used for high quality yarn.

**Sources of information**

**Internal information**

Much of the information required by management can be found within the company so that is the best place to start. Often, extensive records are kept but the data is not made available in a form that can be readily used by management. All organizations collect information in the course of their everyday operations. For example, orders are received and delivered, costs are recorded, activity reports are submitted and invoices are sent out. As an example, the information that can be derived from invoices includes:

- sales by territory:
- sales by customer type (if they are classified):
- average order size by customer type and area;
- sales by product type and variety, package type and size;
- average sales by the personnel responsible;
- frequency and seasonality of orders;
- sales incentive or promotion programmes;
- payments outstanding.

Such information helps managers analyse sales performance, target the sales and promotion effort, evaluate distribution channels and dealer performance, and follow up late payments when credit is given.

External information There are many sources, depending on the particular type of information required. Some of these sources are listed below, with examples of the kind of information available.

**dealer network**

variety and types of seed grown, buying habits, competitors' products and prices, stocks

**farmers and farmers' organizations**

consumer profiles, factors affecting seed purchasing, level of input use

**government agricultural and trade statistics**

crop area, yield and farm size and number, imports and exports

**provincial and regional government offices**

precise statistical data and local knowledge, support programmes

**government organizations breeding institutes, certification and extension services**

crop agronomy and variety, information, seed certification tonnages

**international agencies**

statistics, special studies, crop and commodity reports

**seed associations and other trade organizations**

seed company listings and details, seed production and supply data
Product catalogues
Competitor product range, treatments, prices, terms of trade, sales organization

Trade directories
Company listings, product details

Related industries
Agrochemical, fertiliser and machinery companies

Agricultural banks
Economic data, credit and loan facilities, linkage with development programmes

Universities and other teaching establishments
Library facilities, technical and research data, studies and specialist knowledge

Journals and publications
Technical articles and special features, product and market reviews

Attention must be given to the accuracy and reliability of the source and attempts made to cross-reference and double check. Data must be treated with care. Seed import, export and production figures, for example, may not distinguish between seed used for sowing and oil seed for crushing.

Commissioned market research projects

There will be occasions when it is desirable to commission work from professional market research organizations. In order to get exactly the right kind of information from a commissioned study, it is important to adequately brief and agree on Terms of Reference with the company selected to carry out the research. This involves defining with care exactly the sort of information that is required.

If the research is conducted by means of a questionnaire, the market research company will begin by preparing the questionnaire and running a set of pilot interviews. The company should then report back to the client before undertaking the survey proper to ensure that the questions have been formulated appropriately, and make any necessary recommendations.

Although commissioned market research is expensive and will be beyond the means of many small seed companies, serious consideration should, nevertheless, be given to seeking professional help when the consequences of making business decisions based on insufficient or inaccurate data can be costly.

Gathering information

The main techniques for gathering data are through:

- desk research;
- personal interviews;
- group discussions;
- telephone interviews;
- postal surveys.

Desk research is the term given to making use of data that already exists or published data which can be accessed. This is always the starting point of any market research project but the information may not provide sufficient detail or may be out of date, thus making it necessary to undertake field research to generate new information.
Government statistics provide information on a regional basis such as crop areas, yield, number and size of holdings. These can be used to determine total seed demand and give information about the farmers and the quantity of seed they will be likely to use. Fertilizer distributors will have records which will indicate the general level of inputs used. The seed certification service will know the quantity of seed that has been certified and the extension service will be familiar with the use of the different categories of seed, e.g. seed retained on farm, unlabelled and certified seed. Information needs to be collected in such a way that the respondent has little opportunity for an opinion to be expressed. For example, questions might be phrased as follows, "What variety of rice did you grow last year?" "What area did you plant?"

Conversely, qualitative information may require a more discursive approach so that farmers are given the opportunity to express their opinions with questions like, "Variety A, B and C are similar." "Why did you choose variety B?" Thus, the researcher needs to consider the type and quantity of information required in choosing the method of communication.

Face-to-face interviewing is the best form of contact as it involves two-way communication, providing instant response and reaction. The information is usually immediate and the closer personal approach is frequently a good way of getting detailed and accurate information. However, the process can be time consuming and expensive if travel is involved.

This form of contact and information gathering happens all the time on an informal level, but for a formal study it requires a very structured approach and the use of a questionnaire.

Group discussions bring a group of people together to judge their opinions and can be used to test new ideas and concepts. But the presence of a professional is needed to ensure that the exercise is effective.

Questionnaires are often used as a way of collecting both quantitative and qualitative information through face-to-face interviews, by post or over the telephone. Some principles of questionnaire design are:

- the questionnaire must suit the contact method to be used;
- questions should be unambiguous and unbiased;
- questions should be asked one at a time;
- questions should be clearly related to the objectives of the study.

Questions are of three basic types:

1. **Single choice, yes/no**, for example, "Do you buy rice seed?"

2. **Multiple choice**, for example, "How often do you buy rice seed?" "Every year? ... Every second, third, fourth year?"

3. **Open-ended**, for example, "Why do you not buy seed each year?"

Using these three types of questions the questionnaire can be:

- structured using all single- or multiple-choice questions;
- semi-structured using a combination of the above with open-ended questions;
- unstructured using open-ended questions determined by the interviewer.
As a guide, for large samples using a team of interviewers looking for relatively simple information a structured or semi-structured questionnaire should be used. An unstructured or semi-structured questionnaire would normally be used for in-depth interviews of a smaller sample group.

**Market segmentation**

Individual customers have different needs but an organization cannot provide a different product and service for each customer, neither can customers be served properly if they are all treated as being the same. The technique of market segmentation is used to help solve this dilemma.

Market segmentation is the process of identifying and then separating a total market into parts so that different marketing strategies can be used for each part. This involves collecting marketing information about the different segments that the company has identified.

Distinguishing between the different characteristics and needs of consumers order to identify a particular market segment is called *differentiation*. To be of value to the marketing manager the segments should include, *within the segment*, customers that are very similar to each other but, *between segments*, customers that are as *different as possible* from each other. The manager will look for segments that are large enough and have sufficient purchasing power to give an adequate return and make a differentiated marketing approach worthwhile. This information is critical to the selection of target markets.

An example of differentiation could be the difference between vegetable growers with small holdings supplying a range of fresh produce to local markets and specialist growers producing vegetables to supply a canning factory.

Segments on the basis of geographical factors include:

- **location**
  - physical characteristics, rainfall, soil types, altitude

- **irrigated or dry land**
  - different cropping patterns and input regimes, farming systems

Segments on the basis of crop species can include:

- **type or variety**
  - white or yellow maize, hard or soft wheat

- **season**
  - winter, spring or summer sown

- **maturity groups**
  - early, medium, late

- **use and quality**
  - forage or grain, feed or bread making, oil or meal, etc.

- **non hybrid or hybrid vegetables,**
  - maize, sunflower

There are a number of broad classes of crops. These include cereals, pulses, oils, fibres, industrial crops, vegetables and flowers. Vegetables can be further sub-divided by type, e.g. leafy, legumes,
fruit, and root. Each of these types has, in turn, a range of species and varieties. Thus a complete study could involve too much work for the resources available. Crops must therefore be chosen which are directly relevant to the company's business or form part of an evaluation of new opportunities.

Farmers can be grouped according to the kind of farm they operate; since different farms have differing needs the services provided to each type will require specialists who can meet the requirements of that particular farm type. Accordingly, the marketing manager may choose to separate the larger managed farms for personal attention and target farmers who sell their crops for cash rather than those who retain crops for use on the farm.
Chapter 4 - Forecasting demand

Background

The factors which affect demand
Demand forecasting techniques
Growth trends used in a commercial context

Background

By not adequately estimating demand the consequence may be over production or underproduction, both of which can cause serious financial consequences for a seed company. Too much carryover and stock write-offs will be costly while a lack of seed not only means lost revenue but is also a source of frustration for the sales force and the dealer network.

This combination of special features in the seed industry makes the accurate assessment of demand even more critical. Some of these features are the:

- long lead time for the development of new products from breeding programmes;
- seasonality of production;
- production subject to variables like climate which are outside the control of management;
- statutory controls and quality standards;
- existence of a generation system - whereby the production in one year is the progenitor of the next;
- limited 'shelf life and loss of germination;
- the high volume: low value ratio of some seed crops like cereals makes long-distance transport and long-term storage unattractive.

The first step in demand forecasting is to calculate the existing requirement (x percent bought seed) is the amount of commercial seed that is purchased by farmers.

In calculating seed requirement, seed application rates must be taken into account, i.e. the difference between a crop grown for grain or forage, the difference between irrigated and dry land, the difference between a crop which is sown directly or transplanted. It is also important to define the various categories of seed that exist in the market, as an understanding of these segments will assist in the assessment of demand. Seed can be categorized as being:

- grain retained on farm and used as seed;
- grain bartered for seed at village or neighbour level;
- grain sold as unlabelled seed bought from a market or trader;
- certified or labelled seed bought from the distribution system.

Local custom and practice may be such that grain is retained on farm for use as seed. Alternatively, farmers may replace seed every three to five years. Recognizing that grain of inbred crops will be retained by farmers for use as seed if it is possible to do so, the challenge for the seed industry is to convert as much as possible of the unofficially traded seed to certified or labelled seed sales.
The factors which affect demand

Demand, to the seed seller, is the quantity that buyers are willing and able to purchase at a particular price. This is called effective demand and is not the same as the seed requirement. It is important to distinguish between the amount of seed farmers will actually buy and how much they would like to buy, or indeed how much the government would like them to buy. The total amount of certified or labelled seed sold may be quite a small proportion of the total requirement.

Many factors have to be considered when assessing and forecasting demand. Some of these are:

**cropping pattern and intensity**
- extension of irrigation areas; development of double cropping systems and multiple cropping of intensively grown crops; competing crops; new crops; rotations

**seed use**
- type of seed used, i.e. non-hybrid or hybrid; variations under different farming systems, such as irrigated or dry land, and grade of seed used, e.g. if seed is graded and mechanically sown

**climate**
- rainfall and temperature patterns

**demand for crop products**
- commodity demand; export demand; agro-industrial development

**market situation**
- commodity prices; yield levels; prices of seed and other inputs and farm costs; cost of growing competing crops

**disposable farm income**
- levels of farm income; what a farmer will spend on seed; availability of credit

**rate or level of adoption of new technology**
- farming techniques; mechanization (precision drills use less seed); hybrids replacing non-hybrid varieties; adoption of new varieties and certified seed

**government policy**
- subsidies and other inducements such as price support and credit; privatization; extension programmes; import or export policy and duty levels

**crop cycles**
- frequency of good years and poor years; occurrence of natural disasters

**habits and traditions**
- socio-economic factors

**product performance**
- comparison with alternative varieties

**competitiveness**
- the choice the farmer has of using alternative varieties and suppliers; how do the suppliers compare in terms of image, convenience of supply, customer support?

**price**
- how prices compare with alternative sources?
promotion
special promotion campaigns being planned

When an individual company or organization is estimating the market share which may be gained by its own products, product performance, competitive positioning, price and promotion are the most important factors which need to be taken into account. This will form the basis of sales' forecasting and production planning.

The effect of price and farm income on demand

In general, 'the higher the price the lower the quantity purchased', especially where there are substitutes available. In the case of seed, farmers can retain the grain of non-hybrid crops, switch from hybrids to non-hybrids or grow different crops.

In addition to price, farm income is the major limiting factor affecting what a farmer will spend on inputs. The farmer will have to balance the cost versus the benefit before being persuaded to spend money on inputs such as seed and fertilizers. Unfortunately, seed is often the one item that the farmer believes it is possible to save money on, even though less is usually spent on seed than on any other input. He will ask the questions: "What are the chances of getting a return on my investment?"."Will the rains come?"."What will the market be like for the produce? " It must be recognized that there are conflicting demands on farm income and the supplier of inputs is competing for that income.

Marketing and promotional campaigns are designed to persuade farmers that seed represents good value. Farmers often do not attribute value to seed since, in the case of grain, they think they are producing the very product which they are being sold. Thus it would seem to many farmers that they could just as easily replant their own grain.

Demand forecasting techniques

Forecasting is the process of making projections of demand for products by examining past and present performance levels, combined with an assessment of available products and markets. This may be carried out within the government service or by individual companies in a purely commercial context. The following approaches can be used:

· target setting;
· growth trends;
· growth rates adjusted for new technology adoption;
· sampling.

Target setting. This method is commonly used in developing countries where government is directly involved in planning and seed supply. In a centrally managed economy, targets are likely to be set at a national level and production plans fixed for each region.

India is an example of a more open economy where both the public and private sectors coexist in a well-developed seed industry, but where the government retains a coordinating function and has the ultimate responsibility for the security of seed supply. The Ministry of Agriculture sets the targets and organizes meetings to establish the supply situation and production plans of the various organizations involved.

Companies may opt to set a target for an ideal sales level while, at the same time, recognizing that this is unlikely to be achieved and budgeting for a more achievable situation.

Growth trends. This approach is based on the assumption that the rate of growth of seed demand as seen in past years will continue. This may give unrealistically high forecasts and will depend on the
stage of market development for improved seeds. Small increases in volume in the early stages of improved seed use will represent a large increase in percentage terms, which may not be possible to sustain.

*Growth rates adjusted for new technology adoption.* Using this approach a given region is considered on the basis of degrees of new technology uptake and the likely speed of change. Each part of the region can then be categorized as 'low' to 'medium' or 'high' growth, better reflecting the overall situation.

*Sampling.* The accuracy of the above approaches can be improved if sample groups of farmers are questioned to gauge their anticipated demand for seed. This exercise is more reliable where there is a reasonable awareness of the benefits of using improved seeds.

**Growth trends used in a commercial context**

Historical sales can be examined to develop trend lines but the resulting projections must always be reviewed with the benefit of judgment and experience. Seasonal patterns and the variance between years need to be explained. Sales data from previous years are examined by preparing a graph of monthly and cumulative sales and comparing the different years. A graph of successive years gives the overall trend and should answer the following questions:

- is the market expanding or contracting?
- if company sales are to be expanded in existing markets, shares will be taken from which competitors?
- are increased sales going to come from existing customers or from new ones’?
- what products are being launched or phased out?

The sales forecast for each crop group is the total of individual variety forecasts. Thus each variety has to be considered as a different product line at different stages in its life cycle.

When forecasting demand, a certain percentage should not just be added to the previous year's figures as the previous year may not have been typical. It is necessary to create a market-based forecast involving people in the company, as well as those in the distribution chain. If a company expects to increase its sales by ten percent the dealers will need to plan accordingly. Demand forecasts prepared by dealers need to be discussed with them if they do not correspond to the company's forecasts. For instance, it is possible that a dealer was left with carryover stock as a result of a late delivery in the previous season. Alternatively, local conditions may not correspond to the wider picture in the company's area.

The following is an example of a process adopted by an international company operating in a developing seed market:

1. **The company holds a planning meeting involving the entire sales and marketing team.** The individual sales representatives have collected market intelligence during the season and the sales manager has prepared an analysis of the sales for the current and previous years. Figures are recorded on a large board and refined as the discussion progresses.
2. **The size and segmentation of the market is first established for the product group under discussion with any changes, trends or special factors being noted.**
3. **The market volume in the current year is allocated to each competitor noting shares of particular varieties.** As much information as possible has been collected about production and farmers' reactions to competing varieties. Information should also be available about the level of seed imports.
4. **The forecast demand for individual varieties in the company's portfolio is then**
considered in the light of pricing, the dealers' comments on whether the varieties are 'as good as' or 'better than' the competition, the dealers' commission structure and planned promotional activities.

Once again the Seed Co-op in Zimbabwe provides a good example, illustrating how external and government organizations are involved and contribute to the process. The Seed Co-op, in addition to analysing its own data, gathers information from farmers, government statistics and associated businesses, such as chemical and fertilizer companies, to provide greater accuracy in forecasting. In Zimbabwe, where most commercial food crops have been marketed through parastatals, proposed pricing for the next season is a critical factor. Market research is also undertaken.

Government staff carry out extensive surveys of crops planted, yields achieved, crop sales and residues retained on-farm for home consumption. Six small-scale farmers are studied in each administrative district, representing different climatic regions, and providing a very comprehensive database. This data is then compared with information received from the Commercial Farmers' Union, the Central Statistics Office and the Early Warning Unit, which take into account all the types of farming system.

These studies provide the industry with critical information about potential seed requirements which, when considered together with company sales trends and other external factors, remove some of the guesswork from forecasting demand.
Chapter 5 - Supplying the market

Seed as a product

The word product has already been used several times to refer to what is sold. In the widest sense, seed is the product but from a marketing point of view it is individual varieties which are the products. The seed product range is therefore all the varieties of all the crop species that are being sold.

In making the decision to buy a particular variety from a given supplier the consumer will probably expect a whole range of benefits. These include those which relate to the performance of the product as well as less obvious benefits associated with the performance of the supplier.

Some examples of 'product performance' are:

- genetic or variety characteristics, such as plant type, pest and disease resistance, yield, quality, response to inputs;
- seed quality characteristics, which include purity and germination, grade, treatments, and general appearance of the seed sample.

Some examples of 'supplier performance' are:

- packaging, among which are package size, appearance, information useful to the consumer, use of packing materials that contribute to the maintenance of seed quality;
- the reputation of the supplier, as to the availability of seed, competitive pricing, credit arrangements, product range;
- after sales service and customer contact to assist in solving problems such as poor seed performance, or for on-farm technical support;
- the corporate or brand image, for example "if the seed comes from Company X or is the same as Brand Y then it must be good".

A company may choose to distinguish the products it sells by identifying them with a brand name. Where a company has developed a strong name when a new variety is launched the farmer will recognize the name and will be more confident of trying the new variety. Where two companies are marketing the same or a similar variety it is these supplier performance features which will finally influence the purchase decision.
The seed product portfolio

The term product portfolio is commonly used in the seed industry to refer to the range of products offered by a company. The product range can be described as the number of product lines, crop species, individual products or varieties of each line and brands. Companies can use brands to differentiate between seed quality levels and treatments as well as to differentiate markets for the same products. Some companies specialize in certain seeds while others diversify their range of products to spread the business risk, achieve better utilization of their assets or smooth out seasonal cash flows. A seed company will normally try to offer a wide range of seeds to capture as much of the customers' business as possible. The factors to be considered by seed companies in determining their range of products may include:

- the range of crops grown in the marketing area;
- the size of the individual seed market segments;
- market trends, e.g. whether the market is increasing, static or declining;
- the strength of the competition;
- the price farmers are willing to pay for seed, and therefore the likely return from supplying the seed;
- the factors in favour of the farmer purchasing seed, such as the difficulty of retaining his own seed or the choice of using hybrid seed;
- the source, ownership and exclusivity of varieties and variety development costs;
- seed production difficulties which might arise;
- the suitability and capacity of processing and storage facilities for the range of crops;
- the seasonality of crops;
- the implications on staff training, recruitment and administration of introducing new products or a new distribution system;
- government policy and support for different crops and seeds.

As well as thinking about the different product lines, a decision has to be made about the number of individual varieties within a product line that can be maintained in the market. This decision will be influenced by overall market volume and the specific requirements of the identified market segments, such as:

- time to maturity;
- pest and disease resistance;
- quality features related to the end uses;
- agronomic features.

Seed portfolio analysis

A commercial seed enterprise should constantly review the performance of the individual products which make up the product range since overall profitability may be positively or negatively affected by a few products. This exercise is referred to as a Portfolio Analysis, which involves examining each item according to its cash generation, taking account of market share, market growth and its competitive positioning. Cash generation relates not only to the volume traded but the gross margin earned, which is the difference between the cost of seed and the sale price. Some seeds are more expensive to produce and this may not always be reflected in the price which can be charged. Also there is a cost to continuing the supply of pure seed stocks for commercial seed production. This may become too great when sales decline.

The gross margin earning ability of products can be used to characterize the type of seed business and product portfolio offered. Products can be categorized based on performance or competitiveness and on owner/pip or exclusivity.
The performance or competitiveness of products can be appraised as:

- superior or better than competitors' products;
- competitive, but no better than products offered by competitors;
- inferior or not as good as competitors' products.

Ownership or exclusivity refers to whether products are:

- public varieties which are available or accessible to all;
- proprietary varieties, the availability of which is controlled by the breeder or licensee.

A variety which is superior and sold on an exclusive basis would be expected to have higher earning potential than a competitive variety.

Although a variety may be competitive in genetic terms, good quality, a strong brand name and effective promotion can create a sales advantage. It is common for breeding companies to make their own selections of standard varieties in order to create some identity and ownership of the variety. This is particularly true of vegetable varieties.

**Product life cycle**

There will always be a demand for new products. A product may last on the market only for one season, albeit a rare occurrence, or for many years. The concept of the product life cycle is an essential one for planning changes in marketing activities. The product life cycle recognizes that products have a finite market life and charts their lifetime through various phases. In general a development phase exists for all products before they are launched onto the market.

The life cycle can be broken down into five distinct stages as is shown in Figure 4. In the introductory phase, growth is slow and volume is low because of limited awareness of the product's existence and perhaps a reluctance to accept an unproven product. Sales then rise rapidly during the period of growth and profitability per unit of sale should reach a maximum as increased volume enables the benefits of economies of scale to be realized, with unit costs decreasing as fixed costs are spread over a greater number of packs of seeds. Towards the end of this phase, competitors enter the market to promote their own, similar products and this reduces the rate of growth of sales. This period is known as maturity. The market then becomes saturated with the product and sales decline as competitive products erode market share, eventually leading to the withdrawal of the product when it is no longer profitable. The stages in the seed product life cycle are:

**development**
breeding, selection, yield testing, official registration

**introduction**
variety launch and promotion, field demonstrations and extension

**growth**
increased awareness and acceptance of variety, build-up of commercial quantities of seed as dealers increase orders in response to demand created at the farm level

**Figure 4 Stages in the product life cycle**

**Figure 5 Product portfolio life cycles**

**maturity**
growth in sales of the product slows down as maximum cover is reached; there will usually be a
choice of varieties available and better performing varieties will be introduced

*saturation*
maximum penetration has been reached and growth ceases

*decline*
in innovative farmers switch to a new variety while some stay for longer with tried and tested varieties

*withdrawal*
the variety becomes outclassed; when it is no longer profitable to maintain and produce at very low volumes a decision to withdraw it has to be taken

**Managing the life cycle**

To prolong the life of a product a company will need to alter the ingredients of its marketing mix. Changes might include:

- the improvement of the product arising from changes or modifications and an extension of the product line;
- the alteration of distribution patterns or the choice of different distribution channels (i.e. *place*);
- the use of *price* changes to stimulate sales or respond to competitors;
- change the style and emphasis of promotion.

Improvements to seed are made continuously through breeding and through Distinctness, Uniformity and Stability (DUS) testing by government agencies; thus any improvement in a variety may be considered to be a new product. The time scale of the life cycle stages will vary with different seed products and markets. The development stage of a new variety may take 10-12 years, but the successive stages in its life cycle are dependent on variables such as the competition, the sophistication of the market and the pressure of new products in the breeding pipeline.

Most companies produce a range of products (i.e. the product portfolio, see Figure 5) each of which has its own life cycle. Also, it is important to remember that new products may fail to meet registration criteria and existing ones may have to be withdrawn from the market prematurely. For example, resistance to disease could break down in a cereal variety due to the occurrence of a new strain of rust. Marketing programmes will have to be reviewed when such situations arise.

**Developing a product marketing plan**

One aspect of marketing in a seed company is the design of a product marketing plan which, in turn, forms the basis of the production plan. This is how a market-driven organization should operate. Unfortunately, in many non-commercial public sector agencies the reverse is the case. Those who do not sell the seed are making the production decisions.

A three to five-year marketing plan should be created for each variety of seed. These plans should, in turn, be combined to form a product group plan. It is important to think in terms of a three to five year time frame as seed from one generation is used to multiply the next generation. The stock of early generation seed must therefore be sufficient for the production of the later commercial generations. Not only will the plan have to be communicated to the production department but also to the breeders. Successful seed supply requires a planned and integrated approach. If a variety is being produced under license from a foreign breeder, stock seed may have to be imported from abroad, adding a further stage in the process.

In a large company a product manager usually works closely in a team with plant breeders and staff
from the sales and production sections in formulating the marketing plan. Even in a small organization, where one person may have several functions, it is important to maintain this integrated approach.

A standard internal production agreement form should be created by the marketing manager, giving the following details:

- variety, plus parental lines for hybrids;
- volume requirements with underlying assumptions, such as market shares;
- inventory policy, especially important for vegetables where stock may be held to cover part of the following year's sales, or where stock of high margin seed is held to meet additional demand and for security of supply;
- packaging type and size;
- quality standards;
- labelling details;
- seed dressings;
- target cost and gross margin assumptions;
- target date for availability.

It is important that seed stocks are built up in advance of the launch of a new variety so that the sales growth phase is not slowed down by a shortage of seed. A delay of two or three years will mean that any yield advantage will be eroded by successive new varieties. It is also very easy to lose the momentum behind a marketing campaign. The dealers lose interest, the farmers turn to other varieties and the sales team are demotivated because they cannot deliver the seed. Work on varietal purity and early generation seed production would normally commence during the last few years of the trial period but building up commercial seed stocks prior to variety registration involves some risk.

**Stock and inventory policy**

It is important for a seed company to establish a stock policy based on product portfolio and marketing needs. There will always be some unsold stock, resulting from over production or lower than expected sales. Careful management and planning is needed to ensure that stock levels of commercial generation seed are kept to a minimum, thus avoiding losses and additional costs.

As a general rule, of lower value, higher volume crops, such as cereals, and seeds of crops which are difficult to store, such as soybean, are produced to meet seasonal needs. To ensure timely delivery a company may hold buffer stocks, particularly of its leading hybrid and higher margin varieties, or where sowing follows closely upon seed harvesting. The maintenance of adequate stock levels is vital to the success of vegetable seed businesses in particular since:

- there is often a continuous demand to cover seasonal and multiple cropping;
- there is a large number of product lines which have to be maintained and produced;
- seed of each line may not be produced in successive years;
- there are many biennial species where seed production will span two seasons;
- there may be difficulties in producing the seeds.

**The production plan**

The production department should evaluate its variety plan in terms of:

- the date when the seed is required for sale in relation to the harvest period;
- the area required for each generation, allowing for the estimated loss of seed crops, contracts not honoured, crop and inspection failure and processing losses;
· the preferred production location;
· the availability of contract farmers;
· the harvesting period;
· transport and handling into the processing plant;
· processing and storage capacity;
· production risks;
· yield and cost estimates.

The marketing section should have some say in the production location. Where feasible, this should be related to the market location, and to arrangements for transport and the cost of transporting bagged seed from the plant to the point of sale.

Packaging

Seed packaging helps to maintain the quality while facilitating handling and identification of the product. Packaging is a very powerful seed marketing tool and several factors have to be taken into account when deciding on appropriate packaging to be used:

Maintaining quality

The *quality* of the seeds has to be maintained from the time of packing to the time of use by the farmer. The packing material and pack type chosen will depend on the nature of the product and the environment but packaging has to be resistant to moisture penetration, pest damage, adulteration, slipping in the stack and to rough handling.

Ease of handling and convenience

It is important that the pack is adapted to market requirements in terms of size, weight and unit cost. Consideration must also be given to the mode and availability of transport from the point of purchase. A serious consequence of an over-large pack size is that the retailer will break bulk to sell the seed. This will provide the opportunity for deterioration and adulteration, and may invalidate the legal status of the labelling.

Thus a number of factors need to be considered when planning for pack size. These relate the package size to the seed's value, its use and the area normally being sown. Likewise, handling, portability and onward transport at the retail level are important so that retailers do not have to break bulk to sell the seed. Local knowledge can be important in determining if people are charged by weight or number of packages when transporting seed. Also, a bag that when empty has other uses may be a factor considered by the farmer in choosing which seed to buy.

Identification

Presentation is a vital aspect of successful marketing. Packaging materials must be suitable for printing and should be carefully designed to attract attention as well as being distinctive, in order to give the product and the supplier instant recognition. The packaging should form an association in the mind of the farmer between the seed and the supplier (known as the brand image) as well as providing information about the product and giving information on safety, storage and use of the seed. A clear pictorial representation is particularly important for vegetables. Finally, the package should provide as much protection from counterfeiting as is feasible.

Cost

A balance should be struck between cost, technical requirements and visual appearance of the packaging, in relation to the value of the seeds. If, in order to reduce costs, a standard bag or pack is
used for a product line which requires a variety label or stamp to be applied this must be securely attached and be clear to read. Language and the use of graphic representation are also important considerations which will be dictated by regional and local factors. The promotional effect of packaging should not be underestimated.

**Labelling**

Information on the label should fulfil both the legal requirements of 'truthful labelling' and provide evidence of certification, where appropriate, as well as technical information about the product.

**Examples of labels**

Specific information provided should include:

- species, variety, germination, purity and contents;
- seed treatment and appropriate danger signs, plus warnings;
- seed lot number for tracing back to source;
- year of production and date labelled;
- expiry date of validity of certification, if required;
- statement invalidating quality assurance if the bag is tampered with.

Normally there will be a company label plus the official tag if the seed has been certified. The legal requirements vary from one country to another but usually state not only the technical information that should appear but print size, label size and colour. Colour coding is used for certification tags to denote the different generations. Labels should also be made of materials resistant to damage and have secure fixings. It is normal practice to place an additional label in the pack in case the one on the outside becomes detached. Product leaflets are also frequently included as a service to farmers.
Chapter 6 - Seed pricing and costing

The importance of price

Price has different meanings for different groups of people:

- to the buyer price is a cost which is used as a measure of value; the buyer evaluates one variety or source of seed against the alternatives;
- to the seller price is revenue and therefore a key element in the marketing mix; setting the right price is an important tactical decision and is a key factor influencing revenue and profit;
- to a government price may mean popularity and votes and is therefore a sensitive political issue; governments may therefore seek to influence and control seed pricing.

The importance of price varies from one market to another and between different segments in the same market. For example, non hybrid seed, which the farmer can save, will be more price sensitive than hybrid seed. Price will be a more critical factor in marginal farming areas, where spending power is low, but less important where high yields can be obtained and farm produce can be sold profitably. Providing the benefits of the seed are understood, it is other factors, such as the availability of fertilizer and confidence in the produce market, rather than price that dominate the farmer's decision to purchase.

Price and demand

The manager responsible for pricing a product must know how much more will be sold if the price is lowered and, conversely, how much less will be sold if the price is increased. There is obviously a limit to what the farmer will pay as well as a limit to demand however low the price is set (unless seed is used for human consumption). As prices increase the point is reached where substitutes to bought seed, such as farm saved seed, may be used or the farmer may choose to plant a different crop.

Price can be one of the most effective marketing tools available to a company. Pricing strategies for a product or product line should be established on the basis of reaching short and long-term marketing objectives such as selling a certain quantity, achieving a certain market share or making a given margin over costs. However, prices are often set without taking into account the true cost of production and the effect which that may have on the competitive position of a product or product range.
The cost of seed

Cost is a major factor in any discussion about price. Thus the costs involved in putting a bag of seed on the farm must be recorded, analysed and known to management. These costs will include the cost of the processed and packaged seed and the marketing costs associated with selling and distribution. Costs may be grouped according to the activities involved notably:

1. Seed production, involving procurement, processing and storage, quality control and certification.
2. Seed marketing, taking into account marketing, market research, advertising and promotion, sales and distribution.
3. Administration and finance.

For a company planning a seed production programme the working capital needed to procure and process seed has to be assured. If it is not to be financed out of existing resources then short-term loans are required to ensure that there is sufficient working capital. Seed held in stock at the various stages of processing also has to be financed. This is a significant cost item and there may be serious financial consequences for a business that has high stock levels.

The manner in which costs are allocated and presented will depend on the accounting system used. A simple presentation of a Profit and Loss Account demonstrates how income and costs relate, as shown in Figure 6. Elements which make up a Profit and Loss Account are discussed below:

**revenue**
income from various sources such as **sales, commissions or royalties**

**sales**
direct income from sales of seed **commissions** indirect income from sales made on behalf of a third party

**royalties**
income earned from licensing varieties to a third party

**cost of goods**
direct costs of procuring seed for sale plus treatments and packaging; may include processing costs depending on accounting policy

**gross margin**
sales income less purchase costs (also expressed as a percentage); serves as a useful indicator of the earning power of the product or business

**expenses**
company overhead costs associated with different activities such as production, sales and distribution, marketing, and administration

**trading profit gross**
margin less expenses

**plant breeding**
breeding, variety maintenance and trial costs

**gross profit**
trading profit less plant breeding expenditure
**net profit after finance and tax**

gross profit less finance and tax charges

The Profit and Loss Account can be presented for the business as a whole or for individual products or groups of products which may represent ‘Profit Centres’ within the business. Costs which are common to the whole business, e.g. the central management or the fixed cost of owning and operating a breeding station and processing plant, can be allocated across products. Although some products will be more profitable than others, and will be able to bear a greater share of the overheads, it is important to cost each product as honestly as possible for management control and decision-making purposes.

**Pricing policy**

Seed pricing involves setting prices when a new product is launched or a new distribution channel is used. Also, decisions may need to be taken to change the price in response to competition and to the general market situation.

In the public sector prices are often based on an economic pricing policy. Economic pricing considers the effect of seed price on the economy, taking into account the amount officials think farmers can afford to pay and the role of the seed industry in the development of agricultural production. Ideally, however, the public sector should follow a more commercial pricing policy which accounts for all costs and allows for an element of profit.

**Figure 6 Profit and loss account example**

Some objectives in government seed pricing could be:

- to induce farmers to use certified seed of improved varieties in order to increase national production;
- to provide adequate incentives to seed producers to supply seed in sufficient quantity to meet demand;
- to encourage the development of private distribution channels;
- to implement government agro-economic policies.

The objectives of public-sector seed agencies are usually similar to those of government since the main purpose is to maximize seed use while achieving a marginal profit to finance the organization. Institutional inefficiencies often mean that profits are not realized and the government is, in effect, financing a hidden subsidy to make up for the losses which cannot be covered by cost increases or operational improvements.

Where subsidies can be justified they should be part of a declared policy of assistance provided to farmers for specific crop development programmes. Subsidies should not be used to compensate for the inefficiency of seed supply organizations and should not discriminate against the private sector by only being available for seed supplied through the public sector. In some countries, the effect of subsidies is to create a great deal of uncertainty and this is a disincentive to private seed supply development.

Government pricing policy should not undermine private enterprise in a mixed economy since the private sector will need to establish a price structure which will reflect the true cost of seed and meet its business objectives. Subsidies may form part of transitional arrangements where the private sector is being encouraged to enter the market. This was the case when the seed market was liberalized in Turkey. The government arranged for subsidies to be paid to private companies with a phasing out over a five-year period.
State-run organizations may continue to supply the high volume and low margin non-hybrid seeds, such as cereals, or seeds of public varieties while the private sector develops more profitable high margin and imported seeds. Some objectives in private sector seed pricing are likely to be:

- *props maximization* which will be the long-term target although there may be many other shorter term considerations which will influence pricing policy, such as increasing market share and gaining acceptance of new products;
- *price competition*, may be achieved by setting a price that gives a competitive edge in the market place but may not be lower than that of a rival because other factors, such as service, will be contributing to a company's competitive advantage;
- a *yield? investment* which must be at least as good as other uses for investors' funds.

**Pricing strategies**

Once a company's seed pricing objectives have been established, different pricing strategies must be considered. These include:

**Low price strategy**

Low price strategies are used where consumers respond very positively to small downward changes in price, but a company may not always gain from setting low prices as more efficient competitors may respond with similar price cuts. If the product is not particularly price sensitive then the net effect of a price reduction can simply mean a reduction in revenue. A company may be tempted to reduce its price where similar or substitute products are also sold or when there is an oversupply. However, seeds can become devalued by selling them cheaply especially where there are real benefits associated with the product. Imported vegetable seeds are often chosen by farmers in preference to locally produced varieties in the belief that they are better because they are more expensive. It is therefore critically important to understand the likely response of the farmer when adopting a low price strategy.

**Market price strategy**

Where a few large companies dominate supply, products tend to be similar (known in the seed industry as "me-too" varieties) and the role of price tends to be neutral, i.e. a market price is established.

**High price strategy**

This strategy can be used as a long- or short-term policy. In the case of the long-term policy the company will have identified a market segment for a high quality, value-added product such as graded and treated seed for precision drilling. A high price will reflect the exclusive image or added value of the product. A short-term, high-price policy takes advantage of a new product introduced onto the market, as may be the case with a new high-yielding variety where supply is limited.

**Pricing techniques**

The important influences on pricing are cost, demand, prices of the product's main competitors and short-term sales targets.

**Cost-plus pricing**

This method involves calculating the unit cost of a product and adding the appropriate profit margin to give a base price which might then be altered in relation to prevailing market conditions. While
this seems a simple approach the fact that such pricing is production oriented and may therefore not reflect what is happening in the market place, makes it risky. A rigid application of cost-plus pricing may lead to price increases when demand is lower and reductions when demand is strong. This is the opposite of what should normally be done.

**Contribution pricing**

This is a form of cost-plus pricing which involves separating the different products that make up the product portfolio and allocating to them the direct costs associated with their production. The price is determined at a level which will generate revenues in excess of these costs, thereby contributing towards meeting business overheads. Individual products can be analysed in terms of their ability to cover their direct costs and contribute to overheads.

**Competitive pricing**

Where there is market competition, costs cannot always be the determining factor in pricing. Here the nature and extent of competition will have a major influence on the price. If a product is faced with direct competition from similar products the price will be restrained. In contrast, when a product is faced by indirect competition from products in different sectors of the market there will be more scope to vary the price. This provides the possibility of using different strategies.

**Short-term pricing techniques**

Pricing can be a useful tool for pursuing short-term marketing and sales targets. When a new variety is launched higher prices can be set, providing the opportunity of earning higher returns from those farmers willing to pay the higher prices before seed becomes more widely available. Lower prices may be linked to promotional activities such as boosting sales of established varieties, creating interest in new ones, reducing high stocks and encouraging farmers to buy early.

**Distributors' margins**

There are no fixed rules to apply, but the basis for setting a margin will depend on what is expected of the distributor and the acceptable final price to the consumer. Clearly, if the distributor is going to be actively involved in selling the seed and is expected to take a stock risk then the margin must afford adequate compensation.

Seed margins have to be attractive enough to provide the dealer with an incentive to stock and sell. Where there is competition, seed marketing companies compete by offering more attractive trading terms. This encourages dealers to stock their products and give them prominence. If farmers go to buy seed, and are undecided about the variety, the dealer will recommend seed from the most profitable supply source.

If a seed company wishes to enter an exclusive arrangement with a dealer, such that seed of other companies will not be sold through the same outlet, then it is usual to provide a higher margin. The dealer will also have to be assured that the company is able to offer an adequate range of competitive products.

**Price lists, terms and conditions of sale price lists**

Whatever the mechanism used for setting prices these prices need publishing and publicizing. Prices must be published in time for the selling season and in time for farmers to make their buying decisions. Frequently, situations arise in the public sector where all the parties involved in the price setting process fail to agree or the administration of the system is too slow. As a consequence, the sales campaign is delayed or there is uncertainty in the market causing seed to remain unsold.
It is common to provide an internal price list for the seed company's sales staff giving details of margins, commissions and discounts and indicating the latitude they have when selling to the distributors. Retail prices may be published as part of a catalogue or as a separate printed list. The advantage of a separate list is that it can be altered in response to market conditions more frequently than a printed catalogue. The distributors' price list should give details of:

- product group and variety name; package sizes and details plus package prices and the per kilogram price for comparison; prices for different seed preparations and treatments; the minimum unit of sale; discounts available; payment details;

Figure 7
Some components of terms and conditions of sale

1. Complaints procedure: the circumstances under which a complaint about seed quality will be considered.
2. Seed standards: regulations governing the supply of seed.
3. Latent defect: since seeds are supplied free of disease the company disclaims responsibility for subsequent infection when the seed is grown.
4. Definition of terms used to describe the variety response and performance: words such as resistance, immunity, tolerance and susceptibility are defined.
5. Plant variety protection: adjustment of prices to account for any royalty payments that are liable to be paid.
6. Published prices and quotations and subsequent alterations: explanation of what is included in the price and the right to alter quotations.
7. Force Majeure: covers factors outside the reasonable control of the supplier; standard exclusion clause covering the failure of a crop or delivery under such circumstances, such as a natural disaster, government action or civil commotion.
8. Damage delay or loss in transit: time limit and procedure modification
9. Transport charges and insurance: the supplier determines the delivery system. If he covers 'normal' delivery then any excess, e.g. express delivery, may be charged to the customer.
10. Payment: statement of standard payment terms and discounts.
11. Currency changes affecting the cost of seed this covers goods of foreign origin where there may be currency changes or the imposition of import taxes
12. Bankruptcy affecting the buyer and seller: legal position pertaining to bankruptcy of either party
13. Arbitration rules or legal jurisdiction under which disputes will be settled
14. Acceptance of terms: the placing of an order infers acceptance of these terms.
15. Seed supplied for crop production not seed production: disclaimer for performance of a subsequent crop grown from retained seed.
16. Property rights and payment: definition of the transfer of properly at the point at which payment is made in full.

- date and period for which the prices apply;
- minimum order time from supplier;
- transport costs and arrangements if applicable;
- insurance costs in transit if applicable;
- appropriate contact names, addresses and numbers.

Terms and conditions of sale

These may be printed in catalogues, on price lists or on order and dispatch forms. They set out formally the basis on which the business will be conducted between the seller and the buyer. They also provide a reference point should there be any subsequent dispute. It should be understood that
basic consumer protection rights cannot be avoided by simply writing disclaimers into the terms and conditions. Some components of the terms and conditions of sale are shown in Figure 7.
Chapter 7 - The management of distribution

Background

Distribution is the process of moving packaged seed from the stores where it is held following processing and packing to the farmer. This may involve a single step, if sales are made directly to farmers, or a series of steps involving intermediate wholesalers and retailers.

Clearly, distribution is a key area of marketing and is a vital part of meeting the customers' needs and requirements. In a large seed organization responsibilities are shared between those working in Sales, Inventory Control, Order Administration, Dispatch and Transport (ideally coordinated by the Marketing Department). Thus individual responsibilities need to be clearly defined. In small companies one person may fulfil all of these functions. Essentially, the marketing function takes over from production once the packaged seed has left primary storage.

Distribution therefore covers the place element in the marketing mix and relates to getting:

- the right products
- in the right mix
- in the right quantity
- at the right time
- in the right place
- in the right condition
- at the right price
- under the right contractual terms

The route that seed follows to the consumer is often known as the marketing channel. There will obviously be marketing channels already in use but every business should continually reappraise the alternatives which means:

1. Setting distribution objectives.
2. Considering existing constraints.
3. Listing and evaluating the alternative systems.
4. Deciding on the best channels to use.

In conducting this appraisal, consideration should be given to the nature of the product, the distributors, the consumer and the competition. The product should be appraised by its:

- volume to weight ratio;
· unit package size and value;
· transport and protection requirements;
· handling characteristics (whether the product will be palletised or unpalletised); load size; requirements in terms of maintaining seed quality.

All the product's characteristics need to be taken into account. There is an enormous difference between moving fifty 50-kilogram sacks of wheat seed and fifty 50-gram packets of cabbage seed. High value, small packets will be more readily pilfered than SO-kilogram sacks thus making security a further consideration. Load and package size will have to be planned in relation to the availability of transport, road conditions, access and handling arrangements.

The distributors should be evaluated in terms of:

- their existing product range and territory;
- the number of outlets needed to cover the market and the appropriateness of their locations;
- the location of the seed company's stores in relation to the wholesale or retail outlets;
- the size of the sales area allocated to an individual distributor, measured by the physical area and potential sales value;
- whether a single distributor should be given exclusive marketing rights; the capacity and quality of the available storage;
- the margin or commission and credit arrangements that will be required by the distributors;
- the need for training and marketing support;
- the handling of unsold stock and the need for a return system.

Seed consumers should be considered in terms of:

- the period when seeds are required and whether there is a single sowing period or, as in the case of vegetables, a more continuous demand;
- when seed is purchased and in what quantity;
- the most popular package sizes;
- the distance normally travelled between farm and retail outlet;
- the transport used by farmers to move the seeds to their farms;
- farmers' credit needs.

The competition should be appraised in terms of:

- which channels they use;
- the terms and conditions they offer their dealers;
- the capability of the company to match or improve on their level of service and support.

In planning physical distribution a balance has to be struck between the need to provide good customer service and the need to minimize costs. If a bag of seed does not get to the right place at the right time there is no sale and, as a consequence, the customer may not come back the following year. Farmers' demands are seasonal and they generally buy seed just before sowing time, rather than planning ahead, with the result that the transport and delivery system can be put under extreme pressure. Intermediate storage between the seed company's stores and the retailers will therefore need to be considered to make the system more responsive, but this will add to the cost. Another approach is to encourage farmers to buy early so that stock can be moved to the dealers, thus easing the transport problem. For this purpose a 'buy early' promotion campaign could be run.

As shown in Figure 8, distribution is not just about physical product flow to the consumer. Several
other movements are also involved. These all have to happen at the right time to make the system work effectively.

**Seed distribution systems**

Seed distribution can be carried out by government, public sector agencies, cooperatives and the private sector or, as is often the case, by a combination of all of these (see Figure 9). Channels for seed marketing may be described as:

- **direct**
  the seed producing organization supplies the farmer directly

- **single level**
  the seed producing organization supplies the farmer through independent retail outlets

- **multilevel**
  the seed producing organization supplies a national distributor, wholesalers or regional distributors who, in turn, supply sub-distributors or the retail outlets

**Figure 8 Types of flow between seller and buyer**

**Figure 9 Distribution systems**

**Direct channels**

Under this system the seed producing organization maintains a sales division covering the sales area and supplying the farmer directly from central seed stores and a network of supply points. Some features of direct channel distribution are:

- the supplier has direct contact with the consumer;
- a high level of service and customer support can be maintained;
- direct control is maintained over the quality of the product;
- the upkeep of such a system can be expensive, with high fixed costs if a sales force is employed;
- a responsive management structure and well-motivated staff are required;
- where there are many staff involved in a direct sales organization there can be an inbuilt inertia to change so the system may lack flexibility;
- the revenue necessary to pay for the high fixed costs will only come from having a wide product range and achieving good market shares or selling high value products such as horticultural seeds.

Where the public sector is the main supplier of agricultural inputs, a direct marketing system is often operated. The public sector must be aware of the need for an effective management structure, good communications systems and staff who are motivated and responsive to the needs of the consumer. Typically, however, such public sector organizations suffer from being 'passive' rather than 'active' marketing agents.

Private companies supplying field crop seeds are unlikely to be able to justify a direct sales organization unless they have a monopoly on the market or are selling a broad product range in a developed market. Conversely, where a company has a considerable investment in proprietary, high-margin, low-volume products, such as vegetable seeds, direct marketing is a viable option.

**Single-level channels**
With this system, the seed producing organization supplies a network of retail outlets. In order to achieve national coverage, the producer may require intermediate storage in order to service these outlets adequately. The main features of this system are that:

- the seed supplier relies on the retailer for contact with the consumer;
- retail networks require strong service and support from the supplier;
- good administrative control must be provided by the sales management;
- the supplier's distribution system must be well organized and responsive;
- product quality at the retail level must be monitored for deterioration and adulteration and a return system should be considered;
- although the products may be well promoted, the supplier relies on the retailer to make the final sale.

Public-sector seed supply organizations are increasingly channelling sales through private dealer networks, in the interests of reducing costs and increasing sales. However, these dealer networks need effective support, and resources must be made available for marketing and promotion. An example is Indonesia where the sales of food crop seeds, produced through 20 processing units, have been transferred to a private sector network of 300 dealers and sub-dealers.

**Multilevel channels**

Under this system the involvement of the seed producing organization in physical distribution is minimized. This system is characterized by:

- the supplier having no direct contact with the consumer;
- products being strongly promoted in order to create demand;
- supplying seed to the distributors in sufficient time to achieve timely availability at the retail level;
- management ensuring that there is a good system of monitoring sales and obtaining feedback from the consumer;
- the distributor being interested only in the strongest selling lines.

If neither infrastructure nor the economy are well developed, national distributors may simply not be available and the seed producer will have to supply seed to regional wholesalers or distributors.

**Sources of seed available to farmers**

For farmers there are a number of sources available for the purchase of seed. These are:

**direct sales**
the seed producer supplies the farmer directly from central seed stores and a network of his/her own supply points

**farmer producers**
farmers with seed production contracts are licensed to supply other farmers within their zone of influence

**cooperatives**
cooperatives act as 'farmer producers' and/or as suppliers of inputs to members

**farmer dealers**
farmers act as dealers, supplying their neighbours; this can evolve into a highly developed system

**commission agents**
these work directly with the producer or his/her intermediaries, passing on orders from the farmers

**grain merchants**
traders involved in the seed and grain business who are also licensed seed producers

**crop buyers**
collectors and crop or commodity traders who provide a point of contact with farmers and can be used to market seed

**retail store dealers**
town and village dealers who retail a range of agricultural inputs, with the larger operators possibly having sub-dealers

**industrial processors**
processors interested in specific crops including oilseed crushers and vegetable canners, who may have an interest in supplying seed as part of a growing contract or integrated production system

**cold store operators**
potato cold store operators trade potato seed since they deal directly with the growers and have the appropriate storage

**consumer outlets**
garages, shops and supermarkets (are best suited to display small packets of seed)

**mail order**
suitable for low volume high value products such as vegetables and flowers

Although government extension outlets are not strictly retail outlets, seed is sometimes supplied to the farmer through government sponsored agencies and departments which administer crop or regional development and credit programmes.

**Seed storage and transport**

There are several reasons why seed is stored:

- to allow the efficient management of seed handling and processing;
- to cover the natural time gap between seed harvest and sowing;
- to enable sufficient stocks to be carried in the distribution system;
- to carry over unsold stock from season to season;
- to provide security of supply (buffer stocks) to meet fluctuations in demand and supply and meet the agreed inventory policy;
- to provide sufficient stock seed for future production requirements.

Assuming that seed is harvested at maturity with satisfactory germination and vigour, it will become subject to a natural process of deterioration over time, the rate of decline being influenced by several factors such as moisture content, packaging, treatments and storage. These factors must be controlled to ensure that seed bought by farmers is in satisfactory condition and has retained its potential for high performance.

It is very important that storage conditions are satisfactory and that seed is regularly monitored for both internal as well as external deterioration. Dealers frequently sell fertilizer as well as seeds and it is imperative that seed is not stored alongside fertilizer. Fertilizer attracts moisture from the atmosphere creating damp conditions that damage seeds. Separate arrangements have to be made for the transport and distribution of potato seed, which requires special cool storage conditions.
problems and seed quality loss are caused by:

- high humidity and high temperature causing loss of germination and vigour;
- water, causing direct damage, increasing humidity and promoting fungal attack;
- insects and pests (birds and rodents) causing direct damage and spillage;
- cross contamination from fertilizers, chemicals and toxic materials;
- pilfering of seed due to the insecurity of the store.

To avoid such storage problems a company should consider constructing or renting high quality buildings which may be both fumigated and ventilated, with concrete floors, waterproof roofs, moisture-proof walls, good roof space above stack height, power and light. The location chosen should have adequate drainage and not be prone to flooding. Seed should be stacked off floor level and apart from other products. Holes in roofs, walls and under doors need to be avoided to prevent pests from entering the store. The stores should be secure with an efficient stock control system in place; and regular checks of buildings and seed storage conditions should be carried out.

Although ownership of the seed may have passed to the dealer it is the name of the supplying organization which is carried on the bag. The marketing manager in the supplying organization must be satisfied that minimum storage standards can be met by the distributors, allowing for the length of time seed is expected to be in store. Reference could be made to these minimum standards in the representation agreements. In planning storage a judgment must be made concerning peak holding capacity and carry-over requirements, the capital cost of building and the availability and the cost of space which can be rented, and the off-take rate during the sales season. The latter will depend on distance, transport, demand patterns and storage at the point of sale.

If the seed organization has a regional structure, a network of regional seed stores should be provided from which distributors and retail sales points can be quickly supplied. Apart from concerns about security and basic protection, physical storage requirements will depend on the amount of time that the seed is likely to be held. Generally, seed can be moved back to central stores which have the required specifications after the selling season, to ensure that quality is maintained over longer periods of time. This will also make retesting and relabelling more convenient. A policy decision will have to be made regarding the provision of a return system for dealers.

The supplying organization can be expected to have comprehensive insurance for goods held in its own stores but special cover may have to be arranged for goods in transit if the seed-supplying organization undertakes delivery. Alternatively, seed can be sold ex-store with responsibility passing to the customer. The decision whether to supply ex-store or deliver can only be made in relation to the local situation but will be influenced by the product type, customer base and the competition.

Management of distribution and sales

Sales service

In order for distribution and sales to be managed effectively a sound management and reporting structure is vital at every level. Within the marketing organization the sales service functions are directly concerned with the operational aspects of seed distribution.

Central sales and distribution functions are:

- central sales management;
- order administration and preparation;
- transport;
- dispatch;
- stock records and inventory control;
· sales administration and invoicing (credit control).

While the field sales force consists of:

· regional sales management;
· technical representatives;
· safes representatives.

Assuming that seed is distributed on a regional basis through a dealer system the marketing manager should:

· allocate responsibility for major customers within the organization in order that they may receive special attention;
· define the sales territories of the area sales managers, salesmen and dealers;
· know what the potential seed requirement is by the type of seed in each territory;
· agree sales targets when setting the forecast and budget with those responsible for the territory;
· schedule dealer visit and support programme with salesmen;
· insist on activity reports from the salesmen and arrange regular meetings;
· establish a regular reporting system for monitoring sales and stock availability, both at the point of sale and at the supply locations;
· introduce a sales staff incentive scheme in the form of bonuses or gifts linked to individual sales performance.

Order and stock administration

Every organization needs to develop a sales administration system which would include the following steps:

order receipt
entering the order into the order administration system

order validation
checking details, customer status and carrying out credit checks

stock allocation
checking that stock is available and adjusting stock records

order alteration
refering back, if necessary, to salesmen and customer

dispatch allocation
allocating packing date and rotation and dispatch number

order preparation
withdrawing stock and adjusting stock records

order dispatch
notifying salesman and/or customer when to expect delivery

invoice
sending by post, or by special order if leash-on-delivery' is being used

payment receipt
entering payment receipts in the accounting system

credit control
collecting over due accounts, where necessary

Reference has been made to the fact that useful marketing information can be generated from invoices. Sales administration generates management control information, such as sales progress and stock update reports, and triggers action if stock shortages develop in the distribution system. The importance of accurate stock control and record-keeping throughout the system should not be underestimated. This should include seed at all stages of bulk storage, processing and awaiting sale. Information that may effect planning, e.g. the effect of drought, the timing of rains or possible disruption to the transport system must also flow in from the sales regions. Obviously, good communications are vital if the system is to respond quickly to potential sales opportunities.

Operations calendar

Seed processing, packing and distribution creates a great deal of activity, involving people in different departments and locations. It is important that the planning is well thought out and the periods of peak activity identified and expressed in terms of working days, storage capacity or transport tonnage, so that extra resources can be brought in if necessary. A simple example of the activities related to spring sown seed could be:

OCTOBER AND NOVEMBER
seed order analysis and confirmation, transport planning

DECEMBER
seed packing completed

JANUARY
seed available for distribution to retail stores

FEBRUARY
seed actually available at retail stores, update on sales' forecasts and final order adjustment

MARCH AND APRIL
sowing, and restocking if necessary

Where seeds of different crops with different sowing seasons are supplied the scheduling of activities will be complicated by having separate products, geographic regions and customer groups.

Selection of dealers

The number and distribution of sales’ points and dealers is influenced by the cover required to adequately service the market. A judgment will have to be made on how best to service the farmers in a region and achieve the sales and financial objectives of the organization. As a guide for selecting dealers a check list is provided in Figure 10.

Figure 10 A guide for selecting dealers

1. The location in relation to the convenience of seed consumers and to the seed company in supplying the dealer.
2. The general appearance of the building and surrounding area.
3. The suitability of the available storage area and space.
4. The existing product range and representation agreements held by the dealer for
competing or complementary products.
5. The terms of existing agreements and exclusive arrangements.
6. The size of the dealer's existing business in terms of volume and value, best selling products, customer profile, cash or credit sales.
7. The dealer's general commercial activity rating based on the display of products and point of sale material, quality of service and level of customer contact.
8. The number and quality of staff.
9. The dealer's financial security and record, bank references and credit rating.
10. Ownership, including details of partners or associates.
11. Whether it is a single retail outlet or part of a network.
12. Communications available, e.g. telephone and fax facilities.
13. The development potential.

Figure 11 Elements of a representation agreement

1. The parties involved, e.g. the supplier and the distributor or dealer.
2. The products covered, e.g. the variety, the brand, product range.
3. The period of the agreement, e.g. one year, two years, and whether renewable.
4. Obligations of the supplier, e.g. to supply seed of a given standard, to advertise the product, to supply promotional material, to offer product training.
5. Obligations of the distributor or dealer, e.g. to display and promote the product, to achieve agreed targets, to store the seeds correctly, to provide the required information.
6. Marketing territory, e.g. a district defined by a local administrative boundary.
7. Terms of trading, e.g. exclusive or non-exclusive, limitations to trade, discount or margin allowed plus any standard volume-linked discounts on published prices; payment.
8. Performance clauses, e.g. minimum levels of trade, company reward schemes.
9. Termination, e.g. acts detrimental to the interests of the supplier, non achievement of minimum levels of trade, notice period for both parties, procedure in case of dispute, legal jurisdiction.
10. Date and signatories.

These agreements should be simple and easy to understand and, if necessary, reproduced in the local language.

It is important to make an assessment of the general activity of the dealer since, as well as selling seed, the dealer is the primary contact point with the market. There is no point in a company servicing inactive dealers. Once selected they should agree to minimum targets for a mix of products. The dealership should be worth holding so the dealer will work to achieve targets rather than risk losing his dealership.

It is recommended practice to sign representation agreements with distributors and dealers. Elements to be included in a dealer representation agreement are shown in Figure 11.

It is important that the dealer be willing to participate in company training programmes. The dealer should be trained, not only in the technical and agronomic aspects of the product range, but in product presentation, selling and storage. There will also be a requirement for the dealer to follow various administrative and record-keeping procedures.

The farmer may need a credit before being able to buy inputs. Credit can come from several sources but competition between seed companies may lead to credit being extended to farmers through the dealers. Dealers may therefore be required to operate a credit system supported by the seed company.
Chapter 8 - Promotion, advertising, extension, demonstration

The promotional campaign

Resources invested in variety development and seed production will be wasted if farmers are not persuaded to use the improved varieties. All promotional activities involve sending messages to the distributors and consumers in order to inform them about a company's products and help them to make their decision to buy a particular variety or brand of seed. It is important to monitor how effective this communication is by ensuring feedback from both the dealers and the consumers. Such communication can be divided into two distinct types:

Non-controllable methods

These are personal recommendations that reflect the consumers' overall perception of the product and service. They are powerful messages and will influence buying decisions. Therefore, it is important to know what farmers think of a product, especially those leading farmers who are targeted in extension work, as their influence may be considerable.

Controllable methods

These are the marketing messages which are carefully designed and directed to achieve the objectives of an organization's promotional campaign. Types of marketing messages which can be used are listed at the top of the next page.

*advertisements*
messages sent via the media to inform and influence the farmer

*sales promotions*
specific techniques designed to increase sales of particular seeds

*personal selling*
the importance of salesmanship

*publicity and public relations*
generalized communication which is designed to promote the company's image rather than that of specific seeds
extension

taking the promotional activity out into the field

Farmers in developing countries have certain characteristics:

- they have low purchasing power coupled with a low rate of return from farming;
- they are generally conservative and therefore are slow to adopt new products;
- they may not be well informed;
- they often lack mobility and the means to transport goods.

It should also be recognized that educational and literacy standards will not always be high in rural communities. The use of visual material will help to overcome some communication problems. In all forms of communication, companies should always try to make the subject of seeds interesting and relevant to the consumer.

The communication and promotion process must be carefully thought out and the person responsible must be very clear about the aims and objectives and anticipated effect. A master plan should be created with separate plans for each activity and sales region. These should all be timed for maximum effect and designed to reinforce each other. When introducing a new variety, expenditure will be higher as awareness must be created.

As timing is very important a calendar of key events should be drawn up indicating the involvement of all those working on the campaign. Individual responsibilities must be clearly defined and activities involving other services, such as extension, well coordinated. It is important that the effort is targeted and a good reporting system set up to allow for adjustments to be made during the season and resources redirected if necessary. There is, for example, no point in continuing to promote a product if no seed is available.

Advertising

A company may use an advertising agency in order to benefit from its specialist skills. The assistance provided by an advertising agency may range from the production of a simple poster to a whole series of events and activities linked to a product campaign.

There will usually be one person who acts as a focal point with the advertising agency and who would ideally become familiar with the client's business and market. The process is similar to that described for commissioning market research. Decide what is to be achieved and why, then create a brief which will form the basis of discussion with the agency. The agency can then respond with ideas and costings which will enable a choice to be made. Printed or broadcast media can be used for advertising. It is important to select the most appropriate.

The published print media

This includes newspapers, periodicals, magazines, trade and professional journals. There may be both advantages and disadvantages when advertising in this manner.

Some advantages of the printed media are that:

- good coverage can be obtained and, by using the local press and specialist papers, accurate targeting can also be achieved;
- it is relatively cheap and immediate;
- complex messages can be given in print; these last and can be read again and again;
- reply and cut-out coupons with an exchange value can be used to encourage farmers to request further information and buy the product.
Some disadvantages of the printed media are:

- the text, and therefore the message, may not be well understood due to language and literacy problems;
- only limited space may be available;
- printed text has limited impact and colour does not always reproduce well in newspapers;
- a daily paper has a limited life and the advertisements will have to compete for attention with stories and other information.

As well as placing advertisements, press releases can be given to newspapers or features written that carry the name of the company and its products.

**The broadcast media**

This includes television, radio and cinema.

**Television.** Some advantages of television are:

- the impact will be greater as both sound, colour and movement can be used to convey the message;
- massive coverage can be achieved and some local targeting may be possible.

Some disadvantages of television are:

- it can be very expensive and is only suitable for simple messages;
- the exposure time is short and the advertisement may miss the target audience;
- TV reception may be poor and if local targeting is not possible the message will not be relevant to many viewers;
- there may not be any related interest programmes that will be viewed by the target audience;
- in many countries farmers cannot afford television, although televisions are often available in clubs, bars and other public places.

An interesting example of the use of television is in Zimbabwe where the Seed Co-op positions advertisements prior to the screening of the weather forecasts, which are of obvious interest to farmers. Linked to this is the Co-op's catch phrase "only buy the seed you know" which gives instant recognition when seen and heard in other situations, such as in printed advertising and on packaging.

**Radio.** Some advantages of radio are:

- good coverage is achieved; this is not confined to the home as people listen to the radio everywhere, including when they are working on the farm;
- it is relatively cheap to broadcast on radio compared to television and advertisements are easier to prepare;
- the incidence of local broadcasting, in local languages, is greater than with television;
- related interest programmes and farming information spots are usually more frequent.

Some disadvantages of radio are:

- reception may be poor in certain areas;
- people don't always listen closely and consequently may have poor recall of the message.
Language problems can be overcome through local broadcasting and there is always the possibility of involving local personalities to add interest and relevance to the area. Radio is useful for making announcements, such as the availability of seed in the area. Another form of broadcasting is the loudspeaker van which can be used to tour villages or towns to make similar announcements, particularly on a market day.

**Cinema.** In rural locations where cinema is the main entertainment a high proportion of the audience will be involved in farming so this medium could be considered for advertising. Advertising slides are not expensive to prepare and these can be shown during the show.

**The outdoor media.** Outdoor media include posters, signs and advertising on transport, bus shelters, walls and buildings. These forms of advertising can be used to increase the visibility of the company and its products. Outdoor advertising may have considerable and lasting impact at a low cost if it is well situated and if there is not too much competition for the available space. Exclusive arrangements can always be made for the use of space.

In addition to commercial advertising, retailers should be supplied with signs and crop boards. It is important that good sites are chosen which are highly visible and strategically placed to ensure maximum exposure.

**Packaging design.** Packaging is a form of advertising. Clear printing, the use of colour, brand or company logo and well reproduced photographs or images are all important components of design.

**Sales promotion**

Sales promotion is the term given to describe a variety of techniques designed to encourage customers to buy. They complement advertising and other promotional activities. They are tactical devices that provide incentives to 'buy now', thus sales promotion is short-term (to achieve an immediate effect) whereas advertising is a longer term communications process. The techniques used to achieve these short-term effects can be divided into either selling to the market channel or selling out of the marketing channel.

**Selling to the marketing channel**

These are the techniques which, by providing incentives and support, enhance sales to the trade and encourage the distributors and dealers to stock the product. Some examples follow.

**Dealer 'loaders'.** These are ways of encouraging dealers to build up their stocks in sufficient time, so that inadequate supplies and last-minute transport problems are avoided. Examples are: offering discounts on orders taken early and progressive, volume discounts on large orders (quantity discounts). These discounts can, of course, be passed on to the customer.

**Point-of-sale materials.** These are materials supplied by the seed company to the sale points to support sales of their product range. They are used to display and attract attention to the product range as well as to provide information. This form of sales support encourages the dealer to order stocks. Examples of point-of-sale materials include colourful display boxes in which seed packets are placed, particularly vegetable seeds, product information leaflets, seed catalogues and audio-visual displays, such as slides with sound tracks or videos.

**Dealer competitions.** The larger seed companies can afford to offer significant prizes linked to dealer sales' performance. It is also an established technique in the more developed countries to hold dealer seminars in attractive locations. While it may not be realistic to expect companies in developing economies to incur the high levels of expenditure necessary to organize dealer seminars, some form of incentive scheme may be worth running. Overseas suppliers could also be asked to
support such schemes by inviting the ‘dealer of the year’ to visit the producing country. A dealer will also value the status of seeing his name in print so press releases and dealer names featured in catalogues and advertisements can be used.

**Dealer training.** Training dealers in the use and benefits of the product is a vital form of support. A dealer will attract customers and sell more if confident and knowledgeable about the product. Training should also cover product care in store and stock rotation as well as retail presentation.

**Credit.** This again encourages higher stocking and can be used selectively to promote certain product lines. Credit can be used as an incentive to dealers where companies have to compete for shelf space.

**Sale or return.** This is particularly relevant for the stocking of new products as it provides an element of risk-sharing. However, it can be costly to the supplying company. A return system is used to promote preferential stocking but simply stocking the dealer on a sale or return basis should be avoided as the dealer will have no commitment to sell. Such a system should always provide an incentive to take stock. Thus, for example, returns could apply only to stock taken over and above the previous year's sales. There are, of course, quality considerations and companies may prefer to collect unsold stock for secure storage and relabelling to avoid the possibility of farmers complaining of poor germination in a subsequent year. This can be provided as a service to the dealer with the product remaining the property of the dealer. It is important that the supplying company protects its name and image at all times.

**Promotional gifts.** Small gifts (give-aways) can be given to dealers as added incentives. The seed company's name can be promoted on pens, cigarette lighters and calendars. These serve the purpose of keeping the company and its brand names in the dealer's mind. Small value items can also be passed on to farmers when they purchase their seed. Larger value items may be given to dealers as presents in return for orders for new products, achieving higher volumes or even for displaying a company's seeds in front of its competitors' products. Many of these techniques may only seem relevant to the more sophisticated and competitive market situations but marketing managers should be aware of the techniques that are used to encourage dealers to stock and to promote one product in preference to another.

**Selling out of the marketing channel**

These are the techniques which assist the retail trade in promoting and selling products to the final consumer. Some examples follow.

**Free samples.** Dealers can give out samples of new varieties. The indiscriminate use of free samples can be counterproductive, however, as the farmer may not achieve a good result and blame the variety or may not use the sample as it was free.

**Seed exchange.** Seed can be exchanged for farmers' grain to overcome initial resistance to buying and using improved seed. This is perhaps more of an extension practice which should be organized by the seed company on a direct basis.

**Coupon offers.** Refundable coupons can be used offering 'money off' the next purchase to encourage repeat orders or purchases of other products in the company's range.

**Price reductions.** This will obviously be popular but the danger is that revenue will simply be reduced without significantly increasing sales so the technique needs to be used selectively.

**Competitions.** Competitions only create interest if they capture the imagination, e.g. a yield competition and membership to a 'yield club' for a certain achievement. They can be organized on a village level or directed at a certain group, such as young farmers.
**Premium offers.** The offer of an extra product for a promotional price can be made. This could be a joint promotion with a non-seed product or linked to seed of another species that could be grown by the farmer.

**Field demonstrations and group discussions.** These are both very effective ways of promoting seed products and supporting the local dealer. These topics are dealt with later when seed extension and demonstration are considered.

It is important that, before embarking on promotional activities, the marketing manager is given the necessary support within the supplying organization as well as among the distributors and dealers. There is obviously no point in starting a promotion without ensuring that sufficient funds and materials are available and that there is the necessary administrative organization.

**Personal selling**

While seed products may be well advertised and promoted, a high degree of personal selling and service will always be required. Seed company staff and, where possible, dealers should always be provided with adequate training and familiarization with the products they are selling and the market they are selling into.

A good presentation of the company and its product range is important in making the sale. The company should provide the necessary visual material that can be used in both informal one-to-one and more formal group presentations. A ring binder with sequenced seed product leaflets and photographs is a useful way of conducting a one-to-one presentation. A good seed catalogue is also useful, especially for a product group with a large range.

**Public relations (PR)**

Public relations is defined as 'the means by which a company tries to develop a mutual understanding between itself and its public'. PR is therefore concerned with what people think of both an organization and its products. The ‘public' refers to customers, shareholders, employees, special interest groups, trade unions and the general public.

PR is a long-term and ongoing process, its objective being to enhance both reputation and image, thus creating an external environment in which a company can prosper. It helps convert any negative feelings towards an organization into positive ones. If favourable attitudes exist, consumers will be much more receptive to the direct marketing activities of the company.

It is therefore necessary to identify any unfavourable attitudes among seed dealers and buyers, from which a PR strategy can be developed to reduce the negative effects and build up a more positive perception and image. PR activities include:

**press relations**
press conferences and press releases are useful ways of disseminating news items such as stories of achievement, policy changes, management changes and new product launches

**community relations**
good publicity can be achieved by an involvement with, and support of, local events and activities such as organizing farming competitions and giving awards, e.g. an irrigation pump, to individuals or to a whole village

**editorial activity**
the distribution of in-house magazines, annual reports and dealer newsletters with stories as well as product information, brochures, etc., all maintain contact and can be used to target messages to
particular groups

customer care
an extension of the sales contact with dealers or consumer groups beyond the sale; customer care means dealing with any product-related problems, such as poor germination, in order to retain customer loyalty

sponsorship
this involves supporting local sporting, farming and cultural events chosen not only for their potential exposure but for their relevance to the nature of the business; national farming competitions, for example, can give a company a great deal of exposure through the media

visits
groups of farmers and dealer scan be invited to the company research station, seed processing facilities and warehouse; appropriate press coverage can be arranged

Seed extension and demonstration

Extension is taking the promotional activity out into the field and demonstrating to the farmer the value and benefit of using improved seeds and cultivation techniques. In a competitive market, each company will organize its own field demonstrations to promote its individual varieties and brands.

The field demonstration

This is potentially a very powerful promotional technique but good planning and execution are needed if it is to have the desired effect. Demonstrations can be used to:

- promote the adoption of certified seed and improved farm management techniques;
- conduct comparative variety yield trials;
- launch a new variety or restimulate interest in existing varieties;
- demonstrate single varieties in a larger block trial;
- teach farmers how to grow crops to maximize variety benefits.

The demonstration must involve proper seed and fertiliser usage, soil and water management practices, weed control and plans protection measures and, if necessary, security measures. In order to plan a demonstration the following are some guidelines that should be observed.

Planning ahead is essential. Points to note include:

- all requirements must be considered, dealers must be supportive, good land and good farmers must be identified a season ahead when any field problems can be seen;
- government agencies, such as the extension services, may be involved so they will need warning of any requests for help;
- resources will need allocating so projected costs will require budgeting, e.g. rent may have to be paid as well as inputs supplied; running field days also costs money;
- to make full use of the demonstration it should be part of an overall campaign so other promotional activities will need to be reviewed.

Great care must be taken in selecting the location. Aspects to be considered are:

- the farmer must have the basic equipment and skills needed for carrying out all the farming operations;
- he/she should be well regarded in the locality and be considered a good farmer; selecting the bigger and better-off farmers can produce a negative reaction;
the site should be uniform and have no obvious disadvantages which will affect cultivation;
- good access and some space to handle visiting groups is important;
- proximity to passing traffic for maximum visibility of signs should be considered.

In carrying out the demonstration the following steps need to be taken:

- conducting a soil test for mineral deficiencies;
- planning the layout to include own varieties, controls and possibly competing varieties and/or different treatments;
- organizing the delivery of inputs and briefing the farmer on the layout and cultivation;
- obtaining sign boards for the perimeter and the individual plots (but these should not be posted until it is sure that there are no unforeseen problems);
- arranging for regular inspection visits and farmer support for subsequent operations;
- planning site use for maximum exposure and advantage at the appropriate stage of development;
- informing all those who will be involved, for example the company, the dealers, the extension service and the media.

During the growing season emphasis needs to be placed on:

- advertising the demonstration and organizing visits for groups of dealers and farmers; the dealer should come with his own customers; consideration should be given to who else may benefit from seeing the demonstration and who may influence variety choice;
- monitoring progress, keeping records and taking photographs;
- preparing visual aids and having a supply of product and company literature available;
- thinking ahead to a promotion for the next sales season linked to taking orders during the field day;
- when groups visit demonstration plots, recording names and addresses for future contact.

Publicity material, such as this attractive brochure cover from Zimbabwe, is an important way of promoting a company

An attractively presented catalogue is an important sales tool - these are two examples

Packaging used by two multinational seed companies demonstrating the importance of attractive and good quality packaging

An example of an attractive cover from a promotional brochure by an indian seed company

After harvest, attention needs to be paid to:

- analysing and presenting any data generated from the demonstration and circulating the information to those who visited and to the host farmer; following-up any prospects with the dealers.

Other extension-related activities could include the company being present at exhibitions, agricultural shows and gatherings where potential customers are present. This can also be part of a PR exercise. Companies should make sure that other organizations such as the Extension Service, breeding stations, agricultural colleges and universities receive samples of the varieties being promoted.

Group discussions
It is usually not possible to contact enough farmers individually. This makes group discussions a useful way of interacting with them on an informal basis and simultaneously receiving feedback. Such discussions can be organized at a local level prior to the selling season to support the dealer network and should involve representatives from the various sales outlets together with a technical specialist. Visual aids such as video should be used.

Seed seminars

These are more formal occasions which can be used to disseminate technical information and can involve breeders, sales representatives and extension officers as well as farmers. Seed seminars also provide farmers with the opportunity of discussing their experiences with experts. These occasions can be shared with other related organizations and suppliers, such as chemical companies. This will increase the impact and help to share the cost.

Field days and open days

Field days are usually held at demonstration plots but open days can be held at a research station where plots have been sown. If they are held at the supplier's premises a field day provides an opportunity to show farmers what is involved in putting a bag of seed on a farm and the expenses incurred. Obviously, bringing farmers to a central point can be costly but field days provide an effective PR opportunity and can be used to reward dealers and customers.

Catalogues

Catalogues are an essential sales aid and can range from a simple listing of a limited number of field crop seeds to a glossy colour publication of a large range of horticultural seeds. The catalogue both informs the distributors and consumers about a company's products and services while also helping to convey a company's image. The contents of a catalogue can include:

- the front cover featuring the company name, logo, date, name of product range, cover photograph or art work;
- a listing of contents, if the catalogue is a large one;
- an introduction, highlighting new product additions, company developments, awards, official trial results;
- a map of the sales area covered by the catalogue with the various company locations marked; representatives, seed supply stores and distribution points; names, addresses and telephone numbers should be given where relevant;
- descriptions of terms and symbols used as well as seed quality, grades and treatments offered;
- categorized listing of products by species and variety with appropriate product description, unit quantities supplied, special uses, sowing and harvesting period;
- useful conversion tables, e.g. imperial to metric measurements or local units;
- useful technical information;
- terms and conditions of sale;
- a calendar, possibly featuring the seasonal planting of the company's products;
- a price list, which should not necessarily be an integral part of the catalogue but perhaps an insertion since the catalogue may be current longer than the price list.

A seed catalogue can be expensive to produce which may seriously limit numbers and therefore distribution. Therefore care should be taken to provide a catalogue or brochure which is both economic and serves the intended purpose.

The promotional budget
No rule can be given as to how much to spend on promotion but it is one of the easiest ways of spending money and so should be carefully controlled and well targeted. Obviously a judgment has to be made by management in considering how much to spend on promotion but there is a minimum level of activity that must be maintained, as an organization must be visible to the farmer.

At the product level the earning potential of the product will also influence the amount that can be spent on promotion. It is likely that the higher value vegetable varieties and hybrid field crop varieties will be sold in a more competitive market, requiring more promotional support.

**Approaches to budgeting for promotional purposes**

At an early stage, a company has to decide on the allocation of funds for promotion. The following are some possible approaches.

*"What can the company afford?"* This is a weak approach as it will not be related to specific objectives and will therefore have no measurable effect.

**Allocating a percentage of the sales' value to promotion.** This is a more useful approach as it is related to sales and enables a company to match what might be regarded as an industry standard. This can be used as a starting point in costing into the total company budget a sum that can be made available for promotion. The disadvantage is that by adopting this method, a decline in sales in one year may lead to a lower promotional budget in the next, leading in turn to lower sales, and so on.

**Individual product targets.** This is the most logical approach as it will be related to specific and measurable objectives by product or product group. Obviously priorities will have to be set and choices made within the company budget.

A small seed company will not have the resources to become involved in all the activities that have been described but the principles involved are, nevertheless, relevant. A minimum necessary level of product and dealer support can be achieved by prudently choosing the most cost-effective activities.
Chapter 9 - The marketing plan

The operational marketing plan

An operational marketing plan serves as a detailed 'road map' for the planning and supervision of all marketing activities for the following year. The plan is therefore concerned with tactics and action. The marketing plan should be made up of a series of sub-plans covering all elements of the marketing mix for each product line.

Marketing sub-plans

Developing an effective marketing plan involves understanding the expectations of the consumer, in order to make decisions about Product, Price, Place and Promotion. Each sub-plan must be prepared to satisfy the expectations of the consumer and to meet the business objectives of the company.

The product plan should cover:

- the product range and the number of varieties to be offered;
- the key performance factors, e.g. yield, resistance, grain quality;
- seed specification in terms of quality and treatments;
- new product flow and new variety launch.

The price plan is concerned with:

- pricing policy;
- commissions/margins in the distribution chain;
- dealer discount structure;
- short-term pricing tactics, e.g. new variety, stock clearance.

The place plan needs to consider:

- the distribution networks that will be used;
- intermediate storage and transport arrangements;
- sales territories and responsibilities of the representatives;
- customer convenience.

The promotion plan must take into account:

- packaging type and design, colour, logo and product information;
- the advertising and PR campaign;
- the promotional material and sales aids;
- demonstrations;
- coordination with other organizations.

Marketing support plans

In addition to the above, other plans will also have to be made.

The marketing information plan is concerned with:


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- the internal flow of management information;
- market research projects to be undertaken;
- customer feedback on product, service and promotions;
- competitor review to judge relative marketing performance.

The production plan covers:

- seed production volume targets by variety;
- the quantity and type of packaging that is required;
- the chemicals required for seed treatments;
- the packing schedule and dates that stock is required.

The personnel plan needs to consider:

- the staffing levels required, both permanent and temporary;
- the training that will need to be given to staff and dealers;
- an appraisal system, pay scales and bonus structure;
- line management organization and responsibilities.

The budget plan needs to cover:

- sales targets and costs of all the associated activities;
- financial objectives, e.g. gross margin, expenses and profit;
- resources required expressed in financial terms;
- performance measurement against budget and controls.

Although the marketing department should have some freedom and flexibility to change tactics, once the marketing plan is approved by management, the marketing department should not change objectives or dramatically alter budgets. Any changes in these critical areas can only be made after consultation with, and approval by, senior management. The marketing plan could therefore be viewed as a contract between management and the marketing department.

**Strategic planning**

Managers are frequently too preoccupied with day-to-day operational problems to become involved in longer term thinking. Indeed, businesses can fail due to the failure of management to consider the future. Organizations can be slow to perceive changes. These may be happening to the cropping pattern, with the introduction of competitive varieties, or to the seed distribution system.

**The approach to strategic planning**

The starting point is always reviewing the current strategy. The approach to reviewing that strategy has three main elements which pose the three questions that follow.

1. "**What is the outlook for the seed industry and the seed market in the future?**" This examines those factors, outside the control of the business, which create future uncertainties, for example: a. what if the government relaxed import restrictions on seed? b. what if the government removed certain crop subsidies? c. what if the world commodity price for a crop fell by half?

2. "**How secure is the company's position in the market?**" This provides an analysis of the company's position in relation to current and future competition and is an examination of its strengths and weaknesses versus its main competitors, for example: a. breeding strength and range of varieties offered for sale; b. seed production capacity and cost of production; c. location and capacity of storage facilities.

3. "**What is the future direction of the company's business and how is this going to be achieved?**" In answering this question a manager is stating the company's broad business objectives and an understanding of how they will be achieved. An example of this might be "to operate a business selling high-value imported vegetable seeds through retail dealers, based on an exclusive agreement with an international seed company, with a view to achieving a five percent share of the vegetable seed market in five years".

However, such a statement can only be formulated once the market situation has been analysed. Also any future plan has to be considered against existing constraints such as finance, staff competence, competition and trading...
restrictions.

**Planning procedure and timetable**

Every organization should have a planning and reporting timetable linked to seasonal activity and the financial year. The activities of the agricultural year may not necessarily coincide with the reporting requirements of the financial year end. As far as possible the planning cycle should fit the seasonal activity of the business.

The following example of a planning procedure (see Figure 12) comes from an international company operating in Pakistan, selling a range of seeds including sunflower, maize, cotton and sorghum, with a financial year ending on 31 December.

**Planning tools**

There are several techniques which can be used to assist with planning. They include:

*Using charts.* A chart gives the opportunity to produce a visual plan showing key events and responsibilities over a twelve-month period. Plans from each sector of the business can be compared and peak workloads anticipated better with critical periods monitored more closely.

*Using marketing briefs.* These are a series of documents created by the marketing department which help to give both a complete and individual plan for each seed variety. The format should allow for individual sections to be monitored, reviewed and revised, if necessary, thus forming the cornerstone for marketing, sales and production decisions. Suggested headings for these briefs are given in Figure 13.

**Monitoring performance**

**Management Information Systems (MIS)**

The receipt of an order for a bag of seed initiates a chain reaction which results in that bag of seed reaching the farmer. This not only involves physical action, such as transport, but also administrative action, such as creating a dispatch note, updating stock records, sending out an

**Figure 12 A strategic planning example from Pakistan**

The planning cycle begins with a Strategic Business Review in late August-early September following the "Kharif" planting season after the July rains. This is a formalized review in three stages covering all aspects of the business and involving all business managers. The previous season's activity will be reviewed and sales targets agreed for the coming two season's on a three-year rolling basis.

<table>
<thead>
<tr>
<th>Attendance</th>
<th>Topics reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review 1</td>
<td>regional management area sales managers</td>
</tr>
<tr>
<td></td>
<td>sales, distributor and variety performance; marketing mix; competitors' activities.</td>
</tr>
</tbody>
</table>

This meeting is a review of the previous sales season, which started in November/December with farm calls, through the active selling season of January/March and subsequent harvest for maize/sunflower. It also allows for a review of the sorghum selling period and sales of cotton during July/August.

| Review 2 | regional management | sales manager performance; decisions on distributor mix; sales support activity; planning of strategy and budgets; planning for seed production. |

This second review takes the findings from the first meeting and considers action plans for the next year, making
key decisions on marketing, distributors, sales support and seed production.

<table>
<thead>
<tr>
<th>Review 3</th>
<th>key regional and national management</th>
<th>review and agree proposals from the second review; emphasis on financial implications costs, revenue and trading margins; review longer term strategic and business development plans over 3 to 5 years.</th>
</tr>
</thead>
</table>

**Objectives**

1. Written statement of campaign objectives
2. Market size details
   - seed market
   - crop market
3. Sales volume targets*
4. Seed production (local and imports)*
5. Market share targets*
6. Pricing details
7. Income statement*
   - income
   - margin %
   - gross margin
8. Distribution channels
9. Marketing position
10. Key competing varieties
11. Packaging
12. Package size, type
13. Seed specifications
14. Labelling

**Promotion**

1. Farmers' needs
2. Product benefits
3. Product weaknesses
4. Competing varieties
5. Promotional budget*
6. Promotional requirements
   - target group
   - media
   - timing
   - promotional items

* data should be provided for three years and should include previous and current years invoice, payment collection and credit control. Each of these administrative actions will produce manual or computer records containing information which, when analysed and presented in a form that is useful to management, can be used for planning, monitoring and control of the activities of the organization.

The marketing plan forms the basis of monitoring as it details the marketing activities and objectives which can be compared with actual results and progress. Regular updates and forecasts should be made for each reporting period against the budget. This process starts with the salesman who first talks to the dealers and farmers and reassesses the
sales potential, then talks to the sales manager who collates the information and updates the forecasts.

Such information helps a manager analyse sales performance, target the sales and promotion effort, evaluate distribution channels and dealer performance and follow up late payments where credit is given. Clearly, no manager can cope with having copies of all invoices sent to him so there needs to be a system, either manual or computer based, which does the analysis and presents a report in a form which can be readily understood.

This can be illustrated by imagining a situation that is likely to arise with a company which is distributing seeds throughout several regions. During the sales season the stock of a particular variety, which has been heavily promoted, has been moved out of the central warehouse to locations around the country. Sales have not been consistent throughout each region with some locations having sold out and not able to satisfy the demand while others are still holding stock. The sowing period is short so it is imperative that the sales manager receives information about the progress of sales in the different regions on a daily basis. Action can then be taken to move stocks between locations and make an additional effort where sales are slow.

Information systems

The efficient production of reports depends on sound data collection and handling systems. Computers have become an essential tool but the extent to which information systems are computerized will obviously depend on the size and capacity of the seed company. What is important is that any system should be well designed and based on a complete understanding of the real, not assumed or apparent, needs of individual managers. A Management Information System essentially consists of three phases, inputting the data, processing it and producing the output (see Figure 14). Input data required for management information system together with the resulting output reports are shown in Figure 15.

Example of an invoice

Figure 14 The three phases of a management information system

Figure 15 Data required for a management information system

Input data can be either internal data or external data:

1. Internal data are stock records, invoices and payroll records.
2. External data are information gathered on competitors, a market survey conducted to evaluate how effective a promotion campaign has been and government agricultural statistics.

Output data is used for planning reports and operational reports:

1. Planning reports are not required on a regular basis. Some form of data handling system will be needed to produce the highly summarized information as and when required.
2. Operational reports are produced to assist the marketing or sales manager to control the day-to-day sales campaign, e.g. stock reports by product line and location, sales reports by product line and region. Decisions may have to be taken as a result of comparing the actual situation to the plan or budget. Information for such decisions is usually based on internal data and is usually required on a predetermined routine basis, e.g. weekly stock and sales reports.
FAO technical papers

FAO AGRICULTURAL SERVICES BULLETINS

1 Farm planning in the early stages of development, 1968 (E Rep. 1982 -FS)
2 Planning for action in agricultural development, 1969 (E F S)
3 Karakul processing, 1969 (E)
4 Bread from composite flour, 1969 (E* F S)
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