

# Operational Business Management I (Horticulture)

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## Lesson 2

This is just a cover sheet, turn to the next page to continue.

# External Influences On Horticultural enterprise

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## Lesson Aim

Appraise the impact of external influences.

### **MARKET TYPES**

#### **Monopoly**

- Goods or services that have no close substitutes are sold by one company– i.e. utility companies (electricity, gas etc.).
- Barriers are set to block new businesses from entry.

#### **Monopolistic Competition**

- Competition between many different companies producing similar products (with only small differences) i.e. shoes, tubs of yoghurt etc.
- Each company producing the product is the sole producer of that particular version – this is called branding.
- These businesses still compete with each other to capture market share even though they have a monopoly on their own brand.

Branding is increasingly more prevalent in horticulture – for example apples, oranges, melons and so on may have brand name stickers on each of them. Lettuce is sold (pre-packaged) in air-tight branded bags. However branding is not feasible with some produce such as potatoes and onions.

Branding is also expanding in the ornamental plant business i.e. plants may be subject to restrictions through PVR (plant varieties rights – one grower bred the plant and registered a copyright); plants may have a registered brand name – the plant may only be sold under this name by the registering business.

#### **Oligopoly**

- Small numbers of companies compete and dominate in an industry.
- Products might be very similar.
- Products may be branded.

#### **Perfect Competition**

Examples of perfect competition: commodities, particularly farming commodities.

- An identical product is sold by many different companies to many buyers.
- Entry or exit to the market is unrestricted – and is also aligned to cost of production as compared to total revenue.
- An established business does not have an advantage over a new business.
- Both sellers and buyers are well informed on prices – supply and demand ie. the intersection of the supply and demand curve sets the price.
- Production rates are determined by revenue – producers set how much they will produce at a level that ensures a profit (i.e. total revenue minus total cost equals maximum profit. For example it may be profitable to produce 500 tons of wheat but a loss may be made if only one ton is produced). In order to stay in business it is realistic to assume that revenue should exceed production costs.

### **INTERNATIONAL MARKETS AND TRADABLE COMMODITIES**

Tradable commodities are goods within an economy which are imported or exported or could potentially be imported or exported. Many agricultural crops and products that are imported or cash crops for export are known as tradable commodities.

What is the difference between tradable and non-tradable commodities?

- Non-tradable commodities are goods and services which are not traded outside of a country's borders usually because cost of export or import of these goods makes international trade prohibitive or because the nature of the goods means they cannot be physically traded across borders i.e. public services, land and housing, highly perishables etc.
- Prices and terms of trade for tradable commodities are set by world markets at world market prices and are subject to exchange rate variables.
- Prices for non-tradable commodities are set through domestic supply and demand.

In agriculture and horticulture (as well as many other industries) some of the goods and services produced are internationally tradable commodities. This means that managers in these industries must have a solid understanding of what the term implies. In agriculture for example wheat is a tradable commodity – many producers pool together their wheat harvest to trade on the international market. There is no prejudice as to quality, price and the amount each producer grows – however there are strict guidelines as to minimum quality standards that need to be followed.

The price set for commodities are prone to many variables that include:

- The size of the import and export market.
- Trade barriers – tariffs, protected markets etc.
- The position of world market economies.
- Correct market information.

The line between what is tradable and non-tradable is constantly shifting as more commodities are put forward as potentially tradable i.e. education, carbon etc.

Some commodities are difficult to define and may only be tradable in some circumstances eg. food commodities (i.e. perishables) may be tradable when they are close to the trading borders of other countries but not tradable when they are produced in remote areas.

Sometimes commodities which were tradable become non-tradable eg. due to floods or drought a food crop may be needed and traded locally. The parameters for what is or isn't tradable are therefore flexible and shift according to circumstance.

## **GLOBALISATION**

Globalisation is the increasing generalised expansion and integration of world-wide economic activity through international trade of goods, services, technology, capital (international investment), labour, migration, information and ideas.

Globalisation trends include:

- The increased role of large multi-national corporations in the world economy.
- Greater intervention in domestic policies and affairs by such organisations as the World Bank and IMF (International Monetary Fund, WTO (World Trade Organisation)).

Forms of Globalisation include:

- Industrial – the world-wide expansion of large companies through trade but also off-shore production.
- Financial - world-wide financial markets enable the corporate, national and sub-national borrower access to capital.

- Political – expanding the political interests of nations to areas outside of their immediate political region.
- Informational – increasing the flow of information between remote nations.
- Cultural – promotion of growing contacts between different cultures.

### **Globalisation and Horticulture**

Some impacts of globalisation in horticulture should include:

- Reduced costs for information exchange and shipment of goods.
- Improved quality of produce; perishables spend less time in transport; improved technology in storage.
- Total market size has increased enabling the scale of economies to produce many new products.
- Specialisation – greater access to large and diverse markets.
- Countries with a low income can now trade on the world market; information exchange and better access to capital should enable these nations to improve output to an extent where it exceeds domestic demand.
- Improvement in food security for low income populations; external investment can offer greater employment and employment security which in turn improves food security.

### **SUPPLY AND DEMAND**

An understanding of the balance between supply and demand is of fundamental importance. In a free enterprise exchange economy, as with agricultural and horticultural produce, prices are usually determined by the interaction between supply and demand. Other product prices are also determined this way but they don't normally fluctuate to the same degree.

#### **Market Forces**

The interaction of supply and demand and how that shapes a market economy is commonly termed as the 'market forces'.

#### **Demand**

Without demand, supply will stagnate hence marketing sets out to stimulate demand. If demand is not sustained, production must slow down with resultant unemployment and loss of profits both in production and in every aspect of the distributive system.

Factors determining demands are:

- Consumer's income.
- Price of produce.
- Price of competing produce.
- Price of complementary produce.
- Season, weather conditions, consumer tastes, trends, or other such factors.

Price increases normally produce a change in demand. Refer to Fig.1 next page.

- A lower price (i.e. P1), generally means a larger quantity consumed, (ie. Q2). If the price increases to P2, then the demand usually decreases and a smaller quantity will be consumed (ie. Q1).
- As income increases, consumption generally increases, but the buyer may change his/her priorities i.e. 10percent increase in income generally means only 1-2 percent increase in food consumption. However there is a general trend that this increase will be demand for processed or convenience foods.

For food consumption to increase, the population must increase!

- The price of competing/substitute goods may directly affect the demand of produce ie. an increase in price of competitive goods generally means the demand for other produce will increase eg. apples: pears are substitute goods. If the price of apples increases then the demand for pears may increase (if the pears are competitively priced).
- The purchasing pattern of salad vegetables shows a good example of complementary produce. When lettuce is in demand, tomatoes and other salad vegetables will also increase in demand, and consequently price.

## Supply

If supply shifts leftward up the demand curve, the price will increase and quantity decrease.

### *Interaction of Supply and Demand*

Where the demand and supply curves intersect is where the quantity demanded by consumers equals the quantity supplied by producers. At any lower price, amount demanded exceeds amount supplied. At any higher price, amount supplied exceeds amount demanded. Refer overleaf to Fig. 2.

In fig. 3(a) following page, for quantity Q1, the market price is P1. If supply should fall the price is likely to rise to P2. This is the optimal time to sell. In fig. 3(b) overleaf, for quantity Q1 the market price is P1. If demand should rise, the price will optimally increase as will quantity supplied.

### *Some Factors that Determine Supply*

Supply can be interrupted due to diverse reasons and depending on the product; food products contend with weather, land availability, labour, pest and disease problems and so on. Other factors include:

- *Consumer attitudes* - consumers expect a greater choice of quality products, value for money, safety and environmental issues are also becoming more of an issue ie. consumers awareness of 'clean and green' products ie. food safety concerns drives demand for safe food; environmental concerns drives demand for clean and green (environmentally sound and sustainable) products.
- *Consolidation of markets* - for example fresh food sales are now dominated by a limited number of retail chains - in some markets this comprises more than 70% of sales.
- *Competition* – global sourcing through open international markets; improved internal efficiency by large companies; improved relationships with suppliers leading to greater control over quality, price and availability to consumers.
- *Alliances* – between large stake-holders are formed to meet ever-changing market requirements i.e. in relation to quality assurance, international trade regulations, and traceability requirements. This also improves and increases co-operative strength and competitiveness through an integrated supply chain from the producer to the consumer.
- *Trade policies* – introducing change to price and policy governing the sale of products by both domestic and foreign governments ie. restricting access to export markets or the introduction of subsidies to local producers etc.
- *Organisational responses* - ie. if demand for pink grapefruit rises, suppliers respond by encouraging greater production output by existing producers or by new producers entering the market. A sudden subsequent fall in demand could then create an over-supply – impacting on either the price or the producer (ie. prices go up and/or producers leave the market). Understanding and predicting change in the market is a complex but necessary part of business operations.

## Elasticity

The degree to which a demand or supply curve reacts to a change in price is known as the curve's elasticity.

Elasticity varies:

- Inelastic products are essential products are less sensitive to price fluctuations, because demand is always high – consumers will usually continue to buy these irrelevant of price changes i.e. bread, milk and other staples. Demand is not highly variable.
- Elastic products are services and goods that are not seen as essentials by consumers, these are more sensitive to price variation and therefore demand – a slight change in price may determine demand. Consumers will not buy these products or services if they consider that the price is too high to fit into a budget ie. the opportunity cost has become too high.

A simple equation is used to determine elasticity

- Elasticity = (% change in quantity divided by % change in price).
- The curve is elastic if the elasticity is equal to one.
- The curve is inelastic if it is less than one.
- Flatter or horizontal curves are associated with a large decrease in demand after a small price increase – the flatter the curve the more elastic the good or service.

# Supply and Demand Graphs

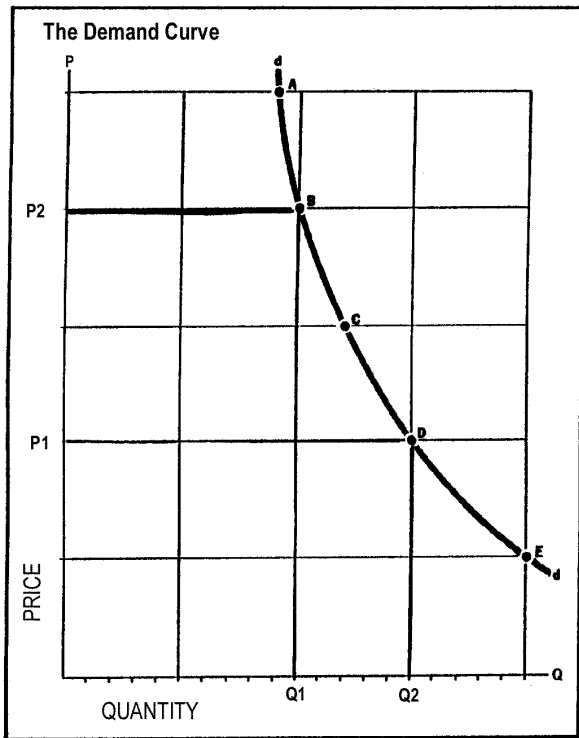


Figure 1

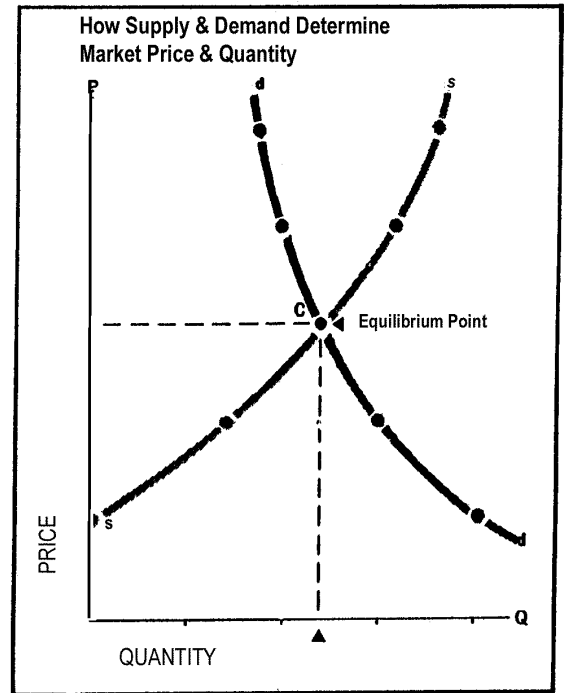


Figure 2

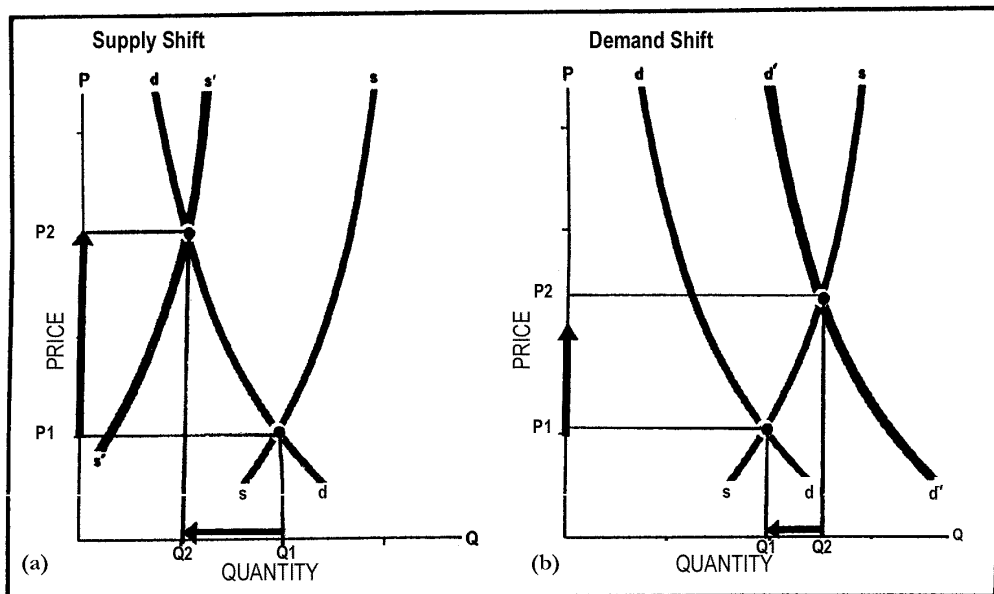


Figure 3

## Economies of Scale

More business does not necessarily mean more profit. Often when a business expands to produce more products, it will find that the amount of profit per unit produced will decrease.

There are usually a series of barriers which need to be broken through, before moving on to greater profit. It can work something like this:

- A farm sells \$200,000 of produce and has a profit of \$35,000.
- When the sales increase to \$210,000, there is more cost involved in production (eg. more fertiliser, labour and marketing costs), and the profit drops to \$34,000.
- When the farm sells \$250,000 of produce though, the profit increases to \$40,000.

In understanding the way economies of scale work, the farmer needs to aim to produce and market specific quantities of product (or services), in order to optimise profit.

*External Economies* - these are factors that cannot be controlled by individual business but that lower the cost of production in the general market as production increases. For example in farming there may be improvement in the seeds or fertilisers used or there may be an improved change in the technology available eg. harvesting equipment etc.

*External Diseconomies*- these factors are beyond the control of individual business that will increase business costs as production in the general market increases, eg. the increased cost of inputs (that may be artificially inflated) due to scarcity related to higher general production levels.

## **COST STRUCTURES**

Cost structures in business could be defined as: the cost of performing a certain activity, creating a certain product or achieving certain goals.

Economists refer to four types of cost structures;

1. Fixed costs - are those that are independent of output and are set eg. rent and interest on loans.
2. Variable – are dependant on production levels eg. materials, labour (if hours and hourly rates are variable rather than fixed), power, communications costs etc. Variable costs may differ according to the company, what they are producing at the time – the line tends to shift between variable and fixed in some cases.
3. Marginal – costs change according to output i.e. if one extra unit is produced it adds to the marginal cost of production. Or, if the total change of cost of production changes.
4. Average – the normal ongoing costs associated with production. To get the average cost divide the quantity produced by the total cost - the total cost is the sum of all costs – the answer is the unit cost (the cost of one unit of production). Average cost is related to profitability – compare the price of each unit to the average cost – if the average cost is lower than the price, then a profit will be made. Average cost is associated with economies of scale – as production levels rise, average cost per unit falls – see further examples above in Economies of Scale.

The relationship between marginal cost and average cost is as follows:

- When marginal cost is less than average cost then the average cost is falling.
- When marginal cost is greater than average cost then average cost is rising.
- When marginal cost equal average cost then average cost remains constant.

### *Impact of Costs Structures*

- Fixed cost is affected by average cost but not marginal cost (eg. the cost of power may vary from month to month but is usually much the same over a year. Rent is also constant).
- Variable cost is affected by both average and marginal cost.

### **Example of Determination of Cost Structures for a Retail Nursery**



| Cost item                            | Cost Structure | Why is it allocated to this cost structure?                                                                        |
|--------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------|
| Plants in sales                      | Variable       | Price list of wholesaler or producer – prices may vary.                                                            |
| Nursery premises                     | Fixed          | Is based on how much space you rent not to how much you sell or produce.                                           |
| Nursery premises owned by proprietor | None           | Other than opportunity cost (ie. the space could be used for other purposes) it does not effect the cost structure |
| Telephone                            | Fixed          | Proportional to the number of calls made, not to items sold                                                        |

### *Pricing and Cost Concepts*

- Prices should never fall below marginal cost.
- Prices can be above marginal cost but below average cost – but this is not a sound and can not warrant further investment. Variable costs are covered but fixed costs are not.
- When a business 'breaks even' it means that costs are the same as total revenue.

### **Liquidity**

Risk is greatly reduced if liquidity is ALWAYS maintained adequately. It is essential that a business always have the ability to pay for the cost of operating that business. This may be achieved by holding adequate cash in reserve, or alternatively, by developing and maintaining a facility by which adequate cash can quickly and easily be raised (eg. through overdraft facilities, by being able to return unsold goods to the suppliers, or by having assets which are very easily converted into cash). This ability to access funds is referred to as "liquidity". A business with good liquidity is able to survive unexpected occurrences; but a business with poor liquidity may fail if something unexpected happens.

### **SET TASK**

1. Interview one of the following types of horticultural businessmen:

- A grower of fruit, vegetable or other horticultural crops
- A nursery or garden centre proprietor
- A garden service business proprietor
- A landscape designer.

Ask the following questions:

- What is the strength of demand for your products/services?
- What competition do you have in the market place?
- What financial advantages or disadvantages do you have compared with your competitors?
- What is your marketing strategy?

Spend no less than 10 mins and no more than 30 mins conducting this interview.

Make notes of what responses you get.

2. Interview two people who own home gardens. Ask each one the following questions

- List all of the different places where you have purchased plants or garden products over the past year?
- Which of these do you buy from most often and which less often?
- Why?
- List as many things as you can think of that a garden centre could do in order to attract you to buy more from them?

Spend no less than 10 mins and no more than 30 mins conducting this interview.

Make notes of what responses you get.

3. Research the current EU legislation pertaining to trade in horticultural produce between EU countries; and also those outside the EU exporting to EU countries; list the latest EU requirements. (Check the internet, DEFRA (Dept. of Environment, Food and Rural Affairs UK) etc. for information).