

FACILITATOR GUIDE

Production Management

Level 5

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Title:		Develop a Production and Strategic Plan for a Farming Business					
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Directions

1. Learning Material

This guide has developed to assist the facilitator in presenting this unit standard. The guide contains all necessary material to ensure that the facilitator will be able to assist the learner to attain the competencies required by the unit standard.

This set of learning material consists of the following guides:

- **Learner guide** that contains all the information required by the learner to attain competency in this unit standard
- **Facilitator guide** that is a copy of the learner guide but contains additional instructions for the facilitator.
- **Assessment Guide for Assessors and Facilitators** that contains all the documentation needed by the assessor and facilitator to assess the competency of the learner against this unit standard.
- **Assessment Guide for Learner and Learner Workbook** that contains the documentation required by the learner to complete the assessment, along with the worksheets and practical exercises that the learner needs to complete as part of the formative assessment.

Please ensure that you are familiar with the contents of all of these guides before presenting this unit standard.

Although the learner and facilitator guide contains all the information required for attaining competency in this unit standard, references to additional resources (both printed and electronic) are provided for further study by the learner.

Information in boxes is indicated by tags that show:



2. Learning Program Timeframe



This is a summary of the timeframe for this learning program. You will be reminded of the time allowed for each module as you work through the guide.

<i>Process</i>	<i>Total Allocated Time</i>	<i>Theoretical Learning</i>	<i>Practical Learning</i>	<i>Activities</i>
Complete Program (Including summative assessment)	100h	16h 45min	83h 15min	5
Learner Orientation and Ice Breaker	30min	15min	15min	n/a
Purpose, Introduction and Learner Directions	30min	15min	15min	n/a
Revision of Level 4	45min	30min	15min	n/a
Session 1 (Chapter 1)	19h	3h	16h activities	1
Session 2 (Chapter 2)	27h	3h	24h activities	2
Session 3 (Chapter 3)	23h	3h	20h activities	3
Session 4 (Chapter 4)	4h 30min	3h	1h 30min activities	4
Session 5 (Chapter 5)	24h	3h	5h activities	5
Experiential Workplace Learning towards completing Summative Assessment	16h		16h	n/a
Preparation for Assessment and Revision	45min	45min		n/a

3. Technical Program Specifications

Format	Programmed instruction workshop, combined with structured internship format as prescribed for learnership, skills program or short course.
Target Learner Description	A typical level 5 learner should have been exposed to the working world for a considerable period and should have an extensive and wide-ranging level of experience in the subject matter. EE Ratios: 1 Male:1 Female 8 PDI:2 W 1 Employed:1 Unemployed
Articulation Options	Nil formal in place

Delivery Mode	A combination of small group mode and individual mode
Training Method and Activities	Program Instruction: This program forms part of an apprenticeship where coaches provide practical training in the fields requiring functional competency. The theoretical study section of the training is conducted as a 4-day workshop in the Cohort group format. Additional training activities include buzz groups, rotating role plays, simulations, games and brainstorming sessions, and group discussions.
Learner Support Strategies	Learners are inducted by "explore strategies to learn program". Learners are supplied with all resources and aids as required by the program, including: • Objects and devices such as equipment • Manuals and guides • Visual aids

Facilitator Tip

This unit standard is aimed at level 5 learners.

Typical level 5 learners:

- Are already equipped with wide-ranging specialised technical skills related to the field of learning, the world of business and business communication.
- Can be expected to be in possession of a broad knowledgebase with substantial depth in other related learning areas.
- Are able to operate under range of familiar and unfamiliar contexts under general supervision.
- Have the capacity to select the correct and appropriate procedures for his / her context from a wide range of procedures.
- Have the ability to plan, present information, choose methods, and access resources.
- Normally operates in a field where he / she has full responsibility for the nature, quantity and quality of outputs.
- Might bear responsibility for group output.

The examples given in this resource guide might be for a different geographical area or commodity to what the learner is exposed to. Please adapt your examples according to the learning context.

4. Facilitator's Checklist

Facilitator Tip

This checklist has been designed to assist you in delivering the best possible facilitation to the learners.

Please use it and supply whatever resources you might have in short supply at your venue of learning.

Preparation	Yes	No
Content Knowledge I have sufficient knowledge of the content to enable me to facilitate with ease.		
Application Knowledge I understand the program matrix and have prepared for program delivery accordingly.		
Ability to Respond to Learners Background and Experience I have studied the learner demographics, age group, experience and circumstances, and prepared for program delivery accordingly.		
Enthusiasm and Commitment I am passionate about my subject and have prepared my program delivery to create a motivating environment with real commitment to success.		
Enterprise Knowledge I know and understand the values, ethics, vision and mission of the Citrus Academy and the service provider under whose auspices the program will be conducted, and have prepared my program delivery, reporting and administrative tasks accordingly.		
Equipment Checklist:		
Learner Guides: 1 per learner		
Learner Assessment Guides: 1 per learner		
Writing material and stationery for facilitator and learner		
White board and pens		
Flip chart paper		
Proxima projector and screen		
Notebook computer and program disk		
Documentation Checklist:		
Attendance register		
Course evaluation		
Learner course evaluation		
Portfolios of evidence		

5. **Proposed Floor Plan**

No floor plan is prescribed for this training module.

Introduction

1. Purpose

The learner achieving this unit standard will be able to understand the influence that markets and technology have on the production process and will be able to develop a strategic plan for the agricultural processing activities in the agricultural business environment. In addition, they will be well positioned to extend their learning and practice into other areas of management in business and agricultural marketing to the advantage of the industry. Learners will understand the importance of the application of business principles in agricultural production with specific reference to production/conversion.

They will be able to operate farming practices as businesses and will gain the knowledge and skills to move from a subsistence orientation to an economic orientation in agriculture. Farmers will gain the knowledge and skills to access mainstream agriculture through a business-orientated approach to agriculture.

2. Learning Assumed to Be in Place

It is assumed that the learner has successfully completed the unit standards listed below:

<i>NQF Level</i>	<i>Unit Standard Number</i>	<i>Unit Standard Description</i>
NQF4	Literacy and Numeracy	
3	116259	Explain the application of marketing principles within an alternative and dynamic agricultural marketing environment
4	116288	Execute sustainable resource use and quality control
4	116319	Prepare a whole farm budget and establish a proper integrated information system for an agri-business

Facilitator Tip

It is important to ensure that the learners who are undertaking this learning program has already completed the correct prior learning modules, to ensure that they are not unfairly disadvantaged by the learning process, and can be supported accordingly.

Do not forget to complete the Diagnostic Assessment (Step 3 in the Assessment Guide).

Revision of Level 4

Timeframe

You have to complete this section as follows:

<i>Total time</i>	<i>Theory</i>	<i>Practical</i>
45min	30min	15min

Facilitator Tip

Utilise this opportunity to revise concepts covered at level 4 and to identify areas where learners lack knowledge or to identify learners who are not at the correct level to enter this program. This will assist you in identifying areas where more attention will have to be spent in facilitation and explanation during the course.

1. Resource Use

- Resources and inputs are similar, but resources are generally perceived as being start-up requirements, while inputs refer to ongoing production requirements.
- Resource planning is about determining whether the resources to produce what the market wants are available, and how these resources can be used to sustain quality production.
- An inventory of the available resources includes assessments of climatic features, land, soil, water, plant material, capital, labour, agrochemicals, and machinery and equipment.
- Climate is viewed as a resource because temperature, humidity and sunshine play an important role in the productivity of the trees and the marketability of the product.
- Apart from land cost and availability, its topography, size, orientation and location are important.
- Generally speaking, citrus requires well-drained, deep, sandy loam soils with a clay content of below 30% and a neutral pH.
- The peak water requirement must be calculated to assess the availability of water, and the water should be analysed to determine the quality of the available water.
- Nursery trees must be purchased from a reputable nursery and be certifiable in terms of the requirements of the Citrus Improvement Programme.
- The availability of capital and the cost of capital must be assessed and incorporated into a business plan and cash flow projection.

- A source of skilled and experienced permanent and temporary workers in the area where the farm is located is essential.
- Agrochemicals include fertilisers, crop protection chemicals, herbicides and postharvest chemicals. Their availability must be assessed in terms of the location of the farm.
- The type and quantities of equipment required depend on the size of the farming operation and the farming practices that are employed.
- Sustainable resource use means the use of the resources in such a way as not to damage, harm or deplete them, while using them to maintain production of the required yield and quality.
- The production plan ranks alongside the marketing plan and financial plan as major contributors to the overall strategic plan of the enterprise.
- A yield model forms the basis for the production plan.
- The employment of resources to support the production plan has to be compliant with legislative requirements.

2. Enterprise Scope

- In citrus production, economies of scale means that as a citrus enterprise grows and the number of tons of fruit produced increases, the cost of each additional ton produced decreases.
- The size of the enterprise depends on the availability of fixed and mobile resources, the potential return on capital, the availability and condition of existing facilities, and the market demand for the cultivars that can be produced on that land.
- Deciding on the size of a citrus enterprise is a complex issue that is dependent on the interaction of various factors, but a few taken in combination are critical, such as the trade off between production efficiency and market demand and the trade off between cultivar suitability and cost.

3. Principles of Quality Management System

- Quality defines desirable characteristics of a product, a process, or a service.
- Quality refers to the how the fruit looks and tastes, and also to the safety of the fruit for human consumption.
- Minimum standards for fresh fruit are prescribed by the Agricultural Products Act (APS), which relates to internal and external quality, and food safety and phytosanitary issues.
- There are also commercial standards organisations, such as GlobalGAP, whose standards growers are obliged to comply with in order to gain access to particular markets
- Quality management should form an integral part of every production process.
- Quality management is concerned with quality assurance throughout the production and packing process and quality control, which refers to inspections.
- A formalised quality management system must be in place that provides for quality assurance and quality control.
- HACCP is an example of a quality assurance system.

4. Integrating Quality Management Systems

- The stages of the production process and the points at which quality can be adversely affected must be identified before a quality management system can be implemented.
- A management schedule indicating the various production processes at specific times during the season must be developed for each cultivar on the farm.
- The production manager must understand the affect of various factors on the tree and the fruit quality.
- Quality assurance must be integrated with each process involved in citrus production.
- HACCP involves hazard analysis, identification of critical control points, establishing critical limits, monitoring critical control points, establishing procedures for corrective actions, recordkeeping and verification.
- Quality control is concerned with inspecting or monitoring fruit quality at various points in the trade chain.
- Maturity indexing is a technique used to provide information on the rate of change of fruit maturity prior to harvest.
- A cost-benefit analysis is about determining the financial justification for taking an action.
- The cost of implementing and maintaining a quality management system must be compared with the possible financial advantages of achieving better quality.



Chapter 1

After completing this chapter, the learner will be able to:

Gather intelligence, information and data related to production processes, technology and markets in agriculture

Timeframe

You have to complete this section as follows:

<i>Total time</i>	<i>Theory</i>	<i>Practical</i>
19h	3h	16h activities

Facilitator Tip

Take the time to ensure that learners can distinguish between the concepts of data, information and knowledge. Ask learners to name workplace-related examples of each.

1. Data, Information and Knowledge

For the purposes of this material, a useful way of looking at the terms data, information, knowledge and intelligence is as follows:

- **Data** is raw information, most often in the form of numbers, tables, graphs and formulas.
- **Information** is processed data, meaning data that has been sourced, collected, analysed, interpreted and summarised.
- **Knowledge** is information that has been assimilated, placed into context, communicated and put to use.

According to http://denham.typepad.com/km/2003/11/information_gat.html, the difference between information and knowledge is that "We often come to think our collections are 'knowledge', but they remain gatherings of information until engaged by a community, interpreted by individuals, verified and tested in use."

The term **intelligence** suggests that the knowledge gained about a particular subject or event, being what is known about it, has been summarised or packaged for a specific purpose. As such, it is conceivable that the intelligence about one specific aspect of a problem could serve as data for a broader or wider study.

In *Information Research*, Vol. 8 No. 1, October 2002 (<http://informationr.net/ir/8-1/paper141.html>), the differences between the concepts of data, information and knowledge are illustrated as follows:
'Knowledge differs from information in that it is predictive and can be used to guide action while information merely is data in context. If, for example, raw data were to be given as -10 degrees, then information would be it is -10 degrees outside, and the knowledge would be that -10 degrees is cold and one must dress warmly.'

A simple way to think about the difference between data, information and knowledge is that as you move through the data-to-knowledge continuum, the material takes on increasing levels of meaning and the perceiver gains increasing levels of understanding.

Information gathering is the gathering of data or information for the purpose of converting this into a form or format in which it can be put to practical use. Once gathered, data or information must be appropriately processed and organised so that it can add to the knowledge pool and be put to best use.

Effective information gathering is the most basic perspective-widening tool an effective citrus production manager has at his disposal. Good quality information creates the patterns from which ideas emerge, and provides the criteria by which ideas are screened and assessed.

2. Gathering Information

While gathering the right information is an essential skill for an effective leader, information is not an end in itself. It is useful because it serves as an input towards generating ideas and building vision, which leads to effective decision-making. Effective managers gather two main types of information, which are:

- Background information; and
- Task-related information

Any information is only as reliable as its source. If the source has a vested interest in putting across a specific point of view, the information may be presented in a manner which is misleading, most often by reporting selected facts and leaving out others. Effective managers always ensure that the source of the information is dependable and trustworthy.

2.1. Gathering Background Information

Background information is used to build a view of the production and marketing world in which the company operates. This information is made up of the countless facts, trends and opinions encountered and observations made on a daily basis.

Background information typically includes political, social, environmental, technical and economic issues that could impact in various ways on the business, and therefore on business decisions. For example, for questions such as "should I plant more citrus?", or "should I raise more capital to fund additional equipment and machinery?" to be answered with confidence, sufficient high quality information should be available as a basis.

The higher the quality of background information, the more effectively the manager is able to prioritise it, thereby being able to exercise better judgment and common sense in decision-making.

Background information is gathered as follows:

- Know what it is that you want to know, but do not be too fixed when it comes to background information. The most important information may very well be that which you did not even know you needed to know.
- Read newspapers and news websites respected for the quality and accuracy of their journalism, and focus on articles that provide insights into trends that could affect your business. An example of such a newspaper is Business Day.

- Talk to customers, suppliers, market agents and industry representatives and get a thorough understanding of the issues influencing the industry and your own operation.
- Read industry magazines such as the SA Fruit Journal, Australian Citrus News, Florida Citrus Industry and Californian Citrograph, and newsletters of both your own and your customers' industries to better understand international market trends and production developments.
- Talk to fellow producers, technical citrus industry experts and knowledgeable people within your organisation, and understand their perspectives on the key trends and features of interest.
- Read brochures to make sure you understand your industry's products, services and markets.
- Have a good understanding of company or business unit strategy, which is what your company says it wants to do, who it wants its customers to be, and how it plans to serve them.
- Take the time to tune in to what is going on in your organisation, through both the formal and informal communication channels.
- Attend local study group meetings, and pay attention to information circulated by industry bodies such as the Citrus Growers' Association (www.cga.co.za) and Citrus Research International (www.cri.co.za).
- Attend appropriate local and, where possible, overseas technical and marketing conferences such as the CRI Biannual Citrus Symposium, the International Citrus Congress and Fruta Logistica.

It is necessary to take the time to gather information to broaden one's perspective. It is all too easy to allow these activities to disappear under the pressures of a hectic schedule.

2.2. Gathering Task-Related Information

Task-related information is gathered for a specific purpose, for example:

- In preparing a disease control spray programme, one requires the latest information on available agrochemical products, their relative merits and prices.
- For developing a fifteen-year planting plan, a global market forecast from a reliable source is required.
- Specific information about the disposable incomes of a certain group of consumers in a key market sector is required to develop a market strategy.
- The human resource manager needs to know the availability of graduates with fruit science qualifications.

In all such instances the required information is focused and task specific.

Information-gathering actions are clearly identified steps in the specific project or task being undertaken. There are three key steps in the process:

- Understand clearly the purpose for which the information is required.
- Make certain what the right questions are to ask.
- Gather the specific information you need according to a plan.

The amount of research required to gather the information depends on the scale of the task, the time available, and the consequences of the information being wrong.

If the information is needed to make a small decision, or the consequences of getting it wrong are small, not too much time should be spent on research. On the other hand, if an important decision with long-term impact will be made based on the information and the consequences of getting it wrong will be severe, a lot more research has to be done to ensure that the information is accurate.

Asking the right questions is the key to getting the right answers. Start by brainstorming, ideally with other informed people. Draw on a predefined framework, where available, that has been used in the past to collect this type of information. For example, if information is being gathered as part of researching a business plan, buy a good book on business planning and adapt the framework it proposes. Finally, plan for gathering the information and decide how much funding is available for the research.

A lot of information is relatively freely available, within your company or in good business, academic or institutional libraries. Some information is packaged and for sale, as is the case with trade publications. Other information you may need to gather yourself, by for example interviewing clients or conducting market research. It may also be necessary to pay a qualified expert to answer questions, such as when legal advice is required.

When all the research has been completed, and the information has been gathered, take a step back and look at the answers through the filter of common sense. Ask yourself if any information seems to be missing, or if anything jars with your instincts and experience.

3. Analysing Data and Information

Data analysis is the process of converting raw data into a form where it becomes information that is relevant and appropriate. Data analysis not about changing data, as this could lead to inaccurate information, but about determining its relevance and expressing it in a usable format.

One must always be aware of the danger of focusing too strongly on the collection, processing and analysis of new data, while largely ignoring the possible value of existing information. New information should be analysed and processed in such a way that it can be incorporated into the existing information pool, broadening the existing picture, without necessarily creating an entirely new one every time.

Typically the steps to be followed in analysing data or information are as follows:

- Identifying the problem
- Assessing the accuracy of the data
- Designing a data template
- Using data analysis techniques
- Analysing and interpreting data
- Testing conclusions

3.1. Identifying the Problem

As is the case with information gathering, it is not possible to analyse data effectively without first having a clear idea of what the overall purpose of the exercise is. The question must be clear before data or information can be effectively analysed to find an answer.

It is easier to deal with a number of smaller, simpler sub-issues than it is to tackle a complex issue in its entirety. For this reason it is useful to break down the problem into a number of component parts and to consider the information requirements for each part.

3.2. Assessing the Accuracy of the Data

Before analysing raw data, an assessment must be made of the accuracy of the data. The source of the data plays a very important role in this regard, especially if a new data source is used. A few standard questions that should be asked in assessing the accuracy of data are:

- Where did the data come from and is it a reliable and accredited source?
- Have the data been peer-reviewed?
- How was the data collected?
- Is this raw data or has it already been analysed and processed? If so, was the first data analysis process reliable or done by a reliable source?
- Is this comparative data that may be questionable?
- Is the context of the data clear?

3.3. Designing a Data Template

For numerical data, a useful tool is to compile a blank table or graph depicting the relevant row and column headings or axes into which the data or information will be placed. This gives direction to the type and level of information required and the analysis process needed to transform it from its given format into the desired format.

For example, if it is required to demonstrate the trend relating to South American lemon exports by country over the past 10 years, it is helpful to start off by drawing up a blank table or histogram where each column represents a year and each row, or section of each bar of the histogram, represents a country in South America.

Data may have been obtained from different sources, and each source may have expressed its data in a different form. Filling in a blank table will assist in determining what data is still required and what manipulation is required to transform it into the required format.

3.4. Using Data Analysis Techniques

Another method or approach that is of value in analysing or ordering data is so-called Exploratory Data Analysis (EDA) (<http://www.itl.nist.gov/div898/handbook/eda/eda.html>). This method is useful when trying to make sense of data that may not seem to fit the required template or format, or where no template has yet been created. EDA is not merely a collection of techniques, but a philosophy of how to dissect a data set, what to look for, how to look, and how to interpret.

Most EDA techniques are graphic in nature, with a few added quantitative techniques. The reason for the heavy reliance on graphics is that by its very nature, the main purpose of EDA is to explore open-mindedly. Graphics gives the analysts the ability to detect structural secrets, thereby providing some new, often unsuspected, insight into the data. In combination with the natural pattern-recognition abilities that we all have, graphics provides unparalleled power to carry this out.

The particular graphical techniques employed in EDA are often quite simple, encompassing various techniques of:

- Plotting the raw data, using histograms, line graphs, etc.
- Plotting simple statistics to create distribution curves
- Positioning such plots to maximise our natural pattern-recognition abilities

3.5. Analysing and Interpreting Data

Once the objective has been clarified and the sources of data and information selected, the important stage of compiling the data and arranging the relevant information into a useable form arises.

This process can best be explained by using the example below.



Data Analysis

Evaluate the merits of a new or expanded citrus planting involving the latest cultivars

The key first steps in establishing a new citrus planting, or in introducing new cultivars into an existing one is to:

- Determine the market opportunity for the proposed cultivar(s).
- Ascertain what production capacity is required to create an economically viable citrus production venture with the given fixed resources.
- Generate information about the climatic requirements of the required new cultivars.
- Understand the climatic features of the proposed site to ascertain the probability of it being able to support the production of high yields of superior quality fruit of the desired new cultivars.

These information inputs may take the form of partially or completely processed data and require further refinement to make them relevant.

Information on the market opportunity could be obtained from industry sources, such as the Citrus Growers' Association, where statistics are made available on an annual basis on historical price trends, export volumes and net realisations for local and export fruit by cultivar group. Fruit South Africa is also able to supply relevant information on market access developments and supply / demand trends.

Information on climatic requirements and adaptability of the cultivars in question could be obtained from a variety of technical publications and other sources. Such information could be in the form of experimental results where the performance of the relevant cultivars will have been compared in trials in different production areas. Such trials will have been laid out statistically so that yield and quality values between areas could be ascribed mainly to the climatic differences by minimising the effect of other variables, such as soil type, aspect, rootstock, etc. Typically, yields expressed in kilograms of fruit per tree measured annually over a period of at least 5 years at each of the trial sites would have been converted to per hectare tonnages, averaged and compared. Similarly trends in the development of fruit quality during the maturation period would have to be averaged over the period of the trial for each location and be compared. This information would then be relevant and appropriate for understanding the effect of climatic factors on the performance of the proposed new cultivars.

Information on the climatic features of the planting site could be obtained from a weather station at the site or near to it. Such records would ideally include daily maximum and minimum temperatures over a period of 10 or more years. From this data, average monthly maximum and minimum temperatures could easily be calculated. This information could in turn be used to calculate annual and seasonal heat units, an indication of the climatic suitability of the site to certain climatically sensitive cultivars, such as clementines. The information generated in this manner can then be compared to areas that are known to be suitable for the proposed cultivars.

For example, if it has been established through trials or commercial experience, or both, that clementines are well suited to the climate of, for instance Seville in Spain, the climatic features of the proposed local site must be compared with those of Seville to establish the likelihood of clementines succeeding at the new site. In this way, the probability of a range of new cultivars being suitable to the proposed site can be gauged.

3.6. Testing Conclusions

It is always important to keep the objective in mind throughout the information gathering and analysis phases. Beware of so-called nonsense correlations where the data and information may be accurate and the analysis sound, but the logic of the conclusion is faulty.

For example, if you gather data about the number of pirates in the world and about global warming, and analyse this data, you will find that there is a significant inverse relationship between the two (200 years ago there were many pirates, and very little global warming, today there are almost no pirates and a high degree of global warming). The conclusion would therefore be that if we could increase the number of pirates, global warming would decrease. Also, if you gather data about the number of legs that most of the cows on earth have and about the number of legs that most of the tables on earth have, and you analyse this data, you will find an almost exact numerical similarity. And you may be fooled into concluding that a cow is a table.

In both these cases, the data is correct, the analysis is sound, but the conclusion is illogical.

4. Using Information to Take Decisions

The purpose of gathering information is to be in a position to make sound decisions. Reverting to the above example, information has now been gathered and prepared relating to the suitability of a range of market-desired cultivars to the climatic features of the farm. Other information has been gathered relating to the specific requirements and production and bearing characteristics of the cultivars concerned. There are now a number of important decisions that can be taken. These include:

- In situations where the climatic suitability of a particular cultivar is marginal, should it be planted or not?
- Is the cost of specific production interventions justified?
- What proportion of each cultivar should be planted in order to ensure an even supply of fruit throughout the total harvesting and packing period?
- What special production measures will have to be taken to ensure optimum production and quality of the chosen cultivars on the specific site?
- What resources and infrastructure will have to be employed to harvest the fruit of each of the cultivars within their respective harvest windows?

Before final decisions are taken on some of these questions, more information may have to be gathered. This may involve consultation with selected technical and financial experts and fellow producers.

At the end of the process, the risks attached to undertaking the specific venture should be well understood. A business plan can then be compiled, in which all relevant production, marketing, and financial aspects are integrated to provide an estimate of return on investment. This will be the document upon which the final decision to go ahead or not will be based.



Facilitator Tip

Summary

This is an opportunity to check the progress that learners have made.

Allow time for the learners to read through the summary and to gauge their own progress. Make sure that each and every learner gets an opportunity to ask questions.



Chapter 1

- Data is raw information, most often in the form of numbers, tables, graphs and formulas.
- Information is processed data, meaning data that has been sourced, collected, analysed, interpreted and summarised.
- Knowledge is information that has been assimilated, placed into context, communicated and put to use.
- The two main types of information that are gathered are background and task-related information.
- Background information is used to build a view of the production and marketing world in which the company operate, while task-related information is gathered for a specific purpose.
- The steps followed in analysing data and information are identifying the problem, assessing the accuracy of the data, designing a data template, using data analysis techniques, analysing and interpreting data, and testing conclusions.
- Information that has been analysed and interpreted can now be used as a basis for making decisions.



Complete activity 1 in the **Learner Workbook**.



Activity 1 – Research and Report

Remind learners that this is an individual task and that the media search must be conducted independently. Remind learners of sources for a media search. It is important that learners list their sources. Explain that learners are not simply to quote from media sources, but that they must provide their own insight into and understanding of the information.

Timeframe: 16h

Chapter 2

After completing this chapter, the learner will be able to:

Evaluate the influence that market trends have on the production process in the agricultural business environment

You have to complete this section as follows:

<i>Total time</i>	<i>Theory</i>	<i>Practical</i>
27h	3h	24h activities

Timeframe

Facilitator Tip

The concept of market demand can be explained through asking learners to think as a consumer in different situations, and to state their demands as a consumer of a specific product. Use a variety of markets that the learners are familiar with, and give learners or groups of learners a variety of consumer characteristics to think through. When all the consumer profiles and their demands have been identified, draw a schematic on white board paper and stick it up in the class for future reference.

1. Market Demand

We have previously discussed the importance of the export market for South African citrus. In this chapter references to *the market* apply in the main to the export market.

Being able to quantify the level of demand in a specific market for a particular product in a given time period, is a vital success factor for any citrus production operation. From a South African citrus export perspective, there are costs involved in establishing orchards, in nurturing trees during the years it takes them to mature, and in harvesting packing, shipping and distributing the fruit. These costs highlight the importance of being able to forecast what the demand for our products will be during our season, and what price we can realistically expect to achieve for our products.

In theory it should be very easy to determine demand. After all there are numerous companies around the globe that conduct research and gather consumer data. This data would, for example, show that the consumption of oranges per person in EU countries has remained constant for the past 20 years, whereas in Japan it has increased. Add to this data about population growth and it should be quite easy to determine the market potential for a product in a given period.

The complexity of determining future demand arises when one considers constantly changing consumer preferences for specific cultivars and type, the impact of competitive products, changes in disposable income, and other external factors.

The key to success lies in knowing the competition, understanding the impact of emerging trends on consumer behaviour, and being aware of consumer preferences in specific markets. This enables the most appropriate product to be supplied at the most appropriate time to differentiate your business from that of the competition.

The multitude of market-related forces that contribute to the environment in which South African citrus production takes place, is varied and complex. These include:

- Worldwide oversupply
- The dominant position of the retail giants
- Mismatched supply and demand. Avoiding a situation where South African citrus floods the market requires sound information, education and discipline from both producers and exporters.
- Fluctuations in the value of the South African currency.
- Performance of competitors' currencies
- Status of the economies of importing countries
- Competition from new entrants and from other food kinds
- Foreign government subsidies and assistance
- The limited ability of the local market to absorb citrus at acceptable prices
- Weather patterns
- Stricter quality and food safety standards
- Changes in consumer fruit preferences

South African citrus producers receive no government subsidies, compete on over-supplied export markets, and operate in forever changing production and marketing environments. Under these circumstances, citrus producers need to understand the various markets and explore niche opportunities that may exist in order to be successful in the long term. As individuals and collectively, they need to match demand and supply, produce high quality fruit in a cost-effective manner, and achieve high yields of the targeted cultivars.

2. Adapting Production to Market Trends

Facilitator Tip

Now that the demands of the consumer or market segment have been determined, assign the task to different groups to develop a strategy for adapting to and meeting the demands of a specific market. Allow groups to report back on their findings and comment on each other's conclusions.

With annual crops such as vegetables or grain, it is possible to change areas planted and crop type from year to year in response to predictions based on current and expected demand / supply balances.

Citrus, however, is a long term crop. The productive lifespan of an orchard greatly exceeds the speed at which shifts in consumer trends, competitive actions and other factors impact on demand. This means that sound decisions on what areas to plant, with what cultivars and in what ratios, should only be taken after analysing available market trends and extrapolating, interpreting and integrating such relevant information from a number of reliable sources.

However, short-term adjustments to supply patterns also have to be made based on prevailing and anticipated market forces within any particular season.

This means that the citrus producer has to contend with two sets of circumstances:

- He has to decide what volumes of fruit to send into the various export market segments within a specific season. In this context the term 'market segment' is used broadly to cover differences between retail and wholesale markets within a single country as well as markets in different countries.
- He has to consider the development of long term planting (production) and demand (market) trends of local and competing global citrus industries, or at least sectors of these industries.

In the first case, the production manager, through close liaison with his export agent, tracks weekly, if not daily, fruit supplies from other local producers and from competing countries and monitor the movement of this product into the markets in which he has an interest.

He attempts to assess the quality and volumes of their product against his own supplies in the knowledge that oversupply weakens a market and influences perceptions about the quality of the product in that market. For example, when a market is fully supplied yet has confidence in the shelf-life and quality of the available fruit, demand is likely to remain firm. If, on the other hand, the market suspects that the condition of the product is deteriorating, demand will weaken as the market becomes increasingly pessimistic about the likely value of the product by the expected consumption date. This can lead to a downward spiral in market confidence in own and competitive products resulting in slow sales, the accumulation of increasingly poor quality product and plummeting prices.

All such factors need to be taken into account by management to inform short-term decisions when switches of product supply into different market segments within a single production season are being considered.

Long-term demand / supply trends and extrapolations are used to inform long-term decisions, such as whether or not to channel resources into expansion or land acquisition actions given present and expected future changes to the operating environment. To arrive at such decisions strategic planning exercises are carried out.

Strategic planning is traditionally focused on setting the action plans to attain long-term objectives, taking into account current realities and expected future influencing factors. Successful strategic planning however requires information relating to both short-term influencing factors and long-term trends.

At the two extremes lie long range strategic decision-making on the one hand, and ultra short-term weekly adjustments to harvesting, delivery and distribution patterns aimed at optimising intra-seasonal returns, on the other. Somewhere in between lies the response of the producer to certain opportunities that may arise and can be exploited. Such opportunities can come in the form of the opening of a new export market or a growing demand in certain market segments for organic or Fairtrade products.



Facilitator Tip

Summary

This is an opportunity to check the progress that learners have made.

Allow time for the learners to read through the summary and to gauge their own progress. Make sure that each and every learner gets an opportunity to ask questions.



Summary

Chapter 2

- Being able to quantify the level of demand in a specific market for a particular product in a given time period, is a vital success factor for any citrus production operation.
- The complexity of determining future demand arises when one considers constantly changing consumer preferences for specific cultivars and type, the impact of competitive products, changes in disposable income, and other external factors.
- Citrus is a long term crop and decisions on what areas to plant, with what cultivars and in what ratios, should be taken after analysing available market trends and extrapolating, interpreting and integrating such relevant information from a number of reliable sources.
- In production decision-making, lie long range strategic decision-making on the one end of the scale, and ultra short-term weekly adjustments to harvesting, delivery and distribution patterns aimed at optimising intra-seasonal returns, on the other.



Practical

Complete activity 2 in the **Learner Workbook**.



Facilitator Tip

Activity 2 – Research and Report

Remind learners that they have to complete this activity individually and adapt the approach to the farm on which they are completing their practical duties. Encourage learners to seek workplace advice from supervisors, mentors and coaches to complete this activity.

Timeframe: 24h

Chapter 3

After completing this chapter, the learner will be able to:

Evaluate the influence that technology has on the production process in the agricultural business environment

You have to complete this section as follows:

<i>Total time</i>	<i>Theory</i>	<i>Practical</i>
23h	3h	20h activities

Timeframe

Facilitator Tip

Divide the class into groups and have each group report back on:

- What technology has influenced your life in the last 10 years?
- How has this technology influenced your life?
- What did people do before this technology existed?
- Has this technology improved your life? How?
- How do you know if the technology has improved your life or not?

Hold a class discussion around the same points from the perspective of different citrus industry role-players, such as the farmer, the packhouse, the transportation company, exporters, etc.

1. Evaluating Existing Technology

Successful citrus production operations employ systems whereby the condition, efficiency and cost-effectiveness of existing machinery, equipment, information technology, production and harvesting technology, and communications and financial technology are regularly monitored and evaluated. Such technologies include motor vehicles, irrigation systems and equipment, agrochemical spray machinery, tree pruning equipment, computer equipment, and software packages.

2. Analysing the Influence of Technological Advances

By comparing the outcome of the abovementioned evaluations with the features and price tags of new machinery, equipment or technologies, ongoing decisions can be made on the merits of retaining existing equipment and machinery or replacing these with newer, improved versions. Such decisions depend on current production efficiencies, the level of capital and other resource reserves, new prospects offered by predicted market demand, and the skills available on site to improvise and improve existing technologies.

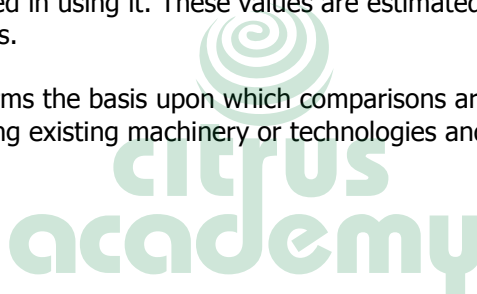
Information to be provided on a typical technology audit sheet includes the following:

- Description of the item or the relevant machinery, equipment or technology, its purchase details, including supplier, date and cost, and its present day value
- Its functional specifications, and other details pertaining to its use, capacity and capabilities
- Details of its servicing, repair and maintenance history
- A cost / benefit analysis where the value of the item over the period it has been used is related to its cost and compared with the alternative option

According to Mind Tools, (http://www.mindtools.com/pages/article/newTED_08.htm), a cost / benefit analysis is a powerful, widely used and relatively easy tool for deciding whether to make a change. The tool is used by firstly working out how much the change will cost to make, and then calculating the benefit you will gain from it. Where costs are paid over time or benefits are received over time, the time it will take for the benefits to repay the costs is calculated.

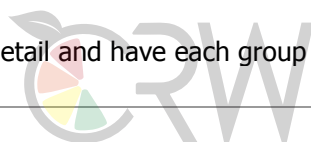
A cost / benefit analysis can be carried out by using only financial costs and financial benefits. Intangible items may however also be included in the analysis, such as ease of use of the new item and its value to the morale of the staff involved in using it. These values are estimated and inevitably bring an element of subjectivity into the process.

The cost / benefit analysis forms the basis upon which comparisons are made and decisions taken between the merits of retaining existing machinery or technologies and purchasing new ones.



Facilitator Tip

Work through the example below in detail and have each group come up with a similar example relevant to citrus farming.



Example

Cost / Benefit Analysis

The production manager is deciding whether to implement a new computer-based pest and disease control system. He only has one computer at his disposal and his employees are not computer literate. But he is aware that by creating a computerised database and using this for future decision-making his crop will achieve a higher export percentage.

His financial cost / benefit analysis could be along the lines of the one given below:

<i>Costs</i>	<i>Benefits</i>
New Computer Equipment: • 2 PCs with supporting software @ R8,000 each • 2 Printers @ R700 each • Cabling and installation @ R2,000	• Time saving in manually processing field inspection data: 4 people @ R400/day • Savings on purchasing pesticides in bulk: R10,000 • Improve export percentage by 3%: R30,000

Training Costs:

- Computer introduction, 2 people @ R200 each
- Pest and disease introduction, 2 people @ R400 each

Other Costs:

Lost time: 5 man days @ R300/day

Total Costs: R22,100

Total Benefit: R41,600 / year

Cost Recovery Period: $R22,100 / R41,600 = 0.53$ years = approx. 6 months

Although the estimates of the benefits are quite subjective, the production manager would be likely to introduce the new system, given the short cost recovery period.

Note that larger projects would be evaluated using formal finance or capital budgeting, which takes into account many of the complexities involved with financial decision-making.

3. Estimating and Extending the Lifespan of Machinery and Equipment

Facilitator Tip

Lead a class discussion around how long technology should be kept. Explore the pros and cons of keeping, discarding or upgrading technology. Use examples that are relevant to citrus production.

Decisions on whether and for how long to extend the lifespan of machinery and equipment, can best be made following proper analysis. Machinery and equipment can become redundant for three main reasons:

- Wear and tear rendering it ineffective
- Becoming technologically outdated
- Changes in usage requirements

Regardless of the reason for redundancy, an appropriate analysis needs to be done to evaluate the merits of replacement over maintenance, the cost of new technology over the loss of efficiency of existing machinery, and the possibilities for adapting present equipment to deal with new demands.

The analysis tools used will vary depending on specific circumstances but a cost / benefit analysis remains the most useful method for evaluating the merits for trying to extend the lifespan of equipment and deciding on when it should be replaced.

4. Designing a Maintenance Plan for Machinery

Facilitator Tip

It is recommended that groups receive a pre-facilitation exercise in which they have to draw up a maintenance plan for different types of equipment and machinery. Discuss the practical implementation of each group's recommendations.

Any effective citrus production operation requires a formal equipment and machinery maintenance capability. This starts with the establishment of a maintenance plan. In designing such a plan, the scope of actions and competencies need to be detailed.

Competence in performing operational maintenance of machinery requires evidence of the ability to select and match the correct tools and supplies to carry out scheduled servicing and minor repairs to a range of plant and equipment. It also requires the ability to apply operational safety procedures, access and interpret maintenance plans, apply basic diagnostic techniques, recognise and rectify minor mechanical faults, and keep maintenance records.

An overall machinery maintenance plan is required to cover the processes and procedures to be followed by the enterprise in respect of the full range of machinery and equipment. The maintenance plan first of all needs to state the objectives of the maintenance procedure, and secondly the functions.

A checklist of the essential functions of such a maintenance plan is:

- Management's responsibility
- Organisation
- Administration
- Maintenance scope
- Safety
- Maintenance assessment
- Budget
- Capitalisation
- Personnel
- Work rules
- Operations
- Maintenance responsibilities
- Work control
- Maintenance stores

Within the scope of this checklist, individual maintenance plans covering each type of specific equipment or machinery can be designed. This would include details, such as maintenance schedules and the items to be covered at each maintenance service occasion such as lubrications, repairs and replacements.

5. Comparing Leasing with Purchasing and Replacement with Repair

Facilitator Tip

Explained this section through using the examples of purchasing an appliance through a lay-by, hire purchase, or cash. Cover the reasoning behind each type of purchasing and the advantages or disadvantages of each payment option.

The main advantage of leasing is that the initial cash outlay to gain the use of an asset is generally less than it is for purchasing. The main disadvantage of leasing is that the total cost of the asset over the lease period is considerably higher than what it would have been if the asset had been purchased outright. How do you reconcile these two factors? One way is to do a mathematical analysis of net cash flows that would result from leasing and from purchasing.

A cash flow analysis provides an estimate of how much cash one would need to set aside today to cover the after-tax costs of each acquisition alternative. The analysis takes into account the "time value of money", which basically means that you do not need to have R50 today to pay a R50 expense one year

from now, because you can earn interest on your money. On the other hand the purchase value can be expected to escalate at the rate of inflation.

To perform the analysis, you need to know or assume certain facts, including:

- Purchase and financing terms
- Leasing terms
- Income tax rates
- Asset's expected useful life to your business for depreciation purposes
- Asset's estimated value, if any, at the end of its useful life to your business
- Cost of capital
- Any other costs that would be incurred if the asset was leased and not purchased, or vice versa, for example expected maintenance costs if the lessor was assuming responsibility for those costs.

An example of such a cash flow analysis is available on http://www.toolkit.cch.com/text/P04_5160.asp where the process is discussed step-by-step. It can, however, be concluded that there is no hard and fast rule. There are occasions when analysis will indicate purchase rather than lease and visa versa. A final decision will often depend on various factors, including the specific nature of the asset, for example a car versus a spray machine, the pace at which technology used for that particular equipment or machinery advances, and the potential resale of value of the asset.

Very much of the same argument applies to repair versus replace. Each case has to be judged on merit after the necessary analysis has been carried out. Here too, the analysis would require inputs including the cost and terms of purchase, the maintenance record and cost, the expected future life of the equipment, changing usage requirements, cash flow considerations, and technological advances.



Facilitator Tip

Summary

This is an opportunity to check the progress that learners have made.

Allow time for the learners to read through the summary and to gauge their own progress. Make sure that each and every learner gets an opportunity to ask questions.



Chapter 3

- Technology used on citrus farms include motor vehicles, irrigation systems and equipment, agrochemical spray machinery, tree pruning equipment, computer equipment, and software packages.
- By comparing existing machinery and equipment with the features and price tags of new machinery, equipment or technologies, ongoing decisions can be made on the merits of retaining equipment and machinery or replacing these with newer, improved versions.
- A cost / benefit analysis is a powerful, widely used and relatively easy tool for deciding whether to make a change.
- The cost / benefit analysis forms the basis upon which comparisons are made and decisions

taken between the merits of retaining existing machinery or technologies and purchasing new ones.

- Machinery and equipment become redundant for three main reasons, being wear and tear, becoming technologically outdated, and changes in usage requirements.
- Any effective citrus production operation requires a formal equipment and machinery maintenance capability, which starts with the establishment of a maintenance plan.
- The main advantage of leasing is that the initial cash outlay to gain the use of an asset is generally less than it is for purchasing, while the main disadvantage is that the total cost of the asset over the lease period is considerably higher than what it would have been if the asset had been purchased outright.
- A cash flow analysis indicates the merits of purchasing versus leasing.



Practical

Complete activity 3 in the **Learner Workbook**.



Facilitator Tip

Activity 3 – Presentation

Remind learners that this activity requires a lot of intense historical research and discussion with SMEs. Point out to learners that the historical nature of this activity requires verification of facts and that all resources should be listed and acknowledged. It is important that learners present their presentation and hand in evidence of the presentation.

Timeframe: 20h

Chapter 4

After completing this chapter, the learner will be able to:

Develop a strategic production plan

You have to complete this section as follows:

<i>Total time</i>	<i>Theory</i>	<i>Practical</i>
4h 30min	3h	1h 30min activities

Timeframe

Facilitator Tip

Rather than wading through the theory of developing a strategic plan, request that learners pre-read this and the next section before facilitation. Focus on developing a strategic production plan with the learners based on their practical experience. Work through all the planning stages and conclude with how such a plan is actually compiled.

This session focuses on the planning while the next session focuses on the actual design of the plan. Bring as many compliance documents as possible along to class to familiarise learners with these documents and their content.

1. Introduction

The development of strategic production plan requires the setting of long-term goals (what), an assessment of the current situation and devising and planning a means by which (how) it will be possible to move from the present to meet the set goals.

The next two chapters focus on the total process of developing a strategic plan. In chapter 4, the ground is prepared by looking into certain of the legal and marketing requirements that need to be factored in as a prerequisite for the establishment of a legally compliant citrus production and marketing enterprise. This forms the basis for developing the overall strategic plan.

2. Legal Requirements

The employment of resources to support the strategic production plan has to be compliant with legislative requirements. These legal requirements, which are promulgated as acts of parliament, effectively place boundaries on the various production and marketing activities and how they are conducted. The following are examples of some of the activities and the related Act(s):

- **Environmental conservation** – *Conservation of Agricultural Resources Act of 1983 and National Environmental Management Act of 1998, Plant Improvement Act*
- **Minimum citrus fruit quality standards for local and export products** – *Agricultural Products Standards Act of 1990*
- **Health and safety, and good agricultural practices** – *Health Act of 1977, Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act of 1947, Agricultural Pests Act 1983, Occupational Health and Safety Act*
- **Marketing of citrus** – *Marketing of Agricultural Products Act (Amended) of 2001, Agricultural Produce Agents Act*
- **Citrus research** – *Agricultural Research Amendment Act of 2001, National Advisory Council on Innovation Act of 1997*
- **Citrus technical advisory activities** – *Natural Scientific Professions Act Of 1993*
- **Equity and fair labour practices** – *Employment Equity Act of 1998, Basic Conditions of Employment Act and Sectoral Determination 13, The Land Reform Act (Labour Tenants) of 1996*

The citrus production manager should be aware of the key requirements of these and other relevant legislation when developing the citrus production plan. Compliance with the requirements may involve costs that have to be factored into the plan.

3. Market Requirements

International markets demand the implementation of credible and transparent systems for the production and packaging of fresh produce. Compliance with Good Agricultural Practice (GAP) standards such as GlobalGAP and Tesco's Nature's Choice is now a prerequisite for suppliers of fresh produce to markets in the United Kingdom and European Union. In addition to these GAP standards, suppliers to certain markets have to provide proof of compliance with a variety of other standards for ethical trading, environmental issues, Integrated Pest Management and the like.

The production manager wishing to align his production planning with the ever-changing and increasingly demanding requirements of the major European markets, therefore may expect GlobalGAP standards to suffice, only to find that this standard does not include all of the items or aspects that a particular market of his choice may require, or to the desired level.

A sensible approach would therefore be for the production manager to:

- Become familiar with the key GAP focus areas that the export markets of choice are concerned with.
- Use a sensitive but broad-based audit system to determine the production unit's relative levels of compliance to the standards demanded by the various markets or retail authorities.
- Set as an objective in the strategic production plan that a system will be put in place to enable access to the markets of choice through compliance with their specific environmental and related standards.

Understanding the specific Good Agricultural Practices (GAP) requirements of your markets of choice can be achieved by studying GlobalGAP and the specific requirements of the various major retailers. An export agent can be consulted in this regard. The Integrated Crop Management System developed by the South African fruit export company Capespan is particularly advanced and flexible.

The following key areas are relevant to most GAP requirements:

- General management of the integrated crop management system
- Environmental management

- Responsible agricultural practices
- Responsible use of agrochemical products
- Safe and effective handling of agrochemical products
- Social aspects
- Food safety and quality management
- Postharvest handling and packing of product

3.1. Setting Compliance Objectives

An important strategic objective for the production unit or company is related to compliance with the GAP requirements of the market segments being targeted. Such an objective will not only express in clear terms what the goal(s) are, but also who will be accountable for meeting them, by when, where and how performance will be measured.

3.2. Compliance Documentation

Linked to these GAP requirements would be applicable policy statements, procedures, recordkeeping systems and risk assessments.

The following are examples of the kind of issues that **policy statements** should cover:

- Conservation and enhancement of the environment
- Judicious use of natural resources
- Pollution prevention
- Disposal and recycling of waste
- Judicious use of agrochemicals
- Judicious use of non-organic fertilisers
- Protection of health and safety of workers, visitors and clients
- Management of workers according to ethical trading principles

The following are examples of the issues that **procedures and protocols** should be written to cover:

- Complaints
- Emergencies
- Safety and hygiene rules for visitors and contractors
- Restriction of access to production blocks after crop protection product application
- Compliance with pre-harvest withholding periods
- Fruit sampling for residue analysis
- Managing maximum residue violations
- Product recall
- Water sampling for microbiological analysis
- Fuel and oil management
- Handling and storage of crop protection products and fertilisers
- Verification of calibration accuracy
- Application equipment of crop protection chemicals

The following are the kind of items for which **general records** should be kept:

- Company and production department organogram
- Management plan
- Complaints forms
- Training records and schedule
- Equipment maintenance schedules
- Visitors record forms
- Toilet cleaning records
- Verification and calibration of scales and other measuring equipment

In addition to keeping such general records, specific records are required to cover such items as:

- Use of fertilisers
- Use of spray materials
- Agricultural practices, including orchard block history, irrigation records and phenological stages

Risk assessment procedures must also be put in place, which must:

- Identify the nature of the hazard, for instance chemicals or equipment that could cause harm
- Determine the nature of the hazard, that is who or what could be harmed and how
- Determine the level of risk (high, medium or low)
- Indicate what can be done to manage the risks, such as structural changes, implementation of written procedures, training, and supervision

3.3. Auditing Compliance

It is necessary for an effective audit system to be put in place so that compliance to the various requirements can be measured by the production manager and demonstrated to the fruit importer (market). This should be designed together with the appropriate inspection and certifying authority so that it captures and is able to track progress as standards shift and compliance levels change.

An auditing system can be interactive and web-based, such as the Capespan ICMS system, or it can be run manually. This will depend on the size and complexity of the production unit, the number of market segments being targeted, and the demands being made by each of these market segments.

4. Planning for Implementation and Management of the Production Plan

We have previously looked at the different levels of planning. We also considered drafting an inventory of the type, quantity and quality of resources required to implement a production plan.

As an example we referred to a case where the strategic objective was to establish a new planting of citrus. The resources listed included land, located in an area with favourable climatic features, with soil of the required physical and chemical properties, where water of acceptable quantity and quality is available, nursery trees, capital and labour. An item that should be added to this list is the availability of a regular supply of electricity and other services.

An overall production plan comprises a number of so-called sub-plans, including:

- Land preparation plan
- Cultivar choice plan
- Irrigation plan
- Planting plan (incorporating sequential nursery tree ordering plans)
- Fertiliser application plan
- Pest and disease control plan

The implementation of these plans in a logical sequence by using an appropriate scheduling technique, such as a Gantt Chart, enables the activities and timeframes for all of the relevant sub-plans to be entered onto a single page with each line of the chart representing the time schedule for a separate sub-plan.

From such a Gantt Chart, it would be simple to create a resource usage plan. This consists of creating a separate list of the resources required for each line of the Gantt Chart. These resources can be listed sequentially in a column with adjacent columns indicating the time period during which the respective resources will be used, and the estimated cost of using that resource during that period.

The table created in this manner becomes a useful source of information for determining the overall capital requirement by time period, whether it is by month or year. This in turn can be extended to include running costs and income and thus provide data for a cash flow plan.

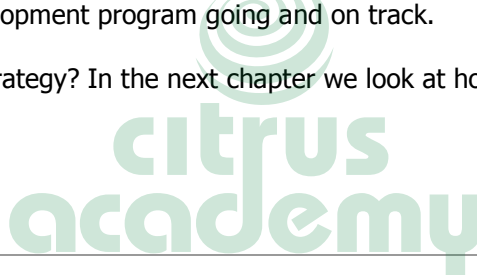
The processes of estimating, information gathering, summarising, and tabulating provide the information platform for the business plan. The business plan identifies:

- What you want to do
- For whom you will do it
- How you will do it
- Where you will do it
- With whom you will do it
- What you need in order to do it
- What it will cost to do it
- Where you may encounter problems
- Whether you will be able to keep doing it

This will enable you to decide whether the proposed overall plan is feasible and viable, enable you to borrow money to finance the venture, indicate what resources and inputs need to be bought, identify possible suppliers, and indicate how purchases can be financed.

It is important to note that once the venture is underway, the business plan becomes the battle plan that is used to keep the development program going and on track.

But what about the overall strategy? In the next chapter we look at how this is tackled.



Facilitator Tip

Summary

This is an opportunity to check the progress that learners have made.

Allow time for the learners to read through the summary and to gauge their own progress. Make sure that each and every learner gets an opportunity to ask questions.



Summary

Chapter 4

- The development of strategic production plan requires the setting of long-term goals, an assessment of the current situation and devising and planning a means by which it will be possible to move from the present to meet the set goals.
- The employment of resources to support the strategic production plan has to be compliant with legislative requirements.
- International markets demand the implementation of credible and transparent systems for the production and packaging of fresh produce.
- An important strategic objective for the production unit or company is related to compliance with the GAP requirements of the market segments being targeted.
- Linked to GAP requirements are applicable policy statements, procedures, recordkeeping systems and risk assessments.
- It is necessary for an effective audit system to be put in place so that compliance to the various requirements can be measured by the production manager and demonstrated to the fruit importer.
- An overall production plan comprises a number of so-called sub-plans.

- The implementation of these plans in a logical sequence by using an appropriate scheduling technique enables the activities and timeframes for all of the relevant sub-plans to be entered onto a single page with each line of the chart representing the time schedule for a separate sub-plan.
- A resource usage plan is developed based on the implementation schedule.
- The processes of estimating, information gathering, summarising, and tabulating provide the information platform for the business plan.



Practical

Complete activity 4 in the **Learner Workbook**.

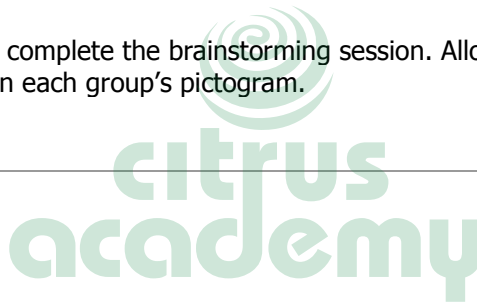


Facilitator Tip

Activity 4 – Group Brainstorm

Allow groups to break away to complete the brainstorming session. Allow time for groups to report back and to comment on each group's pictogram.

Timeframe: 1h 30min





Chapter 5

After completing this chapter, the learner will be able to:

Develop and implement a strategic plan



You have to complete this section as follows:

<i>Total time</i>	<i>Theory</i>	<i>Practical</i>
24h	3h	5h activities

1. Introduction

It is convenient to think of strategy and strategic planning as a neatly compartmentalised process that guides you towards:

- **Mission:** Defining what business you are in and where you are at present
- **Vision:** Deciding where you want to be and what it will look like
- Defining the core values of your enterprise and its people
- Critically evaluating your present and future operating environment
- Providing a means, or strategy, for moving from where you are now to where you have decided you want to be

However, as explained by Tony Manning in *'Making Sense of Strategy'*, corporate evolution assisted by the process of strategic planning is a messy process. "Bosses think they're firmly in charge. In fact they're bounced around by issues and events. Hard as they may try to shape strategy, it is to a great extent shaped for them".

As with all things in life, enterprises undergo lifecycles. Enterprises are born into a changing world and the world keeps changing. The best way for an enterprise to survive and prosper is to continually evaluate and, if necessary, re-invent itself so it is able to fit into the emerging conditions around it.

How should an enterprise set about this process of ongoing evaluation and successful evolution? Accepting that people in the enterprise should be encouraged to engage in constant conversation about what lies ahead, what it means and what should be done about it, there is a need for a process by which these ideas can be captured, translated into action and the outcome continuously measured. It is this process that will be the main focus of this chapter.

2. Strategic Planning

Strategic planning is a management tool – but not a substitute for judgment by leadership – that is used to help an organisation do a better job: to focus energy, instil a sense of common purpose and adjust the organisation's direction in response to a changing environment. It is a disciplined effort to produce fundamental decisions and actions that shape and guide what an organisation is, what it does, and why it does it, with a focus on the future.

The process is **strategic** because it involves preparing the best way to respond to the circumstances of the organisation's environment. Being strategic means being clear about the company's objectives, being aware of the organisation's resources, and incorporating both into being responsive to a dynamic environment.

According to "*What is Strategic Planning?*" (www.nonprofits.org/npofaq/03/22.html), the process is disciplined, in that it calls for a certain order and pattern to keep it focused and productive. The process raises a sequence of questions that helps planners examine experience, test assumptions, gather and incorporate information about the present, and anticipate the environment in which the organisation will be working in the future. Finally, the process is about fundamental decisions and actions because choices must be made in order to answer the sequence of questions mentioned above.

The plan ultimately comprises a set of decisions about what to do, why to do it, and how to do it. Because it is impossible to do everything that needs to be done in this world, strategic planning implies that some organisational decisions and actions are more important than others, and that much of the strategy lies in making the tough decisions about what is most important to achieving organisational success.

Strategic planning can be complex, challenging, and even messy, but it is always defined by the basic ideas outlined above – and you can always return to these basics for insight into your own strategic planning process.

Strategic planning differs from long-range planning in their emphasis on the "assumed" environment. Long-range planning is generally considered to mean the development of a plan for accomplishing a goal or set of goals over a period of several years, with the assumption that current knowledge about future conditions is sufficiently reliable to ensure the plan's reliability over the duration of its implementation. In the late fifties and early sixties, for example, the US economy was relatively stable and somewhat predictable, and long-term planning was therefore both fashionable and useful.

On the other hand, strategic planning assumes that an organisation must be responsive to a dynamic, changing environment, and not the more stable environment assumed for long-range planning. Strategic planning, then, stresses the importance of making decisions that will ensure the organisation's ability to successfully respond to changes in the environment.

Strategic management is the application of strategic thinking to the job of leading an organisation. Management need to be continually asking the question, "Are we doing the right thing?". It entails attention to the big picture, and the willingness to adapt to changing circumstances. It consists of the following three elements:

- Formulating the organisation's vision in light of changing external factors such as regulation, competition, technology, and customers.
- Developing a competitive strategy to achieve the vision.
- Creating an organisational structure that will deploy resources to successfully carry out its competitive strategy – structure follows strategy.

Strategic management is adaptive and keeps an organisation relevant. In these dynamic times, it is more likely to succeed than the traditional approach of: "If it ain't broke, don't fix it."

Finally, strategic planning, though described as disciplined, does not typically flow smoothly from one step to the next. It is a creative process, and the fresh insight arrived at today might very well alter the decision made yesterday. Inevitably the process moves forward and back several times before arriving at the final set of decisions.

Therefore, no one should be surprised if the process is more like a ride on a rollercoaster than a comfortable trip on a passenger train. But even rollercoaster cars arrive at their destination, as long as they stay on track.

3. Evaluating the Total Environment in which the Citrus Enterprise Operates

It has been emphasised that for strategic planning to be successful, there is a need for you and your team to be aware of, and continually adapt to the ever-changing environment. But what do we mean by 'the environment' and how does one go about assessing the relative importance of environmental factors?

In the context of developing a strategic plan for a citrus enterprise or operation, the term 'environment' encompasses all those external and internal factors, that could impact on the success or otherwise of the venture, both present and future, on a micro-, meso- or macro- scale.

Micro-scale issues are local and most often related to the farm, and will be largely within the capabilities of the producer to control. Macro-scale issues are broad-based international factors over which the producer will have little or no influence or control. Meso-scale issues fall somewhere between micro and macro issues.

The purpose of the environmental scan is to identify and assess the factors that could give rise to alternative future scenarios. It is also to awaken and align thinking and provide information to draw on for the drafting of a SWOT analysis, or for other such exercises. It is suggested that as a prompt for identifying environmental factors for the environmental scan, the acronym 'PESTLE' be used, to represent the terms:

- **P**olitical
- **E**conomic
- **S**ocial
- **T**echnical
- **L**egal
- **E**nvironmental

Most environmental influences can be classified under one or another of these headings. For example, the following environmental factors, extracted from actual reports covering a number of strategic planning exercises conducted within the fruit industry over the past few years, are grouped accordingly. What follows is therefore an example of the sort of factors that could go into an environmental scan and which of these could prompt issues that could be included in the SWOT analysis.

Please Note

The points presented in *italics* in the environmental scan example given below prompted the factors placed into the SWOT analysis, with the letters in brackets denoting whether, in the this particular case study, it could be considered a Strength, Weakness, Opportunity or Threat.

3.1. Political

- Need for and impact of land transformation
- Conflict in the farm's management hierarchy
- Family dispute relating to future ownership of the farm
- Location of labourers off the farm
- Effects of BEE – future ownership structures to change
- Land claims – security of tenure and fear of land invasions



- Freedom of access to global markets (no sanctions)
- Reduction of government subsidies of importing countries
- *Ongoing political instability in some Middle Eastern importing countries (Iran, Iraq, etc).(T)*
- Relationship between growers' association and Agricultural Research Council leadership
- Declining provision of extension and other services by Department of Agriculture, Forestry and Fisheries
- Good government facilitation of market access to China
- Pending formation of southern hemisphere citrus producers' alliance
- Membership of CIMO
- Grower representation on SA Citrus Growers' Association
- *Intra-competition in RSA continues to weaken its international competitiveness (T)*
- Implications of expansion of EU
- Possible transgression of competition laws through formation of USA market alliance
- SADEC influence on promoting citrus exports to African markets
- *Potential of increased sales into Angola (O)*
- Privatisation of SA port authorities
- Establishment of citrus training academy
- Structure and representation on citrus industry bodies such as Citrus Research International
- *Negotiations with Association of Road Transporters (W)*
- Successful local government elections held leading to stable political outlook forecast

3.2. Economic

- Production input cost escalation
- Cash flow difficulties arising from previous expansion programs
- *Imbalance in cultivars planted, peak resource demand uneconomical (W)*
- Hike in freight rates forecast due to high oil price
- *Increases in local transport costs (W)*
- Good local market prices being realised for seedless cultivars
- *Strong brand image (S)*
- *Global over-supply of citrus into traditional markets (O)*
- *Asian markets (India, Malaysia, Pakistan, etc.) show huge growth potential (O)*

- Growth and strengthening of supermarket chains and their bargaining power
- *Consolidation of supply and markets occurring (T,O)*
- Strength of the Rand
- One currency for Africa?
- Instability of local electricity supplies
- *Deterioration of local road infrastructure(T)*
- DTI support for research is positive
- Increased allocation of Treasury funding to Agricultural Research Council
- Government approval of grower levy to support research
- Influence of AIDS on cost of skilled labour
- *Human skills shortage and increase in cost of skilled staff (W)*
- SA economic fundamentals in place, stable outlook forecast
- Purchasing power of local consumers increasing
- WTO negotiations leading to easier economic access to certain export markets
- Big producers getting bigger – smaller growers disappearing
- *Growers creating own export businesses – need to have marketing expertise (W,O)*
- *Consolidation of export agents – reduction in total number (S)*

3.3. Social

- BEE initiatives enabling accelerated ownership of citrus enterprises
- Improvement in living conditions and wages of labour
- *Staff are change agile (S)*
- Improvement in skills levels of previously disadvantaged individuals in middle and senior management levels
- Fair labour practices (Fairtrade) demanded by certain important export market sectors
- Increased out-sourcing and contracting of required skills
- Healthy lifestyle culture leading to increased fruit consumption in major European markets
- Customised service increasingly demanded by consumers resulting in changes in buyer profile
- Emerging local black middle class creating increased demand for local citrus sales

3.4. Technical

- Citrus research by CRI providing excellent service to growers

- *Enterprises have in-house specialist production expertise (S)*
- Agricultural Research Council less relevant to citrus research and extension effort than ever before
- Grower production advisory services increasingly in hands of private consultants
- *Fewer regions available with high quality soil and water (S)*
- Shortage of critical government technical skills and personnel in facilitating market access requirements
- Need to stay abreast of IT developments to facilitate technical and logistical operations
- Restrictions on usage of agrochemicals requires greater focus on improved integrated pest and disease control options
- *New cultivars required to meet specific production and market needs (W)(O)*
- Maintenance of Citrus Improvement Programme essential
- *Documented production processes and procedures in place (S)*
- Restriction on movement of plant material into and within RSA not being effectively policed
- Market access to some key markets threatened by False Coddling Moth
- *Climate change – hotter, drier, longer summers, resulting in poor fruit colour and other production/quality problems (T)*
- Increase in black spot resistance to traditional control measures
- Restrictions on imports from areas with black spot
- *Fruit quality requirements of importing countries becoming stricter (W)*
- Declining capacity of professionally trained people for technical posts
- Higher technical knowledge and skills required of growers

3.5. Legal

- *Competition Act will limit formation of local alliances and collusion on price fixing on export markets (T)*
- Effect of mandatory Citrus Improvement Programme – Act currently being drafted
- *Tighter implementation of certain legislation anticipated – especially environmental (T)*
- Amendments to Marketing of Agricultural Products Act may result in increased production costs

3.6. Environmental

- Supermarket groups differentiating on basis of environmental issues
- Growers have difficulty meeting environmental requirements of different market sectors

- Maximum Residue Limits set by key markets for certain agrochemical products causing pest and disease control difficulties
- Certain traditional citrus producing regions can no longer meet environmental restrictions
- *New production areas free of critical pests and diseases exist (S)*
- *Phytosanitary trade barriers becoming increasingly difficult to meet (S)(T)*
- *Proof of food safety measures increasingly demanded by export markets (T)(O)*

From the above example of a broad-based environment scan it should be clear that there are many influencing issues, internal and external, that must be taken into account as the first step in a strategic planning exercise. The points arising from this environment scan inform the processes that follow, namely identifying the strengths and weaknesses of the business as it is currently operating and considering the threats and opportunities it faces. This constitutes the next step of the exercise.

4. Understanding the SWOT Analysis

Facilitator Tip

Most learners should be familiar with the concept of a SWOT analysis. It is important to do a SWOT analysis with the learners based on one of the farms on which they work.

A SWOT analysis is a valuable tool for ordering and aligning information to assist decision-making. SWOT analyses can be used to assist decision-making at all levels of the organisation, from lower levels to the highest level at executive management or board level.

When the technique is used as the basis for a strategic planning exercise, meaning for high level planning, it is necessary to look into the use and value of the tool in greater detail. This will demonstrate how to use the information collected to generate an action plan.

The SWOT analysis provides information that is helpful in matching the enterprise's resources and capabilities to the competitive environment in which it operates. It therefore makes sense for an environmental scan to be conducted prior to the SWOT analysis. The following diagram, sourced from QuickMBA® on <http://www.quickmba.com/strategy/swot/>, shows how a SWOT analysis fits into an environmental scan.

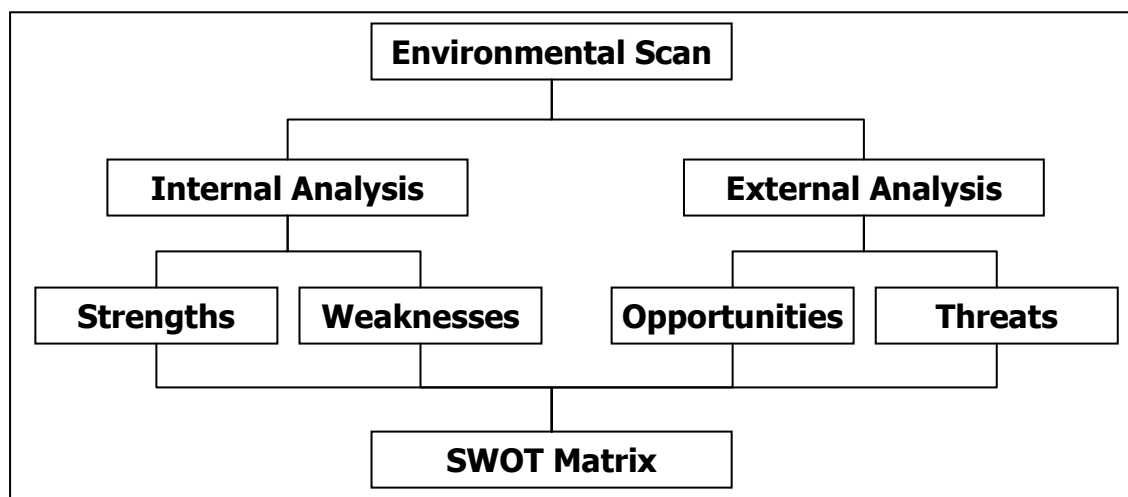


Figure 5.1: SWOT Analysis in Relation to Environmental Plan

4.1. Strengths, Weaknesses, Opportunities and Threats

An enterprise's **Strengths** are its resources, assets and capabilities that can be used as a basis for developing competitive advantage, and could include:

- Specialist production expertise
- Financial assets
- Brand image
- Intellectual assets
- Change agility
- High quality soil and water
- Favourable climatic factors for high production and quality
- Production processes and procedures in place
- Skilled technical and management staff
- Good relationship with a top performing export agent
- Location of enterprise enables wide market access

Weaknesses represent the absence of certain strengths and could include:

- Lack of marketing expertise
- Commodity cultivars planted (in relation to your competitors)
- High transport costs to packhouse and rail link
- Poor quality fruit
- Damaged reputation

Opportunities and threats are external factors. The external environmental analysis may reveal certain new **Opportunities** for profit and growth. These could be:

- Moving into developing markets such as those in Asia and China
- Mergers, joint ventures or strategic alliances with other producers, market agents or markets
- Moving into new market segments that offer improved profits
- Forming a growers' club to produce patented cultivars

Changes to the external environment may present **Threats** to the enterprise. These could include:

- A new local or overseas competitor in your key market
- Price wars with local and overseas competitors
- Trade barriers
- Competitors more cost-effective channels of distribution
- Pest or disease outbreaks restricting access to key markets
- Consolidation of export market (supermarket) purchasing power
- Shifts in consumer tastes away from the enterprise's products
- New regulations
- Political instability in some key markets

4.2. Rules for Successful SWOT Analysis

- Be realistic about the strengths and weaknesses of your organisation.
- Analysis should include factors reflecting both where your organisation is today, and where it could be in the future.
- Try to be specific. Avoid grey areas.
- Always analyse in relation to your competition, being better than or worse than your competition.
- Keep your SWOT short and simple. Avoid complexity and over-analysis.

- A SWOT is subjective. Different people will see things differently.

4.3. The SWOT Matrix

An enterprise should not necessarily focus only on the more lucrative opportunities. It may stand a better chance of developing its competitive advantage by rather identifying a fit between its strengths and upcoming opportunities. In some cases, the enterprise can overcome a weakness in order to prepare itself to pursue a promising opportunity.

To develop strategies that take into account the SWOT profile, a matrix to these factors can be constructed. The SWOT matrix, also known as the TOWS matrix, is shown below:

	<i>Strengths</i>	<i>Weaknesses</i>
<i>Opportunities</i>	S-O strategies	W-O strategies
<i>Threats</i>	S-T strategies	W-T strategies

- **S-O strategies** pursue opportunities that are a good fit with the company's strengths.
- **W-O strategies** overcome weaknesses to pursue opportunities.
- **S-T strategies** identify ways that the enterprise can use its strengths to reduce its vulnerability to external threats.
- **W-T strategies** establish a defensive plan to prevent the enterprise's weaknesses from making it highly susceptible to external threats.

Examples of these four strategies taken from the SWOT analysis above are:

- **S-O** S (location of enterprise enables wide market access) – O (moving into developing markets such as those in Asia and China)
- **W-O** W (lack of marketing expertise) - O (moving into new market segments that offer improved profits)
- **S-T** S (specialist production expertise) – T (pest or disease outbreaks restricting access to key markets)
- **W-T** W (poor quality fruit) – T (shifts in consumer tastes away from the enterprise's products)

5. Steps in Developing a Strategic Plan

Facilitator Tip

Work through the strategic plan that you drew up during facilitation with the learners and identify which approach from those following below was used. Discuss how the plan might have been different if another approach was used.

All strategic plans have the same overarching purpose, namely to set the enterprise on a course that will enable it to set and achieve its objectives. All strategic plans also contain the same basic elements that have been outlined. There are however different methods or processes that can be followed to arrive at

the end result. It is sometimes useful to combine aspects of these different approaches to accommodate specific circumstances.

Three alternative approaches are outlined below, being:

- A traditional approach
- Bath Consultancy Group method
- Participlan® method

5.1. A Traditional Approach

Strategic plans cannot be formed in a vacuum: they must fit the organisation and its specific circumstances. Two separate stages characterise strategic planning, being formation and implementation. It must be remembered that strategic planning is an alive and flexible process that continuously has to be revisited, revised and adapted.

But the process has to start somewhere. The fundamental steps to establishing strategy within an enterprise are to:

- Define what business you are in and where you are at present (mission)
- Decide where you want to be and what it will look like (future objectives or vision)
- Assess your present and future (or expected) operating environment
- Critically evaluate your competition
- Define the core values of your enterprise and its people

Once these steps have been taken, you will be able to provide a means for moving from where you are now to where you have decided you want to be, in essence the strategic plan. The action plans that are required to implement the plan can then be developed and implemented.

As an aid in dealing with these issues it is useful to consider Thomas Peters's (of 'In Search of Excellence' fame) Seven S model. This assists the process of diagnosing a company's problems in the run-up to developing and implementing the strategy.

The Seven Ss are:

- **Shared values** – A common approach to how things get done
- **Systems** – Processes and procedures for getting things done
- **Skills** – Intellectual assets
- **Style** – Culture
- **Staff** – People assets
- **Structure** – Designed to complement the plan
- **Strategy** – In response to changes in the operating environment

These are not presented in any order of priority or hierarchy. The elements are all interconnected and in any effective enterprise, each of the Ss complements the others and consistently advances the company goal. The seven Ss constitute a checklist to ensure that during the process of strategic planning due attention is given to each of these critical issues.

Other tools traditionally used generating and ordering ideas during the strategic planning process are:

- Developing a SWOT analysis
- Porter's five forces that drive enterprise competition, being the threat of substitutes, the threat of new entrants, the bargaining power of suppliers, the bargaining power of buyers, and the intensity of rivalry among competitors.
- The Ansoff Matrix, that provides a clear way to classify routes for enterprise expansion, for example extending plantings of citrus (The 10-Day MBA, S. Silbiger, 2002). Here, what

determines the strategy is the 'newness' of the product (cultivar) or market. An existing product (e.g. valencia oranges) can either go into an existing market (UK) or a new market (China), and a new product (seedless, late Clementines) can do the same. There are therefore four possibilities: Existing products into existing markets (penetration strategy), existing products into new markets (market development strategy), new products into old markets (expansion strategy), and new products into new markets (diversification strategy).

5.2. Bath Consultancy Group Method

(with acknowledgement to 'Key Concept Paper', Bath Consultancy Group, December 1994)

This method involves capturing both verbal and written comments to key questions put to management, staff and other relevant participants at appropriate sessions, and comprises the following steps:

- Clarifying the mission
- Agreeing on the vision
- Creating a holistic model of business assets
- Analysing the environmental aspects
- Analysing competitors
- Review
- Strategy quadrant
- Action plan

5.2.1. Clarifying the Mission

The mission is considered to be a statement of the business you are in. It represents the current situation and provides the framework in which strategising takes place. The clarity of the mission and individuals' understanding of this can be checked by the answers given to the following questions with three to five bullet points:

- The primary purpose of our enterprise is to.....
- The key core values of our enterprise that guide how things are done are.....
- Strategy: our enterprise focuses on
- Its unique competencies that distinguish it from others in the field are.....

From the inputs received a mission statement would be created.

5.2.2. Agreeing the Vision

The vision statement created from getting answers to the following:

If our enterprise was miraculously successful in achieving its purpose, implementing its strategy and living out its core values, what we would see, hear and feel is.....

5.2.3. Creating a Holistic Model of Business Assets

Since it is widely recognised that the value and performance of an enterprise cannot be gauged by considering its financial performance or material assets only, Bath Consultants developed the 'Bath Corporate Transformation Model' that takes a deeper look at enterprise assets.

These are split into two groups, those most visible to outsiders, namely relationship assets, brand image and financial or material assets, and the organisational learning assets that are less visible to outsiders, being people assets, intellectual assets and change and learning agility.

Listing these assets provides a strategic audit. By considering the relationship between these assets, and how changes in one can affect others, important information becomes

available about the current state of strategic health of the enterprise, its strengths and weaknesses and where it is now.

5.2.4. Environmental Analysis

This process is similar to that already dealt with where the acronym PESTLE is used to prompt the inputs. To make the process manageable, each participant is asked to list just three issues per heading and to prioritise these on a 0 (low) to 10 (high) basis.

5.2.5. Competitor Analysis

Having looked at your competencies (strengths) and the changing context in which you operate, it is important to look at your competitors. This is done by asking such questions as: 'Who are your major competitors? How might they take market share from you or undermine any of your six assets? What sort of competition beyond the present horizon could compete with your enterprise in a way not yet thought of?' (See also Porters' five forces of competition referred to above.)

From this information it is possible to list which assets we need to capitalise on, recognise, and leverage. It will also identify the gaps, needs and problem areas that have to be addressed. It would furthermore be possible to decide which of the competitive challenges needed to be addressed most urgently.

5.2.6. Review

Having provided answers to the previous questions it is now possible to state:

- What the key challenges are for our enterprise
- What it is that we can uniquely do to for the business to meet those challenges
- Where we can add most value

We can also make a list of the things we need to continue doing, stop doing and do differently in order to bring about the changes we have identified.

5.2.7. Strategy Quadrant

It is now possible to draft a strategy quadrant. On the vertical axis there are two levels of competence, namely existing and new. On the horizontal axis we have two levels of opportunities, namely existing and new. This is similar in structure and purpose to the Ansoff Matrix mentioned above.

- In the block of **existing competencies** and **existing opportunities**, we would be looking to exploiting these along the entire value chain, expanding the field of involvement.
- For **new competencies** and **existing opportunities** we would be looking to building, protecting and extending our core business.
- For **new opportunities** and **existing competencies** we would be looking at ways of redeploying or recombining our current competencies to capitalise on the opportunities.
- For **new competencies** and **new opportunities** we would be looking at what we could uniquely do that tomorrow's world needs.

The issues listed in these quadrants would effectively be the things that need to be done (actions). The group would then have to decide which of these would most effectively take the company from where it presently is to the vision previously defined.

5.2.8. Action Plan

For this the so-called Ishikawa Fish is drawn. This depicts the head of the fish as being the vision, and the tail of the fish as being the current position. The backbone represents the set or list of actions needed to move from the current situation to the vision. This list of required actions would have been identified during the previous process of allocating items to the strategy quadrant.

For each agreed action an action plan is required. The action plan must identify what has to be done, how, by when, by whom, and how progress will be monitored. This is achieved by invoking the so-called 6-P model for planning. The 6-P model is a simple yet powerful model for planning any project, change process or new strategy. It consists of three guiding strategic Ps and three operational Ps. The exercise is applied to each action plan.

Strategic	Purpose	- Why are we doing this? - What is the overall purpose of the project? - What outcome will it achieve?
	Principles	- What are the business rules that should inform this project? - What core values should guide how things should happen?
	Parameters	- What are the boundaries and limits of this project? - What will this project include and not include? - What are the constraints of time, people, money, etc.?
Operational	Project Deliverables (Program)	- What are the tangible outputs that this project should deliver? - What are the indicators of a successful result?
	Project Plan	- What are the key activities in the project? - What is the timetable for the activities in the project? - What should happen by when?
	People	- Who is the leader and who are the team members? - Who is responsible, meaning who will carry out the action? (R) - Who is accountable, meaning where does the buck stop? (A) - Who should be consulted before actions or decisions are taken? (C) - Who should be informed after decisions or actions have been taken? (I)

For each action there is now a detailed sub-strategy, including how it will be accomplished, by whom, by when and how progress will be measured. The outcome, measured at intervals, as decided, will inform adaptations that might need to be made to the specific action plan concerned.

5.3. Participlan® Method

(with kind permission of Business Presentation Group, Cape Town)

This is a method that has been developed to harness collective thinking. It makes complex issues such as strategic planning faster, easier and more participative. It is a technique that eliminates

hierarchy in meetings, focuses on the objective and being an anonymous, visual mapping method enables all participants to contribute without fear of identity or victimisation.

It is used in decision-making, conflict resolution, innovation, problem-solving, information gathering and strategic planning. Specific models to deal with these various requirements have been developed. The strategic planning model has been used with success in the South African fruit industry on numerous occasions.

The method consists of the group responding in writing to a number of carefully structured questions. Each participant writes his responses on specially designed oval cards that are collected and displayed on large display sheets. The facilitator allows debate on the meaning of the cards and clusters cards with similar meaning. Finally the full range of responses from all participants is captured on film and used as the substance of the report.

The following are typical questions posed in strategic planning sessions:

Question 1: *What are the typical scenarios we could face over the next 3 to 5 years?*

This is another way of doing an environmental scan and calling for threats and opportunities.

Question 2: *What are we currently doing well and what are we not doing well?*

This is another way of calling for strengths and weaknesses.

Question 3: *Twelve months from now, we are described as the best at what we do.... What are we doing and what do we look like to warrant this praise?*

This is another way of setting the vision.

Question 4: *What measures will tell us we have achieved each of these goals?*

Question 5: *What competencies and skills will we need to meet these goals?*

Question 6: *What stumbling blocks stand in the way of us meeting these goals?*

The points arising in question 3 are prioritised so that the top four or five issues are identified as the key goals. The prioritised issues are allocated to volunteer or appointed participants who elect others in the group to join them in creating proposed action plans. The action plans are then presented to the full meeting as preliminary action plans. Management endorses the appointment of project leaders and project teams for the formal implementation of the agreed action plans.

As suggested from the above examples, there are countless ways of structuring strategic planning sessions, and most borrow aspects from the tried and tested methods developed over time by a variety of academics and business practitioners.

An organisation's strategic planning will prove worthwhile if the people in the enterprise keep the process alive and relevant through ongoing conversation and continuously adapt the plans they have collectively formulated to fit the changing business environment.

6. Using the Strategic Plan to Legally Produce the Desired Products

The various elements contained in the total strategic planning process have been dealt with. These include:

- Gathering, analysing, preparing and using information
- Evaluating the influence that market trends have on production and production processes
- Evaluating the influence that technology has on production
- The development of a strategic production plan and the tools available to achieve this

It now remains to conclude by bringing the most relevant aspects together to reaffirm the process of developing a strategic plan.

6.1. Setting Objectives

Visions, objectives, goals and targets are all terms with similar meaning but with different time frames and different relative levels of significance. There is a cascading order from the long-term picture, or vision, to the short-term target or milestone. The process of strategic planning enables the creation of vision and the translation of the vision into a series of lower level objectives and goals, each one congruent with the overall vision.

6.2. Identifying Opportunities

Identifying opportunities arises from the SWOT analysis, where opportunities would arise either from issues that fit well with identified strengths, or overcoming identified weaknesses.

6.3. Methods for Dealing with Problems

Very often solutions to problems are provided by those closest to the action. Any strategic planning exercise therefore requires a high level of participation from staff at various levels. This not only brings about a line-of-sight between management and staff, but ensures buy-in at all levels thus facilitating implementation.

6.4. Ensuring Legality

An appropriate level of knowledge of the legal requirements of the production and marketing aspects is needed. This covers both labour issues and concerns about fruit quality and consumer health.

The process of strategic planning itself has been covered in some detail in the above chapters. In conclusion it is appropriate to quote strategist Tony Manning.

"The environment in which you compete does influence what you can and cannot do. It may help, hinder or hurt you. But its effect is determined to a great extent by the way you choose to deal with it. Growth is possible in many seemingly hopeless industries. To be depressed because you are in a so-called 'sunset' industry is as ridiculous as being over-excited because you're in a 'sunrise' industry. Life is what you make it. The future is a matter of choice, not chance. You may face exceptional challenges, but it is how you think and act that matters." – Tony Manning



Facilitator Tip

Summary

This is an opportunity to check the progress that learners have made.

Allow time for the learners to read through the summary and to gauge their own progress. Make sure that each and every learner gets an opportunity to ask questions.



Summary

Chapter 5

- Strategic planning is not always a neat and easy process, but it should lead you towards defining the mission, vision, core values, operating environment, and how to get where you want to be.
- The mission statement defines what business you are in and where you are at present.
- The vision statement defines where you want to be and what it will look like.

- Strategic planning is a management tool that is used to help an organisation do a better job. The plan ultimately comprises a set of decisions about what to do, why to do it, and how to do it.
- For strategic planning to be successful there is a need to be aware of and continually adapt to the ever-changing environment.
- Micro-scale issues are local and most often related to the farm, macro-scale issues are broad-based international factors over which the producer will have little or no influence or control, and meso-scale issues fall between micro and macro issues.
- As a prompt for identifying environmental factors for the environmental scan, the acronym PESTLE can be used, to represent the terms political, economic, social, technical, legal and environmental.
- A SWOT analysis is a valuable tool for ordering and aligning information to assist decision-making and provides information that is helpful in matching the enterprise's resources and capabilities to the competitive environment in which it operates.
- An enterprise's strengths are its resources, assets and capabilities that can be used as a basis for developing competitive advantage.
- Weaknesses indicate the absence of certain strengths.
- Opportunities and threats most often arise from external factors.
- There are a number of alternative approaches to developing a strategic plan. Three of the most commonly used are a traditional approach, the Bath Consultancy Group method, and the Participlan® method.
- The Bath Consultancy Group method involves clarifying the mission, agreeing on the vision, creating a holistic model of business assets, analysing the environmental aspects, analysing competitors, review, strategy quadrant, and action plan.
- The Participlan® method was developed to harness collective thinking, and consists of the group responding in writing to a number of carefully structured questions.
- Lastly, the legality of the strategic plan must be ensured.

Complete activity 5 in the **Learner Workbook**.

Practical

Activity 5 – Group Brainstorm

Allow time for groups to break away for the brainstorm session. Ask the groups to report back and comment on the different group's SWOT analyses and pictograms.

Timeframe: 5h

Facilitator Tip

Facilitator Tip

The learners have to take part in 16 hours of experiential, workplace learning to gather the required evidence for the summative assessment and to apply the knowledge that they have gained in this module.

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