



Copyright ©

Citrus Orchard Foreman Occupational Learning

Work Scenario Guide

A2: Ongoing Planning

Qualification:	110667 – Occupational Certificate: Orchard and Vineyard Foreman
Work Scenario:	A2: Ongoing Planning
Learning Area:	A: Take part in the business management of the farming operation
Scenario Description:	To run your farm effectively, you need to understand the inner workings of the business. You need to work with management to manage the ongoing planning of operations and financial management for your farm, including all production activities and financial operations.

© Citrus Academy 2026

1st edition (06/2026)

Content originator:
Citrus Academy

Occupational alignment:
Ukudla Namanzi (Pty) Ltd

Disclaimer

By accepting this document and reading its contents you agree to be bound by the terms of this disclaimer.

The use of the contents of this document is at your own risk. Neither the Citrus Academy NPC nor Citrus Research International (Pty) Ltd or the Citrus Growers' Association NPC warrant that the content of this document is suitable for your intended use or that it is free of inaccuracies or omissions. The opinions and advice expressed in this document are not necessarily those of the Citrus Academy NPC, Citrus Research International (Pty) Ltd or the Citrus Growers' Association NPC. The Citrus Academy NPC, Citrus Research International (Pty) Ltd and the Citrus Growers' Association NPC, their directors, officers, employees, agents and contractors shall not be liable for any loss or damage of any nature suffered by any person as a direct or indirect result of the use of, or inability to use any advice, opinion or information contained in this document, or any misrepresentation, misstatement or omission, whether negligent or otherwise, contained in this document.

You indemnify the Citrus Academy NPC, Citrus Research International (Pty) Ltd and the Citrus Growers' Association NPC against any claim by any third party against the Citrus Academy NPC, Citrus Research International (Pty) Ltd or the Citrus Growers' Association NPC, their directors, officers, employees, agents or contractors arising from, or in connection with, the use of, or reliance on, the contents of this document. It is your responsibility to determine suitability of the contents of this document for your intended use.

Contents

Alignment Information	4
Qualification	4
Modules	4
Learning Outcomes	5
Chapter 1 Ongoing Planning	9
1. Ongoing Planning	9
2. Schedules	9
3. Pest and Disease Management	10
4. Labour	10
5. Financial Planning and Budgeting	10
6. Risk Management	10
7. New Technology Adoption	11

Alignment Information

Qualification

The content of this learner guide is aligned to the following occupational qualification:

SAQA QUAL ID	Qualification Title			
110667	Occupational Certificate: Orchard and Vineyard Foreman			
Originator				
Development Quality Partner – AgriSETA				
Primary Or Delegated Quality Assurance Functionary			NQF Sub-Framework	
-			OQSF - Occupational Qualifications Sub-Framework	
QUALIFICATION TYPE		FIELD		SUBFIELD
Occupational Certificate		Field 01 - Agriculture and Nature Conservation		Primary Agriculture
Abet Band	Minimum Credits	Pre-2009 NQF Level	NQF Level	Qual Class
Undefined	147	Not Applicable	NQF Level 04	Regular-ELOAC

Modules

The content of this learner guide is aligned to the following modules of the occupational qualification above.

Module Code	Module Title	Level	Credits
Knowledge Modules			
611202-001-00-KM-01	Plant Structure and Physiology	4	5
611202-001-00-KM-02	Vineyard or Orchard Establishment	3	2
611202-001-00-KM-03	Vineyard or Orchard Manipulation Processes	3	8
611202-001-00-KM-04	Harvesting	3	4
611202-001-00-KM-05	Basic Principles of Plant Nutrition	4	4
611202-001-00-KM-06	Crop Protection	3	3
611202-001-00-KM-07	Assets in Horticultural Production	3	2
611202-001-00-KM-08	Farm Business Management and Farming Process Management	4	8
611202-001-00-KM-09	Human Resource Management and Processes	4	8
611202-001-00-KM-10	Overseeing Farming Resource Utilisation	4	8
Practical Skill Modules			
611202-001-00-PM-01	Organise, Allocate and Monitor Availability and Productive Use of Resources	4	5
611202-001-00-PM-2a	Set Team and Individual Performance Goals to Enhancing Team Performance	4	10
611202-001-00-PM-2b	Control Vineyard or Orchard Practices	4	10

611202-001-00-PM-03	Supply Accurate Daily Orchard or Vineyard and Production Information	4	10
Work Experience Modules			
611202-001-00-WM-01	Vineyard or Orchard Resource Optimisation	4	20
611202-001-00-WM-02	Skilled and Motivated Work Team Output	4	20
611202-001-00-WM-03	Daily Orchard or Vineyard and Production Information Availability	4	20

Learning Outcomes

The content of this learner guide is aligned to the following learning outcomes of the modules above.

Knowledge Topics	
Outcome Code	Module Title
KM-01-KT01	Plant structure and physiology
IAC0101	The vegetative and reproductive seasonal cycle of the crop is described
IAC0102	The reason for specific production practices during specific stages in the seasonal cycle is explained
IAC0103	The impact of conditions and practices during the current season on the following season is discussed
KM-02-KT02	Farm Lay-out
IAC0210	The importance of minimising the impact of farming on the natural environment is discussed in terms of the positive and negative long- and short-term effects on both the farm and the natural environment
IAC0211	The importance of waste management is explained in terms of its impact on the surrounding environment as well as the farm
IAC0212	The principles of water management is outlined and discussed to isolate factors that impact water quality and availability taking care to consider both downstream impacts and the long-term effects of correct and incorrect water management
IAC0213	The impact of production practices on natural resources are outlined to illustrate methods for minimising the negative impact
KM-02-KT03	Block establishment
IAC0305	The importance of soil conservation is explained
IAC0306	The basic principles of soil conservation and the application thereof are discussed
KM-04-KT03	Post-harvest processes
IAC0301	The different post-harvest processes in the pack house are described in the correct order and how they maintain quality is explained
IAC0302	The cold chain processes required for this crop is described
KM-05-KT05	Irrigation
IAC0503	Installation and maintenances principles are outlined and motivated
IAC0506	Irrigation scheduling in different climatic and weather conditions and stages of fruit production is outlined and motivated
IAC0507	The impact of soil properties and conditions on irrigation scheduling are discussed
KM-05-KT07	Food Safety
IAC0707	The procedure for dealing with alien invaders is outlined
IAC0708	The impact on the environment and contamination of resources is discussed
KM-06-KT01	Principles of integrated pest and disease management

IAC0116	The impact on the environment and contamination of resources is discussed
KM-08-KT04	General farming business management
IAC0403	The concepts and basic principles of decision making, problem solving, motivation, delegation are defined and evaluated as it pertains to horticultural production
IAC0404	The concepts and basic principles of planning and scheduling (PERT chart) are defined and evaluated as it pertains to horticultural production
IAC0405	The concepts and basic principles of continuous improvement are defined and evaluated as it pertains to horticultural production
KM-09-KT03	Overseeing horticultural farming operations
IAC0302	The principles of setting goals and targets are outlined and explained
IAC0303	The effects of time and methods on farming operations is explained in terms of their impact on strategic planning, goals and objectives
IAC0305	The concept and basic principles of time management are described
IAC0306	A day-to-day activity plan of the various production processes orchard or vineyard management is compiled
IAC0307	Planning techniques are described in terms of their applicability to the processes in the production cycle
IAC0308	The planning process is constructed in such a way as to provide for risks
KM-10-KT01	Finances
IAC0101	Budgeting concepts are defined and the principles thereof are discussed
IAC0102	An understanding of concepts of profitability, sustainability and competitiveness is demonstrated
IAC0104	Methods of monitoring expenditure against an operational budget are described
IAC0106	Impact of internal and external variables on cost are explained
IAC0107	The concepts of equipment availability and reliability are discussed
KM-10-KT07	Administration, record keeping, reporting
IAC0701	The need for administration, record-keeping and reporting is motivated and the underlying principles explained
IAC0702	Effective administration and record-keeping is described and implemented
Practical Skills	
PM-01-PS02	Determine agricultural input to support the production activities of the orchard related to the production stages of the crop
IAC0201	A set of information to construct a plan or schedule was analysed and applied
IAC0202	Requirements of the production elements were correctly identified
IAC0203	An applicable planning process taking into account the year and growth stages of the plant according to the seasonal cycle was applied
IAC0204	List of inputs and factors related to the activity are identified
IAC0205	Ratios and variances are correctly calculated
PA0201	Determine the agricultural input required for maintained orchard and crop quality.
PA0202	Determine the machinery, tools and equipment which will be needed to maintain orchard and crop quality throughout the different seasons of the year.
PA0203	Determine how different scenarios will influence the input.
AK0201	Techniques and formats for the development of production plans
AK0202	Techniques for the interpretation of financial information such as budgets and cash flow
AK0203	Forecasting techniques
AK0204	Controlling and maintaining quality standards

AK0205	Techniques to exercise cost control
AK0206	Techniques for continuous improvement
AK0207	Techniques to analyse and summarise farm information
PM-01-PS03	Organise and allocate equipment and agri-chemicals to the work team to perform Vineyard or orchard practices
PA0301	Obtain relevant information regarding the logistical processes for a production unit
PM-01-PS09	Compile an income-expenditure budget for the Vineyard or orchard
IAC0901	The income-expenditure budget for the Vineyard or orchard is comprehensive and calculations are accurate
IAC0902	Deviations from the projected are correctly identified and motivated
PA0901	Compare the projected financial income and expenditure with actual
PA0902	Determine and list deviations
PA0903	Motivate the deviations
PA0904	Compile an income-expenditure budget for the Vineyard or orchard
PA0905	Determine corrective actions for continuous improvement
PA0906	Control cost (finance) of the Vineyard or orchard
PM-2a-PS01	Set performance goals and conducting performance interviews
IAC0101	An understanding of the relation between performance goals to performance and the production plan of the entity is demonstrated
PA0101	Work out norms (calculation) and quality norms
PM-2b-PS01	Conduct a practical exercise to control and evaluate the agricultural practices in a Vineyard or orchard based on case study information
IAC0101	The complete and practical production schedules are produced
IAC0102	Practical and relevant task lists are developed in a manner that is relevant to the production plans
IAC0103	What-if scenarios are produced that are relevant to a horticultural farm and the problem-solving and the issues are sufficiently addressed by decision making
IAC0104	A continuous improvement diagram is produced that is relevant to horticultural production
IAC0105	The production practices are correctly inspected and assessed for compliance with legislation and quality and quantity standards
IAC0106	The feedback session is held with the team and is pertinent to the achievement of production targets
IAC0107	The production operation is practically demonstrated and meet the standard for the operation
PA0101	Practically obtain relevant information from a production unit and observe technical activities of the work team
PA0102	Draw up schedules for the implementation of the production plans
PA0103	Develop a task list for temporary and permanent workers to enable the implementation of the plan
PA0104	Document a minimum of five what-if scenarios, and apply problem-solving and decision- making skills to come up with recommended courses of action
PA0105	Design a process or plan to improve or maintain consistent quality and quantity of the production process
PA0106	Practically evaluate Vineyard or orchard practices for compliance to quality and quantity standards
PA0107	Practically compare the quality and quantity of the practices of different teams and individuals to determine compliance with (farm, operation and cultivar) standards and identify actions to support the individual/team who do not meet the set standards

PA0108	Conduct a daily feedback session with a team to discuss achievement of targets or under-performance
PA0109	Observe and interpret real data and compare to expected outcome
PA0110	Use a control system for recording productivity
PA0111	Apply the technical requirements for the production operation
PA0112	Perform a job costing exercise
PM-03-PS02	Perform a practical exercise to report on Vineyard or orchard and production progress based on case study information
IAC0201	The report is correctly compiled
IAC0202	The presentation is given covering all the relevant information
IAC0203	The deviations and incidents are identified and explained
PA0201	Interpret the information
PA0202	Identify deviations and incidents
PA0203	Analyse the progress
PA0204	Compile a report with suggestions of corrective actions
PA0205	Explain and discuss the report
PA0206	Interpret and understand charts, statistics and graphs and discuss the report
PA0207	Calculate the average

Chapter 1

Ongoing Planning

learning outcomes

The content of this chapter is aimed at helping you to:

- Adapt and revise plans when needed.

1. Ongoing Planning

Citrus farming is a complex business, and a single orchard can be productive and worked on for decades. The lifespan of an orchard involves multiple stages, from planting and caring for young trees to harvesting the fruit to eventually replacing the old trees. This long timeframe, combined with a large amount of different production activities that take place at different times, makes planning for your production essential.

Planning properly is the best way to ensure long-term success, but planning alone is not enough. A plan might be well made, well researched, detailed, and realistic when it is created; only for a change in circumstances to make the plan infeasible or not useful. For example, it is all well and good to have a general plan for the next few years' harvests, especially when planting trees, but there may well be an unexpected event like a new disease or a breakdown in shipping networks that make your plan impossible to use.

This fact, along with the fact that plans need to be revaluated after completion and adjusted to make sure they will be viable again, means that you should think of planning as 'ongoing', and not something that is done once and left. In this chapter we will discuss some of the basic concepts regarding ongoing planning in various situations.

2. Schedules

As you well know, a lot of production activities, from irrigation to pest control to harvest and more are completed according to schedules, sometimes designed months in advance. These schedules must be well thought out to grow fruit that is the best it can possibly be.

Unfortunately, life can be unpredictable, so sometimes even a well-designed schedule needs to be reworked. Readjustments may be required for all types of schedule, so it is important to constantly review your schedules and adjust them where needed. These adjustments can be as basic as changing the frequency of irrigation, to switching to a different agro chemical for pest control, to totally reconsidering a harvest plan.

Let us use the example of irrigation. As you know, effective irrigation planning is crucial for the health and productivity of citrus trees. Irrigation management involves more than just watering the crops; it includes selecting the right irrigation systems, developing and adjusting precise irrigation schedules, and continuously monitoring soil moisture levels.

Let's say an irrigation schedule is designed according to weather forecasts that say there will be little rain. Then, the forecast turns out to be wrong, and heavy rain begins. The irrigation schedule will need to be readjusted to account for the extra rainfall and to avoid over-irrigation. You may need to change the frequency, or even the water quality to account for the rain.

3. Pest and Disease Management

When it comes to ongoing planning for pest and disease management, this will usually involve reacting to unexpected events like sudden outbreaks, new threats, new management techniques, or the results of previous control programs. For example, you may choose a certain program to control mites, which may prove ineffective during the season, forcing you to readjust and take a new approach in future planning.

New research on pests and diseases is constantly being done by bodies such as the CRI, and it is vital that you keep up to date with their publications and adjust your pest and disease management plan accordingly. They may announce new treatments, new regulations, new threats, and it is best to get ahead in these situations. Planning for pest management involves designing ways to address pest and disease outbreaks effectively and quickly. This can include maintaining an inventory of agrochemicals or other control methods, providing staff with extra training, and establishing relationships with experts.

4. Labour

A citrus farm can sometimes employ dozens of workers, and managing that much labour can be a big task. Effective labour planning is mostly about predicting your future labour needs for various production practices. This requires a solid understanding of the stages of production, and an ability to adjust labour as needed.

Aside from planning for the number of workers needed, you need to also make sure that you have the right workers. These workers need to have the right skills, and you may need to invest in training and development programs to ensure that they are up to the task required of them.

5. Financial Planning and Budgeting

Financial planning is a major part of running any business, and citrus production is no exception. This involves creating and maintaining various financial documents and reports such as budgets, cashflows, business plans, and others. In terms of ongoing planning, this will usually consist of regular budget reviews and performance meetings.

These will usually involve looking at the farm's financial performance with a wider lens, and adjusting production practices (such as choosing different agrochemicals or changing yield goals) to cut or increase spending.

Aside from budgeting, managing cash flow is very important, especially in a seasonal industry like farming, where income is uneven throughout the year. You and farm management need to plan for periods of low cash flow and ensure that the business can stay afloat until it becomes more profitable again. This may involve adjusting cashflows and budgets in an ongoing fashion.

There are also unpredictable risks that have to do with business costs. These can include changes in the costs of inputs, inflation, or interest rates. These changes can lead to situations where a previously profitable production plan becomes unprofitable, such as a loan for equipment becoming too expensive, or the cost of agrochemicals becoming too expensive to produce fruit profitably.

6. Risk Management

As with all business, and life in general, there is risk involved in producing citrus. These risks can involve changes in environmental and climatic conditions, market conditions, financial conditions, and general societal conditions in and around your farm. Let's discuss all these various risks and the ways you can adjust plans below.

Firstly, changes in climatic conditions can have serious effects on your fruit. Sudden or long-lasting droughts, cold periods, heavy precipitation, and other extreme weather events can be destructive enough to destroy entire harvests. The best way to mitigate this damage is to keep a close eye on weather forecasts and creating plans to respond to these emergencies.

For example, if your farm is in a region prone to frost, you may need to invest in frost protection measures such as protective covers, and keep them ready throughout the year. In drought-prone areas, you may have to give special attention to careful water management practices, such as rainwater harvesting or the use of drought-resistant varieties, while keeping a close eye on and adjusting your water use plans.

Markets can be volatile, and changes in price can be a challenge in the citrus market. Citrus prices can fluctuate for a number of reasons, including changes in supply and demand, currency exchange rates, and global trade policies.

For example, you may plan your year's harvest and budgets using a certain assumption of the eventual price you will sell your fruit at, only for the price to fall due to outside circumstances like a news report saying citrus is bad for you. Now, you will still have to sell your fruit (since even some revenue is better than no revenue), but you may well have to reconsider which markets, agents, and firms you want to work with in an effort to save cost.

There are other ways to limit the possible losses of price risk, such as contracts that guarantee a certain price in advance. Planning for price risk involves you keeping track of market conditions and prices, and constantly adjusting production and business plans.

7. New Technology Adoption

One of the best ways to run a successful business, especially in farming, is being willing and able to adopt new technology. New technology is constantly being produced, including software, hardware, machinery, equipment, agrochemicals, and knowledge. If you keep up to date with these, you can constantly improve your production, lowering costs and improving quality.

New technological tools can help you minimise wasted inputs, such as water and fertilizers, improve crop yields, limit environmental damage, increase fruit quality, and lower costs. For all of these reasons, it is very important that you keep up to date with new research and technology, and constantly adjust your plans accordingly.

summary

Chapter 1

- The long lifespan of an orchard combined with a large amount of different production activities makes planning for your production essential.
- Planning properly is the best way to ensure long-term success, but planning must be flexible and 'ongoing' to be effective.
- Many production activities are completed according to schedules, sometimes designed months in advance.
- Readjustments may be required for all types of schedule, so it is important to constantly review your schedules and adjust them where needed.
- When it comes to ongoing planning for pest and disease management, this will usually involve reacting to unexpected events.
- New research on pests and diseases is constantly being done by bodies such as the CRI, and it is vital that you keep up to date with it.

- Effective labour planning is mostly about predicting your future labour needs for various production practices.
- Ongoing financial planning involves creating and maintaining various financial documents and reports.
- The risks associated with citrus production can involve changes in environmental and climatic conditions, market conditions, financial conditions, and general societal conditions in and around your farm.
- New technology is constantly being produced, and you can constantly improve your production by keeping up to date with these.

assessment activities

- ✓ **Activity P1:** Complete this activity to test your knowledge of ongoing planning.
- ✓ **Activity F1:** Complete this activity to test your knowledge of the entire module.