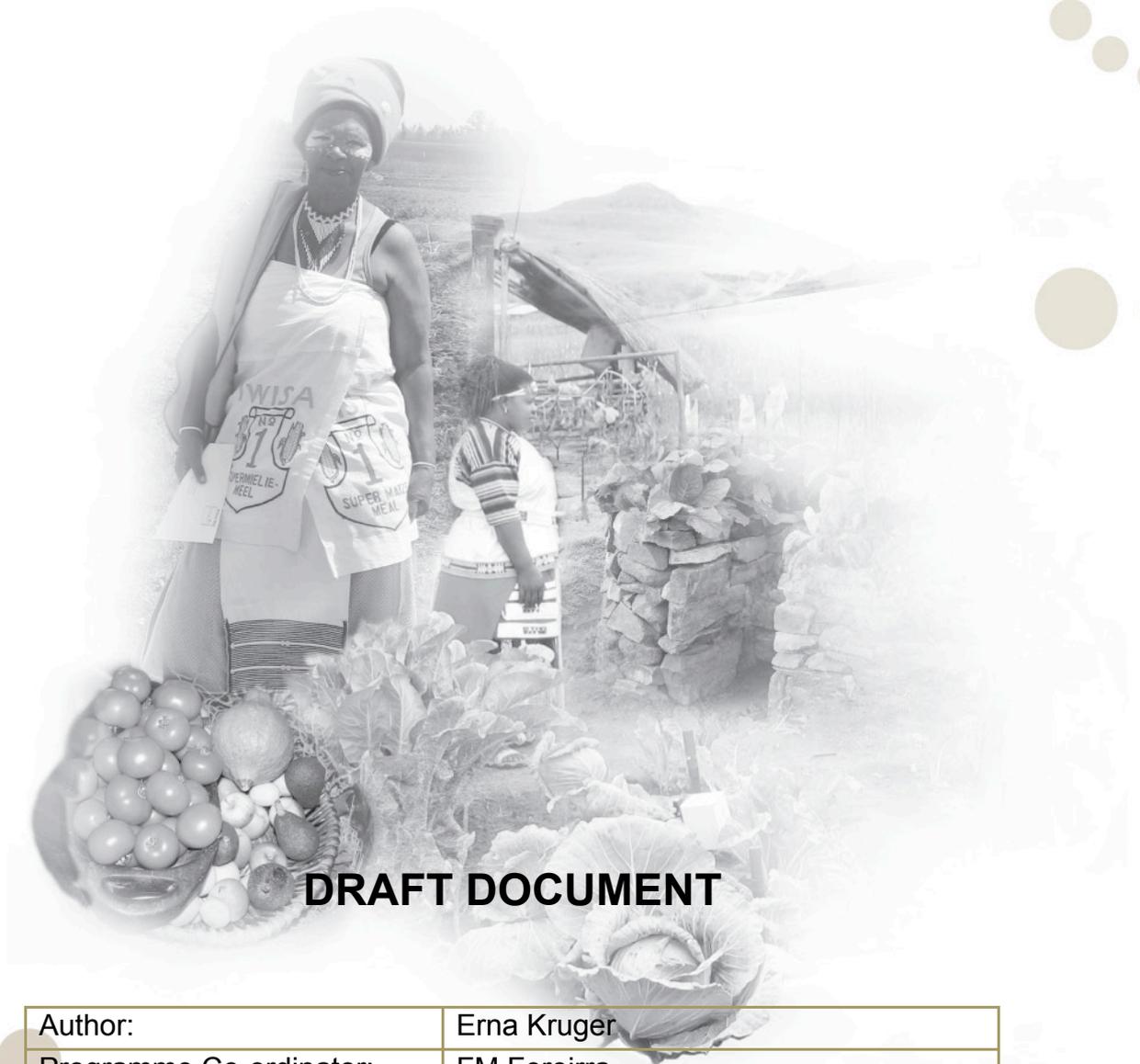


Module 5

Optimising household food production

■ Module code: PHFS05P



DRAFT DOCUMENT

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Printed and published by the South African Institute for Distance Education and the University of South Africa.

This study guide, PHFS05P Optimising Household Food Production, was developed for the first pilot run of the Programme for Household Food Security in agreement between the South African Institute Distance Education and the University of South Africa.



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This study guide PHFS05P 2010 is a draft for a pilot run of the Programme for Household Food Security in agreement with SAIDE and UNISA.



The project for training household food security facilitators was initiated by the South African Institute for Distance Education (SAIDE) that received funding from the WK Kellogg Foundation and received funding to help facilitate the design and development of a programme aimed at further upgrading the skills of community development workers and volunteers. SAIDE approached the College of Agriculture and Environmental Sciences of the University of South Africa (CAES: Unisa) and the two institutions signed a memorandum of agreement in this regard. The programme was to be offered by Unisa as a Short learning programme. The project is being overseen by a Steering Committee under the leadership of Prof Maggi J Linington (Executive Dean, CAES) and Ms Jenny Glennie (Director – SAIDE).

This Study Guide for the module *PHFS05P Optimising Household Food Production* is the fifth of the six modules to be piloted with a groups of volunteers linked to non-governmental organisations (NGOs) and community development workers (CDWs) of local government in the Eastern Cape. The Eastern Cape NGO Coalition (ECNGOC) have supported the strategy through advocacy and helping to link organisations with the project enabling the recruitment of practicing volunteers or community development workers who want to be trained and specialise in Household Food Security. The ECNGOC organized consultative meetings between the UNISA-SAIDE project team and a number of interested NGOs wishing to participate in the pilot project.

The project is managed by a Project leader from SAIDE, Dr Alice Barlow-Zambodla, and has a designated Programme Coordinator, Mrs Frans M Ferreira from the CAES, Unisa. Six writing teams participated in the curriculum development and design process together with other stakeholders. The teams were involved in the writing of six study packages, one for each module. Their names are listed on the front page of each Study Guide. A team of people involved in developing a resource package for Agricultural Water Use in Homestead Farming Systems for the Water Research Commission was also involved in the curriculum development process and writing of the modules.

The Programme in Household Food Security is an approved UNISA Short Learning Programme that serves to promote community engagement with UNISA by linking curriculum and tuition, research and community service with the delivery of higher education. This is in line with the UNISA vision: *The African University in service of humanity*.

The publications used to develop and design the qualifications are hereby acknowledged. The publications are acknowledged for the use of their material, content, illustrations, ideas and activities. The material has been used for educational purposes to design and develop this material study package to train household food security facilitators.

Articles and illustrations have been adapted for use in this training material. These have been taken from publications where the publishers indicated that parts of publications or the illustrations may be used for educational purposes provided that the sources have been acknowledged. Where this has not been done and recognised as such, the writing team does acknowledge the relevant publications.

The publications used are:

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A homestead garden can be a few pots, a tiny patch or a large bed. The results are the same – tasty, healthy and seasonal vegetables for the picking. Vegetables are a major source of minerals and vitamins and the fresher they are the higher their nutritional value. Besides the health benefits, growing vegetables has become part of the whole cool earth movement. It is a way of caring for the Earth, adopting beneficial gardening practices and putting scarce resources like water and space to good use.

Although it is always easier to buy vegetables, there is nothing more satisfying than planting and picking your own vegetables, experiencing their intense flavour and knowing that they have not been drowned in poisonous pesticides. (Adapted from *South African Garden*. September 2008, p.25)

We introduce this module by examining different farming systems. We continue with how to prepare for healthy plant growth and what to plant to keep you healthy. You will also find out how to sustain your garden so that you and your family can continue to produce food. The knowledge and skill you gain here will go a long way towards helping address food insecurity in communities.

Purpose of the module

In this module your main task is to link everything you have learnt in previous modules and done with households so far, to get the bigger picture and implement a homestead food garden together with households. You will plan and carry out a set of sustainable, low-input activities with selected households in the area to help them finalize the design plans for their homestead food gardens. Why is this important? As people become informed and take actions to start and maintain their gardens, they will be able to sustain themselves and their families. This will break the cycle of poverty and protect the environment at the same time.

To prepare you for working with households, you will learn about the elements of sustainability which need to be implemented and other important decisions that need to be taken, when putting the design plan for the homestead food garden into action. This will ensure that households are provided with food on a continuous basis and the food is healthy and nutritious to fulfil their dietary needs and preferences.

How Module 5 fits into the programme

Each module is an important part of the Household Food Security Programme. The modules for the programme are the following:

Module 1	PHFS01K	Introduction to household food security concepts
Module 2	PHFS02L	Participatory extension for household food security
Module 3	PHFS03M	Sustainable natural resource use
Module 4	PHFS04N	Food behavior and nutrition

Module 5 PHFS05P Optimising household food production

Module 6 PHFS06Q Food resource management

The modules are linked and what you learn in one module will also help you in another. The diagram given below is a *programme map* that will provide you with an overall picture of the programme. It shows you the main purpose of the programme and what each of the six modules focuses on.

Overview of modules

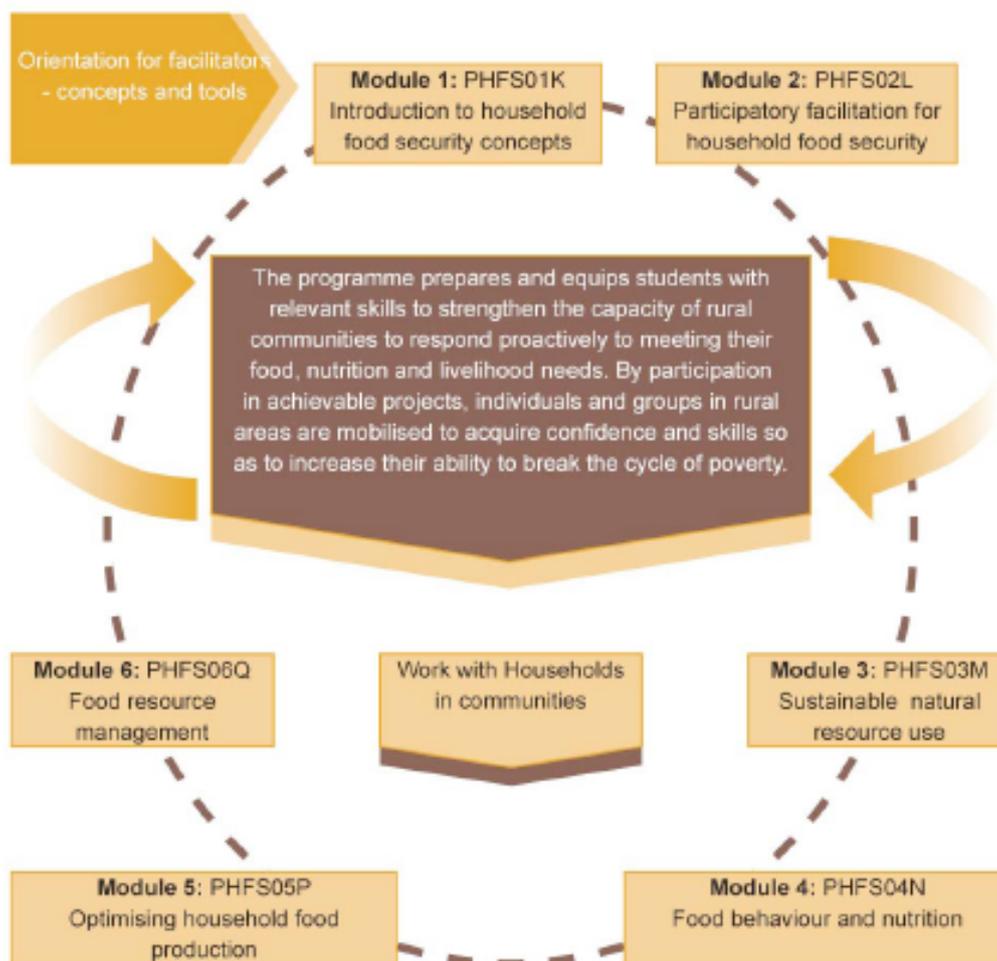


Figure 0.1 The programme map

Module 5 outcomes

The table below shows the topics of the four units in Module 3 and gives you a good idea of what you are expected to know and do. The assessment in this module is closely linked to the outcomes. It includes two assignments, portfolio activities and workbook activities. You will find detailed information about the assessment activities in your Tutorial Letters; 101, 102 and 103.

Unit	Specific Learning Outcomes	Assessment Criteria
1. Sustainability of a household farming system	1. Distinguish between traditional farming, high-external-input farming and low-external input farming 2. Do a SWOT analysis for a homestead farming system and suggest interventions which will enhance food security.	Assignment 1 (10%)
2. Planning your food garden for maximum benefit	1. Analysing the needs of a plant and various planting methods so as to cultivate crops successfully. 2. Finalise the design plan for a food garden by considering low-input principles.	Assignment 2 (20%)
3. Making and maintaining your food garden	1. Take action by designing food beds, enriching the soil and planting crops that will enhance food security. 2. Maintain the food garden by using sustainable, low-input principles	
4. Preparing your portfolio	Complete selected activities for the household food security portfolio	Portfolio activities (60%)
		Workbook 10% Selected activities from all units

Brief outline of the units

Unit 1 Sustainability of a household farming system

We start this unit by revising the concepts “*system*” and “*sustainability*”, which were examined in Module 3. Three common farming systems and elements of sustainability within each system are explored. The homestead as a sustainable farming system according to Low-external input principles is the focus of the final section.

We conclude the unit with a case study of a farmer working within his own knowledge system and how he manages his resources as an example of a farming system. This case study will also give us some ideas to implement when we start our homestead food garden.

Unit 2 Planning your food garden for maximum benefit

Biotic and abiotic factors in a plant’s environment affect the survival of the plant and we identify those factors, which are necessary for the survival of all plants. To provide for the needs of a plant so that it will grow successfully, we need to understand the structure and functions of the different plant parts. We then briefly examine plant processes such as photosynthesis, respiration and transpiration. Soil nutrients needed by a plant for healthy growth is the topic of our next section. We consider climate, which crops to plant, plant mixes and a planting schedule which is suitable

for the area where we plan our homestead food garden. We conclude the unit by linking everything that was done in previous modules to finalise our draft food garden design plan, that will be implemented in the next unit.

Unit 3 Making and maintaining your food garden

This unit is the culmination of all the work done in previous modules when we take action and start our homestead food garden. We make our vegetable beds and enrich the soil with compost made according to sound, low-input principles that you learned in Module 3. Sowing seed and/or planting cuttings of the crops we chose is our next step of the action plan. We maintain our gardens by exploring household remedies for addressing plant pests and diseases. The unit is concluded by looking at ways to save seed and making cuttings as methods to continue the good work and enhancing food security.

Unit 4 Preparing your portfolio

You worked with households in Units 2 and 3 when together you finalized and implemented food gardens. The main aim of this unit is to provide evidence of your work with households when you do the portfolio activities.

What is in your study pack?

Check your study pack for this module. It should contain the following:

This study guide	✓
A module workbook	✓
A tutorial letter 101 and 102 (TUT 101 and 102) which tells you what your assignments are and when you should submit them	✓
A general information letter on the programme	

The teaching approach for this programme

What we as people do, flows from plans we make, based on information we have at the time, and how we understand that information. As we start implementing our plans, we learn more and can therefore improve our plans and actions. The approach that we will use, not only in this module, but also in all the modules to follow, is the Triple “A” approach. The use of the Triple A approach will guide your learning by engaging you in a cyclical process of assessing, analysing and acting based on the new information which you have learnt.

The ‘Triple-A’ is one of many ways in which this ongoing planning and re-planning process is described. We gather information (assess), think about it and use it to come up with plans (analyse), implement those plans (act), all the while gathering new information.

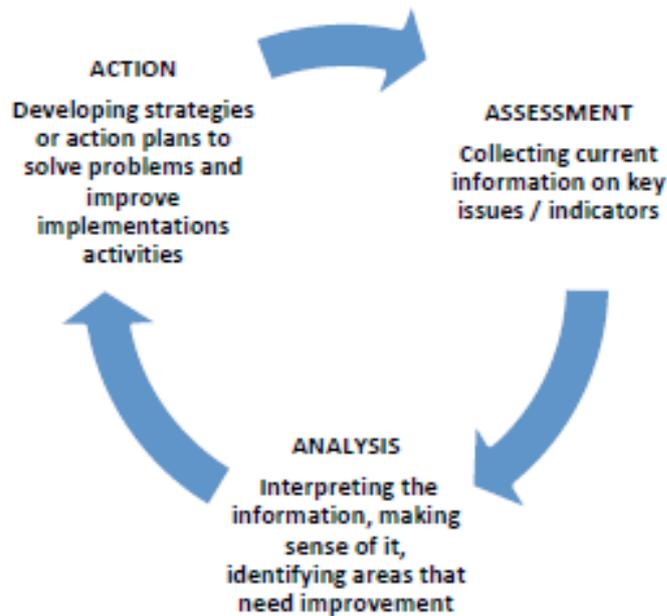


Figure 0.2 The Triple 'A' Approach

How will you know what to do in the study guide?

We make use of symbols or icons to show you what you are expected to do.

<p>Text Activities</p> 	<p>These are learning activities that encourage you come up with your own ideas as you read the text. Write your ideas in the blocks provided in the study guide.</p>
<p>Icon for workbook activities</p> 	<p>Some activities have been selected that will help you to reflect on your own context and deepen your understanding of the main issues dealt with in the module. You will either do these activities by yourself or in a group. Write your ideas and comments in the workbook provided.</p>
<p>Case study blocks</p> 	<p>We have included a number of short case studies that reflect what is happening in practice in different parts of South Africa and in other parts of the world. The case studies serve two main purposes: to give you examples of what people are doing in different contexts and to invite you to reflect on these experiences as they will help to strengthen your insight and understanding of the issues.</p>
<p>People's Voices</p> 	<p>Boxes in the text give quotes of experiences of household members on food security. Some boxes also give quotes from people and descriptions of events.</p>
<p>Icon for</p>	<p>The activities with the households in Unit 4 are portfolio</p>

<p>portfolio activities</p> 	<p>activities. They are practical activities and you will be required to produce specific evidence for your portfolio in order to complete them.</p>
<p>Concept boxes</p>	<p>Boxes in the text give definitions and explanations of concepts.</p>

The module map gives you an overall picture of what Module 5 is about. The map appears before each unit to remind you of the purpose and direction of the module and to show you how the individual units are linked.

Module 5 Map

