

Module 3

Sustainable Natural Resources Use

■ Module code: PHFS03M



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

This studyguide, PHFS03M for Sustainable Natural Resources Use, was developed for the 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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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 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 (UNISA, CAES) 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 Dr M.J Linington (Dean, CAES, UNISA) and Ms J Glennie (Director, SAIDE).

This study guide for the module *PHFS03M Sustainable Natural Resources Use* is the third of six modules in the programme to be piloted with groups of community development workers linked to local government and volunteers linked to non-governmental organisations (NGOs) in the Eastern Cape. The Eastern Cape NGO Coalition (ECNGOC) has supported the strategy through advocacy and helping to link organizations with the project, thus enabling the recruitment of practising 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 NGOs organised community meetings and identified students at a number of sites who would participate in the pilot study. The NGOs and people to be acknowledged are Student Partnerships Worldwide (SPW), Transkei Land Service Organisation (TRALSO), The Directorate of Social responsibility in the Anglican Diocese of Grahamstown (DSR), Africare and an independent community development consultant. The project is managed by a Project Leader from SAIDE, Dr A Barlow-Zambodla, and has a designated Programme Coordinator from CAES, UNISA, Mrs FM Ferreira. Six writing teams participated in the curriculum development and design process, together with other stakeholders.

The teams were involved in the writing of study materials for each module and need to be acknowledged for their dedication to the task of developing the study packages. Their names are listed on the front page of each study guide. In addition acknowledgements go to a team of people involved in developing a resource package for Homestead Farming and Water Management for the Water Research Commission which was also involved in the curriculum design and development process and writing of this module.

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 the service of humanity”.



The references used to develop and design the study materials are acknowledged for the use of their material, content, illustrations, ideas and activities. The material have been used for educational purposes to design and develop this material study package to train household food security facilitators for educational purposes in the writing of this study material:

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 illustrations may be used for educational purposes provided that the sources been acknowledged. Where this has not been done and recognised as such, the writing team does acknowledge the relevant publications.

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Water is a vital natural resource without which we cannot live. How we use water so that there is enough for everyone today and in the future is a challenge we face in South Africa and in other parts of the world. But water is not the only natural resource we need and use.

For thousands of years local people have used indigenous plants as a source of food. As you know, some of these plants can also serve as medicine. An interesting example that will be known to many of you is the ghowa or Hoodia plant, which is eaten by many South Africans, and is also used as a medicine. Many cultural groups in South Africa look in a holistic way at human well-being. What does this mean? A traditional healer will not only prescribe medicines (various plant materials), but will often also provide some psychological help to his patients. Refer back to the four dimensions of healing in Module 2: the physical, social, psychological and spiritual dimensions.



Figure 1.1 The ghowa/ghoba plant (*Hoodia* spp.)

In this module you will find out about the natural resources that are available in your area, how people are using them to obtain food, and how their use affects the environment and the community. You will also examine different and improved ways in which the natural resources in the area can be used so that people can continue to get food that will keep them healthy.

Purpose of the module

In this module your main task is to plan and carry out a set of activities with selected households in the community to help them gain a good understanding of their current and possible future use of natural resources in their area. Why is this important? As people become informed and take actions to manage their use of resources responsibly to obtain food, they will be able to sustain themselves and their families. These actions will help to 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 issues around the use of natural resources and strengthen your ability to use some participatory techniques and methods. What you learn in this module will also help you with Module 5 when you start a homestead garden, and with Module 6 when you look at food resource management.

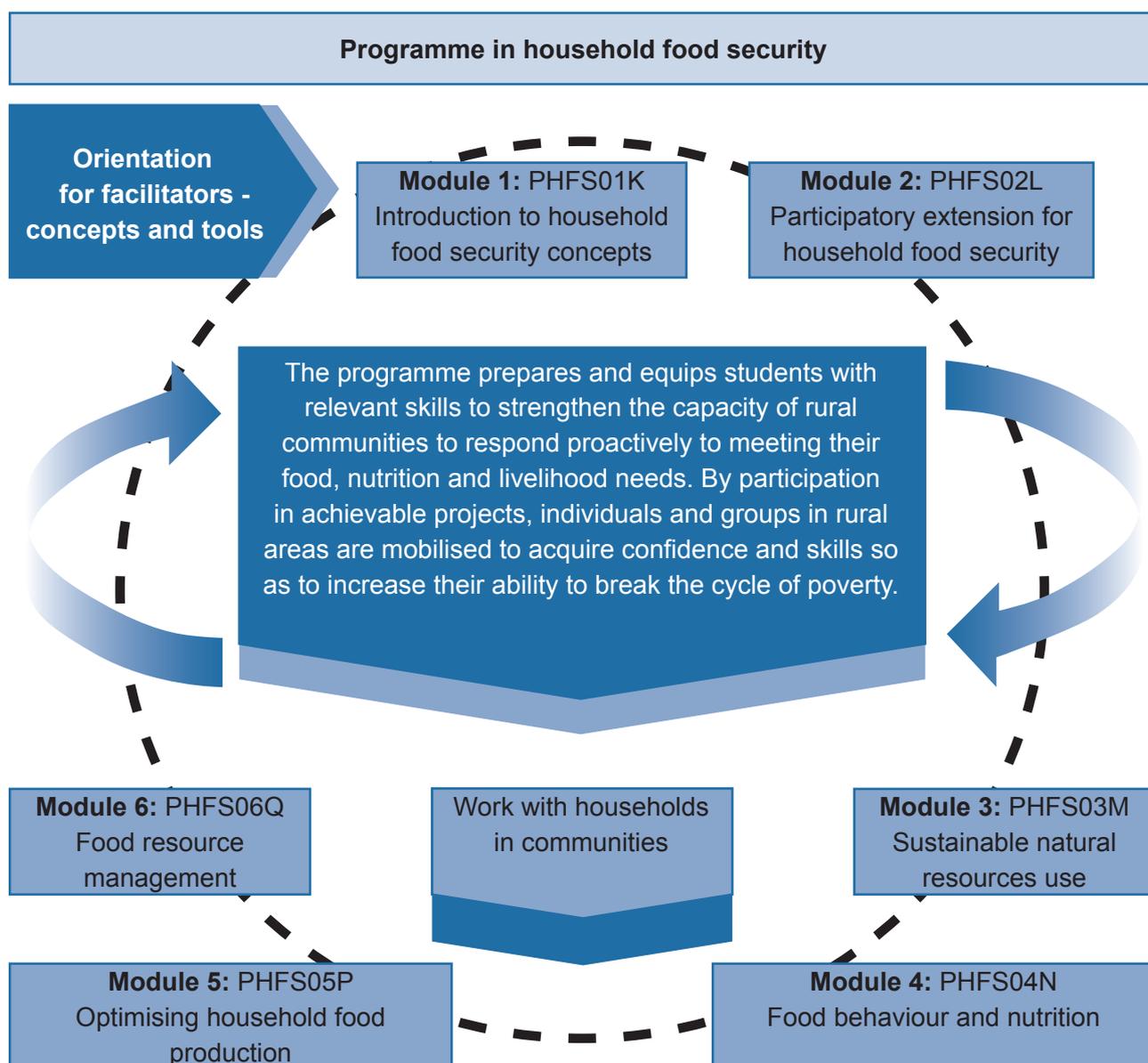
How Module 3 fits into the programme

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 behaviour 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 focus on.

Overview of modules



Module 3 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 the General Tutorial Letter.

Unit		Specific Learning Outcomes	Assessment
1.	Natural resources and their importance	Assess resources in terms of their contribution to food security	Assignment 1 (10%)
2.	Linking natural resources and food security	Assess the availability, accessibility, utilisation and stability of natural resources with individuals and groups in an area Consider constraints regarding natural resources	Assignment 2 (20%)
3.	Using natural resources wisely	Determine the impact of natural resources use on the environment and on people. Explore various knowledge systems for an alternative resource management option.	
4.	Taking action for household food security	Develop solutions with households for improved natural resource use and livelihood strategies	Portfolio activities (60%)
			Workbook 10% Selected activities from all units

Brief outline of the units

Unit 1 – Natural resources and their importance

We examine the natural resources in the environment such as water, soil, biodiversity, and natural energy resources in order to gain an understanding of how they fit together to create a natural system. Understanding how natural systems work and your own place in these systems will help you to find out how best to use natural resources so they will not be depleted (used up).

Unit 2 – Natural resources and food security

The link between natural resources and food security is explored. We need to have enough natural resources available, we need to access them and we need to utilise them wisely. This will ensure stability and will therefore, enhance food security. We examine participatory tools and methods to find out which resources are available in your area and how the people living there are using them for obtaining food. We conclude the unit by looking at some of the constraints regarding natural resources including disease and gender-related issues.

Unit 3 – Using natural resources wisely

The impacts of our use of natural resources on the environment and on other people are examined. We focus on the importance of using the natural resources that are available to us in a sustainable way to ensure stability and thus contribute to food security. In this way, you can find out the strengths and weaknesses of present resources use practices. You will get a good idea of what is working well, what is not, and what can be done to improve the situation. The low input principles examined in the unit are used to design a plan for a homestead garden which will be implemented in Module 5.

Unit 4 – Taking action for household food security

The work you undertake in Units 1, 2 and 3 prepares you for working with households in your community. You will plan and carry out an intervention in which you invite them to participate fully. With your guidance they will assess their use of natural resources in obtaining food, they will analyse their current practices and come up with possible actions that will help them to improve their use of natural resources. Your work with the households consists of portfolio activities.

What is in your study pack?

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

This study guide	<input checked="" type="checkbox"/>
A module workbook	<input type="checkbox"/>
Tutorial Letters 101 and 103, with your assignments and by when you should submit them	<input type="checkbox"/>
A general information letter, Tutorial letter 301, on the programme	<input type="checkbox"/>



During the year you will receive additional tutorial letters that give you general feedback on the assignments submitted.

The teaching approach for this programme

What we do flows from the **plans we make**, it is 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 other modules, is the “Triple A” Approach.

The “Triple A” Approach guide your learning by engaging you in a cyclical process of **assessing**, **analysing** and **acting** based on the new information which you have been given.

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.

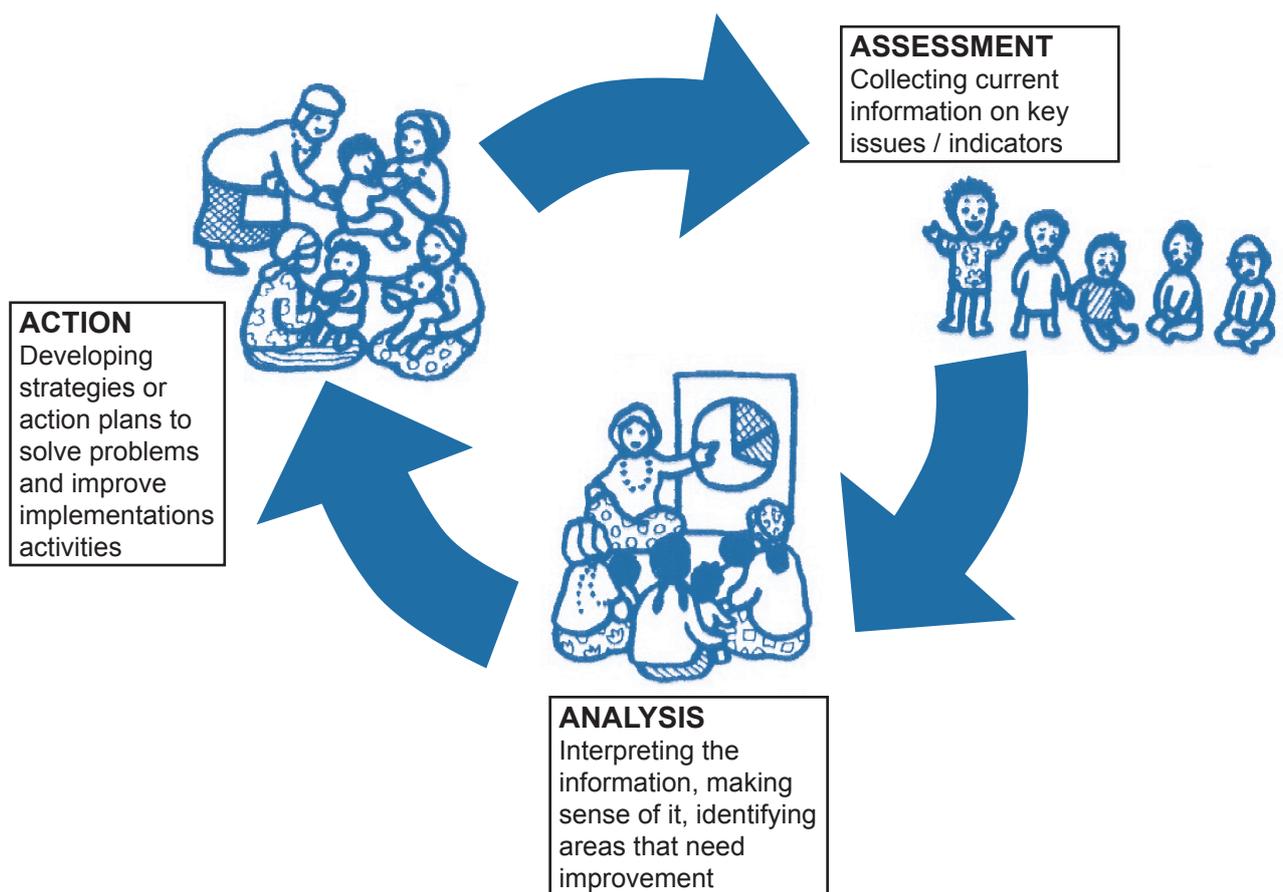


Figure 1.2 The “Triple A” Approach
(Adapted from FAO, 2005)

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.</p>
<p>Workbook activities</p> 	<p>Some activities have been selected to 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. These are activities which are provided in the study guide but which should only be completed in the workbook.</p>
<p>Case studies in 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 to be addressed.</p>
<p>People's voices</p> 	<p>Boxes in the text give quotes of experiences of household members and other people on food security and descriptions of other events.</p>
<p>Portfolio activities</p> 	<p>The activities with the households in Unit 4 are portfolio 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

The module map gives you an overall picture of what Module 3 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 3 Map

