



Umnga Farmers Training Group

Accreditation nr: PAET2511

Project Report

on the

**Vulisango Food Security
Matyhameni
Lower Tyirha
Qumbu**

Reference: SCMU4-05/06/0007

to

**The Department of Social Development
Province of the Eastern Cape
Private Bag X0039
BISHO
5608**

15 March 2006

Project Report

Introduction

The Department of Social Development advertised an invitation to submit proposals in the Daily Dispatch of 9 January 2006. Umnga Farmers Group tendered to the Department of Social Development and was granted a contract under reference no: SCMU4-05/06/0007 on 9 February 2006.

The purpose of the Contract was described as follows:

The purpose of the contract was to provide agricultural technical/management training on the following subjects as according to the approved tender:

- Crop production
- Planting of seeds and maintenance
- Pest and disease control
- Fertilizer application
- Production management
- Report writing
- Bookkeeping
- Administration

1. Report on the outcomes of the technical training:

A total of 23 members of the project were declared competent on the following unit standards with reflection to the specific outcomes as follows:

Unit standard title and SAQA code:

12575 – Demonstrate an understanding of soil preparation

Credits: 5

Specific Outcomes and Assessment Criteria:

SPECIFIC OUTCOME 1

Demonstrate an understanding of the properties of soil.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. Soil structure and soil texture are defined according to a definition.

ASSESSMENT CRITERION 2

2. Structure-less soil are identified and explained according to criteria and advantages.

ASSESSMENT CRITERION 3

3. The composition of soil is explained according to criteria.

ASSESSMENT CRITERION RANGE

Soil refers to layered and duplex soil.

ASSESSMENT CRITERION 4

4. Advantages and disadvantages of soil are identified according to criteria.

ASSESSMENT CRITERION RANGE

Soil refers to layered and duplex soil.

ASSESSMENT CRITERION 5

5. The composition of duplex soil is explained according to criteria.

SPECIFIC OUTCOME 2

Demonstrate an understanding of soil preparation.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. The advantages and disadvantages of effective and ineffective soil preparation are explained according to criteria.

ASSESSMENT CRITERION 2

2. The function and application of soil preparation equipment and materials are identified and explained according to workplace procedures.

ASSESSMENT CRITERION RANGE

Equipment may refer to plough implements and materials may refer to chemicals or fertilisation.

SPECIFIC OUTCOME 3

Demonstrate an understanding of soil sample taking.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. The importance of soil sample taking is explained according to criteria.

ASSESSMENT CRITERION 2

2. The reasons for making profile pits are explained according to workplace procedures.

ASSESSMENT CRITERION 3

3. The requirements of a profile pit in a vineyard are explained according to criteria.

ASSESSMENT CRITERION 4

4. The method of soil sampling is explained according to criteria,

Unit standard title and SAQA code:

12556 – Apply fertilizer manually

Credits: 2

Specific Outcomes and Assessment Criteria:

SPECIFIC OUTCOME 1

Demonstrate an understanding of fertilizing a crop.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. The reasons for fertilizing a crop is explained according to crop growth needs.

ASSESSMENT CRITERION 2

2. The reason for soil sampling is explained according to fertilizing cost and input.

ASSESSMENT CRITERION 3

3. Factors that influence fertilizer application are explained to maximise crop growth.

ASSESSMENT CRITERION RANGE

Factors may refer to season, rain, dampness of soil, stage of crop growth and kind and amount of fertilizer.

SPECIFIC OUTCOME 2

Prepare for the application of fertiliser

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. Personal preparation is done according to workplace procedures.

ASSESSMENT CRITERION 2

2. Utensils to be used are identified and prepared according to workplace procedures.

ASSESSMENT CRITERION RANGE

Utensils may refer to an empty "oil tin can", piece of rope or a Mayfield spreader.

ASSESSMENT CRITERION 3

3. Fertiliser is prepared according to workplace procedure.

SPECIFIC OUTCOME 3

Apply fertiliser to a crop

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. The fertilizer is applied at the calculated rate and according to workplace procedures.

ASSESSMENT CRITERION 2

2. Application of fertiliser amounts and rate of application are controlled according to workplace procedures.

ASSESSMENT CRITERION RANGE

Rate of application may refer to a Mayfield sprayer or a length of rope equivalent to the distance the contents of the tin must be emptied.

ASSESSMENT CRITERION 3

3. Common problems associated with fertilizer application are solved within scope of work.

SPECIFIC OUTCOME 4

Perform end of fertiliser application procedures

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. Utensils are cleaned and stored according to workplace procedures.

ASSESSMENT CRITERION 2

2. Waste from the cleaning process are handled and dispatched according to workplace procedures.

ASSESSMENT CRITERION 3

3. Fertilizer is stored according to workplace procedures.

ASSESSMENT CRITERION 4

4. Faulty or broken equipment are reported according to workplace procedures

Unit standard title and SAQA code:

116200 – Plant the crop under supervision

Credits: 4

SPECIFIC OUTCOMES AND ASSESSMENT CRITERIA:

1. Use and care for the tools and equipment in the planting of a specific crop.

Range: Planting methods include, but are not limited to planting by hand, planting with use of machines, etc. Tools include, but are not limited to spades, forks, and planting line.

Assessment criteria:

- 1.1 Tools are used correctly in order to plant a specific crop.
- 1.2 Equipment is used correctly in order to space plants according to the requirements of a specific species.
- 1.3 Tools are cleaned and returned to storage in good order.

2. Handle planting material correctly for the successful establishment of a specific crop.

Range: Planting material may include, but is not restricted to, long term crops and cash crops. The handling of plants includes, but not limited to, the safe storage of plants before planting, the prevention of damage to plant material, ensuring that the planting material has sufficient moisture, and that sanitary precautions are adhered to. Planting methods include, but are not restricted to planting by hand and planting with use of hand-held tools.

Assessment criteria:

- 2.1 Planting areas are prepared to suit the selected planting material.
- 2.2 Plant material that is on hand for planting is kept moist and sheltered.
- 2.3 Newly planted material is provided with sufficient water shortly after planting.
- 2.4 Newly planted material that will not survive is removed and replaced with new material.
- 2.5 Diseased plants are removed from the planting area to prevent contact with healthy plants.
- 2.6 Basic hygiene standards are maintained, such as cleaning tools to prevent cross-contamination.

3. Describe the basic effects of the environment on specific crops.

Range: Environmental effects include, but are not limited to temperature, wind, humidity, rain, soil, etc.

Assessment criteria:

- 3.1 The basic effect of temperature and humidity on seedlings is explained.
- 3.2 Plants suffering from root shock are identified and the cause explained.
- 3.3 The best time of the day for transplanting is identified.
- 3.4 The effect of heat on transplanted seedlings is explained.

4. Plant planting stock at correct spacing between rows, between individual plants, and at the correct depth for specific plant species.

Range: Spacing, depth and distance include, but are not limited to the distance indicated on plant line, measurements as prescribed, etc.

Assessment criteria:

- 4.1 Seedlings are planted correctly, as per prescribed methods, under close supervision.
- 4.2 Seedlings are placed in holes that are the correct depth for specific species.
- 4.3 Seedlings are planted at the correct distance from each other, as per instructions.

Unit standard title and SAQA code:

12554 – Control weeds manually

Credits: 3

Specific Outcomes and Assessment Criteria:

SPECIFIC OUTCOME 1

Demonstrate an understanding of manual weed control.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. The effect of weed growth on a crop is identified according to basic plant growth factors.

ASSESSMENT CRITERION RANGE

Plant growth factors may refer to carbon dioxide, water, sunlight, nutrients or food and warmth.

ASSESSMENT CRITERION 2

2. Factors affecting successful weed control are identified to ensure best use of effort, cost and time.

ASSESSMENT CRITERION RANGE

Weed control factors may refer to season, dampness of soil, size of weeds and re-establishment of weeds.

ASSESSMENT CRITERION 3

3. The reason for hand or manual control of weeds is explained in relation to other available weed control methods.

ASSESSMENT CRITERION RANGE

Reasons should include cost, size or types of weeds and season.
Different kinds of weeds are identified according to weed types and weed growth periods.

ASSESSMENT CRITERION 4

4. Different kinds of weeds are identified according to weed types and weed growth periods.

ASSESSMENT CRITERION RANGE

Weed types may refer to broadleaf weeds, grasses and sedges.
Weed growth periods refer to annual weeds, biennial weeds and perennial weeds

SPECIFIC OUTCOME 2

Prepare equipment to be used for weeding.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. Equipment used for weeding are selected and checked according to workplace procedures.

ASSESSMENT CRITERION RANGE

Equipment may include but is not limited to Hoe`s, Slasher`s and pangas.

ASSESSMENT CRITERION 2

2. Equipment used for weeding are prepared according to workplace procedures and any defaults are reported

ASSESSMENT CRITERION RANGE

Preparation may include sharpening and minor repairs.

ASSESSMENT CRITERION 3

3. Faulty or broken equipment is reported according to workplace procedures.

SPECIFIC OUTCOME 3

Weed an agricultural crop manually.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. The manual weeding technique is performed according to workplace procedures.

ASSESSMENT CRITERION RANGE

Weeding technique refers to hand pull, hoe and slash to required height.

ASSESSMENT CRITERION 2

2. The equipment is left in a safe and ready to use condition.

ASSESSMENT CRITERION 3

3. Waste from the weeding process is handled and dispatched according to workplace procedures.

Unit standard title and SAQA code:

14374 – Control weeds, pests and plant diseases in an agricultural field using chemical

Credits: 6

Specific Outcomes and Assessment Criteria:

SPECIFIC OUTCOME 1

Demonstrate an understanding of chemical control for weeds, pests and plant diseases.

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. The effect of weed, pest and plant disease growth on the yield of crops and orchards is identified according to basic plant growth factors.

ASSESSMENT CRITERION RANGE

Plant growth factors may refer to carbon dioxide, water, sunlight, nutrients or food and warmth.

ASSESSMENT CRITERION 2

2. Factors affecting successful chemical control of weeds, pests and plant disease are identified to ensure best use of effort, cost and time.

ASSESSMENT CRITERION RANGE

Weed control factors may refer to season, dampness of soil, soil type, size of weeds and weed growth periods: annual, biennial and perennial.

Pests/insect control factors refer to season, dampness of soil, soil type and type and size of insects/pests.

ASSESSMENT CRITERION 3

3. The factors influencing effective chemical control are explained taking positive and negative impact into account.

ASSESSMENT CRITERION RANGE

Effective chemical control includes cost, size or types of weeds, pests and plant diseases, application method, season, predators, hardiness, chemical resistance and reaction to chemicals.

ASSESSMENT CRITERION 4

4. Different kinds of weeds, pests and plant diseases are identified within scope of work.

ASSESSMENT CRITERION RANGE

Range: Weed kinds may refer to broadleaf weeds, grasses and sedges. Pests/insects may refer to leaf -, boll -, root eaters, sap sucking and soil pests.

ASSESSMENT CRITERION 5

5. Methods of weed, disease and pest control are identified according to consumer and environment safety.

ASSESSMENT CRITERION RANGE

Weed, disease and pest control may refer to ecological, biological, chemical and integrated control

SPECIFIC OUTCOME 2

Prepare sprayer and chemicals for chemical control

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. Personal preparation is done according to workplace procedures.

ASSESSMENT CRITERION 2

2. The manual sprayer is checked and prepared according to workplace procedures.

ASSESSMENT CRITERION RANGE

Checking may refer to functioning and calibration of sprayer, pressure setting of nozzle, discharge rate of sprayer, discharge rate compared to another sprayer, leaks and harnesses.

ASSESSMENT CRITERION 3

3. A chemical mixture to control weeds, pests and plant diseases is prepared according to workplace procedures.

ASSESSMENT CRITERION RANGE

Chemical mixtures may refer to a water/chemical mixture.

ASSESSMENT CRITERION 4

4. Weed, pests and plant disease chemical threshold values are determined by the scouting technique.

ASSESSMENT CRITERION RANGE

Scouting technique refers to counting the actual pest or the phases of the pest life cycle per area.

SPECIFIC OUTCOME 3

Apply chemicals with a knapsack sprayer

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. Chemicals controlling weed, pests and diseases growth are applied according to workplace procedures.

ASSESSMENT CRITERION RANGE

Application techniques refer to spot spraying, full cover spraying, partial spraying and pre-emergence or post-emergence spraying

ASSESSMENT CRITERION 2

2. Spraying criteria are controlled according to workplace procedures.

ASSESSMENT CRITERION RANGE

Spraying criteria may refer to walking speed, height of nozzle above ground, pressure and pumping rhythm

ASSESSMENT CRITERION 3

3. Common problems associated with spraying of chemicals are solved within scope of work.

SPECIFIC OUTCOME 4

Perform end of chemical control procedures

ASSESSMENT CRITERIA

ASSESSMENT CRITERION 1

1. Sprayers and protective clothing are cleaned and stored according to workplace procedures.

ASSESSMENT CRITERION 2

2. Chemicals and waste from the cleaning process are handled and dispatched according to workplace procedures.

ASSESSMENT CRITERION 3

3. Chemicals are stored according to workplace procedures.

ASSESSMENT CRITERION 4

4. Faulty or broken equipment and chemical containers are reported according to workplace procedures.

Unit standard title and SAQA code:

11602 – Operate and maintain irrigation systems

Credits: 2

SPECIFIC OUTCOMES AND ASSESSMENT CRITERIA

- 1 Identify and obtain appropriate tools for basic maintenance of irrigation systems.

Range: Includes but not limited to: Spade, pliers, binding wire, hose-clamps couplings, ties, joints, reducers, etc.

Assessment criteria:

- 1.1 Appropriate clothing is worn.
(Range: Overall, gumboots, hat, etc.)
- 1.2 The ability to identify and select task appropriate equipment is demonstrated.
- 1.3 The correct usage of equipment is demonstrated.
- 1.4 Problems encountered with the use of equipment are identified and corrected.
(Range: Spade needs sharpening, wrong gauge binding wire, couplings not suited to specific pipe type, etc.)
- 1.5 Tools are appropriately cleaned and stored after use.
(Range: Washing, greasing, oiling, etc.)
- 1.6 Faulty equipment is reported to Supervisor.

- 2 Operate an irrigation system according to set procedures.

Range: Includes but is not limited to: flow and pressure regulation, cleaning filters, pipeline maintenance, cleaning of blocked sprinklers, shifting of pipes, etc.

Assessment criteria:

- 2.1 The correct usage of measuring equipment is demonstrated.
(Range: Pressure and flow gauges, etc.)
- 2.2 The ability to service and clean equipment is demonstrated.
(Range: Filters, pipes, sprinklers, etc.)
- 2.3 The ability to carry out pipeline maintenance is demonstrated.
(Range: Repairs, replacement, flushing, etc.)
- 2.4 The correct method of shifting pipes is demonstrated.
(Range: Pipes, draglines, spacing, avoidance of crop damage, etc.)

- 3 Identify the basic factors affecting crop growth under irrigation

Range: Includes but is not limited to effect of lack of water and fertilizer, irrigation not started/stopped as per schedule, effect of lack of maintenance, effect of incorrect pressure/flow rate, etc.

Assessment criteria:

- 3.1 The basic factors affecting crop growth are described.
(Range: Sunshine, water, fertilizer, good soil, etc.)
- 3.2 The consequences of the pressure/flow rate too low/ high are described.
- 3.3 The consequences if pipes are shifted too early/late are described.
- 3.4 The consequences if the pipeline spacing is incorrect are described.

Registration of accredited qualification

A total of 22 credits were registered as according to the administration procedure of the Agri-SETA to each individual of the 23 learners. In future if these learners wants to do a learnership in a national certification in Plant Production, they will get credit for 22 of the needed 120 credits on NQF level 1.

This function was successfully completed with reference to the outcome as described above.

a) Issuing of accredited qualification certificates to 23 learners attending the mentioned unit standards.

Accredited certificates for all 23 learners were handed to the project members on Tuesday, 14 March 2006. A copy sample of a certificate is attached to this report.

b) Registration of all qualifications where applicable to the Agri-SETA/SAQA.

A learner status form was completed and forwarded to the Agri-SETA for registration as reported above.

Report on the individual learners that benefited from this programme.

All information on the following individuals was captured on our database and will be kept for future reference.

Total learners	Surname	First Name	Second Name	ID number
1	Nqwazi	Zwelixolile		530620 5851 088
2	Kruca	Nowezile	Edith	450222 0499 082
3	Nqwazi	Nophelo	Xoliswa	710615 1008 081
4	Nyiba	No-Last	Cynthia	700822 0744 086
5	Mabethela	Velelephi		690626 6065 087
6	Mbejisana	Asanda		841011 0943 084
7	Mbejisana	No-Eight		681111 1235 085
8	Xwayi	Nontembeko		761127 0427 088
9	Mbejisana	Mziwamadoda		600606 6699 084
10	Gwexa	Andelwa		830218 0597 082
11	Mkhangwana	Hlubikazi	Marcia	800819 0692 082
12	Renene	Neziswa	Nosamkele	750713 0890 087
13	Mcwabane	Nowongile	Catherine	590316 0158 085
14	Mabetela	English		731216 6207 086
15	Qebeyi	Ephie	Nothobile	380301 0300 089
16	Cangashe	Victoria	Nozangoku	561223 0980 085
17	Mkhangwana	Kholeka		800913 0825 089
18	Qabazi	Boniswa		750305 0101 084
19	Nqwazi	Mexon	Bonginkosi	560610 6032 088
20	Mbejisana	Fikiswa		750607 1290 083
21	Nqwazi	Joyce	Nozipo	560823 0181 088
22	Mhlekwana	Nyameka		820929 5697 089
23	Renene	Tsele	Magayeka	410320 0109 088
24	Mhlekwana	Nolindelo		770907 0838 080

2. Report on the outcomes of the management training

A total of 20 members attended and successfully completed the management training of the project. The following specific outcomes were achieved:

Chapter 1

Introduction to farm management

- 1.1 Introduction
- 1.2 How should I manage my farm?
 - 1.2.1 Objectives of the farm business
 - 1.2.2 Plan to achieve your objectives
 - 1.2.3 Implement plans that have been drawn up
 - 1.2.4 Control activities according to plan(s)
 - 1.2.5 The fields of decision making
 - 1.2.6 The external environment
- 1.3 Self-test Questions

Chapter 2

Introduction to business planning

- 2.1 Introduction
- 2.2 Maybe starting our own business
- 2.3 But what is a business
- 2.4 The three different kinds of business
- 2.5 What makes an entrepreneur?
 - 2.5.1 Characteristics of an entrepreneur
- 2.6 Why are you thinking of starting your own business?
- 2.7 What are your reasons for starting your own business?
- 2.8 I hope that starting my own business will make my life better in the following ways:

Chapter 3

Project administration

- 3.1 Introduction
- 3.2 Reasons for having accurate financial records are:
- 3.3 Elements of the farm record keeping system
- 3.4 Definitions of terms
- 3.5 Self-test questions

Chapter 4

Administration Procedure

- 4.1 Introduction
- 4.2 Discussion of recording procedure
 - 4.2.1 Livestock enterprises
 - 4.2.2 Crop enterprises
 - 4.2.3 Fixed costs
- 4.3 Report writing and reporting

Chapter 5

You and your bank

- 5.1 How to choose your bank
- 5.2 How to get a good “track record” with your bank
- 5.3 Getting a loan
 - 5.3.1 Where to get help
 - 5.3.2 How to go about it
 - 5.3.3 Advantages and disadvantages

Chapter 6

Basic Bookkeeping and administration

- 6.1 Introduction
- 6.2 Cash book
- 6.3 Petty cash book
- 6.4 Purchases
- 6.5 Sales
- 6.6 Income Statement
- 6.7 Balance sheet
- 6.8 Service contracts and pay sheets
- Chapter 7
- 7.1 Meeting procedure and administration
- 7.2 Chairperson
 - 7.2.1 Choosing a chairperson
 - 7.2.2 The chairperson's task
- 7.3 Secretary
 - 7.3.1 Choosing a secretary
 - 7.3.2 The secretary's tasks
- 7.4 Minutes
- 7.5 Treasurer
 - 7.5.1 The treasurer's tasks
- 7.6 Members
- 7.7 Agenda
- 7.8 The meeting
- Chapter 8
- Learn about committees
- 8.1 How many members on a committee?
- 8.2 Getting more members
- 8.3 Types of committees
- 8.4 Subcommittees
- 8.5 Disqualifying members of absence
- 8.6 Chairperson
- 8.7 Committee meetings
- 8.8 Minimum number of members who must be present at a meeting (quorum)
- 8.9 Committee report
- 8.10 Unacceptable recommendations

HIV/AIDS awareness programme

On Friday, 24 February 2006 a special programme of 2 hours was run on HIV/AIDS awareness to all members of the project.

Conclusion

The Umnga Farmers Group through this report believes to have reached all the outcomes of the contract between the Department of Social Development and the Umnga Farmers Training Group as stipulated. We sincerely hope that the Department of Social Development was satisfied with our service delivered and that we will have through this contract a long and sustainable business relationship in future towards the development of our disadvantaged communities.

A.T. Motsoikha
PROJECT MANAGER
UMNGA FARMERS TRAINING GROUP

DATE