



Umngca Farmers Training Group

Accreditation nr: PAET2511

Training Report

on the

**Mthatha Greening and Clean Project
Technical Skills Training**

to

**IKAMVA Consulting Agency
1st Floor: Offices 36 – 41
Old Mutual Building
Mthatha**

2 November 2005



“A better future for all”

Training Report

Introduction

Ikamva Development Agencies consulted with the Umnga Farmers Group on 18 September 2005 for a quotation in the training of 60 project members in a qualification in Crop and Vegetable production and an additional 60 members in Tree planting as part of the Mthatha Greening and Clean Project. A quotation was made on 19 September 2005 that related to a formal contract between Ikamva and Umnga that was signed on 23 September 2005.

The purpose of the Contract was described as follows:

The purpose of the consultancy is to provide specialist training to the community members of the Ngangelizwe Community Project, situated in the district of Mthatha.

The end result of the consultancy will relate to the following outcomes:

1. Technical Skills Qualification as accredited by SAQA and the Agri-SETA on the following unit standards to 60 learners:
 - 12575 – Demonstrate and understanding of soil preparation = 5 credits
 - 116206 – Fertilise soil and attend to basic plant nutrition = 5 credits
 - 116200 – Plant the crop under supervision = 4 credits
 - 14374 – Control weeds, pests and plant diseases in an agricultural field using chemicals = 6 credits

2. Outcome based skills training that will relate to a certificate in Tree planting to 60 learners that will include the following outcomes:
 - Identification and selection of indigenous tree species.
 - Site selection for tree planting
 - Soil preparation before planting
 - Handling of seeds and seedlings
 - Planting of seed or tree seedlings
 - Management of the indigenous plantation

Report on the outcomes of the training as stipulated in the contract:

With reference to the contract page 3, paragraph 4.1.2, Umnga Farmers Group had to deliver the following:

- a) Develop, print and supply learning material to all learners of the community as according to the specific outcomes and unit standards prescribed by SAQA.**
- b) Lecture and instruct community members in theoretical and practical skills as according to this agreement.**
- c) Assessment and evaluation of each participating individual learner as according to the specific outcomes as prescribed by SAQA on all unit standards.**

Learning material was specially developed for this programme that enabled all 60 learners participating in the crop and vegetable production course to qualify and be declared competent in the following unit standards:

- 12575 – Demonstrate and understanding of soil preparation = 5 credits
- 116206 – Fertilise soil and attend to basic plant nutrition = 5 credits
- 116200 – Plant the crop under supervision = 4 credits
- 14374 – Control weeds, pests and plant diseases in an agricultural field using chemicals = 6 credits

A total of 20 credits were registered as according to the administration procedure of the Agri-SETA to each individual of the 60 learners. In future if these learners want to do a learnership in a national certification in plant production, they will get credit for 20 of the needed 120 credits on NQF level 1.

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

d) Issuing of accredited qualification certificates to 60 learners attending the vegetable and crop production course.

Accredited certificates for all 60 learners were handed to Ikamva on the final day of training, Friday, 28 October 2005.

e) Issuing of qualification certificates to 60 learners attending the tree planting course.

Accredited certificates for all 60 learners were handed to Ikamva on the final day of training, Friday, 28 October 2005.

f) Registration of all qualifications where applicable to the Agri-SETA.

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.

No	FirstName	SecondName	Surname	IDNo	Gender
1.	Lungisile		Mpoposhe	851021 5900 085	Male
2.	Mzukanyile		Mpako	790902 5788 089	Male
3.	Siyanda		Ceba	791124 5750 089	Male
4.	Onke		Dandala	810128 5442 081	Male
5.	Nozibele		Mpote	681011 0773 088	Female
6.	Mzamo		Majavu	460818 5601 081	Male
7.	Xolisa		Majikija	580412 6187 087	Male
8.	Victoria	Nomakwezi	Mvukuzo	581225 0400 085	Female
9.	Langa		Dlutshe	761202 6013 081	Male
10.	Nomfundiso		Mhlakaza	660502 0426 086	Female
11.	Nokuzola		Silobelo	450101 2448 083	Female
12.	Nontsasa		Mfimfita	711111 1178 081	Female
13.	Thozamile	Tylden	Semake	490811 5156 085	Male
14.	Gcinile	Edmund	Mkiva	630405 6038 086	Male
15.	Bonisile		Ghu	680204 6293 083	Male
16.	Mxolisi		Monco	780717 5686 089	Male
17.	Nomahlubi		Mgidlana	601211 0147 088	Female
18.	Nomfundiso		Mlakalaka	530201 0245 087	Female
19.	Nomacule		Mkwini	650916 0787 085	Female
20.	Nonyameko		Xabendlini	580421 0206 082	Female
21.	Ncebakazi		Mabusela	720821 0377 083	Female
22.	Nozengazi		Mpitshi	520618 0162 081	Female
23.	Nontlahla	Margaret	Mazwi	521225 0234 081	Female
24.	Noxolo		Mbonyana	620228 0403 086	Female
25.	Zola		Ndinisa	820517 5723 086	Male
26.	Majejene		Royi	480711 0227 083	Female
27.	Zuzile		Nkothana	790620 6291 081	Male
28.	Wiseman	Zanoxolo	Qangaqa	570824 5887 081	Male
29.	Putunywa	Theodora	Geca	700507 0985 082	Female
30.	Ndabuko		Mfukuli	770715 6128 087	Male
31.	Nombeko		Siko	760310 1042 087	Female
32.	Maud	Nomapondo	Tsutsu	601004 0176 086	Female
33.	Nozuko	Veronica	Nketshisa	780814 0837 088	Female
34.	Nonkoliseko		Qashani	760404 1479 082	Female
35.	Bantu		Mkongi	621112 5845 088	Male
36.	Jerry		Ntshindayi	631003 5283 081	Male

No	FirstName	SecondName	Surname	IDNo	Gender
37.	Nobubele	Patience	Mbina	591128 1092 083	Female
38.	Nomsa		Memani	721025 0600 085	Female
39.	NtombeJola	Mavis	Mtukwana	701026 0897 089	Female
40.	Nokwandisa		Gadla	780428 0888 080	Female
41.	Nombulelo	Virginia	Mabungela	660406 0683 086	Female
42.	Noxolo	Nomakhaya	Deleki	640613 0896 080	Female
43.	Bongiwe	Nancy	Duma	641205 0949 081	Female
44.	Nozuko	Yvonne	Dumisani	821212 1355 088	Female
45.	Linda		Mtezankuni	811025 0388 088	Female
46.	Nombuzo	Nothobile	Mahlati	520917 0311 080	Female
47.	Botisa		Manzini	690616 1290 087	Female
48.	Sisanda		Mbana	850427 1027 081	Female
49.	Felix	Thulani	Mbangi	770826 5757 089	Male
50.	Lindeka		Mdudu	800515 0954 080	Female
51.	Nowethu	Andiswa	Mfene	720710 1199 085	Female
52.	Nokwanda		Mhlati	730919 0867 083	Female
53.	Nontuthuzelo	Rina	Mhlungwini	650101 2347 085	Female
54.	Nosakhele		Mkhetshane	670402 0850 088	Female
55.	Nontsikelelo	Vivian	Mkhosana	651221 1276 086	Female
56.	Zukiswa		Mlambisa	600916 0320 086	Female
57.	Mhleli		Mlilo	770104 6191 082	Male
58.	Nomabhongo	Sylvia	Mthirara	520514 0243 080	Female
59.	Vuyokazi		Mute	740211 0853 083	Female
60.	Khutala		Ngcaluza	810909 0964 082	Female
61.	Sizwe		Sigamla	780616 6388 085	Male
62.	Matshaya		Luna	700709 0252 089	Female
63.	Veliswa		Ncapayi	720428 1031 089	Female
64.	Zameka		Nyangiwe	641105 1005 083	Female
65.	Tembeka		Qina	500702 0574 083	Female
66.	Ludwe		Mbambi	821213 5891 086	Male
67.	Ntombomzi		Ngalo	730618 0935 086	Female
68.	Bongikhaya		Mafuya	790928 6095 083	Male
69.	Silulami		Mntonga	670624 5031 089	Male
70.	Phumzile		Makaula	741004 0896 080	Male
71.	Nodumo		Mneno	830313 1136 087	Female

No	FirstName	SecondName	Surname	IDNo	Gender
72.	Lulama		Ndikinda	591112 1029 089	Female
73.	Ludwe	Epithet	Mahali	830811 5503 087	Male
74.	Nosakhele	Maggie	Mahlangabeza	660306 1051 087	Female
75.	Babalo	Nicholas	Stokwe	851215 6039 086	Male
76.	Manelisi		Peters	841208 5485 083	Male
77.	Sonwabile		Sanda	740511 5246 088	Male
78.	Tobani	Vuyo	Sobahle	790907 5349 089	Male
79.	Nomakhosazana		Mamba	521127 0837 089	Female
80.	Sandiso		Siqongana	770215 5649 084	Male
81.	Nikiwe		Mangaliso	751230 0703 086	Female
82.	Vuyiswa		Magade	561010 0532 085	Female
83.	Nathi		Yengo	781206 5712 086	Male
84.	Thobile	Bennet	Mamba	620201 5814 086	Male
85.	Kholisile		Sodo	831106 5451 083	Male
86.	Bayanda	Precious	Mnukwa	750505 1665 082	Female
87.	Nomsa		Dazela	731225 1683 084	Female
88.	Nomthandazo		Rashana	680612 1896 082	Female
89.	Veliwe		Maqokolo	700705 1059 085	Female
90.	Vusiwe		Mamtyani	620620 0265 087	Female
91.	Kholiswa		Bashe	600706 0913 083	Female
92.	Nonyameko		Madlumela	660205 0364 089	Female
93.	Ntombizandile		Skaap	681013 0071 083	Female
94.	Nozukile		Baleni	650923 1058 086	Female
95.	Queen		Vena	800110 0657 089	Female
96.	Lindiwe		Somaguda	600913 0952 083	Female
97.	Zola		Masumpa	760606 6785 086	Male
98.	Kuselwa		Petela	730705 0809 088	Female
99.	Georginah		Blaai	470316 0689 085	Female
100.	Mzunzima		Msuthwana	670501 5232 083	Male
101.	Nomakhaya		Silulwane	580614 0339 081	Female
102.	Nomama		Lusasa	701027 0820 089	Female
103.	Sinoyolo		Sompetha	831116 5439 087	Male
104.	Nobelungu		Ntengo	690806 0823 083	Female
105.	Siyamthemba		Mayiji	801123 5570 081	Male
106.	Mninawe		Mhaga	621201 5245 082	Male
107.	Lindile		Sontenze	770712 5806 086	Male

No	FirstName	SecondName	Surname	IDNo	Gender
108.	Phelisa	Patricia	Seku	760306 0798 083	Female
109.	Nombulelo		Magamle	800616 0902 085	Female
110.	Joyce		Hlazo	720823 0730 089	Female
111.	NomaIndia		Tyantyi	700703 0949 083	Female
112.	Nobenathi		Madolo	730613 0881 083	Female
113.	Mlamli		Mathintela	721126 5841 086	Male
114.	Buyiswa		Petros	750412 1040 087	Female
115.	Nomtshaka		Mbaleki	710720 0809 081	Female
116.	Zoleka		Matomane	760115 0801 080	Female
117.	Kekeni		Fetu	580501 6110 089	Male
118.	Zanoxolo		Ngozi	670315 6243 084	Male
119.	Bongiwe		Mantyi	720127 0785 089	Female
120.	Nosisi		Gxumisa	691228 1289 082	Female
121.	Nokuthula		Magatyana	760609 0933 083	Female
122.	Yolisa	Felicia	Sotshozi	630624 0472 089	Female

Additional equipment supplied by the provider to the programme:

Crop and Vegetable Production

Equipment	Quantity
Moncoseb 2 Kg	1
Cypermethrin 1 liter	1
Abemec Plus 1 Liter	1
Round-up 200ml	1
Tray seedlings spinach	4
Tray seedlings onion	4
Tray Cabbage seedlings	4
Pumpkin seed 500g	1
Carrot seed 500g	1
Beetroot seed 500g	1
Tomato seed 500g	1
Onion seed 500g	1
Spinach seed 500g	1
Fertilizer 2.3.2.(22) 10Kg	1
Fertilizer LAN 10Kg	1
Student manuals	20

Tree planting

Equipment	Quantity
Fertilizer 2.3.2.(22) 10Kg	1
Fertilizer LAN 10Kg	1
Indigenous tree plants	120
<i>Common Name</i>	<i>Scientific Name</i>
• Flat-crown	Albizia Adianthifolia
• Pompon tree	Dais Cotinifolia
• Kei-apple	Dovyalis Caffra
• Natal fig	Ficus Natalensis
• Wild olive	Olea Europaea subsp. Africana
• Weeping boer-bean	Schotia Brachypetala
• Buffalo-thorn	Ziziphus Mucronata
Student manuals	60

Report on course contents

Crop and vegetable production

The duration of this course was 20 days, starting Monday, 3 October 2005 and ended on Friday, 28 October 2005.

The following course content was delivered:

Unit Standard: Demonstrate an understanding of soil preparation

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 fertilization.

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: Fertilise soil and attend to basic plant nutrition

Specific Outcomes and Assessment Criteria:

1. Apply appropriate nutrient substances to soils or crops under close supervision.

Range: Soil nutrition includes but is not limited to soil nutrients (lime, liquid fertiliser, chemical fertilisers [single and mixtures], trace elements) and can include organic soil improvement methods and substances and techniques (compost, organic teas, and mulching).

The methods and techniques of applications can include manual, broadcast, liquid methods, leaf nutrition and slurry, depending on what is required in the specific context.

Assessment criteria:

- 1.1 The ability to apply a pre-measured amount of the correct soil nutrition substance on an indicated area of soil is demonstrated.
- 1.2 The ability to identify nutrients that will be applied is demonstrated.

2. Understand how to make compost and when to use it.

Range: Basic understanding of Carbon-Nitrogen ratios, familiarity with the value of common local sources of organic waste; understanding of the importance of soil organic matter and its role in holding soil nutrients and water, and in combating soil acidity.

Assessment criteria:

- 2.1 How to store manure so that nutrients are not lost is shown.
- 2.2 Making a compost heap, mixing manure (or other nitrogen source) with organic matter, adding appropriate amounts of water is demonstrated.
- 2.3 The composting process is managed and it is recognised when compost is ready to use, and the nutrient-loss dangers of leaving the heap too long is recognised.

3. Identify basic symptoms of nutritional deficiencies in different crops.

Range: Nitrogen, Phosphorous and Magnesium deficiencies.

Assessment criteria:

- 3.1 The colour change on plant leaves, and/or fruit/ plant abnormalities, compared with healthy plants is recognised.
- 3.2 The position of the discoloured leaves is described.

4. Demonstrate a basic understanding of soil properties.

Range: Soil properties refer to the texture and structure, water holding and drainage capacity, and soil composition in terms of silt/clay/gravel ratios.

Assessment criteria:

- 4.1. Soil structure and texture are identified using simple tests/ observations
- 4.2 Composition of soil based on simple tests and observations is described
- 4.2. The advantages and disadvantages of different soil types in a specific context are described

5. Apply soil preparation tasks that require hand-held tools and low-technology ploughing implements.

Range: Soil preparation refers to low-technology plough implements and hand-held tools such as picks, shovels, forks and/or animal drawn tools for soil preparation. Soil preparation refers to the application of tools to prepare a piece of ground to achieve appropriate tilth, texture and friability.

Assessment criteria:

- 5.1. The advantages and disadvantages of effective and ineffective soil preparation are described, as well as their effects on plant roots.
- 5.2. The function and correct use of simple ploughing tools in soil preparation are explained and demonstrated.

Unit Standard: Plant the crop under supervision

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: Control weeds, pests and plant diseases in an agricultural field using chemicals

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.

Tree planting

The duration of this course was 5 days, starting Monday, 17 October 2005 and ended on Friday, 21 October 2005.

The following course content was delivered:

Unit Standard: Tree planting

Specific Outcomes and Assessment Criteria:

1. Understanding and applying the preparatory hints before planting the trees.
2. Inspection and handling of plants before and during planting.
3. Understand and apply correct propagation methods or procedures.
4. Management of trees after planting.

Conclusion

The Umnga Farmers Group through this report believes to have reached all the outcomes of the contract between Ikamva and Umnga as stipulated. We sincerely hope that Ikamva 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.

J. Stassen

CEO

UMNGA FARMERS TRAINING GROUP

DATE