No. 1040 **10 September 2004**

Established in terms of Act 58 of 1995

SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Primary Agriculture

Registered by NSB 01, Agriculture and Nature Conservation, publishes the following qualifications and unit standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the qualification and unit standards upon which qualifications are based. The full qualification and unit standards can be accessed via the SAQA web site at **www.saqa.org.za**. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, Hatfield Forum West , 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the unit standards should reach SAQA at the address ***below and no later than 4 October 2004.*** All correspondence should be marked **Standards Setting – SGB for Primary Agriculture** and addressed to

The Director: Standards Setting and Development
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Attention: Mr. D Mphuthing
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SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Certificate: Animal Production

SAQA QUAL ID	QUALIFICATION TITLE	
48970	National Certificate: Animal Production	
SGB NAME	SGB Primary Agriculture	
ABET BAND	PROVIDER NAME	
Undefined		
QUALIFICATION CODE	QUAL TYPE	SUBFIELD
AGR-5-National Diploma	National Certificate	Primary Agriculture
MINIMUM CREDITS	NQF LEVEL	QUALIFICATION CLASS
120	Level 1	Regular-Unit Stds Based
SAQA DECISION NUMBER	REGISTRATION START DATE	REGISTRATION END DATE

PURPOSE OF THE QUALIFICATION

The purpose of this qualification is to allow new entrants access to the Primary Agricultural Sector with specific reference to Animal Production. The contexualised purpose and usage of the qualification is as follows:

> A learner assessed against this qualification will have the necessary competence to participate as part of a working team, performing the agricultural processes as applicable to animal production in a closely defined context and under close supervision.

> Competency will be gained in any of the specialized sub-fields of Animal Production as specified under Areas Of Specialization (i.e. Small stock, Large Stock, Dairy Production, Aqua Culture, etc.)

> The learner will be able to take responsible decisions within a limited range based on a sound understanding of the basic principles of agri-business and good agricultural practices, in meeting the set objectives and targets within the broader farm plan which includes the economical application of general resources, agricultural production and technical knowledge and skills, all in an Animal Production context.

> The Learner will be able to carry out repetitive procedures in a predictable environment and will be able to adhere to the relevant safety, quality, hygiene and technical standards as applicable within the industry.

> In addition to the above, the learner will be well positioned to extend learning and practice into other sub-fields such as Plant Production and Mixed Farming, since such efforts will only require additional learning within the elective scope of other qualifications at this level.

> The learner will be well positioned to progress towards higher levels of Management and Technical production practices as defined by qualifications at the next level.

> Learners will be enabled to actively participate in the Primary Agricultural Sector through the production of quality agricultural products, enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

> Finally, this qualification will allow qualifying learners to become economically active in farming practices that will have a direct impact on Local Economic Development through the production of food, the improvement of household food security and access to mainstream agriculture.

Rationale:

This qualification provides learners the opportunity to gain a qualification in Animal Production. The range of typical learners that will enter this qualification will vary and includes:

> New entrants in farming who wish to progress to the level of Junior Labourer within farming operations in Animal Husbandry;
> New entrants that wishes to enter the sector as farmers;
> Learners in possession of different levels of practical experience in farming operations, which will be assessed and RPL'ed;
> Possible candidates for promotion identified by the community as leaders.
> Learners may come from both genders.

The learner will engage in supervision and operational activities relevant to Animal Production.

Requests and expressions of need for this qualification, coming from the broad, but also specific farming communities (Animal Husbandry) forms the basis for the development of this qualification.

This qualification will form the basis for learners to extend their learning into more specialised areas of animal production and provides the basis of the establishment of sustainable farming operations through the inclusion of a whide spectrum of competencies required by farmers in South Africa. Whilst technical production orientated competencies are ensured, other aspects such as agri-business and good agricultural practices are included in the range of competencies required by farmers in order to enable them to strive towards agricultural management standards and practices at higher levels.

Competent qualifying learners in this qualification will participate in the production quality agricultural products in Animal Husbandry whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

RECOGNIZE PREVIOUS LEARNING?

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LEARNING ASSUMED TO BE IN PLACE

It is assumed that a learner entering a programme leading to this qualification has achieved numeracy, literacy and communication equivalent to ABET 3.

Recognition of Prior Learning:

This qualification may be achieved in part or in whole through the recognition of prior learning. Credit will be given to learning, which has already been acquired, through the appropriate process of assessment.

For example:

> Learners who have acquired skills and competencies in this qualification through for instance experience in the industry will be assessed against the unit standards the qualification comprises of prior to entering learning. Credits will be allocated to those unit standards and exit level outcomes in which the learner is found competent. The outstanding unit standards will then be sequenced according to an appropriate learning programme.

> Should a new entrant into the industry wish to enter this learning programme, recognition will be given to al appropriate learning acquired through the schooling system.

> In terms of fundamental unit standards, competencies could be acquired through life experience.

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to take.

QUALIFICATION RULES

Fundamental
> A minimum of 42 credits should be achieved in fundamental. All unit standards listed are compulsory.

Core
> 59 credits should be achieved in core. All unit standards listed are compulsory.

Elective
> A minimum of 15 credits should be achieved in Elective, depending on the context of application of the unit standards.

EXIT LEVEL OUTCOMES

Exit Level Outcomes are divided into five categories of competencies, namely:

> Fundamental Competencies
> Agri-business
> Agricultural Practices
> Animal Production
> Plant Production (This component has been included to ensure that Learners at this level is exposed to a small component of plant production)

Fundamental Competencies:

1. Apply various communication skills within the agricultural environment.
2. Apply mathematical calculations within the agricultural environment.
3. Safely and accurately collect routine agricultural data by applying prescribed methods of data collection for agricultural purposes.
4. Recognise the basic concepts of sustainable farming practices and be able to perform basic tasks in applying sustainable farming practices.

Agri-business:

5. Keep record and report appropriately on inputs and resources in an agricultural environment.
6. Describe the production process in an agricultural environment.
7. Describe the importance of marketing within the agricultural production process.
8. Keep an accurate and current simple financial record keeping system in an agri-business environment.
9. Apply the basic principles of human resources management in an agricultural environment.
10. Understand the basic principles of enterprise selection and production.

Agricultural Practices:

11. Apply sound food safety principles by identifying risk factors in food contamination and applying preventative measures to ensure product safety.
12. Observe and maintain basic water quality by working with the technical systems that control quality factors in water.
13. Incorporate an understanding of the role of natural resource management in sustainable agricultural practices into existing farming activities by applying basic practices to conserve the environment, including natural resources.
14. Carry out basic physical farm layout tasks including construction of rainwater harvesting and soil conservation structures.
15. Operate, care for and store basic tools and equipment in a safe and responsible manner.

Animal Production:

16. Visually evaluate animals externally with respect to their basic anatomical characteristics and morphological systems.
17. Supply feeding by following the correct on-farm animal feeding practices.
18. Observe and report on breeding behaviour of farm animals.
19. Demonstrate an understanding of and identify the readiness of animal products for harvesting.
20. Observe the health status of the animals and handle animals correctly.

Plant Production:

21. Produce crop whilst demonstrating an understanding of the physical and biological environment and its relationship to sustainable production.

ASSOCIATED ASSESSMENT CRITERIA

Fundamental Competencies:

1.
> Oral reports are made or data is entered on pre-printed forms or screens.
> Instructions (including challenging, inappropriate or incorrect instructions) are received, evaluated,

clarified and acted on.
> Workplace language, e.g. special purpose gestures and terminology to describe conditions, events, problems and actions is used.
> Meetings (describe conditions, state own opinions) are participated in.
> Information is collected from a variety of sources by recognising / reading / and/or using sensory cues.
> Information (collected from instruments, gauges, outputs, incidents, operations) is organised, summarised and responded to.
> Conditions or states are determined by measuring (i.e. temperature, size, mass, colour).

2.
> Numbers are used to count and measure.
> A calculator is used to add, subtract, divide or multiply.
> Simple fractions and decimals are read and written.
> Simple rations / percentages are applied as part of an instruction.
> Proper use is made of number sequence, i.e. batch numbers.
> Shapes are recognised.
> Money is calculated in Rands and cents (related to pay, deductions, price, etc.)
> Business related application are applied.
> Underpinning natural science principles are applied.

3.
> Different elementary data collection methods are applied whilst agricultural data is collected.
> Collected agricultural data is recorded correctly and accurately.
> Data collection equipment is used and maintained.
> Appropriate health, safety and hygiene standards are maintained throughout the data collection process.

4.
> Basic environmental patterns and processes such as soils, climate, water sources, topography, ecosystems pertaining to local conditions only are recognized.
> An elementary comprehension of farming systems and design such as internal and external inputs; local, regional and export markets; diverse income sources; needs and aspirations of people is demonstrated
> Measurable indicators of sustainability such as social, economic and ecological are identified and described.

Agri-business:

5.
> Agricultural inputs are received.
> Storage information on inputs is sourced.
> Stock levels are maintained.
> Accurate records are kept.
> Safety regulations are observed.

6.
> The concept of production is explained.
> The basic functions within the production process are explained.
> The transformation/conversion process is explained.

7.
> The marketing concept is explained.
> The principles of supply and demand are explained.
> The components and importance of marketing mix are explained.

8.
> Capital investment is explained.
> Flow of money is explained.
> Flow of cost is explained.
> The concept of profit and loss is explained.
> The basic components of basic financial record keeping system are explained.

9.
> Explain HR management rules and procedures applicable to the immediate work environment.
> Adhere to relevant LR legislation.

> Identify the different types and purposes of contracts and agreements.
> Describe and apply health and safety rules and practices applicable to the workplace.

10.
> The natural resources required for the selection of an agricultural enterprise are identified, recognized and described.
> The infrastructural requirements for the selection of the relevant enterprise are determined and described.
> All livestock or crops on the farm are identified.
> The relation between the natural resources, infrastructure, the choice of stock or crop and production cycle is explained.

Agricultural Practices:

11.
> Good personal hygiene practices are applied.
> Preventative measures against food contamination are applied.
> Warning signs regarding product safety (where applicable) are adhered to.

12.
> Water is sampled correctly and quality observed.
> Water quality is recorded and reported on.
> Minor maintenance tasks are performed on water quality technical systems.

13.
> The impact of farming operations and practices on the environment is explained.
> Environmentally friendly methods of disposal and/or re-use of farm and domestically generated waste and pollutants are applied.
> Biodiversity is maintained and increased.
> Invasive alien plant species and noxious weeds are cleared.
> On farm fire breaks and/or fire guards are established.

14.
> Veld, planted pasture and arable land are recognized.
> Soil physical characteristics are related to land capability.
> A swale (level contour bund), using a simple water level is constructed.
> Swales and soil erosion prevention structures are maintained.

15.
> Tools and equipment that had been selected from a range of tools, are appropriate to the agricultural task.
> Problems related to the use of tools and equipment are recognized and appropriate action is taken.
> Routine maintenance tasks are performed in a safe manner.
> Agricultural equipment is cleaned and stored correctly.

Animal Production:

16.
> The class, species and type of animal is identified and named.
> The components and the externally visible divisions or parts of an animal are named.
> Gross abnormalities therein within the external parts of the animal are identified.
> The animal's life cycle is identified and described.

17.
> The quality of animal feed is maintained and reported on.
> Feed levels are observed and controlled.
> Appropriate feed type and quantity is selected.
> Correct feeding practices are applied.
> Abnormal feeding behaviour is identified and reported on.

18.
> Normal mating behaviour is recognized.
> Abnormal mating behaviour in breeding animals are observed and reported.
> Successful mating amongst breeding animals is identified and reported on.

> Post breeding animal behaviour is observed.

19.
> The origin and purpose of harvesting and use of animal products is explained.
> The indicators to determine the readiness for the harvesting of animal products are described.
> The potential of animal products that can be harvested is described.
> Correct techniques and procedures are applied.

20.
> Behaviour and physical attributes are observed, recorded and reported.
> Abnormalities in animal behaviour are observed and reported.
> Animals are correctly, safely and successfully moved to and into a holding facility.
> Animals are correctly and safely restrained in a restraint facility.

NOTE: Assessment should be specific to the area of operation (i.e. Either large livestock, small livestock, pigs, poultry, etc.)

Plant Production:

21.
> Soil as a factor in crop production is explained.
> Climatic factors influencing crop production and their practical implications are identified and described.
> The importance of water as a factor in crop production.
> The influence of topography on crop production is identified, described and explained.
> Biological organisms as a factor influencing crop production is identified, described and explained.
> The effects of crop production practices on the sustainability of the environment are observed and assessed.

Integrated Assessment:

Integrated assessment at the level of the qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is relevant and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

Generic nature of the unit standards and the context of assessment:

Because of the diverse nature of the primary agricultural sector, a generic approach to developing the unit standards has been adopted. This resulted in generic unit standards which should be contextualised within a specific area of operation, a specific agricultural commodity or specific agricultural system. Assessment therefore, should not be divorced from the context of application. All assessment tools, such as guides as well as the interpretation of unit standards and specifically range statements, should be contextualised within a specific agricultural commodity and/or system.

INTERNATIONAL COMPARABILITY

In the case of the primary agriculture context it is difficult to compare the qualification and unit standards against similar international qualifications due to the vast differences in levels of mechanization and literacy of farm operators. It should also be noted that climatic and market conditions differ considerably between South Africa and other countries and the variety in commodities is therefore significant.

This qualification and associated unit standards have been evaluated against comparable qualifications and unit standards of the following Qualifications Authorities:

> Australian AQF
> New Zealand NQF, and
> British NVQ's.

During this comparison the following was found:

Australian AQF: This qualification is comparable to an AQF Certificate I in Agriculture in an animal production context. Packaging of the AQF qualification reflects the need for sector specific content of a qualification to remain flexible, a quality that has also been captured in this qualification. The AQF qualification requires the inclusion of Units of Competency, similar to the unit standards reflected in the South African qualification. It should however be noted that the qualification of the AQF contains considerably more Elective type Units of Competency since these units have been developed for specific sub-fields. In the case of this qualification a more generic approach have been followed, allowing contexualisation of fewer unit standards across a wide range of sub-fields. It could be concluded that there are numerous similarities between the Units of Competency and the Unit Standards reflected in the SA qualification covering similar sub-fields.

New Zealand NQF: This qualification is comparable to a NZNQF National Certificate in Agriculture (Level 1) in an animal production context. It should be noted that the NZQF qualification has been developed for a specific sub-field of specialization whilst a more generic approach is taken in this qualification allowing for contexualisation of the qualification across a wider range of sub-fields. In the NZQF qualification focus is given to local conditions, practices and approaches to agriculture whilst this qualification focuses on agriculture within a South African context.

British NVQ: The level of this qualification is too low to be compared with any Agricultural Qualification of the NVQ since levels of literacy and learning assumed to be in place is considerably higher than in South Africa.

Furthermore, input to the development of this qualification has been compared against international standards and qualifications and is evidenced in the following:

> Qualifications and competency units as defined by the New South Wales Department of Education and Training.

> The wide and narrow consultative process as well as the contributions made by role players from Universities and Technicons whom have a specific requirement for internationally comparable qualifications.

ARTICULATION OPTIONS

A learner will be able to progress horizontally from one category to another, namely small stock, large stock or pig production, etc. (Please refer to the list mentioned under "Areas of Specialisation") He/she will be able to do this without re-doing the whole qualification, but by only completing the necessary elective unit standards.

Furthermore, the learner will be able to progress horizontally to the following qualifications:
> National Certificate in Plant Production, NQF 1;
> National Certificate in Mixed Farming Systems, NQF 1.

This qualification allows access to the agricultural sector (refer to the SGB's brief and matrix) and gives access to the relevant agricultural qualification at NQF 2, namenly:
> National Certificate in Animal Production, NQF 2.

In terms of competencies, the learner will progress from farming operation skills to basic managerial skills to managerial skills. The scope of practice will also increase.

The learner will be able to articulate with other occupations within the agricultural pharmaceutical operations such as laboratory assistant, assistance in the

marketing and selling of agricultural pharmaceutical products and fertilisers. The learner will also be able to move to the secondary agricultural field.

MODERATION OPTIONS

> Anyone assessing a learner against this qualification must be registered as an assessor with the relevant ETQA.

> Any institution offering learning that will enable achievement of this qualification, or assessment against this qualification must be accredited as a provider with the relevant ETQA.

> Moderation of assessment will be overseen by the relevant ETQA according to agreed ETQA procedures.

Therefore anyone wishing to be assessed against this qualification may apply to be assessed by any assessment agency, assessor or provider institution which is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Assessors need:

> A minimum of 2 (two) years' practical experience in animal production practices relevant to an area of specialisation mentioned below;

> Practical experience in the specific agricultural commodity (which might include the list of "Areas of Specialisation" mentioned below or a specific commodity such as abelone, fish, ostriches, etc.) and/or system such as permaculture, organic production, etc.

> Technical competence in animal production practices at, at least one NQF level above the assessee.

NOTES

Areas Of Specialisation:

Areas of specialisation of the qualification in Animal Husbandry include but are not limited to:
> Small stock production,
> Large stock production,
> Dairy production,
> Pig production,
> Poultry production,
> Game,
> Aqua / mari culture,
> Commercial insects
> Animal fibres harvesting,
> Bee keeping,
> Natural resources harvesting
> Organic production,
> Perma-culture production,
> Eco/Agri Tourism,
> Agro Chemicals,
> Horse Breeding,
> Etc.

UNIT STANDARDS
(Note: A blank space after this line means that tne qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	LEVEL	CREDITS	STATUS
Core	116158 Apply basic agricultural enterprise selection principles	Level 1	2	Draft - Prep for P Comment
Core	116159 Identify the need for capital and understand the need for the recording of the income and different costs in an agri-business	Level 1	2	Draft - Prep for P Comment
Core	116160 Apply basic human resource management principles and practices applicable in an agricultural environment	Level 1	2	Draft - Prep for P Comment
Core	116163 Handle inputs and stock in agri-business	Level 1	2	Draft - Prep for P Comment

Core	116164 Demonstrate an understanding of the importance of marketing	Level 1	2	Draft - Prep for P Comment
Core	116165 Define production and understand the basic activities of production / conversion in the agri-business environment	Level 1	2	Draft - Prep for P Comment
Core	116166 Apply basic food safety practices	Level 1	1	Draft - Prep for P Comment
Core	116167 Select, use and care for hand tools and basic equipment and infrastructure	Level 1	4	Draft - Prep for P Comment
Core	116168 Maintain basic water quality	Level 1	1	Draft - Prep for P Comment
Core	116169 Understand how sustainable farming systems conserve natural resources	Level 1	4	Draft - Prep for P Comment
Core	116172 Apply elementary farm layout and infrastructure	Level 1	2	Draft - Prep for P Comment
Core	116173 Evaluate basic external animal anatomy and morphology	Level 1	5	Draft - Prep for P Comment
Core	116174 Recognise basic breeding behaviour of farm animals	Level 1	6	Draft - Prep for P Comment
Core	116190 Recognise defensive behavior in animals	Level 1	4	Draft - Prep for P Comment
Core	116191 Apply standard animal feeding procedures	Level 1	6	Draft - Prep for P Comment
Core	116197 Observe and handle animals	Level 1	5	Draft - Prep for P Comment
Core	116198 Harvest animal products	Level 1	5	Draft - Prep for P Comment
Elective	116149 Understand organic market requirements	Level 1	3	Draft - Prep for P Comment
Elective	116153 Apply basic pig husbandry practices	Level 1	5	Draft - Prep for P Comment
Elective	116161 Sort and handle animal fibre	Level 1	5	Draft - Prep for P Comment
Elective	116207 Apply basic dairy production practices	Level 1	6	Draft - Prep for P Comment
Elective	116208 Understand the basic practices of beekeeping and the benefit thereof for agriculture	Level 1	1	Draft - Prep for P Comment
Elective	116209 Demonstrate an understanding of agri/ecotourism as a system at micro level	Level 1	5	Draft - Prep for P Comment
Elective	116638 Mix and deliver feedlot feed to bunker	Level 2	4	Draft - Prep for P Comment
Elective	116643 Administer livestock processing treatments	Level 2	8	Draft - Prep for P Comment
Fundamental	7447 Working with numbers in various contexts	Level 1	6	Reregistered
Fundamental	7450 Work with measurement in a variety of contexts	Level 1	2	Reregistered
Fundamental	7451 Collect, analyse, use and communicate numerical data	Level 1	2	Reregistered
Fundamental	7452 Describe, represent and interpret mathematical models in different contexts	Level 1	6	Reregistered
Fundamental	12462 Engage in a range of speaking and listening interactions for a variety of purposes	Level 1	6	Registered
Fundamental	12469 Read and respond to a range of text types	Level 1	6	Registered
Fundamental	12470 Write for a variety of different purposes	Level 1	6	Registered
Fundamental	12471 Explore and use a variety of strategies to learn (revised)	Level 1	5	Registered
Fundamental	13355 Demonstrate an understanding of the physical and biological environment and its relationship to sustainable crop production	Level 1	4	Registered
Fundamental	14084 Demonstrate an understanding of and use the numbering system	Level 1	1	Registered
Fundamental	116156 Collect agricultural data	Level 1	2	Draft - Prep for P Comment
Fundamental	116157 Demonstrate an understanding of the basic concepts of sustainable farming systems	Level 1	4	Draft - Prep for P Comment

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Certificate: Mixed Farming Systems

SAQA QUAL ID	*QUALIFICATION TITLE*	
48971	National Certificate: Mixed Farming Systems	
SGB NAME	SGB Primary Agriculture	
ABET BAND	*PROVIDER NAME*	
Undefined		
QUALIFICATION CODE	*QUAL TYPE*	*SUBFIELD*
AGR-1-National Certificate	National Certificate	Primary Agriculture
MINIMUM CREDITS	*NQF LEVEL*	*QUALIFICATION CLASS*
120	Level 1	Regular-Unit Stds Based
SAQA DECISION NUMBER	*REGISTRATION START DATE*	*REGISTRATION END DATE*

PURPOSE OF THE QUALIFICATION

The purpose of this qualification is to allow new entrants access to the Primary Agricultural Sector with specific reference to Mixed Farming Systems. The contexualised purpose and usage of the qualification is as follows:

> A learner assessed against this qualification will have the necessary competence to participate as part of a working team, performing the agricultural processes as applicable to Plant and Animal Production as required for a mixed farming system in a closely defined context and under close supervision.

> Competency will be gained in a combination of the sub-fields of Plant and Animal Production as specified under Areas Of Specialization (i.e. Small Stock, Large Stock as well as Vegetables, Fruit Production, Hydroponics, etc.)

> The learner will be able to take responsible decisions within a limited range based on a sound understanding of the basic principles of agri-business and good agricultural practices, in meeting the set objectives and targets within the broader farm plan which includes the economical application of general resources, agricultural production and technical knowledge and skills, all in a Mixed Farming context.

> The Learner will be able to carry out repetitive procedures in a predictable environment and will be able to adhere to the relevant safety, quality, hygiene and technical standards as applicable within the industry.

> In addition to the above, the learner will be well positioned to extend learning and practice into other sub-fields such as Plant Production and Animal Production, since such efforts will only require additional learning within the elective scope of other qualifications at this level.

> The learner will be well positioned to progress towards higher levels of Management and Technical production practices as defined by qualifications at the next level.

> Learners will be enabled to actively participate in the Primary Agricultural Sector through the production of quality agricultural products, enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

> Finally, this qualification will allow qualifying learners to become economically active in farming practices that will have a direct impact on Local Economic Development through the production of food, the improvement of household food security and access to mainstream agriculture.

Rationale:

This qualification provides learners the opportunity to gain a qualification in Mixed Farming Systems (Plant-

and Animal Production). The range of typical learners that will enter this qualification will vary and includes:

> New entrants in farming who wish to progress to the level of Junior Labourer within farming operations in Mixed Farming Systems;
> New entrants that wishes to enter the sector as farmers;
> Learners in possession of different levels of practical experience in farming operations, which will be assessed and RPL'ed;
> Possible candidates for promotion identified by the community as leaders.
> Learners may come from both genders.

The learner will engage in supervision and operational activities relevant to Plant Production.

Requests and expressions of need for this qualification, coming from the broad, but also specific farming communities forms the basis for the development of this qualification.

This qualification will form the basis for learners to extend their learning into more specialised areas of plant- and animal production and provides the basis of the establishment of sustainable farming operations through the inclusion of a wide spectrum of competencies required by farmers in South Africa. Whilst technical production orientated competencies are ensured, other aspects such as agri-business and good agricultural practices are included in the range of competencies required by farmers in order to enable them to strive towards agricultural management standards and practices at higher levels.

Competent qualifying learners in this qualification will oversee quality agricultural products in mixed farming systems whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

It is assumed that a learner entering a programme leading to this qualification has achieved numeracy, literacy and communication equivalent to ABET 3.

Recognition Of Prior Learning:

This qualification may be achieved in part or in whole through the recognition of prior learning. Credit will be given to learning, which has already been acquired, through the appropriate process of assessment.

For example:

> Learners who have acquired skills and competencies in this qualification through for instance experience in the industry will be assessed against the unit standards the qualification comprises of prior to entering learning. Credits will be allocated to those unit standards and exit level outcomes in which the learner is found competent. The outstanding unit standards will then be sequenced according to an appropriate learning programme.

> Should a new entrant into the industry wish to enter this learning programme, recognition will be given to al appropriate learning acquired through the schooling system.

> In terms of fundamental unit standards, competencies could be acquired through life experience.

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to take.

QUALIFICATION RULES

Fundamental
> A minimum of 46 credits should be achieved in fundamental. All unit standards listed are compulsory.

Core
> 64 credits should be achieved in core. All unit standards listed are compulsory.

Elective
> A minimum of 10 credits should be achieved in Elective, depending on the context of application of the unit standards.

EXIT LEVEL OUTCOMES

Exit Level Outcomes are divided into five categories of competencies, namely:

> Fundamental Competencies
> Agri-business
> Good Agricultural Practices
> Plant Production; and
> Animal Production

Fundamental Competencies:

1. Apply various communication skills within the agricultural environment.
2. Apply mathematical calculations within the agricultural environment.
3. Safely and accurately collect routine agricultural data by applying prescribed methods of data collection for agricultural purposes.
4. Recognise the basic concepts of sustainable farming practices and be able to perform basic tasks in applying sustainable farming practices

Agri-business:

5. Keep record and report appropriately on inputs and resources in an agricultural environment.
6. Describe the production process in an agricultural environment.
7. Describe the importance of marketing within the agricultural production process.
8. Keep an accurate and current simple financial record keeping system in an agri-business environment.
9. Apply the basic principles of human resources management in an agricultural environment.
10. Understand the basic principles of enterprise selection and production.

Good Agricultural Practices:

11. Apply sound food safety principles by identifying risk factors in food contamination and applying preventative measures to ensure product safety.
12. Observe and maintain basic water quality by working with the technical systems that control quality factors in water.
13. Incorporate an understanding of the role of natural resource management in sustainable agricultural practices into existing farming activities by applying basic practices to conserve the environment, including natural resources,
14. Carry out basic physical farm layout tasks including construction of rainwater harvesting and soil conservation structures in a small farm or garden environment
15. Operate, care for and store basic tools and equipment in a safe and responsible manner.

Plant Production:

16. Apply soil nutrient preparations in a safe, effective and responsible manner.
17. Harvest agricultural crops by using basic harvesting tools.
18. Plant a range of crops according to correct placing, spacing and depth of the plant material.
19. Identify insects and explain the damage it can cause to crops.
20. Manipulate plants using pre-determined methods and techniques.

Animal Production:

21. Supply feeding by following the correct on-farm animal feeding practices.
22. Demonstrate an understanding of and identify the readiness of animal products for harvesting.
23. Observe the health status of the animals and will handle animals correctly.

ASSOCIATED ASSESSMENT CRITERIA

Fundamental Competencies:

1.
> Oral reports are made or data is entered on pre-printed forms or screens.
> Instructions (including challenging, inappropriate or incorrect instructions) are received, evaluated, clarified and acted on.
> Workplace language, e.g. special purpose gestures and terminology to describe conditions, events,

problems and actions is used.
> Meetings (describe conditions, state own opinions) are participated in.
> Information is collected from a variety of sources by recognising / reading / and/or using sensory cues.
> Information (collected from instruments, gauges, outputs, incidents, operations) is organised, summarised and responded to.
> Conditions or states are determined by measuring (i.e. temperature, size, mass, colour).

2.
> Numbers are used to count and measure.
> A calculator is used to add, subtract, divide or multiply.
> Simple fractions and decimals are read and written.
> Simple rations / percentages are applied as part of an instruction.
> Proper use is made of number sequence, i.e. batch numbers.
> Shapes are recognised.
> Money is calculated in Rands and cents (related to pay, deductions, price, etc.)
> Business related application are applied.
> Underpinning natural science principles are applied.

3.
> Different elementary data collection methods are applied whilst agricultural data is collected.
> Collected agricultural data is recorded correctly and accurately.
> Data collection equipment is used and maintained.
> Appropriate health, safety and hygiene standards are maintained throughout the data collection process.

4.
> Basic environmental patterns and processes such as soils, climate, water sources, topography, ecosystems pertaining to local conditions only are recognized.
> An elementary comprehension of farming systems and design such as internal and external inputs; local, regional and export markets; diverse income sources; needs and aspirations of people is demonstrated.
> Measurable indicators of sustainability such as social, economic and ecological are identified and described.

Agri-business:

5.
> Agricultural inputs are received.
> Storage information on inputs is sourced.
> Stock levels are maintained.
> Accurate records are kept.
> Safety regulations are observed.

6.
> The concept of production is explained.
> The basic functions within the production process are explained.
> The transformation/conversion process is explained.

7.
> The marketing concept is explained.
> The principles of supply and demand are explained.
> The components and importance of marketing mix are explained.

8.
> Capital investment is explained.
> Flow of money is explained.
> Flow of cost is explained.
> The concept of profit and loss is explained.
> The basic components of basic financial record keeping system are explained.

9.
> Explain HR management rules and procedures applicable to the immediate work environment.
> Adhere to relevant LR legislation.
> Identify the different types and purposes of contracts and agreements.
> Describe and apply health and safety rules and practices applicable to the workplace.

10.
> The natural resources required for the selection of an agricultural enterprise are identified, recognized and described.
> The infrastructural requirements for the selection of the relevant enterprise are determined and described.
> All livestock or crops on the farm are identified.
> The relation between the natural resources, infrastructure, the choice of stock or crop and production cycle is explained.

Good Agricultural Practices:

11.
> Good personal hygiene practices are applied.
> Preventative measures against food contamination are applied.
> Warning signs regarding product safety (where applicable) are adhered to.

12.
> Water is sampled correctly and quality observed.
> Water quality is recorded and reported on.
> Minor maintenance tasks are performed on water quality technical systems.

13.
> The impact of farming operations and practices on the environment is explained.
> Environmentally friendly methods of disposal and/or re-use of farm and domestically generated waste and pollutants are applied.
> Biodiversity is maintained and increased.
> Invasive alien plant species and noxious weeds are cleared.
> On farm fire breaks and/or fire guards are established.

14.
> Veld, planted pasture and arable land are recognized.
> Soil physical characteristics are related to land capability.
> A swale (level contour bund), using a simple water level is constructed.
> Swales and soil erosion prevention structures are maintained.

15.
> Tools and equipment that had been selected from a range of tools, are appropriate to the agricultural task.
> Problems related to the use of tools and equipment are recognized and appropriate action is taken.
> Routine maintenance tasks are performed in a safe manner.
> Agricultural equipment is cleaned and stored correctly.

Plant Production:

16.
> Identify and apply nutrients correctly by using the appropriate application techniques.
> Basic symptoms of nutritional deficiencies are identified.
> Soil properties are explained.

17.
> Tools, appropriate to the harvesting method and crop, are selected and the correct usage is demonstrated.
> Crop is sampled for maturity indexing.
> Harvesting procedures are applied.
> Health, hygiene and safety measures are adhered to and applied.

18.
> Soil or growth medium is prepared and irrigated according to the plant/crop requirements.
> Planting material is handled correctly for the successful establishment.
> The effects of the environment on the specific crop are explained.
> Correct placing, spacing and depth of the plant material is determined.

19.
> Insects and other classes of animals are distinguished.
> The basic anatomy of an insect is described.
> Crop damaging appendages are located and the damages to plants are explained.
> The life cycle of an insect is explained.
> Distinguish between harmful and useful insects and pests.

20.
> Frameworks are developed according to the requirements of the crop.
> Pruning, training and other manipulation techniques are applied.

NOTE: Assessment should be specific to the area of operation (i.e. Either horticulture or agronomy including but not limited to arable and/or dry land production).

Animal Production:

21.
> The quality of animal feed is maintained and reported on.
> Feed levels are observed and controlled.
> Appropriate feed type and quantity is selected.
> Correct feeding practices are applied.
> Abnormal feeding behaviour is identified and reported on.

22.
> The origin and purpose of harvesting and use of animal products is explained.
> The indicators to determine the readiness for the harvesting of animal products are described.
> The potential of animal products that can be harvested is described.
> Correct techniques and procedures are applied.

23.
> Behaviour and physical attributes are observed, recorded and reported.
> Abnormalities in animal behaviour are observed and reported.
> Animals are correctly, safely and successfully moved to and into a holding facility.
> Animals are correctly and safely restrained in a restraint facility.

NOTE: Assessment should be specific to the area of operation (i.e. Either large livestock, small livestock, pigs, poultry, etc.)

Integrated Assessment:

Integrated assessment at the level of the qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is relevant and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

Generic Nature Of The Unit Standards And The Context Of Assessment:

Because of the diverse nature of the primary agricultural sector, a generic approach to developing the unit standards has been adopted. This resulted in generic unit standards which should be contextualised within a specific area of operation, a specific agricultural commodity or specific agricultural system. Assessment therefore, should not be divorced from the context of application. All assessment tools, such as guides as well as the interpretation of unit standards and specifically range statements, should be contextualised within a specific agricultural commodity and/or system.

INTERNATIONAL COMPARABILITY

In the case of the primary agriculture context it is difficult to compare the qualification and unit standards against similar international qualifications due to the vast differences in levels of mechanization and literacy of farm operators. It should also be noted that climatic and market conditions differ considerably between South Africa and other countries and the variety in commodities is therefore significant.

It should also be noted that this qualification is unique in the sense that it provides for the development of learners in both Plant- and Animal Production.

This qualification and associated unit standards have been evaluated against comparable qualifications and unit standards of the following Qualifications Authorities:

> Australian AQF
> New Zealand NQF, and
> British NVQ's.

During this comparison the following was found:

Australian AQF: Although no specific qualification of this nature exists within the AQF, this qualification is partly comparable to the AQF Certificates I in Agriculture in both a plant- and animal production context.

New Zealand NQF: Although no specific qualification of this nature exists within the NZQF, this qualification is partly comparable to the NZNQF National Certificates in Agriculture (Level 1) in both a plant- and animal production context.

British NVQ: The level of this qualification is too low to be compared with any Agricultural Qualification of the NVQ since levels of literacy and learning assumed to be in place is considerably higher than in South Africa.

Furthermore, input to the development of this qualification has been compared against international standards and qualifications and is evidenced in the following:

> Qualifications and competency units as defined by the New South Wales Department of Education and Training.

> The wide and narrow consultative process as well as the contributions made by role players from Universities and Technicons whom have a specific requirement for internationally comparable qualifications.

ARTICULATION OPTIONS

A learner will be able to progress horizontally from one category to another, namely small stock, large stock or pig production, organic systems, perma culture systems, vegetable production, etc. (Please refer to the list mentioned under "Areas of Specialisation") He/she will be able to do this without re-doing the whole qualification, but by only completing the necessary elective unit standards.

Furthermore, the learner will be able to progress horizontally to the following qualifications:
> National Certificate in Animal Production, NQF 1;
> National Certificate in Plant Production, NQF 1.

This qualification allows access to the agricultural sector (refer to the SGB's brief and matrix) and gives access to the relevant agricultural qualification at NQF 2, namenly:
> National Certificate in Mixed Farming Systems, NQF 2.

In terms of competencies, the learner will progress from farming operation skills to basic managerial skills to managerial skills. The scope of practice will also increase.

The learner will be able to articulate with other occupations within the agricultural pharmaceutical operations such as laboratory assistant, assistance in the marketing and selling of agricultural pharmaceutical products and fertilisers.

The learner will also be able to move to the secondary agricultural field.

MODERATION OPTIONS

> Anyone assessing a learner against this qualification must be registered as an assessor with the relevant ETQA.

> Any institution offering learning that will enable achievement of this qualification, or assessment against this qualification must be accredited as a provider with the relevant ETQA.

> Moderation of assessment will be overseen by the relevant ETQA according to agreed ETQA procedures.

Therefore anyone wishing to be assessed against this qualification may apply to be assessed by any assessment agency, assessor or provider institution which is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Assessors need:

> A minimum of 2 (two) years' practical experience in mixed farming systems practices relevant to an area of specialisation mentioned below;

> Practical experience in the specific agricultural commodity (which might include the list of "Areas of Specialisation" mentioned below or a specific commodity such as abelone, fish, ostriches, agronomic crop, horticultural crop, vegetable production, etc.) and/or system such as permaculture, organic production, etc.

> Technical competence in mixed farming production practices at, at least one NQF level above the assessee.

NOTES

Areas Of Specialisation:

Areas of specialisation in Animal Husbandry include but are not limited to:
> Small stock production,
> Large stock production,
> Dairy production,
> Pig production,
> Poultry production,
> Game,
> Aqua / mari culture,
> Commercial insects
> Animal fibres harvesting,
> Bee keeping,
> Natural resources harvesting
> Organic production,
> Perma-culture production,
> Eco/Agri Tourism,
> Agro Chemicals,
> Horse Breeding,
> Etc.

Areas of specialisation in Plant Production include but are not limited to:
> Organic production,
> Hydroponic production,
> Perma-culture production,
> Agronomy,
> Horticulture,
> Natural resources harvesting.

UNIT STANDARDS

(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	LEVEL	CREDITS	STATUS
Core	116158 Apply basic agricultural enterprise selection principles	Level 1	2	Draft - Prep for P Comment
Core	116159 Identify the need for capital and understand the need for the recording of the income and different costs in an agri-business	Level 1	2	Draft - Prep for P Comment
Core	116160 Apply basic human resource management principles and practices applicable in an agricultural environment	Level 1	2	Draft - Prep for P Comment
Core	116163 Handle inputs and stock in agri-business	Level 1	2	Draft - Prep for P Comment
Core	116164 Demonstrate an understanding of the importance of marketing	Level 1	2	Draft - Prep for P Comment
Core	116165 Define production and understand the basic activities of production / conversion in the agri-business environment	Level 1	2	Draft - Prep for P Comment
Core	116166 Apply basic food safety practices	Level 1	1	Draft - Prep for P Comment
Core	116167 Select, use and care for hand tools and basic equipment and infrastructure	Level 1	4	Draft - Prep for P Comment
Core	116168 Maintain basic water quality	Level 1	1	Draft - Prep for P Comment
Core	116169 Understand how sustainable farming systems conserve natural resources	Level 1	4	Draft - Prep for P Comment
Core	116172 Apply elementary farm layout and infrastructure	Level 1	2	Draft - Prep for P Comment
Core	116191 Apply standard animal feeding procedures	Level 1	6	Draft - Prep for P Comment
Core	116197 Observe and handle animals	Level 1	5	Draft - Prep for P Comment
Core	116198 Harvest animal products	Level 1	5	Draft - Prep for P Comment
Core	116200 Plant the crop under supervision	Level 1	4	Draft - Prep for P Comment
Core	116201 Harvest agricultural crops	Level 1	5	Draft - Prep for P Comment
Core	116203 Manipulate plants	Level 1	5	Draft - Prep for P Comment
Core	116204 Recognise pests, diseases and weeds on crops	Level 1	5	Draft - Prep for P Comment
Core	116206 Fertilise soil and attend to basic plant nutrition	Level 1	5	Draft - Prep for P Comment
Elective	116148 Perform basic routine operations in a defined hydroponic context	Level 1	5	Draft - Prep for P Comment
Elective	116149 Understand organic market requirements	Level 1	3	Draft - Prep for P Comment
Elective	116150 Identify and explain permaculture principles	Level 1	8	Draft - Prep for P Comment
Elective	116153 Apply basic pig husbandry practices	Level 1	5	Draft - Prep for P Comment
Elective	116161 Sort and handle animal fibre	Level 1	5	Draft - Prep for P Comment
Elective	116207 Apply basic dairy production practices	Level 1	6	Draft - Prep for P Comment
Elective	116208 Understand the basic practices of beekeeping and the benefit thereof for agriculture	Level 1	1	Draft - Prep for P Comment
Elective	116209 Demonstrate an understanding of agri/ecotourism as a system at micro level	Level 1	5	Draft - Prep for P Comment
Elective	116638 Mix and deliver feedlot feed to bunker	Level 2	4	Draft - Prep for P Comment
Elective	116643 Administer livestock processing treatments	Level 2	8	Draft - Prep for P Comment
Fundamental	7447 Working with numbers in various contexts	Level 1	6	Reregistered
Fundamental	7450 Work with measurement in a variety of contexts	Level 1	2	Reregistered
Fundamental	7451 Collect, analyse, use and communicate numerical data	Level 1	2	Reregistered
Fundamental	7452 Describe, represent and interpret mathematical models in different contexts	Level 1	6	Reregistered

Fundamental	12462 Engage in a range of speaking and listening interactions for a variety of purposes	Level 1	6	Registered
Fundamental	12469 Read and respond to a range of text types	Level 1	6	Registered
Fundamental	12470 Write for a variety of different purposes	Level 1	6	Registered
Fundamental	12471 Explore and use a variety of strategies to learn (revised)	Level 1	5	Registered
Fundamental	14084 Demonstrate an understanding of and use the numbering system	Level 1	1	Registered
Fundamental	116156 Collect agricultural data	Level 1	2	Draft - Prep for P Comment
Fundamental	116157 Demonstrate an understanding of the basic concepts of sustainable farming systems	Level 1	4	Draft - Prep for P Comment

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Certificate: Plant Production

SAQA QUAL ID	*QUALIFICATION TITLE*	
48972	National Certificate: Plant Production	
SGB NAME	SGB Primary Agriculture	
ABET BAND	*PROVIDER NAME*	
Undefined		
QUALIFICATION CODE	*QUAL TYPE*	*SUBFIELD*
AGR-1-National Certificate	National Certificate	Primary Agriculture
MINIMUM CREDITS	*NQF LEVEL*	*QUALIFICATION CLASS*
120	Level 1	Regular-Unit Stds Based
SAQA DECISION NUMBER	*REGISTRATION START DATE*	*REGISTRATION END DATE*

PURPOSE OF THE QUALIFICATION

The purpose of this qualification is to allow new entrants access to the Primary Agricultural Sector with specific reference to Plant Production. The contexualised purpose and usage of the qualification is as follows:

> A learner assessed against this qualification will have the necessary competence to participate as part of a working team, performing the agricultural processes as applicable to Plant production in a closely defined context and under close supervision.

> Competency will be gained in any of the specialized sub-fields of Plant Production as specified under Areas Of Specialization (i.e. Vegetables, Fruit Production, Hydroponics, etc.)

> The learner will be able to take responsible decisions within a limited range based on a sound understanding of the basic principles of agri-business and good agricultural practices, in meeting the set objectives and targets within the broader farm plan which includes the economical application of general resources, agricultural production and technical knowledge and skills, all in an Plant Production context.

> The Learner will be able to carry out repetitive procedures in a predictable environment and will be able to adhere to the relevant safety, quality, hygiene and technical standards as applicable within the industry.

> In addition to the above, the learner will be well positioned to extend learning and practice into other sub-fields such as Plant Production and Mixed Farming, since such efforts will only require additional learning within the elective scope of other qualifications at this level.

> The learner will be well positioned to progress towards higher levels of Management and Technical production practices as defined by qualifications at the next level.

> Learners will be enabled to actively participate in the Primary Agricultural Sector through the production of quality agricultural products, enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

> Finally, this qualification will allow qualifying learners to become economically active in farming practices that will have a direct impact on Local Economic Development through the production of food, the improvement of household food security and access to mainstream agriculture.

Rationale:

This qualification provides learners the opportunity to gain a qualification in Plant Production. The range of typical learners that will enter this qualification will vary and includes:

> New entrants in farming who wish to progress to the level of Junior Labourer within farming operations in Plant Production;
> New entrants that wishes to enter the sector as farmers;
> Learners in possession of different levels of practical experience in farming operations, which will be assessed and RPL'ed;
> Possible candidates for promotion identified by the community as leaders.
> Learners may come from both genders.

The learner will engage in operational activities relevant to Plant Production.

Requests and expressions of need for this qualification, coming from the broad, but also specific farming communities (Plant Production) forms the basis for the development of this qualification.

This qualification will form the basis for learners to extend their learning into more specialised areas of plant production and provides the basis of the establishment of sustainable farming operations through the inclusion of a wide spectrum of competencies required by farmers in South Africa. Whilst technical production orientated competencies are ensured, other aspects such as agri-business and good agricultural practices are included in the range of competencies required by farmers in order to enable them to strive towards agricultural management standards and practices at higher levels.

Competent qualifying learners in this qualification will participate in the production of quality agricultural products in Plant Production whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

It is assumed that a learner entering a programme leading to this qualification has achieved numeracy, literacy and communication equivalent to ABET 3.

Recognition of Prior Learning:

This qualification may be achieved in part or in whole through the recognition of prior learning. Credit will be given to learning, which has already been acquired, through the appropriate process of assessment.

For example:

> Learners who have acquired skills and competencies in this qualification through for instance experience in the industry will be assessed against the unit standards the qualification comprises of prior to entering learning. Credits will be allocated to those unit standards and exit level outcomes in which the learner is found competent. The outstanding unit standards will then be sequenced according to an appropriate learning programme.

> Should a new entrant into the industry wish to enter this learning programme, recognition will be given to al appropriate learning acquired through the schooling system.

> In terms of fundamental unit standards, competencies could be acquired through life experience.

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to take.

QUALIFICATION RULES

Fundamental
> A minimum of 46 credits should be achieved in fundamental.

Core
> 62 credits should be achieved in core.

Elective
A minimum of 12 credits should be achieved in Elective, depending on the context of application of the unit standards.

EXIT LEVEL OUTCOMES

Exit Level Outcomes are divided into five categories of competencies, namely:

> Fundamental Competencies
> Agri-business
> Agricultural Practices
> Plant Production; and
> Animal Production (This component has been included to ensure that Learners at this level is exposed to a small component of animal production)

Fundamental Competencies:

1. Apply various communication skills within the agricultural environment.
2. Apply mathematical calculations within the agricultural environment.
3. Safely and accurately collect routine agricultural data by applying prescribed methods of data collection for agricultural purposes.
4. Recognise the basic concepts of sustainable farming practices and be able to perform basic tasks in applying sustainable farming practices.

Agri-business:

5. Keep record and report appropriately on inputs and resources in an agricultural environment.
6. Describe the production process in an agricultural environment.
7. Describe the importance of marketing within the agricultural production process.
8. Keep an accurate and current simple financial record keeping system in an agri-business environment.
9. Apply the basic principles of human resources management in an agricultural environment.
10. Understand the basic principles of enterprise selection and production.

Agricultural Practices:

11. Apply sound food safety principles by identifying risk factors in food contamination and applying preventative measures to ensure product safety.
12. Observe and maintain basic water quality by working with the technical systems that control quality factors in water.
13. Incorporate an understanding of the role of natural resource management in sustainable agricultural practices into existing farming activities by applying basic practices to conserve the environment, including natural resources,
14. Carry out basic physical farm layout tasks including construction of rainwater harvesting and soil conservation structures in a small farm or garden environment
15. Operate, care for and store basic tools and equipment in a safe and responsible manner.

Plant Production:

16. Demonstrate an elementary understanding of the parts of a plant and their basic functions.
17. Apply soil nutrient preparations in a safe, effective and responsible manner.
18. Assist with the propagation of plants.
19. Harvest agricultural crops by using basic harvesting tools.
20. Plant a range of crops according to correct placing, spacing and depth of the plant material.
21. Identify insects and explain the damage it can cause to crops.
22. Manipulate plants using pre-determined methods and techniques.

Animal Production:

23. Produce livestock whilst demonstrating an understanding of the environment and its relationship to sustainable livestock production.

ASSOCIATED ASSESSMENT CRITERIA

Fundamental Competencies:

1.
> Oral reports are made or data is entered on pre-printed forms or screens.

> Instructions (including challenging, inappropriate or incorrect instructions) are received, evaluated, clarified and acted on.
> Workplace language, e.g. special purpose gestures and terminology to describe conditions, events, problems and actions is used.
> Meetings (describe conditions, state own opinions) are participated in.
> Information is collected from a variety of sources by recognising / reading / and/or using sensory cues.
> Information (collected from instruments, gauges, outputs, incidents, operations) is organised, summarised and responded to.
> Conditions or states are determined by measuring (i.e. temperature, size, mass, colour).

2.
> Numbers are used to count and measure.
> A calculator is used to add, subtract, divide or multiply.
> Simple fractions and decimals are read and written.
> Simple rations / percentages are applied as part of an instruction.
> Proper use is made of number sequence, i.e. batch numbers.
> Shapes are recognised.
> Money is calculated in Rands and cents (related to pay, deductions, price, etc.)
> Business related application are applied.
> Underpinning natural science principles are applied.

3.
> Different elementary data collection methods are applied whilst agricultural data is collected.
> Collected agricultural data is recorded correctly and accurately.
> Data collection equipment is used and maintained.
> Appropriate health, safety and hygiene standards are maintained throughout the data collection process.

4.
> Basic environmental patterns and processes such as soils, climate, water sources, topography, ecosystems pertaining to local conditions only are recognized.
> An elementary comprehension of farming systems and design such as internal and external inputs; local, regional and export markets; diverse income sources; needs and aspirations of people is demonstrated.
> Measurable indicators of sustainability such as social, economic and ecological are identified and described.

Agri-business:

5.
> Agricultural inputs are received.
> Storage information on inputs is sourced.
> Stock levels are maintained.
> Accurate records are kept.
> Safety regulations are observed.

6.
> The concept of production is explained.
> The basic functions within the production process are explained.
> The transformation/conversion process is explained.

7.
> The marketing concept is explained.
> The principles of supply and demand are explained.
> The components and importance of marketing mix are explained.

8.
> Capital investment is explained.
> Flow of money is explained.
> Flow of cost is explained.
> The concept of profit and loss is explained.
> The basic components of basic financial record keeping system are explained.

9.
> Explain HR management rules and procedures applicable to the immediate work environment.

> Adhere to relevant LR legislation.
> Identify the different types and purposes of contracts and agreements.
> Describe and apply health and safety rules and practices applicable to the workplace.

10.
> The natural resources required for the selection of an agricultural enterprise are identified, recognized and described.
> The infrastructural requirements for the selection of the relevant enterprise are determined and described.
> All livestock or crops on the farm are identified.
> The relation between the natural resources, infrastructure, the choice of stock or crop and production cycle is explained.

Agricultural Practices:

11.
> Good personal hygiene practices are applied.
> Preventative measures against food contamination are applied.
> Warning signs regarding product safety (where applicable) are adhered to.

12.
> Water is sampled correctly and quality observed.
> Water quality is recorded and reported on.
> Minor maintenance tasks are performed on water quality technical systems.

13.
> The impact of farming operations and practices on the environment is explained.
> Environmentally friendly methods of disposal and/or re-use of farm and domestically generated waste and pollutants are applied.
> Biodiversity is maintained and increased.
> Invasive alien plant species and noxious weeds are cleared.
> On farm fire breaks and/or fire guards are established.

14.
> Veld, planted pasture and arable land are recognized.
> Soil physical characteristics are related to land capability.
> A swale (level contour bund), using a simple water level is constructed.
> Swales and soil erosion prevention structures are maintained.

15.
> Tools and equipment that had been selected from a range of tools, are appropriate to the agricultural task.
> Problems related to the use of tools and equipment are recognized and appropriate action is taken.
> Routine maintenance tasks are performed in a safe manner.
> Agricultural equipment is cleaned and stored correctly.

Plant Production:

16.
> The different parts of a plant are located, identified and described.
> The role of the parts of the plant is described.
> The relation between the plant and environment is explained.

17.
> Identify and apply nutrients correctly by using the appropriate application techniques.
> Basic symptoms of nutritional deficiencies are identified.
> Soil properties are explained.

18.
> The propagation environment and the components thereof are identified and the role/effect on propagation is described.
> Propagation material and media are prepared according to the propagation environment.
> Routine propagation methods are applied.
> Routine post propagation methods are applied.

> Safety and hygiene measures are applied.

19.
> Tools, appropriate to the harvesting method and crop, are selected and the correct usage is demonstrated.
> Crop is sampled for maturity indexing.
> Harvesting procedures are applied.
> Health, hygiene and safety measures are adhered to and applied.

20.
> Soil or growth medium is prepared and irrigated according to the plant/crop requirements.
> Planting material is handled correctly for the successful establishment.
> The effects of the environment on the specific crop are explained.
> Correct placing, spacing and depth of the plant material is determined.

21.
> Insects and other classes of animals are distinguished.
> The basic anatomy of an insect is described.
> Crop damaging appendages are located and the damages to plants are explained.
> The life cycle of an insect is explained.
> Distinguish between harmful and useful insects and pests.

22.
> Frameworks are developed according to the requirements of the crop.
> Pruning, training and other manipulation techniques are applied.

NOTE: Assessment should be specific to the area of operation (i.e. Either horticulture or agronomy including but not limited to arable and/or dry land production).

Animal Production:

23.
> Environmental factors influencing the veld are identified and described.
> Environmental factors that influence livestock selection are analysed and described.
> Supplementary feeding options for livestock production are identified and described.
> Beneficial and harmful organisms that influence livestock production are identified and described.
[Range: emphasis on locally important parasites and diseases]
> The effects of agricultural management practices on the sustainability of the environment identified and assessed.

Integrated Assessment:

Integrated assessment at the level of the qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is relevant and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

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Because of the diverse nature of the primary agricultural sector, a generic approach to developing the unit standards has been adopted. This resulted in generic unit standards which should be contextualised within a specific area of operation, a specific agricultural commodity or specific agricultural system. Assessment therefore, should not be divorced from the context of application. All assessment tools, such as guides as

In terms of competencies, the learner will progress from farming operation skills to basic managerial skills to managerial skills. The scope of practice will also increase.

The learner will be able to articulate with other occupations within the agricultural pharmaceutical operations such as laboratory assistant, assistance in the marketing and selling of agricultural pharmaceutical products and fertilisers.

The learner will also be able to move to the secondary agricultural field.

MODERATION OPTIONS

> Anyone assessing a learner against this qualification must be registered as an assessor with the relevant ETQA.

> Any institution offering learning that will enable achievement of this qualification, or assessment against this qualification must be accredited as a provider with the relevant ETQA.

> Moderation of assessment will be overseen by the relevant ETQA according to agreed ETQA procedures

Therefore anyone wishing to be assessed against this qualification may apply to be assessed by any assessment agency, assessor or provider institution which is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Assessors need:

> A minimum of 2 (two) years' practical experience in agricultural plant production practices relevant to an area of specialisation mentioned below;

> Practical experience in the specific agricultural commodity (which might include the list of "Areas of Specialisation" mentioned below or a specific commodity such as deciduous fruit, agronomic crop, sugar cane, vegetables, etc.) and/or system such as permaculture, organic production, hydroponic, etc.

> Technical competence in agricultural plant production practices at, at least one NQF level above the assessee.

NOTES

Areas of specialisation of the qualification in Plant Production include but are not limited to:
> Organic production,
> Hydroponic production,
> Perma-culture production,
> Agronomy,
> Horticulture,
> Natural resources harvesting.

UNIT STANDARDS
(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	*LEVEL*	*CREDITS*	*STATUS*
Core	116158 Apply basic agricultural enterprise selection principles	Level 1	2	Draft - Prep for P Comment
Core	116159 Identify the need for capital and understand the need for the recording of the income and different costs in an agri-business	Level 1	2	Draft - Prep for P Comment
Core	116160 Apply basic human resource management principles and practices applicable in an agricultural environment	Level 1	2	Draft - Prep for P Comment
Core	116163 Handle inputs and stock in agri-business	Level 1	2	Draft - Prep for P Comment
Core	116164 Demonstrate an understanding of the importance of marketing	Level 1	2	Draft - Prep for P Comment
Core	116165 Define production and understand the basic activities of production / conversion in the agri-business environment	Level 1	2	Draft - Prep for P Comment
Core	116166 Apply basic food safety practices	Level 1	1	Draft - Prep for P Comment

Core	116167 Select, use and care for hand tools and basic equipment and infrastructure	Level 1	4	Draft - Prep for P Comment
Core	116168 Maintain basic water quality	Level 1	1	Draft - Prep for P Comment
Core	116169 Understand how sustainable farming systems conserve natural resources	Level 1	4	Draft - Prep for P Comment
Core	116172 Apply elementary farm layout and infrastructure	Level 1	2	Draft - Prep for P Comment
Core	116199 Demonstrate a basic understanding of the structure and function of a plant in relation to its environment	Level 1	4	Draft - Prep for P Comment
Core	116200 Plant the crop under supervision	Level 1	4	Draft - Prep for P Comment
Core	116201 Harvest agricultural crops	Level 1	5	Draft - Prep for P Comment
Core	116202 Operate and maintain irrigation systems	Level 1	2	Draft - Prep for P Comment
Core	116203 Manipulate plants	Level 1	5	Draft - Prep for P Comment
Core	116204 Recognise pests, diseases and weeds on crops	Level 1	5	Draft - Prep for P Comment
Core	116205 Propagate plants	Level 1	4	Draft - Prep for P Comment
Core	116206 Fertilise soil and attend to basic plant nutrition	Level 1	5	Draft - Prep for P Comment
Elective	116148 Perform basic routine operations in a defined hydroponic context	Level 1	5	Draft - Prep for P Comment
Elective	116149 Understand organic market requirements	Level 1	3	Draft - Prep for P Comment
Elective	116150 Identify and explain permaculture principles	Level 1	8	Draft - Prep for P Comment
Elective	116209 Demonstrate an understanding of agri/ecotourism as a system at micro level	Level 1	5	Draft - Prep for P Comment
Fundamental	7447 Working with numbers in various contexts	Level 1	6	Reregistered
Fundamental	7450 Work with measurement in a variety of contexts	Level 1	2	Reregistered
Fundamental	7451 Collect, analyse, use and communicate numerical data	Level 1	2	Reregistered
Fundamental	7452 Describe, represent and interpret mathematical models in different contexts	Level 1	6	Reregistered
Fundamental	12462 Engage in a range of speaking and listening interactions for a variety of purposes	Level 1	6	Registered
Fundamental	12469 Read and respond to a range of text types	Level 1	6	Registered
Fundamental	12470 Write for a variety of different purposes	Level 1	6	Registered
Fundamental	12471 Explore and use a variety of strategies to learn (revised)	Level 1	5	Registered
Fundamental	13356 Assess the influence of the environment on sustainable livestock production	Level 1	4	Registered
Fundamental	14084 Demonstrate an understanding of and use the numbering system	Level 1	1	Registered
Fundamental	116156 Collect agricultural data	Level 1	2	Draft - Prep for P Comment
Fundamental	116157 Demonstrate an understanding of the basic concepts of sustainable farming systems	Level 1	4	Draft - Prep for P Comment

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Certificate: Plant Production

SAQA QUAL ID	*QUALIFICATION TITLE*	
48975	National Certificate: Plant Production	
SGB NAME	SGB Primary Agriculture	
ABET BAND	*PROVIDER NAME*	
Undefined		
QUALIFICATION CODE	*QUAL TYPE*	*SUBFIELD*
AGR-2-National Certificate	National Certificate	Primary Agriculture
MINIMUM CREDITS	*NQF LEVEL*	*QUALIFICATION CLASS*
120	Level 2	Regular-Unit Stds Based
SAQA DECISION NUMBER	*REGISTRATION START DATE*	*REGISTRATION END DATE*

PURPOSE OF THE QUALIFICATION

The purpose of this qualification is to allow Junior Personnel and elected candidated to progress towards a position of farm laboures (operators) with specific reference to Plant Production. The contexualised purpose and usage of the qualification is as follows:

> A learner assessed against this qualification will have the necessary competence to participate as part of a working team, performing the agricultural processes as applicable to Plant production in an established and familiar context under general supervision.

> The Learner will be able to perform directed activities and take responsibility for the guiding others at lower level within a Plant Production context.

> Competency will be gained in any of the specialized sub-fields of Plant Production as specified under Areas Of Specialization (i.e. Vegetables, Fruit Production, Hydroponics, etc.)

> The learner will be able to take responsible decisions within a familiar range based on a sound understanding of the basic principles of agri-business and good agricultural practices, in meeting the set objectives and targets within the broader farm plan which includes the economical application of general resources, agricultural production and technical knowledge and skills, all in an Plant Production context.

> The Learner will be able to carry out familiar procedures in a limited environment and will be able to adhere to the relevant safety, quality, hygiene and technical standards as applicable within the industry.

> In addition to the above, the learner will be well positioned to extend learning and practice into other sub-fields such as Plant Production and Mixed Farming, since such efforts will only require additional learning within the elective scope of other qualifications at this level.

> The learner will be well positioned to progress towards higher levels of Management and Technical production practices as defined by qualifications at the next level.

> Learners will be enabled to actively participate in the Primary Agricultural Sector through the production of quality agricultural products, enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

> This qualification will allow qualifying learners to become economically active in farming practices that will have a direct impact on Local Economic Development through the production of food, the improvement of household food security and access to mainstream agriculture.

> Finally, Learners will be able to guide and direct others in terms of the implementation of smaller development projects within a Plant Production context.

Rationale:

This qualification provides learners the opportunity to gain a qualification in Plant Production. The range of typical learners that will enter this qualification will vary and includes:

> Junior farm labourers who wish to progress to the level of Labourer within farming operations in Plant Production;
> Farm owners, in possession of an equivalent qualification at NQF 1;
> Learners in possession of different levels of practical experience in farming operations, which will be assessed and RPL'ed;
> Possible candidates for promotion identified by the community as leaders.
> Learners may come from both genders.

The learner will engage in supervision and operational activities relevant to Plant Production.

Requests and expressions of need for this qualification, coming from the broad, but also specific farming communities (Plant Production) forms the basis for the development of this qualification.

This qualification will form the basis for learners to extend their learning into more specialised areas of plant production and provides the basis of the establishment of sustainable farming operations through the inclusion of a wide spectrum of competencies required by farmers in South Africa. Whilst technical production orientated competencies are ensured, other aspects such as agri-business and good agricultural practices are included in the range of competencies required by farmers in order to enable them to strive towards agricultural management standards and practices at higher levels.

Competent qualifying learners in this qualification will oversee quality agricultural products in Plant Production whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

RECOGNIZE PREVIOUS LEARNING?

N

LEARNING ASSUMED TO BE IN PLACE

It is assumed that a learner entering a programme leading to this qualification has achieved numeracy, literacy and communication equivalent to NQF 1 and technical skills pertaining to agricultural activities equivalent to NQF 1.

Recognition Of Prior Learning:

This qualification may be achieved in part or in whole through the recognition of prior learning. Credit will be given to learning, which has already been acquired, through the appropriate process of assessment.

For example:

> Learners who have acquired skills and competencies in this qualification through for instance experience in the industry will be assessed against the unit standards the qualification comprises of prior to entering learning. Credits will be allocated to those unit standards and exit level outcomes in which the learner is found competent. The outstanding unit standards will then be sequenced according to an appropriate learning programme.

> Should a new entrant into the industry wish to enter this learning programme, recognition will be given to al appropriate learning acquired through the schooling system.

> In terms of fundamental unit standards, competencies could be acquired through life experience.

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to take.

QUALIFICATION RULES

Fundamental
> A minimum of 42 credits should be achieved in fundamental.

Core
> 72 credits should be achieved in core.

Elective
> A minimum of 6 credits should be achieved in Elective, depending on the context of application of the unit standards.

EXIT LEVEL OUTCOMES

Exit Level Outcomes are divided into five categories of competencies, namely:

> Fundamental Competencies
> Agri-business
> Good Agricultural Practices
> Plant Production; and
> Animal Production (This component has been included to ensure that Learners at this level is exposed to a small component of animal production)

Fundamental Competencies:

1. Apply various communication skills within the agricultural environment.
2. Apply mathematical calculations within the agricultural environment.
3. Collect and collate agricultural data and recognize and report on deviations.
4. Explain basic functions of the environment by recognising patterns and processes, knowing local resources and basic sustainable agricultural processes using environmental indicators.

Agri-business:

5. Apply basic skills in record keeping, storage, contaminant management and associated legislation when controlling input and stock.
6. Set goals and objectives related to production / conversion systems within an agricultural business
7. Apply knowledge of the marketing principles within agriculture for a specific product or service.
8. Define and illustrate the gross margin statement, income statement, balance sheet and cash flow budget as well as the different cost aspects that one can find in a business.
9. Describe and understand the principles of Human Resources Management as applied
10. Explain the principles and factors influencing agricultural enterprise selection and production.

Agricultural Practices:

11. Monitor and support the implementation of food safety and quality, production, environmental and social practices and awareness within the agricultural supply chain.
12. Demonstrate an understanding of the importance of water quality to agriculture and to monitor and maintain water quality using established procedures.
13. Apply basic practices to conserve the environment, including natural resources.
14. Select basic equipment and implements that are appropriate to a combination of activities within a single agricultural process.
15. Carry out basic physical farm layout tasks including construction of rainwater harvesting and soil conservation structures in a small farm or garden environment.

Plant Production:

16. Identify the basic structures and functions of a plant.
17. Soil is prepared according to the requirements of the crop.
18. Propagate plants.
19. Recognize common insects, disease symptoms and weeds and apply basic control measures
20. Apply agrochemical products in a safe, effective and responsible manner with consideration to the environment.
21. Plant a range of crops and monitor the correct establish of crops as well as ensuring that planting is placed and spaced as required.
22. Manipulate plants by applying a narrow range of techniques
23. Harvest crops.

Animal Production:

24. Produce livestock whilst demonstrating an understanding of the environment and its relationship to sustainable livestock production.

ASSOCIATED ASSESSMENT CRITERIA

Fundamental Competencies:

1.
> Oral reports are made or data is entered on pre-printed forms or screens.
> Instructions (including challenging, inappropriate or incorrect instructions) are received, evaluated, clarified and acted on.
> Workplace language, e.g. special purpose gestures and terminology to describe conditions, events, problems and actions is used.
> Meetings (describe conditions, state own opinions) are participated in.
> Information is collected from a variety of sources by recognising / reading / and/or using sensory cues.
> Information (collected from instruments, gauges, outputs, incidents, operations) is organised, summarised and responded to.
> Conditions or states are determined by measuring (i.e. temperature, size, mass, colour).

2.
> Numbers are used to count and measure.
> A calculator is used to add, subtract, divide or multiply.
> Simple fractions and decimals are read and written.
> Simple rations / percentages are applied as part of an instruction.
> Proper use is made of number sequence, i.e. batch numbers.
> Shapes are recognised.
> Money is calculated in Rands and cents (related to pay, deductions, price, etc.)
> Business related application are applied.
> Underpinning natural science principles are applied.

3.
> Collected agricultural data is collated and recorded correctly and accurately.
> Data is current and available when needed.
> Methods of collating data are explained.
> Health and safety measures are adhered to.

4.
> Basic environmental patterns and processes are related to sustainable use of agricultural land.
> Limitations of natural resources within the agricultural environment are recognized.
> Principles of sustainable agriculture are applied.
> Measures to prevent environmental degradation indicators are implemented.

Agri-business:

5.
> Storage space is prepared to receive stock through cleaning and disinfecting, identification of appropriate space for storage and prevention of contamination (direct and cross contamination).
> Accurate records are kept by applying basic inventory taking, issuing and receiving of stock, identification of re-order level, reporting on stock levels and re-order prompting skills.
> Legal issues regarding contracts, penalties and obligations as pertaining to input supply is explained.
> Safety regulations are applied.

6.
> The concept of optimal usage of resources and optimisation of outputs are explained.
> Tasks are appropriately scheduled.
> Human resources in terms of skills required, number of labourers required to execute tasks are identified.
> Goals and objectives related to systems within an agricultural business are set.

7.
> The value of marketing research is explained.
> The marketing mix (product, promotion, place, price and people) to a selected enterprise is applied.

> Limited and shared responsibility for the marketing budget is taken.
> The importance of effective distribution channels is explained.

8.
> Direct and indirect costs, as well as fixed and variable costs are explained.
> An income statement, the balance sheet and a cash-flow budget and statement are explained.
> Complete a template, showing and calculating the above financial calculations.

9.
> Human resources philosophy, policies, rules, procedures and disciplinary environment applicable at farm level are explained.
> Employment rights and responsibilities are explained.
> Contracts and agreements are explained and interpreted.

10.
> Natural resources, infrastructural requirements and stock for the selection of a sustainable enterprise are recognized and described.
> Production cycles are recognised and described.
> Harvesting and post-harvesting practices are described.

Agricultural Practices:

11.
> Non-conformances and deviations on food safety, quality and the environment practices are distinguish and reported on.
> Risk factors in food safety and quality are identified and explained.
> The importance of a systematic filing system for records in accordance with GAP (good agricultural practices) and GMP (good manufacturing practices) principles are explained.

12.
> Basic water quality tests and analyses are performed and monitored.
> Maintenance tasks on certain operational technical systems related to water quality are performed.
> The importance of water quality to agriculture is explained.

13.
> The principles of natural resource management are explained.
> Invasive alien plant species and noxious weeds are eradicated.
> On farm fire breaks and/or fire guards are established.
> Eroded areas and potential soil erosion are identified and control measures are suggested.
> The impact of the local climate and micro-climate is explained.
> Harmful and useful fauna and flora and their purpose and/or effect on the farm is explained.

14.
> Appropriate tools, implements and/or equipment, to use in a specified combination of activities within a single agricultural process are selected from a limited range.
> Malfunctioning tools and equipment are identified and minor repairs are performed.
> Safety measures in the use of agricultural equipment and implements are explained and adhered to.

15.
> Veld, planted pasture and arable land are recognized.
> Soil physical characteristics are related to land capability.
> A swale (level contour bund), using a simple water level is constructed.
> Swales and soil erosion prevention structures are maintained.

Plant Production:

16.
> The basic parts which make up a seed, different root systems, different types of leaves, the flower as well as different stem types and its basic function are identified and described.
> The different types and parts of a fruit are identified and described.

17.
> Appropriate quantity and quality of required soil nutrient applications are measured and prepared.
> The soil is prepared according to the requirements of the agricultural crop.
> Basic symptoms of nutritional deficiencies are identified and explained.
> The properties of soil are explained.

18.
> Environmental requirements for propagation in a specific agricultural production context are described
> Appropriate propagation methods are selected and applied safely.
> Successful and unsuccessful propagation are distinguished and rectified.
> Health and safety precautions are adhered to.

19.
> Common insects and types of weeds associated with the specific agricultural enterprise are identified and described.
> Common symptoms of diseases are identified.
> Old and new damage are distinguished and reported.
> Monitoring of pests (scouting) and decrease/increase in pest levels after spraying or other control measures were applied, are explained.

20.
> A pre-application plan is implemented.
> Pest control products are mixed at the correct dose rate.
> Pest control product is applied to produce/crop or farm animals.
> Necessary safety and health precautions whilst applying pest control products are applied and emergencies are dealt with.
> Post-application procedures are applied.
> The process, problems and unusual occurrences are monitored and reported.

21.
> Appropriate tools and equipment used in the planting of a specific crop are selected, used and cared for.
> Handling of planting material is monitored for successful establishment according to required procedures for a specific crop.
> The impact of environmental conditions on the successful establishment of crops is explained.
> The planting of plant material at correct spacing between rows, and individual plants, and at the correct depth for specific plant species are monitored.

22.
> Various manipulation techniques are explained.
> Framework development principles as part of plant manipulation methods are applied.
> A range of flower and fruit manipulation methods are applied.
> Pruning techniques as a vegetative plant manipulation method are applied.
> Safety and hygiene measures are applied.

23.
> Sampling for maturity indexing according to established and familiar procedures are done.
> Health, hygiene and safety measures are applied during the harvesting procedure.
> Requirements disposal of waste are adhered to.

NOTE: Assessment should be specific to the area of operation (i.e. Either large livestock, small livestock, pigs, poultry, etc.)

Animal Production:

24.
> Environmental factors influencing the veld are identified and described.
> Environmental factors that influence livestock selection are analysed and described.
> Supplementary feeding options for livestock production are identified and described.
> Beneficial and harmful organisms that influence livestock production are identified and described.
[Range: emphasis on locally important parasites and diseases]
> The effects of agricultural management practices on the sustainability of the environment identified and assessed.

Integrated Assessment:

Integrated assessment at the level of the qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is relevant and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

Generic nature of the unit standards and the context of assessment:

Because of the diverse nature of the primary agricultural sector, a generic approach to developing the unit standards has been adopted. This resulted in generic unit standards which should be contextualised within a specific area of operation, a specific agricultural commodity or specific agricultural system. Assessment therefore, should not be divorced from the context of application. All assessment tools, such as guides as well as the interpretation of unit standards and specifically range statements, should be contextualised within a specific agricultural commodity and/or system.

INTERNATIONAL COMPARABILITY

In the case of the primary agriculture context it is difficult to compare the qualification and unit standards against similar international qualifications due to the vast differences in levels of mechanization and literacy of farm operators. It should also be noted that climatic and market conditions differ considerably between South Africa and other countries and the variety in commodities is therefore significant.

This qualification and associated unit standards have been evaluated against comparable qualifications and unit standards of the following Qualifications Authorities:

> Australian AQF
> New Zealand NQF; and
> British NVQ's.

During this comparison the following was found:

Australian AQF: This qualification is comparable to an AQF Certificate II in Agriculture (General cross-sector qualification) in a plant production context. Packaging of the AQF qualification reflects the need for sector specific content of a qualification to remain flexible, a quality that has also been captured in this qualification. The AQF qualification requires the inclusion of Units of Competency, similar to the unit standards reflected in the South African qualification. It should however be noted that the qualification of the AQF contains considerably more Elective type Units of Competency since these units have been developed for specific sub-fields. In the case of this qualification a more generic approach have been followed, allowing contexualisation of fewer unit standards across a wide range of sub-fields. It could be concluded that there are numerous similarities between the Units of Competency and the Unit Standards reflected in the SA qualification covering similar sub-fields.

New Zealand NQF: This qualification is comparable to a NZNQF National Certificate in Agriculture (Level 2) in a plant production context. It should be noted that the NZQF qualification has been developed for a specific sub-field of specialization whilst a more generic approach is taken in this qualification allowing for contexualisation of the qualification across a wider range of sub-fields. In the NZQF qualification focus is given to local conditions, practices and approaches to agriculture whilst this qualification focuses on agriculture within a South African context.

British NVQ: The level of this qualification is too low to be compared with any Agricultural Qualification of the NVQ since levels of literacy and learning assumed to be in place is considerably higher than in South Africa.

Furthermore, input to the development of this qualification has been compared against international standards and qualifications and is evidenced in the following:

> Qualifications and competency units as defined by the New South Wales Department of Education and Training.

> The wide and narrow consultative process as well as the contributions made by role players from Universities and Technicons whom have a specific requirement for internationally comparable qualifications.

ARTICULATION OPTIONS

A learner will be able to progress horizontally from one category to another, namely small stock, large stock or pig production, etc. (Please refer to the list mentioned under "Areas of Specialisation") He/she will be able to do this without re-doing the whole qualification, but by only completing the necessary elective unit standards.

Furthermore, the learner will be able to progress horizontally to the following qualifications:
> National Certificate in Animal Production, NQF 2;
> National Certificate in Mixed Farming Systems, NQF 2.

This qualification allows access to the agricultural sector (refer to the SGB's brief and matrix) and gives access to the relevant agricultural qualification at NQF 3, namenly:
> National Certificate in Plant Production, NQF 3.

In terms of competencies, the learner will progress from farming operation skills to basic managerial skills to managerial skills. The scope of practice will also increase.

The learner will be able to articulate with other occupations within the agricultural pharmaceutical operations such as laboratory assistant, assistance in the marketing and selling of agricultural pharmaceutical products and fertilisers.

The learner will also be able to move to the secondary agricultural field.

MODERATION OPTIONS

> Anyone assessing a learner against this qualification must be registered as an assessor with the relevant ETQA.

> Any institution offering learning that will enable achievement of this qualification, or assessment against this qualification must be accredited as a provider with the relevant ETQA.

> Moderation of assessment will be overseen by the relevant ETQA according to agreed ETQA procedures.

Therefore anyone wishing to be assessed against this qualification may apply to be assessed by any assessment agency, assessor or provider institution which is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Assessors need:

> A minimum of 2 (two) years' practical experience in agricultural plant production practices relevant to an area of specialisation mentioned below;

> Practical experience in the specific agricultural commodity (which might include the list of "Areas of Specialisation" mentioned below or a specific commodity such as deciduous fruit, agronomic crop, sugar cane, vegetables, etc.) and/or system such as permaculture, organic production, hydroponic, etc.

> Technical competence in agricultural plant production practices at, at least one NQF level above the assessee.

NOTES

Areas of specialisation of the qualification in Plant Production include but are not limited to:
> Organic production,
> Hydroponic production,
> Perma-culture production,
> Agronomy,
> Horticulture,
> Natural resources harvesting.

UNIT STANDARDS
(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	*LEVEL*	*CREDITS*	*STATUS*
Core	13356 Assess the influence of the environment on sustainable livestock production	Level 1	4	Registered
Core	116053 Understand basic soil fertility and plant nutrition	Level 2	5	Draft - Prep for P Comment
Core	116057 Understand the structure and functions of a plant	Level 2	5	Draft - Prep for P Comment
Core	116060 Utilise and perform minor repair and maintenance tasks on implements, equipment and infrastructure	Level 2	5	Draft - Prep for P Comment
Core	116066 Operate and maintain specific irrigation systems	Level 2	3	Draft - Prep for P Comment
Core	116070 Operate and support a food safety and quality management system in the agricultural supply chain	Level 2	2	Draft - Prep for P Comment
Core	116077 Monitor water quality	Level 2	3	Draft - Prep for P Comment
Core	116079 Monitor the establishment of a crop	Level 2	4	Draft - Prep for P Comment
Core	116081 Identify and recognise factors influencing agricultural enterprise selection	Level 2	2	Draft - Prep for P Comment
Core	116083 Illustrate and understand the basic layout of financial statements	Level 2	2	Draft - Prep for P Comment
Core	116111 Harvest agricultural crops: Procedures	Level 2	4	Draft - Prep for P Comment
Core	116113 Explain principles of human resources management and practices in agriculture	Level 2	2	Draft - Prep for P Comment
Core	116115 Define and understand production systems and production management	Level 2	2	Draft - Prep for P Comment
Core	116119 Demonstrate an understaning of plant propagation	Level 2	3	Draft - Prep for P Comment
Core	116121 Apply sustainable farming practices to conserve the ecological environment	Level 2	5	Draft - Prep for P Comment
Core	116122 Control inputs and stock in agribusiness	Level 2	2	Draft - Prep for P Comment
Core	116124 Control pests, diseases and weeds on all crops effectively and responsibly	Level 2	2	Draft - Prep for P Comment
Core	116125 Apply crop protection and animal health products effectively and responsibly	Level 2	4	Draft - Prep for P Comment
Core	116126 Apply marketing principles in agriculture	Level 2	2	Draft - Prep for P Comment
Core	116127 Apply layout principles for conservation and infrastructure	Level 2	5	Draft - Prep for P Comment
Core	116128 Apply plant manipulation methods	Level 2	4	Draft - Prep for P Comment
Elective	116065 Store and control agrochemical products effectively and responsibly	Level 2	4	Draft - Prep for P Comment
Elective	116069 Participate in agri/ecotourism practices at both micro and meso levels to tourists	Level 2	4	Draft - Prep for P Comment
Elective	116072 Perform routine operations and identify basic problems in hydroponic systems	Level 2	3	Draft - Prep for P Comment
Elective	116076 Introduce organic certification and internal control systems	Level 2	2	Draft - Prep for P Comment
Elective	116109 Interpret and illustrate permaculture principles	Level 2	5	Draft - Prep for P Comment
Elective	116114 Harvest natural flora	Level 2	4	Draft - Prep for P Comment

well as the interpretation of unit standards and specifically range statements, should be contextualised within a specific agricultural commodity and/or system.

INTERNATIONAL COMPARABILITY

In the case of the primary agriculture context it is difficult to compare the qualification and unit standards against similar international qualifications due to the vast differences in levels of mechanization and literacy of farm operators. It should also be noted that climatic and market conditions differ considerably between South Africa and other countries and the variety in commodities is therefore significant.

This qualification and associated unit standards have been evaluated against comparable qualifications and unit standards of the following Qualifications Authorities:

> Australian AQF
> New Zealand NQF, and
> British NVQ's.

During this comparison the following was found:

Australian AQF: This qualification is comparable to an AQF Certificate I in Agriculture in a plant production context. Packaging of the AQF qualification reflects the need for sector specific content of a qualification to remain flexible, a quality that has also been captured in this qualification. The AQF qualification requires the inclusion of Units of Competency, similar to the unit standards reflected in the South African qualification. It should however be noted that the qualification of the AQF contains considerably more Elective type Units of Competency since these units have been developed for specific sub-fields. In the case of this qualification a more generic approach have been followed, allowing contexualisation of fewer unit standards across a wide range of sub-fields. It could be concluded that there are numerous similarities between the Units of Competency and the Unit Standards reflected in the SA qualification covering similar sub-fields.

New Zealand NQF: This qualification is comparable to a NZNQF National Certificate in Agriculture (Level 1) in a plant production context. It should be noted that the NZQF qualification has been developed for a specific sub-field of specialization whilst a more generic approach is taken in this qualification allowing for contexualisation of the qualification across a wider range of sub-fields. In the NZQF qualification focus is given to local conditions, practices and approaches to agriculture whilst this qualification focuses on agriculture within a South African context.

British NVQ: The level of this qualification is too low to be compared with any Agricultural Qualification of the NVQ since levels of literacy and learning assumed to be in place is considerably higher than in South Africa.

Furthermore, input to the development of this qualification has been compared against international standards and qualifications and is evidenced in the following:
> Qualifications and competency units as defined by the New South Wales Department of Education and Training.
> The wide and narrow consultative process as well as the contributions made by role players from Universities and Technicons whom have a specific requirement for internationally comparable qualifications.

ARTICULATION OPTIONS

A learner will be able to progress horizontally from one category to another, namely small stock, large stock or pig production, etc. (Please refer to the list mentioned under "Areas of Specialisation") He/she will be able to do this without re-doing the whole qualification, but by only completing the necessary elective unit standards.

Furthermore, the learner will be able to progress horizontally to the following qualifications:
> National Certificate in Animal Production, NQF 1;
> National Certificate in Mixed Farming Systems, NQF 1.

This qualification allows access to the agricultural sector (refer to the SGB's brief and matrix) and gives access to the relevant agricultural qualification at NQF 2, namenly:
> National Certificate in Plant Production, NQF 2.

Fundamental	7469 Use mathematics to investigate and monitor the financial aspects of personal and community life	Level 2	2	Registered
Fundamental	7479 Describe, represent and informally analyse shape and motion in 2- and 3-dimensional space	Level 2	4	Reregistered
Fundamental	7480 Demonstrate understanding of rational and irrational numbers and number systems	Level 2	3	Registered
Fundamental	8962 Maintain and adapt oral communication	Level 2	5	Registered
Fundamental	8963 Access and use information from texts	Level 2	5	Registered
Fundamental	8964 Write for a defined context	Level 2	5	Registered
Fundamental	8967 Use language and communication in occupational learning programmes	Level 2	5	Registered
Fundamental	9009 Apply basic knowledge of statistics and probability to influence the use of data and procedures in order to investigate life related problems	Level 2	4	Registered
Fundamental	12444 Measure, estimate and calculate physical quantities and explore, describe and represent geometrical relationships in 2-dimensions in different life or workplace contexts	Level 2	3	Registered
Fundamental	116064 Recognise and identify the basic functions of the ecological environment	Level 2	4	Draft - Prep for P Comment
Fundamental	116080 Monitor, collect and collate agricultural data	Level 2	2	Draft - Prep for P Comment

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Certificate: Plant Production

SAQA QUAL ID	*QUALIFICATION TITLE*	
49009	National Certificate: Plant Production	
SGB NAME	SGB Primary Agriculture	
ABET BAND	*PROVIDER NAME*	
Undefined		
QUALIFICATION CODE	*QUAL TYPE*	*SUBFIELD*
AGR-4-National Certificate	National Certificate	Primary Agriculture
MINIMUM CREDITS	*NQF LEVEL*	*QUALIFICATION CLASS*
120	Level 4	Regular-Unit Stds Based
SAQA DECISION NUMBER	*REGISTRATION START DATE*	*REGISTRATION END DATE*

PURPOSE OF THE QUALIFICATION

The purpose of this qualification is to allow Supervisors to progress towards a Junior Farm Manager position with specific reference to Plant Production. The contexualised purpose and usage of the qualification is as follows:

> A learner assessed against this qualification will have the necessary competence to manage Supervisors and working teams, performing the agricultural processes as applicable to Plant production in a range of Plant Production taking responsibility for the quality and quantity of outputs.

> The Learner will be able to take complete responsibility for her/his own actions and also take responsibility for supervising others at lower levels within an Plant Production context under broad guidance and evaluation.

> Competency will be gained in any of the specialized sub-fields of Plant Production as specified under Areas Of Specialization (i.e. Vegetables, Fruit Production, Hydroponics, etc.) with a strong focus on management.

> The learner will be able to take responsible decisions within a wide range based on a sound understanding of the basic principles of agri-business and good agricultural practices, in meeting the set objectives and targets within the broader farm plan which includes the economical application of general resources, agricultural production and technical knowledge and skills, all in an Plant Production context.

> The Learner will be able to oversee the implementation of a wide range of procedures and will be able to ensure the relevant safety, quality, hygiene and technical standards as applicable within the industry.

> In addition to the above, the learner will be well positioned to extend learning and practice into other sub-fields such as Plant Production and Mixed Farming, since such efforts will only require additional learning within the elective scope of other qualifications at this level.

> The learner will be well positioned to progress towards higher levels of Management and Technical production practices as defined by qualifications at the next level.

> Learners will be enabled to actively participate in the Primary Agricultural Sector through the production of quality agricultural products, enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

> This qualification will allow qualifying learners to become economically active in farming practices that will have a direct impact on Local Economic Development through the production of food, the improvement of household food security and access to mainstream agriculture.

> Finally, Learners will be able to guide and direct others in terms of the planning, implementation and control of development projects within a Plant Production context.

Rationale:

The range of typical learners that will enter this qualification will vary and includes:

> Farm operators who wish to progress to the level of junior farm manager;
> Learners in possession of different levels of practical experience in farming operations, which will be assessed and RPL'ed;
> School leavers (Gr. 12) from agricultural schools; and
> Learners may come from both genders.

The learner will engage in farm management and operational activities relevant to Plant Production.

Requests and expressions of need for this qualification, coming from the broad, but also specific farming communities (Plant Production) forms the basis for the development of this qualification.

This qualification will form the basis for learners to extend their learning into more specialised areas of plant production and provides the basis of the establishment of sustainable farming operations through the inclusion of a wide spectrum of competencies required by farmers in South Africa. Whilst technical production orientated competencies are ensured, other aspects such as agri-business and good agricultural practices are included in the range of competencies required by farmers in order to enable them to strive towards agricultural management standards and practices at higher levels.

Competent qualifying learners in this qualification will oversee quality agricultural products in Plant Production whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

It is assumed that a learner entering a programme leading to this qualification has achieved numeracy, literacy and communication equivalent to NQF 2 and technical skills pertaining to agricultural activities equivalent to NQF 3.

Recognition of prior learning:

This qualification may be achieved in part or in whole through the recognition of prior learning. Credit will be given to learning, which has already been acquired, through the appropriate process of assessment.

For example:

> Learners who have acquired skills and competencies in this qualification through for instance experience in the industry will be assessed against the unit standards the qualification comprises of prior to entering learning. Credits will be allocated to those unit standards and exit level outcomes in which the learner is found competent. The outstanding unit standards will then be sequenced according to an appropriate learning programme.

> Should a new entrant into the industry wish to enter this learning programme, recognition will be given to al appropriate learning acquired through the schooling system.

> In terms of fundamental unit standards, competencies could be acquired through life experience.

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to take.

QUALIFICATION RULES

Fundamental
> A minimum of 48 credits should be achieved in fundamental.

Core
> 59 credits should be achieved in core.

Elective
> A minimum of 15 credits should be achieved in Elective, depending on the context of application of the unit standards.

EXIT LEVEL OUTCOMES

Exit Level Outcomes are divided into four categories of competencies, namely:

> Fundamental Competencies
> Agri-business
> Good Agricultural Practices
> Plant Production

Fundamental Competencies:

1. Apply communication skills in an agricultural environment.
2. Apply mathematical calculations within the agricultural environment.
3. Implement a data collection plan in the agricultural sector.
4. Plan and maintain environmentally sound agricultural processes by identifying knowledge processes and patterns of the environment in the region, and understanding the limitations of resources and how their management contributes to sustainable interactive agriculture, using environmental indicators.

Agri-business:

5. Manage stores and agro-inputs in stores.
6. Implement quality control aspects of an agribusiness.
7. Demonstrate ability to development of an integrated marketing plan.
8. Demonstrate the ability to develop an integrated whole farm budget.
9. Apply principles of human resources management in an agricultural environment.
10. Participate in the analysis, planning and management of an agri-business.
11. Describe the historical and current structure of the relevant industry within secondary agriculture.
12. Evaluate and adjust the enterprise and production processes of animal and crop enterprises.

Agricultural Practices:

13. Implement a management system related to food safety, production practices, as well as demonstrate environmental and social awareness within the agricultural supply chain.
14. Apply principles to design, prepare and implement basic operational procedures for the maintenance and storage of equipment, implements and infrastructure.
15. Implement corrective actions to ensure water quality.
16. Implement a natural resource management plan of the farm in relation to area wide planning.
17. Maintain the most appropriate land-use on a farm by continuously assessing the natural resource base.

Plant Production:

18. Explain the different physiological processes involved in the growth and development of the plant.
19. Establish and supervise the implementation of soil preparation procedures
20. Propagate plants in a variety of situations
21. Demonstrate an understanding of an integrated pest management system
22. Develop a harvesting plan for crops.
23. Implement a plant manipulation management plan using a broad range of techniques.

ASSOCIATED ASSESSMENT CRITERIA

Fundamental Competencies:

1.
> Simple presentations are made.
> Situations, reasons, implications, concepts, underlying principles, and check for understanding and adjust message are explained.
> Conditions, situations and events, using data are reported on.

> Work instructions are given.
> Events, situations and conditions are summarised over time.

2.
> Data is represented in graph and table form.
> Trends are plotted.
> Percentages from collected data (statistical calculations) are determined.
> Measurements are accurately.
> Calculations per area performed.
> Financial implications of personal and business related issues are investigated and monitored. Ratios are etermined according to prescribed parameters e.g. mixtures, crops.

3.
> A data collection plan is interpreted.
> A data collection plan is implemented.
> Collected data is analysed.
> Collected data is presented.

4.
> Sustainable agricultural processes and/or practices are planned and maintained, taking into account the four components of the environment.
> Practical and efficient natural resource use is applied.
> Environmental indicators are identified and used.

Agri-business:

5.
> Agricultural inputs are received and checked.
> Records are updated and shortcomings identified.
> Payment is processed.
> Re-ordering is scheduled.
> Agricultural inputs are issued.
> Legislation is enforced.
> Equipment and facilities are inspected and maintained.

6.
> Availability of resources is determined.
> Sustainable resource utilisation is ensured.
> The size of the enterprise is determined.
> Quality control is integrated into the production process.

7.
> A marketing plan is structured.
> A risk plan is structured.
> Remedial actions is identified.

8.
> Whole farm budget is prepared.
> A sensitivity analysis is demonstrated.
> An information system is developed.
> Managerial information is extracted from information system.

9.
> HR Policy is developed.
> Practices, principles, policies and procedures is communicated.
> Implementation plan is developed.
> A HR monitoring plan is implemented.

10.
> The general management functions as related to agri-business is described.
> A systems approach to agricultural production is explained.
> The components of a rolling agri-business plan is explained.
> An information management system is implemented.

> A risk plan is described and implemented.

11.
> The historical and current framework of the industry is explained.
> Useful media is identified.
> Relevant Government Departments is identified.
> Legislation pertaining to the specific industry is described.
> Supportive resources is identified.
> The various relationships within the industry is explained.

12.
> The production processes, stock, harvest procedures and post harvest factors are evaluated and adjusted.
> The production processes, stock, harvest procedures and post harvest factors are integrated within the relevant enterprise.
> Enterprise processes are evaluated and adjusted so that natural resources required for the relevant enterprises are managed sustainably.

Agricultural Practices:

13.
> Good agricultural practices (GAP) associated with good manufacturing practices (GMP), good health practices (GHP), good social practices (GSP) and good environmental practices (GEP) are maintained.
> Reported non-conformances in respect of food safety, production, environmental and social practices and implement corrective action in the agricultural environment are remedied.
> Internal audits according to the specifications of the trade/market in the agricultural environment are conducted.
> Standard operational procedures with regard to agro-chemicals, food safety, quality production practices, environmental and social awareness within the agricultural supply chain are maintained.

14.
> A task related maintenance programme is developed.
> Basic operational procedures for storage and maintenance is explained and implemented.
> Problem solving system is implemented.
> Safety regulations are implemented.
> The adaptation of equipment, implements and technology is explained.

15.
> Corrective actions are taken based on a correct analysis of water quality data.
> The impact of corrective actions is explained.
> Corrective measures are implemented correctly.
> The effects of corrective measures are explained.

16.
> Routine natural resource management practices and/or applications on the farm are assessed for efficiency.
> Preventative and/or rehabilitation measures are selected and applied.
> Activities related to alien eradication, erosion control, seasonal and climatic conditions, utilisation of natural resources are scheduled.
> Contributions are made to the strategic plan of the farm.

17.
> Collected and recorded information that informs the infrastructure development of an agricultural enterprise is categorized.
> High and low yield potential areas are identified according to a range of land use options and criteria.
> Maintenance tasks related to the natural resource base of a farm are organized.
> Sustainability-based farm layout innovations are monitored and maintained.

Plant Production:

18.
> The processes involved in cell division are described.

> The process of transpiration and its role in water uptake is described.
> The process of respiration in relation to gaseous exchange is described.
> The process of transpiration is described.
> Fruit maturity and ripening is described.

19.
> Nutritional programmes based on recommendations are set up.
> A soil utilization plan for specified crops is implemented.
> Full recommendations to remedy nutritional deficiencies are made.
> Soil improvement activities according to soil properties are managed.

20.
> Structures and facilities for various propagation strategies are identified.
> The asexual propagation of a range of plants is described.
> The utilisation of different types of propagation media and environments are described.
> A process for post propagation activities is described.

21.
> Basic trapping, monitoring and recording of pests, diseases and weeds are described.
> The principles of IPM are described.
> Different types of control measures in an IPM are described.
> The decision making process in IPM is described.

22.
> A complete harvesting plan is prepared.
> A maturity index plan is prepared.
> A health, hygiene and safety plan is developed.
> A waste disposal plan is developed.
> A maintenance plan is developed.
> A plant manipulation management schedule is interpreted and implemented.
> Appropriate hygiene and health standards are maintained.

NOTE: Assessment should be specific to the area of operation (i.e. Either horticulture or agronomy including but not limited to arable and/or dry land production).

Integrated Assessment:

Integrated assessment at the level of the qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is relevant and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

Generic Nature Of The Unit Standards And The Context Of Assessment:

Because of the diverse nature of the primary agricultural sector, a generic approach to developing the unit standards has been adopted. This resulted in generic unit standards which should be contextualised within a specific area of operation, a specific agricultural commodity or specific agricultural system. Assessment therefore, should not be divorced from the context of application. All assessment tools, such as guides as well as the interpretation of unit standards and specifically range statements, should be contextualised within a specific agricultural commodity and/or system.

INTERNATIONAL COMPARABILITY

In the case of the primary agriculture context it is difficult to compare the qualification and unit standards

against similar international qualifications due to the vast differences in levels of mechanization and literacy of farm operators. It should also be noted that climatic and market conditions differ considerably between South Africa and other countries and the variety in commodities is therefore significant.

This qualification and associated unit standards have been evaluated against comparable qualifications and unit standards of the following Qualifications Authorities:

> Australian AQF
> New Zealand NQF, and
> British NVQ's.

During this comparison the following was found:

Australian AQF: This qualification is comparable to an AQF Certificate IV in Agriculture (General cross-sector qualification) in a plant production context. Packaging of the AQF qualification reflects the need for sector specific content of a qualification to remain flexible, a quality that has also been captured in this qualification. The AQF qualification requires the inclusion of Units of Competency, similar to the unit standards reflected in the South African qualification. It should however be noted that the qualification of the AQF contains considerably more Elective type Units of Competency since these units have been developed for specific sub-fields. In the case of this qualification a more generic approach have been followed, allowing contexualisation of fewer unit standards across a wide range of sub-fields. It could be concluded that there are numerous similarities between the Units of Competency and the Unit Standards reflected in the SA qualification covering similar sub-fields.

New Zealand NQF: This qualification is comparable to a NZNQF National Certificate in Agriculture (Level 4) in a plant production context. It should be noted that the NZQF qualification has been developed for a specific sub-field of specialization whilst a more generic approach is taken in this qualification allowing for contexualisation of the qualification across a wider range of sub-fields. In the NZQF qualification focus is given to local conditions, practices and approaches to agriculture whilst this qualification focuses on agriculture within a South African context.

British NVQ: The level of this qualification is too low to be compared with any Agricultural Qualification of the NVQ since levels of literacy and learning assumed to be in place is considerably higher than in South Africa.

Furthermore, input to the development of this qualification has been compared against international standards and qualifications and is evidenced in the following:

> Qualifications and competency units as defined by the New South Wales Department of Education and Training.
> The wide and narrow consultative process as well as the contributions made by role players from Universities and Technicons whom have a specific requirement for internationally comparable qualifications.

ARTICULATION OPTIONS

A learner will be able to progress horizontally from one category to another, namely small stock, large stock or pig production, etc. (Please refer to the list mentioned under "Areas of Specialisation") He/she will be able to do this without re-doing the whole qualification, but by only completing the necessary elective unit standards.

Furthermore, the learner will be able to progress horizontally to the following qualifications:
> National Certificate in Animal Production, NQF 4.

This qualification allows access to the agricultural sector (refer to the SGB's brief and matrix) and gives access to the relevant agricultural qualification at NQF 5, namenly:
> National Certificate in Plant Production, NQF 5.

In terms of competencies, the learner will progress from farming operation skills to basic managerial skills to managerial skills. The scope of practice will also increase.

The learner will be able to articulate with other occupations within the agricultural pharmaceutical operations such as laboratory assistant, assistance in the marketing and selling of agricultural pharmaceutical products and fertilisers. The learner will also be able to move to the secondary agricultural field.

MODERATION OPTIONS

> Anyone assessing a learner against this qualification must be registered as an assessor with the relevant ETQA.

> Any institution offering learning that will enable achievement of this qualification, or assessment against this qualification must be accredited as a provider with the relevant ETQA.

> Moderation of assessment will be overseen by the relevant ETQA according to agreed ETQA procedures.

Therefore anyone wishing to be assessed against this qualification may apply to be assessed by any assessment agency, assessor or provider institution which is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Assessors need:
> A minimum of 2 (two) years' practical experience in agricultural plant production practices relevant to an area of specialisation mentioned below;
> Practical experience in the specific agricultural commodity (which might include the list of "Areas of Specialisation" mentioned below or a specific commodity such as deciduous fruit, agronomic crop, sugar cane, vegetables, etc.) and/or system such as permaculture, organic production, hydroponic, etc.
> Technical competence in agricultural plant production practices at, at least one NQF level above the assessee.

NOTES

Areas of specialisation of the qualification in Plant Production include but are not limited to:
> Organic production,
> Hydroponic production,
> Perma-culture production,
> Agronomy,
> Horticulture,
> Natural resources harvesting.

UNIT STANDARDS
(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	LEVEL	CREDITS	STATUS
Core	116278 Implement a food safety and quality management system in the agricultural supply chain	Level 4	3	Draft - Prep for P Comment
Core	116286 Give an overview of the industry structure	Level 4	2	Draft - Prep for P Comment
Core	116288 Execute sustainable resource use and quality control	Level 4	3	Draft - Prep for P Comment
Core	116290 Establish a plan for the monitoring, safe use and maintenance of equipment implements, technology and infrastructure	Level 4	3	Draft - Prep for P Comment
Core	116291 Participate in the development and management of an agri business plan	Level 4	3	Draft - Prep for P Comment
Core	116293 Evaluate, adjust and implement factors influencing agricultural enterprises	Level 4	3	Draft - Prep for P Comment
Core	116295 Demonstrate a basic understanding of the physiological processes in plant growth and development	Level 4	3	Draft - Prep for P Comment
Core	116297 Develop a harvesting plan for the specific agricultural crop	Level 4	3	Draft - Prep for P Comment
Core	116301 Apply effective and responsible integrated pest, disease and weed control	Level 4	3	Draft - Prep for P Comment
Core	116302 Assume co-responsibility and participation in human resource management	Level 4	3	Draft - Prep for P Comment
Core	116303 Implement a natural resource management plan	Level 4	3	Draft - Prep for P Comment

Core	116305 Manage plant manipulation methods of an agricultural crop	Level 4	3	Draft - Prep for P Comment
Core	116309 Implement integrated farm layout and site selection	Level 4	3	Draft - Prep for P Comment
Core	116311 Implement soil fertility and plant nutrition practices	Level 4	3	Draft - Prep for P Comment
Core	116316 Propagate plants in a variety of situations	Level 4	3	Draft - Prep for P Comment
Core	116317 Schedule the operation and maintenance of irrigation systems	Level 4	3	Draft - Prep for P Comment
Core	116319 Prepare a whole farm budget and establish a proper integrated information system for an agri-business	Level 4	3	Draft - Prep for P Comment
Core	116321 Procure and manage agricultural input	Level 4	3	Draft - Prep for P Comment
Core	116322 Manage water quality parameters	Level 4	3	Draft - Prep for P Comment
Core	116684 Participate in the development and management of an agricultural marketing plan	Level 4	3	Draft - Prep for P Comment
Elective	116279 Implement a permaculture site design	Level 4	7	Draft - Prep for P Comment
Elective	116289 Ensure sustainable wild flower harvesting operations	Level 4	5	Draft - Prep for P Comment
Elective	116304 Manage agricultural export logistics	Level 4	4	Draft - Prep for P Comment
Elective	116306 Manage organic certification and internal control systems	Level 4	5	Draft - Prep for P Comment
Elective	116314 Produce crop in a hydroponic system	Level 4	4	Draft - Prep for P Comment
Elective	116315 Recognise agri/ecotourism within the strategic environment	Level 4	5	Draft - Prep for P Comment
Fundamental	7466 Represent and operate on complex numbers in non-trivial situations	Level 4	2	Registered
Fundamental	7468 Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues	Level 4	2	Registered
Fundamental	7470 Work with a wide range of patterns and inverses of functions and solve related problems	Level 4	6	Registered
Fundamental	7483 Solve problems involving sequences and series in real and simulated situations	Level 4	2	Registered
Fundamental	8974 Engage in sustained oral communication and evaluate spoken texts	Level 4	5	Registered
Fundamental	8975 Read analyse and respond to a variety of texts	Level 4	5	Registered
Fundamental	8976 Write for a wide range of contexts	Level 4	5	Registered
Fundamental	8979 Use language and communication in occupational learning programmes	Level 4	5	Registered
Fundamental	12417 Measure, estimate & calculate physical quantities & explore, critique & prove geometrical relationships in 2 and 3 dimensional space in the life and workplace of adult with increasing responsibilities	Level 4	4	Reregistered
Fundamental	116312 Implement a data collection plan	Level 4	4	Draft - Prep for P Comment
Fundamental	116320 Plan and maintain environmentally sound agricultural processes	Level 4	8	Draft - Prep for P Comment

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Diploma: Plant Production

SAQA QUAL ID	*QUALIFICATION TITLE*	
49010	National Diploma: Plant Production	
SGB NAME	SGB Primary Agriculture	
ABET BAND	*PROVIDER NAME*	
Undefined		
QUALIFICATION CODE	*QUAL TYPE*	*SUBFIELD*
AGR-5-National Diploma	National Diploma	Primary Agriculture
MINIMUM CREDITS	*NQF LEVEL*	*QUALIFICATION CLASS*
240	Level 5	Regular-Unit Stds Based
SAQA DECISION NUMBER	*REGISTRATION START DATE*	*REGISTRATION END DATE*

PURPOSE OF THE QUALIFICATION

The purpose of this qualification is to allow Junior Farm Managers to progress towards a Farm Manager position with specific reference to Plant Production. The contexualised purpose and usage of the qualification is as follows:

> A learner assessed against this qualification will have the necessary competence to monitor, implement, co-ordinate, plan, control and provide leadership regarding the agricultural processes as applicable to Plant production in a variety of Plant Production processes taking responsibility for the nature, quality and quantity of outputs.

> The Learner will be able to take complete responsibility for her/his own actions and also take responsibility for the achievements of groups within a Plant Production context.

> Competency will be gained in any of the specialized sub-fields of Plant Production as specified under Areas Of Specialization (i.e. Vegetables, Fruit Production, Hydroponics, etc.) with a strong focus on management.

> The learner will be able to take responsible decisions within a wide range of familiar and un-familiar contexts based on a sound understanding of the basic principles of agri-business and good agricultural practices, in meeting the set objectives and targets within the broader farm plan which includes the economical application of general resources, agricultural production and technical knowledge and skills, all in an Plant Production context.

> The Learner will be able to select from a wide range of standard and non-standard procedures in Plant Production and will be able to ensure the relevant safety, quality, hygiene and technical standards as applicable within the industry.

> In addition to the above, the learner will be well positioned to extend learning and practice into other sub-fields such as Plant Production and Mixed Farming, since such efforts will only require additional learning within the elective scope of other qualifications at this level.

> The learner will be well positioned to progress towards higher levels of Management and Technical production practices as defined by qualifications at the next level.

> Learners will be enabled to actively participate in the Primary Agricultural Sector through the production of quality agricultural products, enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

> This qualification will allow qualifying learners to become economically active in farming practices that will have a direct impact on Local Economic Development through the production of food, the improvement of

household food security and access to mainstream agriculture.

> Finally, Learners will be able to guide and direct project teams in terms of the planning, implementation and control of development projects within a Plant Production context.

Rationale:

The range of typical learners that will enter this qualification will vary and includes:

> Junior farm managers who wish to progress to the level of farm manager;
> Learners in possession of different levels of practical experience in farming operations, which will be assessed and RPL'ed;
> School leavers (Grade 12); and
> Learners may come from both genders.

The learner will engage in farm management and operational activities relevant to Plant Production.

Requests and expressions of need for this qualification, coming from the broad, but also specific farming communities (Plant Production) forms the basis for the development of this qualification.

This qualification will form the basis for learners to extend their learning into more specialised areas of plant production and management and provides the basis of the establishment of sustainable farming operations through the inclusion of a wide spectrum of competencies required by farmers in South Africa. Whilst technical production orientated competencies are ensured, other aspects such as agri-business and good agricultural practices are included in the range of competencies required by farmers in order to enable them to strive towards agricultural management standards and practices at higher levels.

Competent qualifying learners in this qualification will oversee quality agricultural products in Plant Production whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

It is assumed that a learner entering a programme leading to this qualification has achieved numeracy, literacy and communication equivalent to NQF 4 and technical skills pertaining to agricultural activities equivalent to NQF 4.

Recognition of prior learning:

This qualification may be achieved in part or in whole through the recognition of prior learning. Credit will be given to learning, which has already been acquired, through the appropriate process of assessment.

For example:

> Learners who have acquired skills and competencies in this qualification through for instance experience in the industry will be assessed against the unit standards the qualification comprises of prior to entering learning. Credits will be allocated to those unit standards and exit level outcomes in which the learner is found competent. The outstanding unit standards will then be sequenced according to an appropriate learning programme.

> Should a new entrant into the industry wish to enter this learning programme, recognition will be given to al appropriate learning acquired through the schooling system.

> In terms of fundamental unit standards, competencies could be acquired through life experience.

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to take.

QUALIFICATION RULES

Fundamental
> A minimum of 48 credits should be achieved in fundamental.

Core
> 155 credits should be achieved in core.

Elective
> A minimum of 37 credits should be achieved in Elective, depending on the context of application of the unit standards.

EXIT LEVEL OUTCOMES

Exit Level Outcomes are divided into four categories of competencies, namely:

> Fundamental Competencies
> Agri-business
> Good Agricultural Practices
> Plant Production

Fundamental Competencies:

1. Apply communication skills in an agricultural environment.
2. Apply mathematical calculations within the agricultural environment.
3. Develop a data collection plan in the agricultural sector.
4. Integrate sustainable systems thinking into planning and management processes.

Agri-business:

5. Control an agricultural input chain.
6. Develop a strategic plan for agri-processing activities.
7. Describe the integration of the marketing component as a part of the total agri-business
8. Analyse and interpret financial information in an agri-business
9. Demonstrate the ability to optimise and integrate farming systems.

Agricultural Practices:

10. Ensure sound utilisation of agricultural resources.
11. Describe the process of optimisation of water quality in an agricultural production system.
12. Develop, implement and optimise a management system for food safety and quality practices in an agricultural supply chain.
13. Incorporate an understanding of the importance of natural resource management in relation to agricultural practices into the design of a natural resource management plan of the farm in relation to area wide planning and when participating in area wide planning and local government structures and policies.
14. Assist in determining the most appropriate and sustainable land-use for different parts of the land, supervise the implementation and maintenance of the selected infrastructure and maintain the most appropriate land-use on a farm by continuously assessing the natural resource base.

Plant Production:

15. Describe the basic biochemistry involved in the physiological processes of a plant.
16. Develop a soil fertility and plant nutrition plan.
17. Plants are propagated in any production system.
18. Implement and co-ordinate different harvesting plans
19. Identify, monitor and control pests, monitor beneficiall arthropods, plant disease symptoms and weeds in a responsible manner by applying Integrated Pest Management Principles to conserve the environment.
20. Develop a plant manipulation management plan and manage its implementation to maximise growth and yield.

ASSOCIATED ASSESSMENT CRITERIA

Fundamental Competencies:

1.
> Simple presentations are made.
> Situations, reasons, implications, concepts, underlying principles, and check for understanding and adjust message are explained.
> Conditions, situations and events, using data are reported on.
> Work instructions are given.
> Events, situations and conditions are summarised over time.

2.
> Data is represented in graph and table form.
> Trends are plotted.
> Percentages from collected data (statistical calculations) are determined.
> Measurements are accurately.
> Calculations per area performed.
> Financial implications of personal and business related issues are investigated and monitored.
> Ratios are determined according to prescribed parameters e.g. mixtures, crops.

3.
> Appropriate experimental designs are selected for a specific purpose.
> The implementation of data collection plans is described.
> Data collection reports are interpreted and recommendations are made.
> Guidance is provided to data gathering team.

4.
> A whole farming system is developed.
> Methods of systems thinking are applied in the design of soil, plant and animal management.
> The sustainability of whole farming systems is monitored and re-evaluated.

Agri-business:

5.
> Planning of a flow chain is described.
> A plan on the flow of agricultural inputs is prepared and implemented.
> Aspects of HR management related to the flow chain are described.

6.
> Market trends are analysed.
> Trends in technology are analyses.
> A production plan is developed.

7.
> Variables and critical success factors are determined for agri-business.
> Market opportunities are identified and analysed.
> Marketing strategies are developed.
> The marketing function as part of the business plan is explained.

8.
> The use of physical and financial information to compile financial statements is demonstrated.
> The analysis of financial statements and physical records is demonstrated.
> A comparison of financial and economic data to obtain managerial information is demonstrated.

9.
> The integration and optimisation of natural resources are explained.
> The optimisation of infrastructure is explained.
> The optimisation and maintenance of livestock is explained.
> A harvesting system is developed.
> Post harvest systems are developed.

Agricultural Practices:

10.
> The modification of agricultural equipment is explained.
> The determination of specifications of equipment is explained.

> A maintenance and storage plan is developed.
> Safety policies are explained.
> The development of task related technology in the agricultural environment is explained.
> A replacement policy is developed.

11.
> The characteristics of an optimised water system are described.
> Solutions are provided to water quality problems.
> The calibration and utilisation of water quality monitoring equipment is demonstrated.
> The management of infrastructure related to water quality is explained.

12.
> Implement and manage a food safety and quality management system in respect of food safety, production, environmental and social practices in the agricultural environment which meets market requirements in the agricultural supply chain.
> Evaluate, take corrective action and make improvements to ensure the effectiveness/efficiency of the food safety and quality management system with regard to good agricultural practices (GAP) good manufacturing practices (GMP), good health practices (GHP), good social practices (GSP) and good environmental practices (GEP), whichever is applicable to the workplace.
> A traceability system for operational efficiency in the agricultural supply chain is designed.

13.
> Integrated natural resource management practices and plans to combat environmental degradation and deterioration are designed.
> Innovative natural resource management practices to ensure the sustainability of an agricultural endeavour are introduced.
> A natural resource management strategic plan for a farm is developed.
> Company/farm policy on natural resource management is determined.
> Assist in the development of area wide planning and local government structures and policies.

14.
> Information relevant to the natural resources of a site is researched.
> Appropriate technology to determine sustainable farm layout and infrastructure placement is identified and used.
> Principles of sustainability in terms of the layout and infrastructure placement in an agricultural context are applied.
> High and low potential yield areas according to a range of land use options are identified.

Plant Production:

15.
> The role of carbon compounds and ground rules of plant metabolism is explained.
> The movement of solutes and water in a plant is explained.
> The pathways of photosynthesis are explained.
> Respiration pathways are described.
> The role of hormones during plant growh is described.
> The responses of plants to the environment are explained.

16.
> Soil and leaf analysis is interpreted and explained.
> A soil utilisation plan is developed.
> The development of a soil database is explained.
> A soil systems management strategy is described.

17.
> The appropriate propagation environments for a variety of plants are described.
> The application of basic tissue culture is explained.
> Different propagation processes is explained.
> Problems related to propagation are described.

18.
> The implementation of alternative and new harvesting tools and equipment is described.
> The maturity indexing process is described.

> The co-ordination of the harvesting of different crops is described.
> Health, hygiene and safety procedures is explained.
> The co-ordination of waste disposal is explained.

19.
> Common insects, disease symptoms and weeds or know where to have those that are not common are recognized and identified.
> An understanding of the basic principles of integrated pest management with basic control measures as per agricultural enterprise, is demonstrated.
> Recognize and identify pests and beneficials on specific crops (all crops), count and monitor pest population levels over time, as well as the occurrence of beneficials over time, and determine when the threshold is reached.
> Formulate a decision, suitable control method wit reference to product information, make recommendations for application, selection of alternative compounds within a resistance management strategy with notice of occurring weather patterns, water quality, soil composition, adjuvents and/or other chemical or product requirements.

20.
> Plant manipulation needs are incorporated into a plant manipulation management plan.
> Framework development principles are incorporated into a plant manipulation management plan.
> Flower and fruit manipulation practices are evaluated and optimized.
> The implementation of the pruning principles as vegetative plant manipulation methods appropriate to the crop are planned.

NOTE: Assessment should be specific to the area of operation (i.e. Either horticulture or agronomy including but not limited to arable and/or dry land production).

Integrated Assessment:

Integrated assessment at the level of the qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is relevant and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

Generic nature of the unit standards and the context of assessment:

Because of the diverse nature of the primary agricultural sector, a generic approach to developing the unit standards has been adopted. This resulted in generic unit standards which should be contextualised within a specific area of operation, a specific agricultural commodity or specific agricultural system. Assessment therefore, should not be divorced from the context of application. All assessment tools, such as guides as well as the interpretation of unit standards and specifically range statements, should be contextualised within a specific agricultural commodity and/or system.

INTERNATIONAL COMPARABILITY

In the case of the primary agriculture context it is difficult to compare the qualification and unit standards against similar international qualifications due to the vast differences in levels of mechanization and literacy of farm operators. It should also be noted that climatic and market conditions differ considerably between South Africa and other countries and the variety in commodities is therefore significant.

This qualification and associated unit standards have been evaluated against comparable qualifications and unit standards of the following Qualifications Authorities:

> Australian AQF

> New Zealand NQF, and
> British NVQ's.

During this comparison the following was found:

Australian AQF: This qualification is comparable to an AQF Diploma in Agriculture (General cross-sector qualification) in a plant production context. Packaging of the AQF qualification reflects the need for sector specific content of a qualification to remain flexible, a quality that has also been captured in this qualification. The AQF qualification requires the inclusion of Units of Competency, similar to the unit standards reflected in the South African qualification. It should however be noted that the qualification of the AQF contains considerably more Elective type Units of Competency since these units have been developed for specific sub-fields. In the case of this qualification a more generic approach have been followed, allowing contexualisation of fewer unit standards across a wide range of sub-fields. It could be concluded that there are numerous similarities between the Units of Competency and the Unit Standards reflected in the SA qualification covering similar sub-fields.

New Zealand NQF: This qualification is partly comparable to a NZNQF National Diploma in Agribusiness Management (Level 5) in a plant production context as well as with a National Diploma in Horticulture (Level 6). It should be noted that the NZQF qualification has been developed for a specific sub-field of specialization whilst a more generic approach is taken in this qualification allowing for contexualisation of the qualification across a wider range of sub-fields. In the NZQF qualification focus is given to local conditions, practices and approaches to agriculture whilst this qualification focuses on agriculture within a South African context.

British NVQ: This qualification is comparable with the BTEC National Award/Diploma in Agriculture courses.

Furthermore, input to the development of this qualification has been compared against international standards and qualifications and is evidenced in the following:
> Qualifications and competency units as defined by the New South Wales Department of Education and Training.
> The wide and narrow consultative process as well as the contributions made by role players from Universities and Technicons whom have a specific requirement for internationally comparable qualifications.

ARTICULATION OPTIONS

A learner will be able to progress horizontally from one category to another, namely small stock, large stock or pig production, etc. (Please refer to the list mentioned under "Areas of Specialisation") He/she will be able to do this without re-doing the whole qualification, but by only completing the necessary elective unit standards.

Furthermore, the learner will be able to progress horizontally to the following qualifications:
> National Certificate in Animal Production, NQF 5.

This qualification allows access to the agricultural sector (refer to the SGB's brief and matrix) and gives access to the relevant agricultural qualification at NQF 6.

In terms of competencies, the learner will progress from farming operation skills to basic managerial skills to managerial skills. The scope of practice will also increase.

The learner will be able to articulate with other occupations within the agricultural pharmaceutical operations such as laboratory assistant, assistance in the marketing and selling of agricultural pharmaceutical products and fertilisers. The learner will also be able to move to the secondary agricultural field.

MODERATION OPTIONS

> Anyone assessing a learner against this qualification must be registered as an assessor with the relevant ETQA.

> Any institution offering learning that will enable achievement of this qualification, or assessment against this qualification must be accredited as a provider with the relevant ETQA.

> Moderation of assessment will be overseen by the relevant ETQA according to agreed ETQA procedures.

Therefore anyone wishing to be assessed against this qualification may apply to be assessed by any assessment agency, assessor or provider institution which is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Assessors need:

> A minimum of 2 (two) years' practical experience in agricultural plant production practices relevant to an area of specialisation mentioned below;

> Practical experience in the specific agricultural commodity (which might include the list of "Areas of Specialisation" mentioned below or a specific commodity such as deciduous fruit, agronomic crop, sugar cane, vegetables, etc.) and/or system such as permaculture, organic production, hydroponic, etc.

> Technical competence in agricultural plant production practices at, at least one NQF level above the assessee.

NOTES

Areas of specialisation of the qualification in Plant Production include but are not limited to:
> Organic production,
> Hydroponic production,
> Perma-culture production,
> Agronomy,
> Horticulture,
> Natural resources harvesting.

UNIT STANDARDS
(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	*LEVEL*	*CREDITS*	*STATUS*
Core	10050 Integrate marketing plans with business process	Level 5	6	Registered
Core	116324 Plan a farm and select a site	Level 5	9	Draft - Prep for P Comment
Core	116337 Optimise and integrate various farming systems and trends within related enterprises	Level 5	11	Draft - Prep for P Comment
Core	116369 Optimise water quality	Level 5	6	Draft - Prep for P Comment
Core	116371 Manage soil systems	Level 5	10	Draft - Prep for P Comment
Core	116373 Manage the harvesting process of agricultural crops	Level 5	10	Draft - Prep for P Comment
Core	116382 Manage an input chain	Level 5	6	Draft - Prep for P Comment
Core	116384 Manage and control resources in a sustainable manner	Level 5	5	Draft - Prep for P Comment
Core	116394 Implement and manage human resource and labour relations policies and acts	Level 5	9	Draft - Prep for P Comment
Core	116409 Develop and implement plant manipulation methods	Level 5	8	Draft - Prep for P Comment
Core	116414 Develop suitable irrigation systems	Level 5	10	Draft - Prep for P Comment
Core	116419 Develop and implement a food safety and quality management system in an agricultural supply chain	Level 5	7	Draft - Prep for P Comment
Core	116425 Design a natural resource management plan	Level 5	8	Draft - Prep for P Comment
Core	116426 Develop a production and strategic plan for the agricultural business	Level 5	11	Draft - Prep for P Comment
Core	116427 Develop a propagation plan for any agricultural production system	Level 5	9	Draft - Prep for P Comment
Core	116428 Analyse and interpret the financial statements and physical records in an agri-business to generate managerial information	Level 5	11	Draft - Prep for P Comment
Core	116429 Apply integrated pest management principles	Level 5	10	Draft - Prep for P Comment

Core	116431	Describe biological processes in plant physiology	Level 5	9	Draft - Prep for P Comment
Elective	116327	The optimisation of agri / ecotourism strenghts and opportunities and negation of threats and weaknesses	Level 5	6	Draft - Prep for P Comment
Elective	116328	The effective and responsible arial application of agrochemical products	Level 5	14	Draft - Prep for P Comment
Elective	116383	Manage a hydroponic production unit	Level 5	10	Draft - Prep for P Comment
Elective	116398	Evaluate and coordinate area wide sustainable wild flower harvesting	Level 5	8	Draft - Prep for P Comment
Elective	116405	Develop, implement and manage a permaculture site design	Level 5	10	Draft - Prep for P Comment
Elective	116400	Effective and responsible advice, recommendation and sale of agrochemical products	Level 6	12	Draft - Prep for P Comment
Fundamental	7466	Represent and operate on complex numbers in non-trivial situations	Level 4	2	Registered
Fundamental	7468	Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues	Level 4	2	Registered
Fundamental	7470	Work with a wide range of patterns and inverses of functions and solve related problems	Level 4	6	Registered
Fundamental	7483	Solve problems involving sequences and series in real and simulated situations	Level 4	2	Registered
Fundamental	8974	Engage in sustained oral communication and evaluate spoken texts	Level 4	5	Registered
Fundamental	8975	Read analyse and respond to a variety of texts	Level 4	5	Registered
Fundamental	8976	Write for a wide range of contexts	Level 4	5	Registered
Fundamental	8979	Use language and communication in occupational learning programmes	Level 4	5	Registered
Fundamental	12417	Measure, estimate & calculate physical quantities & explore, critique & prove geometrical relationships in 2 and 3 dimensional space in the life and workplace of adult with increasing responsibilities	Level 4	4	Reregistered
Fundamental	116387	Integrate sustainable systems into planning and management processes	Level 5	8	Draft - Prep for P Comment
Fundamental	116412	Develop and manage a data collection plan to support an agricultural enterprise	Level 5	4	Draft - Prep for P Comment

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Diploma: Animal Production

SAQA QUAL ID	*QUALIFICATION TITLE*	
49011	National Diploma: Animal Production	
SGB NAME	SGB Primary Agriculture	
ABET BAND	*PROVIDER NAME*	
Undefined		
QUALIFICATION CODE	*QUAL TYPE*	*SUBFIELD*
AGR-5-National Diploma	National Diploma	Primary Agriculture
MINIMUM CREDITS	*NQF LEVEL*	*QUALIFICATION CLASS*
240	Level 5	Regular-Unit Stds Based
SAQA DECISION NUMBER	*REGISTRATION START DATE*	*REGISTRATION END DATE*

PURPOSE OF THE QUALIFICATION

The purpose of this qualification is to allow Junior Farm Managers to progress towards a Farm Manager position with specific reference to Animal Production. The contexualised purpose and usage of the qualification is as follows:

> A learner assessed against this qualification will have the necessary competence to monitor, implement, co-ordinate, plan, control and provide leadership regarding the agricultural processes as applicable to animal production in a variety of Animal Production processes taking responsibility for the nature, quality and quantity of outputs.

> The Learner will be able to take complete responsibility for her/his own actions and also take responsibility for the achievements of groups within an Animal Production context.

> Competency will be gained in any of the specialized sub-fields of Animal Production as specified under Areas Of Specialization (i.e. Small stock, Large Stock, Dairy Production, Aqua Culture, etc.) with a strong focus on management.

> The learner will be able to take responsible decisions within a wide range of familiar and un-familiar contexts based on a sound understanding of the basic principles of agri-business and good agricultural practices, in meeting the set objectives and targets within the broader farm plan which includes the economical application of general resources, agricultural production and technical knowledge and skills, all in an Animal Production context.

> The Learner will be able to select from a wide range of standard and non-standard procedures in Animal Production and will be able to ensure the relevant safety, quality, hygiene and technical standards as applicable within the industry.

> In addition to the above, the learner will be well positioned to extend learning and practice into other sub-fields such as Plant Production and Mixed Farming, since such efforts will only require additional learning within the elective scope of other qualifications at this level.

> The learner will be well positioned to progress towards higher levels of Management and Technical production practices as defined by qualifications at the next level.

> Learners will be enabled to actively participate in the Primary Agricultural Sector through the production of quality agricultural products, enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

> This qualification will allow qualifying learners to become economically active in farming practices that will have a direct impact on Local Economic Development through the production of food, the improvement of

household food security and access to mainstream agriculture.

> Finally, Learners will be able to guide and direct project teams in terms of the planning, implementation and control of development projects within an Animal Production context.

Rationale:

The range of typical learners that will enter this qualification will vary and includes:

> Junior farm managers who wish to progress to the level of farm manager;
> Learners in possession of different levels of practical experience in farming operations, which will be assessed and RPL'ed;
> School leavers (Grade 12); and
> Learners may come from both genders.

The learner will engage in farm management and operational activities relevant to Animal Production.

Requests and expressions of need for this qualification, coming from the broad, but also specific farming communities (Animal Production) forms the basis for the development of this qualification.

This qualification will form the basis for learners to extend their learning into more specialised areas of animal production and management and provides the basis of the establishment of sustainable farming operations through the inclusion of a wide spectrum of competencies required by farmers in South Africa. Whilst technical production orientated competencies are ensured, other aspects such as agri-business and good agricultural practices are included in the range of competencies required by farmers in order to enable them to strive towards agricultural management standards and practices at higher levels.

Competent qualifying learners in this qualification will oversee quality agricultural products in Animal Production whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

It is assumed that a learner entering a programme leading to this qualification has achieved numeracy, literacy and communication equivalent to NQF 4 and technical skills pertaining to agricultural activities equivalent to NQF 4.

Recognition of prior learning:

This qualification may be achieved in part or in whole through the recognition of prior learning. Credit will be given to learning, which has already been acquired, through the appropriate process of assessment.

For example:
> Learners who have acquired skills and competencies in this qualification through for instance experience in the industry will be assessed against the unit standards the qualification comprises of prior to entering learning. Credits will be allocated to those unit standards and exit level outcomes in which the learner is found competent. The outstanding unit standards will then be sequenced according to an appropriate learning programme.

> Should a new entrant into the industry wish to enter this learning programme, recognition will be given to al appropriate learning acquired through the schooling system.

> In terms of fundamental unit standards, competencies could be acquired through life experience.

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to take.

QUALIFICATION RULES

Fundamental

> A minimum of 48 credits should be achieved in fundamental.

Core
> 159 credits should be achieved in core.

Elective
> A minimum of 33 credits should be achieved in Elective, depending on the context of application or on the combination of the unit standards.

EXIT LEVEL OUTCOMES

Exit Level Outcomes are divided into four categories of competencies, namely:

> Fundamental Competencies
> Agri-business
> Good Agricultural Practices
> Animal Production

Fundamental Competencies:

1. Apply communication skills in an agricultural environment.
2. Apply mathematical calculations within the agricultural environment.
3. Develop a data collection plan in the agricultural sector.
4. Integrate sustainable systems thinking into planning and management processes.

Agri-business:

5. Control an agricultural input chain.
6. Develop a strategic plan for agri-processing activities.
7. Describe the integration of the marketing component as a part of the total agri-business.
8. Analyse and interpret financial information in an agri-business.
9. Demonstrate the ability to optimise and integrate farming systems.

Agricultural Practices:

10. Ensure sound utilisation of agricultural resources.
11. Describe the process of optimisation of water quality in an agricultural production system.
12. Develop, implement and optimise a management system for food safety and quality practices in an agricultural supply chain.
13. Incorporate an understanding of the importance of natural resource management in relation to agricultural practices into the design of a natural resource management plan of the farm in relation to area wide planning and when participating in area wide planning and local government structures and policies.
14. Assist in determining the most appropriate and sustainable land-use for different parts of the land, supervise the implementation and maintenance of the selected infrastructure and maintain the most appropriate land-use on a farm by continuously assessing the natural resource base.

Animal Production:

15. Evaluate and manage animals according to specific criteria related to anatomical, physiological, physical and biochemical systems.
16. Develop and implement health care, prevention and treatment procedures.
17. Develop a strategic animal nutrition plan.
18. Demonstrate the ability to apply an advanced breeding and selection practices and to integrate these practices into a breeding management programme.
19. Demonstrate the ability to guide and direct others during the harvesting of animal products.
20. Demonstrate the ability to meaningfully and purposefully dissect animals.

ASSOCIATED ASSESSMENT CRITERIA

Fundamental Competencies:

1.
> Simple presentations are made.
> Situations, reasons, implications, concepts, underlying principles, and check for understanding and adjust message are explained.

> Conditions, situations and events, using data are reported on.
> Work instructions are given.
> Events, situations and conditions are summarised over time.

2.
> Data is represented in graph and table form.
> Trends are plotted.
> Percentages from collected data (statistical calculations) are determined.
> Measurements are accurately.
> Calculations per area performed.
> Financial implications of personal and business related issues are investigated and monitored.
> Ratios are determined according to prescribed parameters e.g. mixtures, crops.

3.
> Appropriate experimental designs are selected for a specific purpose.
> The implementation of data collection plans is described.
> Data collection reports are interpreted and recommendations are made.
> Guidance is provided to data gathering team.

4.
> A whole farming system is developed.
> Methods of systems thinking are applied in the design of soil, plant and animal management.
> The sustainability of whole farming systems is monitored and re-evaluated.

Agri-business:

5.
> Planning of a flow chain is described.
> A plan on the flow of agricultural inputs is prepared and implemented.
> Aspects of HR management related to the flow chain are described.

6.
> Market trends are analysed.
> Trends in technology are analyses.
> A production plan is developed.

7.
> Variables and critical success factors are determined for agri-business.
> Market opportunities are identified and analysed.
> Marketing strategies are developed.
> The marketing function as part of the business plan is explained.

8.
> The use of physical and financial information to compile financial statements is demonstrated.
> The analysis of financial statements and physical records is demonstrated.
> A comparison of financial and economic data to obtain managerial information is demonstrated.

9.
> The integration and optimisation of natural resources are explained.
> The optimisation of infrastructure is explained.
> The optimisation and maintenance of livestock is explained.
> A harvesting system is developed.
> Post harvest systems are developed.

Agricultural Practices:

10.
> The modification of agricultural equipment is explained.
> The determination of specifications of equipment is explained.
> A maintenance and storage plan is developed.
> Safety policies are explained.
> The development of task related technology in the agricultural environment is explained.

> A replacement policy is developed.

11.
> The characteristics of an optimised water system are described.
> Solutions are provided to water quality problems.
> The calibration and utilisation of water quality monitoring equipment is demonstrated.
> The management of infrastructure related to water quality is explained.

12.
> Implement and manage a food safety and quality management system in respect of food safety, production, environmental and social practices in the agricultural environment which meets market requirements in the agricultural supply chain.
> Evaluate, take corrective action and make improvements to ensure the effectiveness/efficiency of the food safety and quality management system with regard to good agricultural practices (GAP) good manufacturing practices (GMP), good health practices (GHP), good social practices (GSP) and good environmental practices (GEP), whichever is applicable to the workplace.
> A traceability system for operational efficiency in the agricultural supply chain is designed.

13.
> Integrated natural resource management practices and plans to combat environmental degradation and deterioration are designed.
> Innovative natural resource management practices to ensure the sustainability of an agricultural endeavour are introduced.
> A natural resource management strategic plan for a farm is developed.
> Company/farm policy on natural resource management is determined.
> Assist in the development of area wide planning and local government structures and policies.

14.
> Information relevant to the natural resources of a site is researched.
> Appropriate technology to determine sustainable farm layout and infrastructure placement is identified and used.
> Principles of sustainability in terms of the layout and infrastructure placement in an agricultural context are applied.
> High and low potential yield areas according to a range of land use options are identified.

Animal Production:

15.
> The anatomical, physiological, physical and biochemical components as well as their interrelated activities are explained.
> Symptomatic variations and abnormalities are explained.
> Animal production systems are developed based on anatomy, morphology and physiology.

16.
> The health status of animals is evaluated and described.
> Procedures to maintain animal disease prevention programmes are explained.

17.
> The metabolism of nutrients is described.
> The principles of nutrient requirements are described.
> The application of feed formulation principles is explained.
> Analysis of ingredients in feed is explained.
> Feed analysis if explained.
> Feed flow management is explained.

18.
> The integration of advanced breeding practices into a breeding programme is explained.
> Advanced selection methods are explained.
> Fertility and pregnancy diagnosis is explained.
> The components of a sustainable breeding programme are explained.

19.
> Principles related to the production of animal products are explained.

> The effects of harvesting on animals are explained.
> New opportunities in the harvesting of animal products are identified.
> The processes and systems of harvesting are explained.
> The management of animals to be harvested is explained.

20.
> Humane animal killing techniques are demonstrated.
> The use of dissection equipment is demonstrated.
> Various components to be dissected are described.
> The dissection of a specific animal is described and demonstrated.

NOTE: Assessment should be specific to the area of operation (i.e. Either large livestock, small livestock, pigs, poultry, etc.)

Integrated Assessment:

Integrated assessment at the level of the qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is relevant and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

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INTERNATIONAL COMPARABILITY

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This qualification and associated unit standards have been evaluated against comparable qualifications and unit standards of the following Qualifications Authorities:

> Australian AQF
> New Zealand NQF, and
> British NVQ's.

During this comparison the following was found:

Australian AQF: This qualification is comparable to an AQF Diploma in Agriculture (General cross-sector qualification) in an animal production context. Packaging of the AQF qualification reflects the need for sector specific content of a qualification to remain flexible, a quality that has also been captured in this qualification. The AQF qualification requires the inclusion of Units of Competency, similar to the unit standards reflected in the South African qualification. It should however be noted that the qualification of the AQF contains considerably more Elective type Units of Competency since these units have been developed for specific sub-fields. In the case of this qualification a more generic approach have been followed, allowing contexualisation of fewer unit standards across a wide range of sub-fields. It could be

concluded that there are numerous similarities between the Units of Competency and the Unit Standards reflected in the SA qualification covering similar sub-fields.

New Zealand NQF: This qualification is partly comparable to a NZNQF National Diploma in Agribusiness Management (Level 5) in an animal production context as well as with a National Diploma in Animal handling (Level 5). It should be noted that the NZQF qualification has been developed for a specific sub-field of specialization whilst a more generic approach is taken in this qualification allowing for contexualisation of the qualification across a wider range of sub-fields. In the NZQF qualification focus is given to local conditions, practices and approaches to agriculture whilst this qualification focuses on agriculture within a South African context.

British NVQ: This qualification is comparable with the BTEC National Award/Diploma in Agriculture courses.

Furthermore, input to the development of this qualification has been compared against international standards and qualifications and is evidenced in the following:

> Qualifications and competency units as defined by the New South Wales Department of Education and Training.
> The wide and narrow consultative process as well as the contributions made by role players from Universities and Technicons whom have a specific requirement for internationally comparable qualifications.

ARTICULATION OPTIONS

A learner will be able to progress horizontally from one category to another, namely small stock, large stock or pig production, etc. (Please refer to the list mentioned under "Areas of Specialisation") He/she will be able to do this without re-doing the whole qualification, but by only completing the necessary elective unit standards.

Furthermore, the learner will be able to progress horizontally to the following qualifications:
> National Certificate in Plant Production, NQF 4;

This qualification builds on the relevant qualification on NQF 4 (refer to the SGB's brief and matrix) and gives access to the a first degree agricultural qualification at NQF 6. In terms of competencies, the learner will progress from basic managerial skills to skills to managerial skills. The scope of practice will also increase.

The learner will be able to articulate with other occupations within the agricultural pharmaceutical operations such as laboratory assistant, marketing and selling of agricultural pharmaceutical products and fertilisers. The learner will also be able to move to the secondary agricultural field.

MODERATION OPTIONS

> Anyone assessing a learner against this qualification must be registered as an assessor with the relevant ETQA.

> Any institution offering learning that will enable achievement of this qualification, or assessment against this qualification must be accredited as a provider with the relevant ETQA.

> Moderation of assessment will be overseen by the relevant ETQA according to agreed ETQA procedures.

Therefore anyone wishing to be assessed against this qualification may apply to be assessed by any assessment agency, assessor or provider institution which is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Assessors need:

> A minimum of 2 (two) years' practical experience in animal production practices relevant to an area of specialisation mentioned below;

> Practical experience in the specific agricultural commodity (which might include the list of "Areas of Specialisation" mentioned below or a specific commodity such as abelone, fish, ostriches, etc.) and/or

system such as permaculture, organic production, etc.

> Technical competence in animal production practices at, at least one NQF level above the assessee.

NOTES

Areas of specialisation of the qualification in Animal Husbandry include but are not limited to:
> Small stock production,
> Large stock production,
> Dairy production,
> Pig production,
> Poultry production,
> Game,
> Aqua / mari culture,
> Commercial insects
> Animal fibres harvesting,
> Bee keeping,
> Natural resources harvesting
> Organic production,
> Perma-culture production,
> Eco/Agri Tourism,
> Agro Chemicals,
> Horse Breeding,
> Etc.

UNIT STANDARDS
(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	LEVEL	CREDITS	STATUS
Core	10050 Integrate marketing plans with business process	Level 5	6	Registered
Core	116324 Plan a farm and select a site	Level 5	9	Draft - Prep for P Comment
Core	116336 Understand juvinile animal rearing practices	Level 5	8	Draft - Prep for P Comment
Core	116337 Optimise and integrate various farming systems and trends within related enterprises	Level 5	11	Draft - Prep for P Comment
Core	116369 Optimise water quality	Level 5	6	Draft - Prep for P Comment
Core	116381 Investigate life threatening hazards when handling animals	Level 5	8	Draft - Prep for P Comment
Core	116382 Manage an input chain	Level 5	6	Draft - Prep for P Comment
Core	116384 Manage and control resources in a sustainable manner	Level 5	5	Draft - Prep for P Comment
Core	116385 Integrate sustainable breeding and selection methods	Level 5	10	Draft - Prep for P Comment
Core	116388 Evaluate animal anatomy and physiology systems	Level 5	10	Draft - Prep for P Comment
Core	116390 Harvest animal products: animal products systems	Level 5	9	Draft - Prep for P Comment
Core	116393 Evaluate animal health systems	Level 5	8	Draft - Prep for P Comment
Core	116394 Implement and manage human resource and labour relations policies and acts	Level 5	9	Draft - Prep for P Comment
Core	116399 Dissect animals	Level 5	5	Draft - Prep for P Comment
Core	116419 Develop and implement a food safety and quality management system in an agricultural supply chain	Level 5	7	Draft - Prep for P Comment
Core	116425 Design a natural resource management plan	Level 5	8	Draft - Prep for P Comment
Core	116426 Develop a production and strategic plan for the agricultural business	Level 5	11	Draft - Prep for P Comment
Core	116428 Analyse and interpret the financial statements and physical records in an agri-business to generate managerial information	Level 5	11	Draft - Prep for P Comment
Core	116430 Apply and plan animal nutrition	Level 5	12	Draft - Prep for P Comment

Elective	116299	Apply advanced pig husbandry practices	Level 4	5	Draft - Prep for P Comment
Elective	116649	Control feedlot production unit	Level 4	32	Draft - Prep for P Comment
Elective	116327	The optimisation of agri / ecotourism strenghts and opportunities and negation of threats and weaknesses	Level 5	6	Draft - Prep for P Comment
Elective	116370	Manage dairy production systems	Level 5	10	Draft - Prep for P Comment
Elective	116372	Manage hive placement and bee pollination	Level 5	2	Draft - Prep for P Comment
Elective	116402	Effective and responsible control of problem animals	Level 5	8	Draft - Prep for P Comment
Fundamental	7466	Represent and operate on complex numbers in non-trivial situations	Level 4	2	Registered
Fundamental	7468	Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues	Level 4	2	Registered
Fundamental	7470	Work with a wide range of patterns and inverses of functions and solve related problems	Level 4	6	Registered
Fundamental	7483	Solve problems involving sequences and series in real and simulated situations	Level 4	2	Registered
Fundamental	8974	Engage in sustained oral communication and evaluate spoken texts	Level 4	5	Registered
Fundamental	8975	Read analyse and respond to a variety of texts	Level 4	5	Registered
Fundamental	8976	Write for a wide range of contexts	Level 4	5	Registered
Fundamental	8979	Use language and communication in occupational learning programmes	Level 4	5	Registered
Fundamental	12417	Measure, estimate & calculate physical quantities & explore, critique & prove geometrical relationships in 2 and 3 dimensional space in the life and workplace of adult with increasing responsibilities	Level 4	4	Reregistered
Fundamental	116387	Integrate sustainable systems into planning and management processes	Level 5	8	Draft - Prep for P Comment
Fundamental	116412	Develop and manage a data collection plan to support an agricultural enterprise	Level 5	4	Draft - Prep for P Comment

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Certificate: Animal Production

SAQA QUAL ID	*QUALIFICATION TITLE*	
48976	National Certificate: Animal Production	
SGB NAME	SGB Primary Agriculture	
ABET BAND	*PROVIDER NAME*	
Undefined		
QUALIFICATION CODE	*QUAL TYPE*	*SUBFIELD*
AGR-2-National Certificate	National Certificate	Primary Agriculture
MINIMUM CREDITS	*NQF LEVEL*	*QUALIFICATION CLASS*
120	Level 2	Regular-Unit Stds Based
SAQA DECISION NUMBER	*REGISTRATION START DATE*	*REGISTRATION END DATE*

PURPOSE OF THE QUALIFICATION

The purpose of this qualification is to allow Junior Personnel and elected candidated to progress towards a position of farm laboures (operators) with specific reference to Animal Production. The contexualised purpose and usage of the qualification is as follows:

> A learner assessed against this qualification will have the necessary competence to participate as part of a working team, performing the agricultural processes as applicable to animal production in an established and familiar context under general supervision.

> The Learner will be able to perform directed activities and take responsibility for the guiding others at lower level within an Animal Production context.

> Competency will be gained in any of the specialized sub-fields of Animal Production as specified under Areas Of Specialization (i.e. Small stock, Large Stock, Dairy Production, Aqua Culture, etc.)

> The learner will be able to take responsible decisions within a familiar range based on a sound understanding of the basic principles of agri-business and good agricultural practices, in meeting the set objectives and targets within the broader farm plan which includes the economical application of general resources, agricultural production and technical knowledge and skills, all in an Animal Production context.

> The Learner will be able to carry out familiar procedures in a limited environment and will be able to adhere to the relevant safety, quality, hygiene and technical standards as applicable within the industry.

> In addition to the above, the learner will be well positioned to extend learning and practice into other sub-fields such as Plant Production and Mixed Farming, since such efforts will only require additional learning within the elective scope of other qualifications at this level.

> The learner will be well positioned to progress towards higher levels of Management and Technical production practices as defined by qualifications at the next level.

> Learners will be enabled to actively participate in the Primary Agricultural Sector through the production of quality agricultural products, enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

> This qualification will allow qualifying learners to become economically active in farming practices that will have a direct impact on Local Economic Development through the production of food, the improvement of household food security and access to mainstream agriculture.

> Finally, Learners will be able to guide and direct others in terms of the implementation of smaller development projects within an Animal Production context.

Rationale:

This qualification provides learners the opportunity to gain a qualification in Animal Production. The range of typical learners that will enter this qualification will vary and includes:

> Junior farm labourers who wish to progress to the level of Labourer within farming operations in Animal Husbandry;
> Farm owners, in possession of an equivalent qualification at NQF 1;
> Learners in possession of different levels of practical experience in farming operations, which will be assessed and RPL'ed;
> Possible candidates for promotion identified by the community as leaders.
> Learners may come from both genders.

The learner will engage in supervision and operational activities relevant to Animal Production.

Requests and expressions of need for this qualification, coming from the broad, but also specific farming communities (Animal Husbandry) forms the basis for the development of this qualification.

This qualification will form the basis for learners to extend their learning into more specialised areas of animal production and provides the basis of the establishment of sustainable farming operations through the inclusion of a whide spectrum of competencies required by farmers in South Africa. Whilst technical production orientated competencies are ensured, other aspects such as agri-business and good agricultural practices are included in the range of competencies required by farmers in order to enable them to strive towards agricultural management standards and practices at higher levels.

Competent qualifying learners in this qualification will participate in the production quality agricultural products in Animal Husbandry whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

It is assumed that a learner entering a programme leading to this qualification has achieved numeracy, literacy and communication equivalent to NQF 1 and technical skills pertaining to agricultural activities equivalent to NQF 1.

Recognition of Prior Learning:

This qualification may be achieved in part or in whole through the recognition of prior learning. Credit will be given to learning, which has already been acquired, through the appropriate process of assessment.

For example:

> Learners who have acquired skills and competencies in this qualification through for instance experience in the industry will be assessed against the unit standards the qualification comprises of prior to entering learning. Credits will be allocated to those unit standards and exit level outcomes in which the learner is found competent. The outstanding unit standards will then be sequenced according to an appropriate learning programme.

> Should a new entrant into the industry wish to enter this learning programme, recognition will be given to al appropriate learning acquired through the schooling system.

> In terms of fundamental unit standards, competencies could be acquired through life experience.

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to take.

QUALIFICATION RULES

Fundamental
> A minimum of 42 credits should be achieved in fundamental. All unit standards listed are compulsory.

Core
> 71 credits should be achieved in core.

Elective
> A minimum of 7 credits should be achieved in Elective, depending on the context of application of the unit standards.

EXIT LEVEL OUTCOMES

Exit Level Outcomes are divided into four categories of competencies, namely:

> Fundamental Competencies
> Agri-business
> Good Agricultural Practices
> Animal Production
> Plant Production (This component has been included to ensure that Learners at this level is exposed to a small component of plant production)

Fundamental Competencies:

1. Apply various communication skills within the agricultural environment.
2. Apply mathematical calculations within the agricultural environment.
3. Collect and collate agricultural data and recognize and report on deviations
4. Explain basic functions of the environment by recognising patterns and processes, knowing local resources and basic sustainable agricultural processes using environmental indicators.

Agri-business:

5. Apply basic skills in record keeping, storage, contaminant management and associated legislation when controlling input and stock.
6. Set goals and objectives related to production / conversion systems within an agricultural business.
7. Apply knowledge of the marketing principles within agriculture for a specific product or service.
8. Define and illustrate the gross margin statement, income statement, balance sheet and cash flow budget as well as the different cost aspects that one can find in a business.
9. Describe and understand the principles of Human Resources Management as applied.
10. Explain the principles and factors influencing agricultural enterprise selection and production.

Good Agricultural Practices:

11. Monitor and support the implementation of food safety and quality, production, environmental and social practices and awareness within the agricultural supply chain.
12. Demonstrate an understanding of the importance of water quality to agriculture and to monitor and maintain water quality using established procedures.
13. Apply basic practices to conserve the environment, including natural resources.
14. Select basic equipment and implements that are appropriate to a combination of activities within a single agricultural process.
15. Carry out basic physical farm layout tasks including construction of rainwater harvesting and soil conservation structures in a small farm or garden environment

Animal Production:

16. Evaluate animals externally with respect to their internal and external anatomical systems and morphology.
17. Explain the basic concepts used in animal nutrition, maintaining, preserving, modifying and enhancing the nutrient value of animal feeds and follow correct on-farm feeding practices.
18. Identify and monitor breeding behaviour, and pre and post-partum behaviour of farm animals.
19. Harvest animal products, prepare them for processing and identify processes involved in processing of animal products.
20. Identify, record and report on abnormal animal behaviour and physical abnormalities, supervise the movement and restraint of animals and apply treatment and perform basic procedures.

Plant Production:

21. Produce crop whilst demonstrating an understanding of the physical and biological environment and its relationship to sustainable production.

ASSOCIATED ASSESSMENT CRITERIA

Fundamental Competencies:

1.
> Oral reports are made or data is entered on pre-printed forms or screens.
> Instructions (including challenging, inappropriate or incorrect instructions) are received, evaluated, clarified and acted on.
> Workplace language, e.g. special purpose gestures and terminology to describe conditions, events, problems and actions is used.
> Meetings (describe conditions, state own opinions) are participated in.
> Information is collected from a variety of sources by recognising / reading / and/or using sensory cues.
> Information (collected from instruments, gauges, outputs, incidents, operations) is organised, summarised and responded to.
> Conditions or states are determined by measuring (i.e. temperature, size, mass, colour)

2.
> Numbers are used to count and measure.
> A calculator is used to add, subtract, divide or multiply.
> Simple fractions and decimals are read and written.
> Simple rations / percentages are applied as part of an instruction.
> Proper use is made of number sequence, i.e. batch numbers.
> Shapes are recognised.
> Money is calculated in Rands and cents (related to pay, deductions, price, etc.)
> Business related application are applied.
> Underpinning natural science principles are applied.

3.
> Collected agricultural data is collated and recorded correctly and accurately.
> Data is current and available when needed.
> Methods of collating data are explained.
> Health and safety measures are adhered to.

4.
> Basic environmental patterns and processes are related to sustainable use of agricultural land.
> Limitations of natural resources within the agricultural environment are recognized.
> Principles of sustainable agriculture are applied.
> Measures to prevent environmental degradation indicators are implemented.

Agri-business:

5.
> Storage space is prepared to receive stock through cleaning and disinfecting, identification of appropriate space for storage and prevention of contamination (direct and cross contamination).
> Accurate records are kept by applying basic inventory taking, issuing and receiving of stock, identification of re-order level, reporting on stock levels and re-order prompting skills.
> Legal issues regarding contracts, penalties and obligations as pertaining to input supply is explained.
> Safety regulations are applied.

6.
> The concept of optimal usage of resources and optimisation of outputs are explained.
> Tasks are appropriately scheduled.
> Human resources in terms of skills required, number of labourers required to execute tasks are identified.
> Goals and objectives related to systems within an agricultural business are set.

7.
> The value of marketing research is explained.
> The marketing mix (product, promotion, place, price and people) to a selected enterprise is applied.
> Limited and shared responsibility for the marketing budget is taken.

> The importance of effective distribution channels is explained.

8.
> Direct and indirect costs, as well as fixed and variable costs are explained.
> An income statement, the balance sheet and a cash-flow budget and statement are explained.
> Complete a template, showing and calculating the above financial calculations.

9.
> Human resources philosophy, policies, rules, procedures and disciplinary environment applicable at farm level are explained.
> Employment rights and responsibilities are explained.
> Contracts and agreements are explained and interpreted.

10.
> Natural resources, infrastructural requirements and stock for the selection of a sustainable enterprise are recognized and described.
> Production cycles are recognised and described.
> Harvesting and post-harvesting practices are described.

Good Agricultural Practices:

11.
> Non-conformances and deviations on food safety, quality and the environment practices are distinguish and reported on.
> Risk factors in food safety and quality are identified and explained.
> The importance of a systematic filing system for records in accordance with GAP (good agricultural practices) and GMP (good manufacturing practices) principles are explained.

12.
> Basic water quality tests and analyses are performed and monitored.
> Maintenance tasks on certain operational technical systems related to water quality are performed.
> The importance of water quality to agriculture is explained.

13.
> The principles of natural resource management are explained.
> Invasive alien plant species and noxious weeds are eradicated.
> On farm fire breaks and/or fire guards are established.
> Eroded areas and potential soil erosion are identified and control measures are suggested.
> The impact of the local climate and micro-climate is explained.
> Harmful and useful fauna and flora and their purpose and/or effect on the farm is explained.

14.
> Appropriate tools, implements and/or equipment, to use in a specified combination of activities within a single agricultural process are selected from a limited range.
> Malfunctioning tools and equipment are identified and minor repairs are performed.
> Safety measures in the use of agricultural equipment and implements are explained and adhered to.

15.
> Veld, planted pasture and arable land are recognized.
> Soil physical characteristics are related to land capability.
> A swale (level contour bund), using a simple water level is constructed.
> Swales and soil erosion prevention structures are maintained.

Animal Production:

16.
> The composition and structure of the external divisions or parts of animals and identify and evaluate gross abnormalities and their probable causes therein are identified and explained.
> The basic composition and structures of further anatomical systems are identified and named.
> The life cycles of the specific animal are described.

17.

> Basic nutrient groups and functions and feed ingredients and groups are explained.
> Correct on-farm storage procedures are applied to maintain feed quality.
> Feed processing procedures are applied correctly.
> Appropriate feed type and quantity are selected and provided to animals.
> Abnormal feeding behaviour is reported.

18.

> Standing oestrus of female breeding animals and libido of the male breeding animal are observed and identified.
> Signs of giving birth are identified.
> Abnormal behaviour of breeding animals during the birth process is reported.
> Post-partum behaviour of breeding animals is monitored.

19.

> The estimated qualitative and quantitative value of various animal products isidentified.
> Observations regarding the readiness of animal products for harvesting are report on.
> Core animal product and waste are separated.
> Correct harvesting techniques are applied.
> Animal products are processed for preservation or presentation.

20.

> Abnormal behaviour is identified, inspected and recorded.
> The movement and restraint of animals are supervised.
> Basic procedures are performed.
> Basic principles of basic Bio-Security are applied.

NOTE: Assessment should be specific to the area of operation (i.e. Either large livestock, small livestock, pigs, poultry, etc.)

Plant Production:

21.

> Soil as a factor in crop production is explained.
> Climatic factors influencing crop production and their practical implications are identified and described.
> The importance of water as a factor in crop production.
> The influence of topography on crop production is identified, described and explained.
> Biological organisms as a factor influencing crop production is identified, described and explained.
> The effects of crop production practices on the sustainability of the environment are observed and assessed.

Integrated Assessment:

Integrated assessment at the level of the qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is relevant and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

Generic nature of the unit standards and the context of assessment:

Because of the diverse nature of the primary agricultural sector, a generic approach to developing the unit standards has been adopted. This resulted in generic unit standards which should be contextualised within a specific area of operation, a specific agricultural commodity or specific agricultural system. Assessment therefore, should not be divorced from the context of application. All assessment tools, such as guides as

well as the interpretation of unit standards and specifically range statements, should be contextualised within a specific agricultural commodity and/or system.

INTERNATIONAL COMPARABILITY

In the case of the primary agriculture context it is difficult to compare the qualification and unit standards against similar international qualifications due to the vast differences in levels of mechanization and literacy of farm operators. It should also be noted that climatic and market conditions differ considerably between South Africa and other countries and the variety in commodities is therefore significant.

This qualification and associated unit standards have been evaluated against comparable qualifications and unit standards of the following Qualifications Authorities:

> Australian AQF
> New Zealand NQF, and
> British NVQ's.

During this comparison the following was found:

Australian AQF: This qualification is comparable to an AQF Certificate II in Agriculture (General cross-sector qualification) in an animal production context. Packaging of the AQF qualification reflects the need for sector specific content of a qualification to remain flexible, a quality that has also been captured in this qualification. The AQF qualification requires the inclusion of Units of Competency, similar to the unit standards reflected in the South African qualification. It should however be noted that the qualification of the AQF contains considerably more Elective type Units of Competency since these units have been developed for specific sub-fields. In the case of this qualification a more generic approach have been followed, allowing contexualisation of fewer unit standards across a wide range of sub-fields. It could be concluded that there are numerous similarities between the Units of Competency and the Unit Standards reflected in the SA qualification covering similar sub-fields.

New Zealand NQF: This qualification is comparable to a NZNQF National Certificate in Agriculture (Level 2) in an animal production context. It should be noted that the NZQF qualification has been developed for a specific sub-field of specialization whilst a more generic approach is taken in this qualification allowing for contexualisation of the qualification across a wider range of sub-fields. In the NZQF qualification focus is given to local conditions, practices and approaches to agriculture whilst this qualification focuses on agriculture within a South African context.

British NVQ: The level of this qualification is too low to be compared with any Agricultural Qualification of the NVQ since levels of literacy and learning assumed to be in place is considerably higher than in South Africa.

Furthermore, input to the development of this qualification has been compared against international standards and qualifications and is evidenced in the following:
> Qualifications and competency units as defined by the New South Wales Department of Education and Training.
> The wide and narrow consultative process as well as the contributions made by role players from Universities and Technicons whom have a specific requirement for internationally comparable qualifications.

ARTICULATION OPTIONS

A learner will be able to progress horizontally from one category to another, namely small stock, large stock or pig production, etc. (Please refer to the list mentioned under "Areas of Specialisation") He/she will be able to do this without re-doing the whole qualification, but by only completing the necessary elective unit standards.

Furthermore, the learner will be able to progress horizontally to the following qualifications:
> National Certificate in Plant Production, NQF 2;
> National Certificate in Mixed Farming Systems, NQF 2.

This qualification allows access to the agricultural sector (refer to the SGB's brief and matrix) and gives access to the relevant agricultural qualification at NQF 3, namely:
> National Certificate in Animal Production, NQF 3.

In terms of competencies, the learner will progress from farming operation skills to basic managerial skills to managerial skills. The scope of practice will also increase.

The learner will be able to articulate with other occupations within the agricultural pharmaceutical operations such as laboratory assistant, assistance in the marketing and selling of agricultural pharmaceutical products and fertilisers. The learner will also be able to move to the secondary agricultural field.

MODERATION OPTIONS

> Anyone assessing a learner against this qualification must be registered as an assessor with the relevant ETQA.

> Any institution offering learning that will enable achievement of this qualification, or assessment against this qualification must be accredited as a provider with the relevant ETQA.

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Therefore anyone wishing to be assessed against this qualification may apply to be assessed by any assessment agency, assessor or provider institution which is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Assessors need:

> A minimum of 2 (two) years' practical experience in animal production practices relevant to an area of specialisation mentioned below;

> Practical experience in the specific agricultural commodity (which might include the list of "Areas of Specialisation" mentioned below or a specific commodity such as abelone, fish, ostriches, etc.) and/or system such as permaculture, organic production, etc.

> Technical competence in animal production practices at, at least one NQF level above the assessee.

NOTES

Areas of specialisation of the qualification in Animal Husbandry include but are not limited to:
> Small stock production,
> Large stock production,
> Dairy production,
> Pig production,
> Poultry production,
> Game,
> Aqua / mari culture,
> Commercial insects
> Animal fibres harvesting,
> Bee keeping,
> Natural resources harvesting
> Organic production,
> Perma-culture production,
> Etc.

UNIT STANDARDS
(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	*LEVEL*	*CREDITS*	*STATUS*
Core	116055 Understand animal nutrition	Level 2	7	Draft - Prep for P Comment
Core	116060 Utilise and perform minor repair and maintenance tasks on implements, equipment and infrastructure	Level 2	5	Draft - Prep for P Comment
Core	116063 Respond correctly to control defensive behaviour in animals	Level 2	4	Draft - Prep for P Comment

Core	116070 Operate and support a food safety and quality management system in the agricultural supply chain	Level 2	2	Draft - Prep for P Comment
Core	116074 Observe and inspect animal health	Level 2	5	Draft - Prep for P Comment
Core	116077 Monitor water quality	Level 2	3	Draft - Prep for P Comment
Core	116081 Identify and recognise factors influencing agricultural enterprise selection	Level 2	2	Draft - Prep for P Comment
Core	116083 Illustrate and understand the basic layout of financial statements	Level 2	2	Draft - Prep for P Comment
Core	116107 Identify basic breeding practices for farm animals	Level 2	5	Draft - Prep for P Comment
Core	116113 Explain principles of human resources management and practices in agriculture	Level 2	2	Draft - Prep for P Comment
Core	116115 Define and understand production systems and production management	Level 2	2	Draft - Prep for P Comment
Core	116117 Evaluate external animal anatomy and morphology	Level 2	5	Draft - Prep for P Comment
Core	116121 Apply sustainable farming practices to conserve the ecological environment	Level 2	5	Draft - Prep for P Comment
Core	116122 Control inputs and stock in agribusiness	Level 2	2	Draft - Prep for P Comment
Core	116123 Consider plant botany during the placement of bee hives	Level 2	2	Draft - Prep for P Comment
Core	116125 Apply crop protection and animal health products effectively and responsibly	Level 2	4	Draft - Prep for P Comment
Core	116126 Apply marketing principles in agriculture	Level 2	2	Draft - Prep for P Comment
Core	116127 Apply layout principles for conservation and infrastructure	Level 2	5	Draft - Prep for P Comment
Core	116144 Apply animal products harvesting procedures	Level 2	5	Draft - Prep for P Comment
Elective	8347 Control problem Animals	Level 2	4	Registered
Elective	116062 Prepare a sheaning shed for shearing	Level 2	3	Draft - Prep for P Comment
Elective	116069 Participate in agri/ecotourism practices at both micro and meso levels to tourists	Level 2	4	Draft - Prep for P Comment
Elective	116110 Explain dairy production cleanliness	Level 2	5	Draft - Prep for P Comment
Elective	116120 Explain basic pig husbandry practices	Level 2	4	Draft - Prep for P Comment
Elective	116638 Mix and deliver feedlot feed to bunker	Level 2	4	Draft - Prep for P Comment
Elective	116643 Administer livestock processing treatments	Level 2	8	Draft - Prep for P Comment
Elective	116637 Determine livestock mass	Level 3	2	Draft - Prep for P Comment
Elective	116645 Control feedbunker and water trough quality	Level 3	6	Draft - Prep for P Comment
Elective	116647 Demonstrate an understanding of the feedlot environment	Level 3	10	Draft - Prep for P Comment
Elective	116653 Demonstrate an understanding of feedlot feed ingredient and blends	Level 3	6	Draft - Prep for P Comment
Fundamental	13355 Demonstrate an understanding of the physical and biological environment and its relationship to sustainable crop production	Level 1	4	Registered
Fundamental	7469 Use mathematics to investigate and monitor the financial aspects of personal and community life	Level 2	2	Registered
Fundamental	7479 Describe, represent and informally analyse shape and motion in 2- and 3-dimensional space	Level 2	4	Reregistered
Fundamental	7480 Demonstrate understanding of rational and irrational numbers and number systems	Level 2	3	Registered
Fundamental	8962 Maintain and adapt oral communication	Level 2	5	Registered
Fundamental	8963 Access and use information from texts	Level 2	5	Registered
Fundamental	8964 Write for a defined context	Level 2	5	Registered
Fundamental	8967 Use language and communication in occupational learning programmes	Level 2	5	Registered
Fundamental	9009 Apply basic knowledge of statistics and probability to influence the use of data and procedures in order to investigate life related problems	Level 2	4	Registered

Fundamental	12444	Measure, estimate and calculate physical quantities and explore, describe and represent geometrical relationships in 2-dimensions in different life or workplace contexts	Level 2	3	Registered
Fundamental	116064	Recognise and identify the basic functions of the ecological environment	Level 2	4	Draft - Prep for P Comment
Fundamental	116080	Monitor, collect and collate agricultural data	Level 2	2	Draft - Prep for P Comment

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Certificate: Mixed Farming Systems

SAQA QUAL ID	*QUALIFICATION TITLE*		
48977	National Certificate: Mixed Farming Systems		
SGB NAME	SGB Primary Agriculture		
ABET BAND	*PROVIDER NAME*		
Undefined			
QUALIFICATION CODE	*QUAL TYPE*	*SUBFIELD*	
AGR-2-National Certificate	National Certificate	Primary Agriculture	
MINIMUM CREDITS	*NQF LEVEL*	*QUALIFICATION CLASS*	
120	Level 2	Regular-Unit Stds Based	
SAQA DECISION NUMBER	*REGISTRATION START DATE*	*REGISTRATION END DATE*	

PURPOSE OF THE QUALIFICATION

The purpose of this qualification is to allow Junior Personnel and elected candidates to progress towards a position of farm laboures (operators) with specific reference to Mixed Farming systems. The contexualised purpose and usage of the qualification is as follows:

> A learner assessed against this qualification will have the necessary competence to participate as part of a working team, performing the agricultural processes as applicable to both Plant- and Animal Production in an established and familiar context under general supervision.

> The Learner will be able to perform directed activities and take responsibility for the guiding others at lower level within a Mixed Farming context.

> Competency will be gained in a combination of the sub-fields of Plant and Animal Production as specified under Areas Of Specialization (i.e. Small Stock, Large Stock as well as Vegetables, Fruit Production, Hydroponics, etc.)

> The learner will be able to take responsible decisions within a familiar range based on a sound understanding of the basic principles of agri-business and good agricultural practices, in meeting the set objectives and targets within the broader farm plan which includes the economical application of general resources, agricultural production and technical knowledge and skills, all in Mixed Farming context.

> The Learner will be able to carry out familiar procedures in a limited environment and will be able to adhere to the relevant safety, quality, hygiene and technical standards as applicable within the industry.

> In addition to the above, the learner will be well positioned to extend learning and practice into other sub-fields such as Plant Production and Animal Production, since such efforts will only require additional learning within the elective scope of other qualifications at this level.

> The learner will be well positioned to progress towards higher levels of Management and Technical production practices as defined by qualifications at the next level.

> Learners will be enabled to actively participate in the Primary Agricultural Sector through the production of quality agricultural products, enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

> This qualification will allow qualifying learners to become economically active in farming practices that will have a direct impact on Local Economic Development through the production of food, the improvement of household food security and access to mainstream agriculture.

> Finally, Learners will be able to guide and direct others in terms of the implementation of smaller

development projects within Mixed Farming context.

Rationale:

This qualification provides learners the opportunity to gain a qualification in Mixed Farming Systems (Plant- and Animal Production). The range of typical learners that will enter this qualification will vary and includes:

> Junior farm labourers who wish to progress to the level of Labourer within farming operations in Plant Production;
> Farm owners, in possession of an equivalent qualification at NQF 1;
> Learners in possession of different levels of practical experience in farming operations, which will be assessed and RPL'ed;
> Possible candidates for promotion identified by the community as leaders.
> Learners may come from both genders.

The learner will engage in supervision and operational activities relevant to Plant Production.

Requests and expressions of need for this qualification, coming from the broad, but also specific farming communities forms the basis for the development of this qualification.

This qualification will form the basis for learners to extend their learning into more specialised areas of plant- and animal production and provides the basis of the establishment of sustainable farming operations through the inclusion of a wide spectrum of competencies required by farmers in South Africa. Whilst technical production orientated competencies are ensured, other aspects such as agri-business and good agricultural practices are included in the range of competencies required by farmers in order to enable them to strive towards agricultural management standards and practices at higher levels.

Competent qualifying learners in this qualification will oversee quality agricultural products in mixed farming systems whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

It is assumed that a learner entering a programme leading to this qualification has achieved numeracy, literacy and communication equivalent to NQF 1 and technical skills pertaining to agricultural activities equivalent to NQF 1.

Recognition of Prior Learning:

This qualification may be achieved in part or in whole through the recognition of prior learning. Credit will be given to learning, which has already been acquired, through the appropriate process of assessment.

For example:

> Learners who have acquired skills and competencies in this qualification through for instance experience in the industry will be assessed against the unit standards the qualification comprises of prior to entering learning. Credits will be allocated to those unit standards and exit level outcomes in which the learner is found competent. The outstanding unit standards will then be sequenced according to an appropriate learning programme.

> Should a new entrant into the industry wish to enter this learning programme, recognition will be given to al appropriate learning acquired through the schooling system.

> In terms of fundamental unit standards, competencies could be acquired through life experience.

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to take.

QUALIFICATION RULES

Fundamental

> A minimum of 42 credits should be achieved in fundamental.

Core
> 64 credits should be achieved in core.

Elective
> A minimum of 14 credits should be achieved in Elective, depending on the context of application of the unit standards.

EXIT LEVEL OUTCOMES

Exit Level Outcomes are divided into five categories of competencies, namely:

> Fundamental Competencies
> Agri-business
> Good Agricultural Practices
> Plant Production; and
> Animal Production

Fundamental Competencies:

1. Apply various communication skills within the agricultural environment.
2. Apply mathematical calculations within the agricultural environment.
3. Collect and collate agricultural data and recognize and report on deviations
4. Explain basic functions of the environment by recognising patterns and processes, knowing local resources and basic sustainable agricultural processes using environmental indicators.

Agri-business:

5. Apply basic skills in record keeping, storage, contaminant management and associated legislation when controlling input and stock
6. Set goals and objectives related to production / conversion systems within an agricultural business.
7. Apply knowledge of the marketing principles within agriculture for a specific product or service.
8. Define and illustrate the gross margin statement, income statement, balance sheet and cash flow budget as well as the different cost aspects that one can find in a business.
9. Describe and understand the principles of Human Resources Management as applied
10. Explain the principles and factors influencing agricultural enterprise selection and production.

Agricultural Practices:

11. Monitor and support the implementation of food safety and quality, production, environmental and social practices and awareness within the agricultural supply chain.
12. Demonstrate an understanding of the importance of water quality to agriculture and to monitor and maintain water quality using established procedures.
13. Apply basic practices to conserve the environment, including natural resources.
14. Select basic equipment and implements that are appropriate to a combination of activities within a single agricultural process.
15. Carry out basic physical farm layout tasks including construction of rainwater harvesting and soil conservation structures in a small farm or garden environment

Animal Production:

16. Explain the basic concepts used in animal nutrition, maintaining, preserving, modifying and enhancing the nutrient value of animal feeds and follow correct on-farm feeding practices.
17. Identify, record and report on abnormal animal behaviour and physical abnormalities, supervise the movement and restraint of animals and apply treatment and perform basic procedures.

Plant Production:

18. Soil is prepared according to the requirements of the crop.
19. Recognize common insects, disease symptoms and weeds and apply basic control measures
20. Apply agrochemical products in a safe, effective and responsible manner with consideration to the environment.

21. Plant a range of crops and monitor the correct establish of crops as well as ensuring that planting is placed and spaced as required.
22. Manipulate plants by applying a narrow range of techniques

ASSOCIATED ASSESSMENT CRITERIA

Fundamental Competencies:

1.
> Oral reports are made or data is entered on pre-printed forms or screens.
> Instructions (including challenging, inappropriate or incorrect instructions) are received, evaluated, clarified and acted on.
> Workplace language, e.g. special purpose gestures and terminology to describe conditions, events, problems and actions is used.
> Meetings (describe conditions, state own opinions) are participated in.
> Information is collected from a variety of sources by recognising / reading / and/or using sensory cues.
> Information (collected from instruments, gauges, outputs, incidents, operations) is organised, summarised and responded to.
> Conditions or states are determined by measuring (i.e. temperature, size, mass, colour)

2.
> Numbers are used to count and measure.
> A calculator is used to add, subtract, divide or multiply.
> Simple fractions and decimals are read and written.
> Simple rations / percentages are applied as part of an instruction.
> Proper use is made of number sequence, i.e. batch numbers.
> Shapes are recognised.
> Money is calculated in Rands and cents (related to pay, deductions, price, etc.)
> Business related application are applied.
> Underpinning natural science principles are applied.

3.
> Collected agricultural data is collated and recorded correctly and accurately.
> Data is current and available when needed.
> Methods of collating data are explained.
> Health and safety measures are adhered to.

4.
> Basic environmental patterns and processes are related to sustainable use of agricultural land.
> Limitations of natural resources within the agricultural environment are recognized.
> Principles of sustainable agriculture are applied.
> Measures to prevent environmental degradation indicators are implemented.

Agri-business:

5.
> Storage space is prepared to receive stock through cleaning and disinfecting, identification of appropriate space for storage and prevention of contamination (direct and cross contamination).
> Accurate records are kept by applying basic inventory taking, issuing and receiving of stock, identification of re-order level, reporting on stock levels and re-order prompting skills.
> Legal issues regarding contracts, penalties and obligations as pertaining to input supply is explained.
> Safety regulations are applied.

6.
> The concept of optimal usage of resources and optimisation of outputs are explained.
> Tasks are appropriately scheduled.
> Human resources in terms of skills required, number of labourers required to execute tasks are identified.
> Goals and objectives related to systems within an agricultural business are set.

7.
> The value of marketing research is explained.
> The marketing mix (product, promotion, place, price and people) to a selected enterprise is applied.
> Limited and shared responsibility for the marketing budget is taken.

> The importance of effective distribution channels is explained.

8.
> Direct and indirect costs, as well as fixed and variable costs are explained.
> An income statement, the balance sheet and a cash-flow budget and statement are explained.
> Complete a template, showing and calculating the above financial calculations.

9.
> Human resources philosophy, policies, rules, procedures and disciplinary environment applicable at farm level are explained.
> Employment rights and responsibilities are explained.
> Contracts and agreements are explained and interpreted.

10.
> Natural resources, infrastructural requirements and stock for the selection of a sustainable enterprise are recognized and described.
> Production cycles are recognised and described.
> Harvesting and post-harvesting practices are described.

Agricultural Practices:

11.
> Non-conformances and deviations on food safety, quality and the environment practices are distinguish and reported on.
> Risk factors in food safety and quality are identified and explained.
> The importance of a systematic filing system for records in accordance with GAP (good agricultural practices) and GMP (good manufacturing practices) principles are explained.

12.
> Basic water quality tests and analyses are performed and monitored.
> Maintenance tasks on certain operational technical systems related to water quality are performed.
> The importance of water quality to agriculture is explained.

13.
> The principles of natural resource management are explained.
> Invasive alien plant species and noxious weeds are eradicated.
> On farm fire breaks and/or fire guards are established.
> Eroded areas and potential soil erosion are identified and control measures are suggested.
> The impact of the local climate and micro-climate is explained.
> Harmful and useful fauna and flora and their purpose and/or effect on the farm is explained.

14.
> Appropriate tools, implements and/or equipment, to use in a specified combination of activities within a single agricultural process are selected from a limited range.
> Malfunctioning tools and equipment are identified and minor repairs are performed.
> Safety measures in the use of agricultural equipment and implements are explained and adhered to.

15.
> Veld, planted pasture and arable land are recognized.
> Soil physical characteristics are related to land capability.
> A swale (level contour bund), using a simple water level is constructed.
> Swales and soil erosion prevention structures are maintained.

Animal Production:

16.
> Basic nutrient groups and functions and feed ingredients and groups are explained.
> Correct on-farm storage procedures are applied to maintain feed quality.
> Feed processing procedures are applied correctly.
> Appropriate feed type and quantity are selected and provided to animals.
> Abnormal feeding behaviour is reported.

17.
> Abnormal behaviour is identified, inspected and recorded.
> The movement and restraint of animals are supervised.
> Basic procedures are performed.
> Basic principles of basic Bio-Security are applied.

NOTE: Assessment should be specific to the area of operation (i.e. Either large livestock, small livestock, pigs, poultry, etc.)

Plant Production:

18.
> Appropriate quantity and quality of required soil nutrient applications are measured and prepared.
> The soil is prepared according to the requirements of the agricultural crop.
> Basic symptoms of nutritional deficiencies are identified and explained.
> The properties of soil are explained.

19.
> Common insects and types of weeds associated with the specific agricultural enterprise are identified and described.
> Common symptoms of diseases are identified.
> Old and new damage are distinguished and reported.
> Monitoring of pests (scouting) and decrease/increase in pest levels after spraying or other control measures were applied, are explained.

20.
> A pre-application plan is implemented.
> Pest control products are mixed at the correct dose rate.
> Pest control product is applied to produce/crop or farm animals.
> Necessary safety and health precautions whilst applying pest control products are applied and emergencies are dealt with.
> Post-application procedures are applied.
> The process, problems and unusual occurrences are monitored and reported.

21.
> Appropriate tools and equipment used in the planting of a specific crop are selected, used and cared for.
> Handling of planting material is monitored for successful establishment according to required procedures for a specific crop.
> The impact of environmental conditions on the successful establishment of crops is explained.
> The planting of plant material at correct spacing between rows, and individual plants, and at the correct depth for specific plant species are monitored.

22.
> Various manipulation techniques are explained.
> Framework development principles as part of plant manipulation methods are applied.
> A range of flower and fruit manipulation methods are applied.
> Pruning techniques as a vegetative plant manipulation method are applied.
> Safety and hygiene measures are applied.

Integrated Assessment:

Integrated assessment at the level of the qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is relevant and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction

between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

Generic nature of the unit standards and the context of assessment:

Because of the diverse nature of the primary agricultural sector, a generic approach to developing the unit standards has been adopted. This resulted in generic unit standards which should be contextualised within a specific area of operation, a specific agricultural commodity or specific agricultural system. Assessment therefore, should not be divorced from the context of application. All assessment tools, such as guides as well as the interpretation of unit standards and specifically range statements, should be contextualised within a specific agricultural commodity and/or system.

INTERNATIONAL COMPARABILITY

In the case of the primary agriculture context it is difficult to compare the qualification and unit standards against similar international qualifications due to the vast differences in levels of mechanization and literacy of farm operators. It should also be noted that climatic and market conditions differ considerably between South Africa and other countries and the variety in commodities is therefore significant.

It should also be noted that this qualification is unique in the sense that it provides for the development of learners in both Plant- and Animal Production.

This qualification and associated unit standards have been evaluated against comparable qualifications and unit standards of the following Qualifications Authorities:

> Australian AQF
> New Zealand NQF, and
> British NVQ's.

During this comparison the following was found:

Australian AQF: Although no specific qualification of this nature exists within the AQF, this qualification is partly comparable to the AQF Certificates II (General cross-sector qualifications) in Agriculture in both a plant- and animal production context.

New Zealand NQF: Although no specific qualification of this nature exists within the NZQF, this qualification is partly comparable to the NZNQF National Certificates in Agriculture (Level 2) in both a plant- and animal production context.

British NVQ: The level of this qualification is too low to be compared with any Agricultural Qualification of the NVQ since levels of literacy and learning assumed to be in place is considerably higher than in South Africa.

Furthermore, input to the development of this qualification has been compared against international standards and qualifications and is evidenced in the following:
> Qualifications and competency units as defined by the New South Wales Department of Education and Training.
> The wide and narrow consultative process as well as the contributions made by role players from Universities and Technicons whom have a specific requirement for internationally comparable qualifications.

ARTICULATION OPTIONS

A learner will be able to progress horizontally from one category to another, namely small stock, large stock or pig production, organic systems, perma culture systems, vegetable production, etc. (Please refer to the list mentioned under "Areas of Specialisation") He/she will be able to do this without re-doing the whole qualification, but by only completing the necessary elective unit standards.

Furthermore, the learner will be able to progress horizontally to the following qualifications:
> National Certificate in Animal Production, NQF 2.
> National Certificate in Plant Production, NQF 2.

This qualification allows access to the agricultural sector (refer to the SGB's brief and matrix) and gives access to the relevant agricultural qualification at NQF 3,

namenly:
> National Certificate in Animal Production, NQF 3.
> National Certificate in Plant Production, NQF 3.

In terms of competencies, the learner will progress from farming operation skills to basic managerial skills to managerial skills. The scope of practice will also increase.

The learner will be able to articulate with other occupations within the agricultural pharmaceutical operations such as laboratory assistant, assistance in the marketing and selling of agricultural pharmaceutical products and fertilisers.

The learner will also be able to move to the secondary agricultural field.

MODERATION OPTIONS

> Anyone assessing a learner against this qualification must be registered as an assessor with the relevant ETQA.

> Any institution offering learning that will enable achievement of this qualification, or assessment against this qualification must be accredited as a provider with the relevant ETQA.

> Moderation of assessment will be overseen by the relevant ETQA according to agreed ETQA procedures.

Therefore anyone wishing to be assessed against this qualification may apply to be assessed by any assessment agency, assessor or provider institution which is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Assessors need:

> A minimum of 2 (two) years' practical experience in mixed farming systems practices relevant to an area of specialisation mentioned below;

> Practical experience in the specific agricultural commodity (which might include the list of "Areas of Specialisation" mentioned below or a specific commodity such as abelone, fish, ostriches, agronomic crop, horticultural crop, vegetable production, etc.) and/or system such as permaculture, organic production, etc.

> Technical competence in mixed farming production practices at, at least one NQF level above the assessee.

NOTES

Areas of specialisation in Animal Husbandry include but are not limited to:
> Small stock production,
> Large stock production,
> Dairy production,
> Pig production,
> Poultry production,
> Game,
> Aqua / mari culture,
> Commercial insects
> Animal fibres harvesting,
> Bee keeping,
> Natural resources harvesting
> Organic production,
> Perma-culture production,
> Eco/Agri Tourism,
> Agro Chemicals,
> Horse Breeding,
> Etc.

Areas of specialisation in Plant Production include but are not limited to:
> Organic production,
> Hydroponic production,

> Perma-culture production,
> Agronomy,
> Horticulture,
> Natural resources harvesting.

UNIT STANDARDS
(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	LEVEL	CREDITS	STATUS
Core	116053 Understand basic soil fertility and plant nutrition	Level 2	5	Draft - Prep for P Comment
Core	116055 Understand animal nutrition	Level 2	7	Draft - Prep for P Comment
Core	116060 Utilise and perform minor repair and maintenance tasks on implements, equipment and infrastructure	Level 2	5	Draft - Prep for P Comment
Core	116063 Respond correctly to control defensive behaviour in animals	Level 2	4	Draft - Prep for P Comment
Core	116070 Operate and support a food safety and quality management system in the agricultural supply chain	Level 2	2	Draft - Prep for P Comment
Core	116077 Monitor water quality	Level 2	3	Draft - Prep for P Comment
Core	116079 Monitor the establishment of a crop	Level 2	4	Draft - Prep for P Comment
Core	116081 Identify and recognise factors influencing agricultural enterprise selection	Level 2	2	Draft - Prep for P Comment
Core	116083 Illustrate and understand the basic layout of financial statements	Level 2	2	Draft - Prep for P Comment
Core	116113 Explain principles of human resources management and practices in agriculture	Level 2	2	Draft - Prep for P Comment
Core	116115 Define and understand production systems and production management	Level 2	2	Draft - Prep for P Comment
Core	116121 Apply sustainable farming practices to conserve the ecological environment	Level 2	5	Draft - Prep for P Comment
Core	116122 Control inputs and stock in agribusiness	Level 2	2	Draft - Prep for P Comment
Core	116124 Control pests, diseases and weeds on all crops effectively and responsibly	Level 2	2	Draft - Prep for P Comment
Core	116125 Apply crop protection and animal health products effectively and responsibly	Level 2	4	Draft - Prep for P Comment
Core	116126 Apply marketing principles in agriculture	Level 2	2	Draft - Prep for P Comment
Core	116127 Apply layout principles for conservation and infrastructure	Level 2	5	Draft - Prep for P Comment
Core	116128 Apply plant manipulation methods	Level 2	4	Draft - Prep for P Comment
Elective	8347 Control problem Animals	Level 2	4	Registered
Elective	116062 Prepare a shearing shed for shearing	Level 2	3	Draft - Prep for P Comment
Elective	116065 Store and control agrochemical products effectively and responsibly	Level 2	4	Draft - Prep for P Comment
Elective	116069 Participate in agri/ecotourism practices at both micro and meso levels to tourists	Level 2	4	Draft - Prep for P Comment
Elective	116072 Perform routine operations and identify basic problems in hydroponic systems	Level 2	3	Draft - Prep for P Comment
Elective	116076 Introduce organic certification and internal control systems	Level 2	2	Draft - Prep for P Comment
Elective	116109 Interpret and illustrate permaculture principles	Level 2	5	Draft - Prep for P Comment
Elective	116110 Explain dairy production cleanliness	Level 2	5	Draft - Prep for P Comment
Elective	116114 Harvest natural flora	Level 2	4	Draft - Prep for P Comment
Elective	116120 Explain basic pig husbandry practices	Level 2	4	Draft - Prep for P Comment
Elective	116123 Consider plant botany during the placement of bee hives	Level 2	2	Draft - Prep for P Comment
Elective	116638 Mix and deliver feedlot feed to bunker	Level 2	4	Draft - Prep for P Comment

Elective	116643 Administer livestock processing treatments	Level 2	8	Draft - Prep for P Comment
Elective	116637 Determine livestock mass	Level 3	2	Draft - Prep for P Comment
Elective	116645 Control feedbunker and water trough quality	Level 3	6	Draft - Prep for P Comment
Elective	116647 Demonstrate an understanding of the feedlot environment	Level 3	10	Draft - Prep for P Comment
Elective	116653 Demonstrate an understanding of feedlot feed ingredient and blends	Level 3	6	Draft - Prep for P Comment
Fundamental	7469 Use mathematics to investigate and monitor the financial aspects of personal and community life	Level 2	2	Registered
Fundamental	7479 Describe, represent and informally analyse shape and motion in 2- and 3-dimensional space	Level 2	4	Reregistered
Fundamental	7480 Demonstrate understanding of rational and irrational numbers and number systems	Level 2	3	Registered
Fundamental	8962 Maintain and adapt oral communication	Level 2	5	Registered
Fundamental	8963 Access and use information from texts	Level 2	5	Registered
Fundamental	8964 Write for a defined context	Level 2	5	Registered
Fundamental	8967 Use language and communication in occupational learning programmes	Level 2	5	Registered
Fundamental	9009 Apply basic knowledge of statistics and probability to influence the use of data and procedures in order to investigate life related problems	Level 2	4	Registered
Fundamental	12444 Measure, estimate and calculate physical quantities and explore, describe and represent geometrical relationships in 2-dimensions in different life or workplace contexts	Level 2	3	Registered
Fundamental	116064 Recognise and identify the basic functions of the ecological environment	Level 2	4	Draft - Prep for P Comment
Fundamental	116080 Monitor, collect and collate agricultural data	Level 2	2	Draft - Prep for P Comment

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Certificate: Animal Production

SAQA QUAL ID	*QUALIFICATION TITLE*	
49048	National Certificate: Animal Production	
SGB NAME	SGB Primary Agriculture	
ABET BAND	*PROVIDER NAME*	
Undefined		
QUALIFICATION CODE	*QUAL TYPE*	*SUBFIELD*
AGR-3-National Certificate	National Certificate	Primary Agriculture
MINIMUM CREDITS	*NQF LEVEL*	*QUALIFICATION CLASS*
120	Level 3	Regular-Unit Stds Based
SAQA DECISION NUMBER	*REGISTRATION START DATE*	*REGISTRATION END DATE*

PURPOSE OF THE QUALIFICATION

A learner assessed as competent against this qualification will have the necessary competence to supervise and lead a working team performing the agricultural processes as applicable to animal husbandry. Furthermore, the learner will be able to take responsible decisions based on a sound understanding of the basic principles of agri-business and good agricultural practices, in meeting the set objectives and targets within the broader farm plan which includes the economical application of general resources, agricultural production and technical knowledge and skills. The learner will also be able to adhere to and implement according to the level of supervision as well as the relevant quality, safety and hygiene standards as applicable within the industry.

In addition they will be well positioned to extend their learning and practice into other areas of agricultural commodities within a context of either agronomy, or horticulture as applicable to the agricultural commodity, or to strive towards agricultural management standards and practice at higher levels.

Competent qualifying learners in this qualification will oversee the production of quality agricultural products whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

Rationale:

This qualification provides learners the opportunity to gain a qualification in Animal Production. The range of typical learners that will enter this qualification will vary and includes:
> Farm operators who wish to progress to the level of supervisor within farming operations in Animal Husbandry;
> Farm owners, in possession of an equivalent qualification at NQF 2;
> Learners in possession of different levels of practical experience in farming operations, which will be assessed and RPL'ed;
> Possible candidates for promotion identified by the community as leaders.
> Learners may come from both genders.

The learner will engage in supervision and operational activities relevant to Animal Production.

Requests and expressions of need for this qualification, coming from the broad, but also specific farming communities (Animal Husbandry) forms the basis for the development of this qualification.

This qualification will form the basis for learners to extend their learning into more specialised areas of animal production and provides the basis of the establishment of sustainable farming operations through the inclusion of a whide spectrum of competencies required by farmers in South Africa. Whilst technical production orientated competencies are ensured, other aspects such as agri-business and good agricultural

practices are included in the range of competencies required by farmers in order to enable them to strive towards agricultural management standards and practices at higher levels.

Competent qualifying learners in this qualification will oversee quality agricultural products in Animal Husbandry whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

It is assumed that a learner entering a programme leading to this qualification has achieved numeracy, literacy and communication equivalent to NQF 2 and technical skills pertaining to agricultural activities equivalent to NQF 2.

Recognition of prior learning:

This qualification may be achieved in part or in whole through the recognition of prior learning. Credit will be given to learning, which has already been acquired, through the appropriate process of assessment.

For example:

> Learners who have acquired skills and competencies in this qualification through for instance experience in the industry will be assessed against the unit standards the qualification comprises of prior to entering learning. Credits will be allocated to those unit standards and exit level outcomes in which the learner is found competent. The outstanding unit standards will then be sequenced accordjng to an appropriate learning programme.

> Should a new entrant into the industry wish to enter this learning programme, recognition will be given to al appropriate learning acquired through the schooling system.

> In terms of fundamental unit standards, competencies could be acquired through life experience.

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to take.

QUALIFICATION RULES

Fundamental
> A minimum of 48 credits should be achieved in fundamental. All unit standards listed are compulsory.

Core
> 65 credits should be achieved in core.

Elective
> A minimum of 7 credits should be achieved in Elective, depending on the context of application or on the combination of the unit standards.

EXIT LEVEL OUTCOMES

Exit Level Outcomes are divided into four categories of competencies, namely:

> Fundamental Competencies
> Agri-business
> Good Agricultural Practices
> Animal Production

Fundamental Competencies

1. Communication
2. Maths Literacy
3. Recognise, interpret and report on a range of deviations during the data collection process.
4. Incorporate basic concepts of sustainable farming systems into practical farm activities.

Agri-business

5. Maintain stores and agro-inputs in stores.
6. Participate in the production planning process on a day-to-day basis.
7. Apply the components of the marketing cycle in an alternative agricultural marketing environment.
8. Determine viability of agri-business.
9. Assist with the management of human resources in an agricultural environment.
10. Interpret the factors influencing agricultural enterprises and enterprise selection and production, and of planning accordingly.

Agricultural Practices

11. Monitor and supervise the implementation of food safety and quality, production, environmental and social practices, and awareness within the agricultural supply chain.
12. Apply the principles of water quality management and adjust systems to ensure appropriate levels of quality.
13. Apply a routine maintenance and servicing plan.
14. Monitor practices to conserve the environment, including natural resources whereby ensuring optimal utilization of national resources on the farm
15. Decide on appropriate land capability options for a given field.

Animal Production

16. Evaluate animals with respect to their internal and external anatomical systems and physiology of animals.
17. Describe the nature, function and utilisation of animal feeds and nutrients
18. Apply advanced animal breeding practices.
19. Identify and describe the harvesting of animal products.
20. Demonstrate the implementation of minor clinical procedures under restraint.

ASSOCIATED ASSESSMENT CRITERIA

Fundamental Competencies

1.
> To be determined by selection.

2.
> To be determined by selection.

3.
> Data is collected correctly..
> Tools and equipment required for data collection is utilised correctly.
> Data reports are submitted.

4.
> A sustainable farming system is defined and described.
> The nature of a system is explained.
> The balance of sustainability, productivity and conservation of resources is explained.
> The sustainability of a whole farming system is monitored and re-evaluated.

Agri-business

5.
> Orders are received.
> Records are updated.
> Stock levels are maintained.
> Stock are issued.
> Suppliers are evaluated.
> Safety regulations are observed.

6.
> Production schedules are planned.

> Production choices are explained.
> The links between scheduling and financial planning is explained.
> Different scheduling techniques are explained.

7.
> The managerial vision of the agribusiness is explained.
> Alternative marketing environments are described.
> The variables of the marketing cycle are explained.
> Characteristics and critical success factors of marketing is explained.
> The supply chain is modified according to the requirements of alternative markets.

8.
> Sources of income are identified and explained.
> Costs are identified and explained.
> Break-even budgets are developed.
> Whole farm budgets are developed.
> Financial outcomes are predicted.

9
> Hr rules, policies and procedures are applied.
> Explain the role of stakeholders.
> Contracts are interpreted and prepared.
> Employment relations are explained in an agricultural context.

10.
> Requirements re natural resources and infrastructure for the selection of the relevant enterprise is recognized and interpreted.
> Infrastructure for the selection of the enterprise is categorized.
> Appropriate crops and/or animals for the relevant enterprise are determined.
> The production procedures (including harvesting and post harvesting activities) are interpreted.

Agricultural Practices

11.
> An understanding of the concept of traceability in the agricultural supply chain is demonstrated.
> Non-conformances with respect to food safety, production, environmental, and social practices in the agricultural environment are reported.
> Internal audits in the agricultural environment are explained.
> Food safety and quality principles as related to the agricultural supply chain are applied.

12.
> Abnormalities in water quality are recorded and interpreted.
> Environmental aspects of water quality management are explained.
> Corrective actions are taken to ensure the appropriate quality.
> Quality assurance systems are implemented and maintained.

13.
> Scheduling of routine maintenance is explained.
> A service plan is implemented.
> Maintenance procedures are applied.
> Tools, equipment and machinery are maintained.

14.
> The elements of an ecosystem and a food chain are explained.
> The occurrence of different types of fauna and flora and the sustainable utilisation thereof is monitored.
> Soil maintenance and water management practices are monitored.
> The energy cycle is explained.
> A 2 dimentional map of the direct vicinity is interpreted.

15
> Soil survey results and physical observation are interpreted and used in decision-making.
> A land capability analysis to serve as the basis for appropriate enterprise selection for the farm is prepared.

Animal Production

16.
> Structures, composition, physical and biological components are described.
> Interrelated activities of anatomical systems are described.
> Symptomatic variations and abnormalities are identified and described.
> Probable causes of abnormalities and deviations are described.

17.
> Nutritional role of nutrients are described.
> Feed ingredients are identified.
> Animal stimulation and maintenance are described.
> The mixing of feed is demonstrated.
> The application of security to animal feed is described.
> Quality control of animal feed is described.
> Corrective measures to abnormal feeding behaviour is described.

18.
> The signs of birth and associated problems are described.
> Different breeding methods are explained.
> Basic reproductive cycles of farm animals are described.
> Factors affecting reproductive cycles are explained.

19.
> Animal products suitable for harvesting are evaluated.
> The infrastructure required for the harvesting of animal products is described.
> Animal harvesting systems are maintained.
> Animal harvesting systems are evaluated and alternatives suggested.
> The processing and value adding process is described.

20.
> The restraint of animals is demonstrated.
> Basic physical examinations of animals are demonstrated.
> The treatment of minor ailments is explained.
> The vaccination of animals is demonstrated.
> The basic principles of bio-security is explained.
> The components of pre-planned programmes is explained.
> Basic animal welfare practices is explained.

NOTE: Assessment should be specific to the area of operation (i.e. Either large livestock, small livestock, pigs, poultry, etc.)

Integrated Assessment:

Integrated assessment at the level of the qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is relevant and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

Generic nature of the unit standards and the context of assessment:

Because of the diverse nature of the primary agricultural sector, a generic approach to developing the unit

standards has been adopted. This resulted in generic unit standards which should be contextualised within a specific area of operation, a specific agricultural commodity or specific agricultural system. Assessment therefore, should not be divorced from the context of application. All assessment tools, such as guides as well as the interpretation of unit standards and specifically range statements, should be contextualised within a specific agricultural commodity and/or system.

INTERNATIONAL COMPARABILITY

In the case of the primary agricultural context it is difficult to compare the qualification and unit standards because of the vast differences in the level of mechanisation, the level of literacy of the farm operators, climate and other conditions as well as the variety in commodities.

However, Nieu Zeeland and Australian qualifications and unit standards were sourced and evaluated for applicability. Also, during two separate study visits, agricultural practices were compared in the Netherlands and France.

An example of the differences in animal husbandry would be where the cold climate (snow and ice) requires total different feeding processes and different hygiene processes.

ARTICULATION OPTIONS

A learner will be able to progress horisontally from one category to another, namely small stock, large stock or pig production, etc. He/she will be able to do this without re-doing the whole qualification, but by only completing the necessary elective unit standards.

This qualification builds on the relevant qualification on NQF 2 (refer to the SGB's brief and matrix) and gives access to the relevant agricultural qualification at NQF 4. In terms of competencies, the learner will progress from farming operation skills to basic managerial skills to managerial skills. The scope of practice will also increase.

The learner will be able to articulate with other occupations within the agricultural pharmaceutical operations such as laboratory assistant, marketing and selling of agricultural pharmaceutical products and fertilisers. The learner will also be able to move to the secondary agricultural field.

MODERATION OPTIONS

> Anyone assessing a learner against this qualification must be registered as an assessor with the PAETA ETQA.

> Any institution offering learning that will enable achievement of this qualification, or assessment against this qualification must be accredited as a provider with the PAETA ETQA.

> Moderation of assessment will be overseen by the PAETA ETQA according to agreed ETQA procedures.

Therefore anyone wishing to be assessed against this qualification may apply to be assessed by any assessment agency, assessor or provider institution which is accredited by the PAETA ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Assessors need:
> A minimum of 2 (two) years' practical experience;
> Practical experience in the specific agricultural commodity and/or system.
> Competence in the generic assessor unit standards; and
> Technical competence at, at least one NQF level above the assessee.

NOTES

Areas of specialisation:

Areas of specialisation of the qualification in Animal Husbandry include but are not limited to:
> Small stock production,
> Large stock production,
> Dairy production,

> Pig production,
> Poultry production,
> Game,
> Aqua / mari culture,
> Commercial insects
> Animal fibres harvesting,
> Bee keeping,
> Natural resources harvesting
> Organic production,
> Perma-culture production,
> Eco/Agri Tourism,
> Agro Chemicals,
> Horse Breeding,
> Etc.

UNIT STANDARDS

(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	LEVEL	CREDITS	STATUS
Core	116125 Apply crop protection and animal health products effectively and responsibly	Level 2	4	Draft - Prep for P Comment
Core	116211 Minimise risk in animal management	Level 3	3	Draft - Prep for P Comment
Core	116212 Maintain water quality parameters	Level 3	2	Draft - Prep for P Comment
Core	116214 Interpret factors influencing agricultural enterprises and plan accordingly	Level 3	3	Draft - Prep for P Comment
Core	116216 Apply advanced breeding practices for farm animals	Level 3	4	Draft - Prep for P Comment
Core	116217 Explain the harvesting of animal products	Level 3	5	Draft - Prep for P Comment
Core	116218 Explain the planning and scheduling of tasks in a production environment	Level 3	3	Draft - Prep for P Comment
Core	116219 Explain the prevention and treatment of animal diseases	Level 3	5	Draft - Prep for P Comment
Core	116225 Explain elementary animal nutrition	Level 3	6	Draft - Prep for P Comment
Core	116237 Explain costing and the viability of an agri-business	Level 3	3	Draft - Prep for P Comment
Core	116240 Explain store inputs categories, labeling and storage methods	Level 3	3	Draft - Prep for P Comment
Core	116257 Explain human resource policies and procedures	Level 3	3	Draft - Prep for P Comment
Core	116259 Explain application of marketing principles within an alternative and dynamic agricultural marketing environment	Level 3	3	Draft - Prep for P Comment
Core	116260 Explain animal anatomy and physiology	Level 3	5	Draft - Prep for P Comment
Core	116263 Monitor natural resource management practices	Level 3	4	Draft - Prep for P Comment
Core	116271 Monitor and supervise a food safety and quality management system in the agricultural supply chain	Level 3	3	Draft - Prep for P Comment
Core	116274 Assist in farm planning and layout for conservation and rainwater harvesting	Level 3	3	Draft - Prep for P Comment
Core	116275 Apply routine maintenance and servicing plans and procedures	Level 3	3	Draft - Prep for P Comment
Elective	8347 Control problem Animals	Level 2	4	Registered
Elective	10976 Convey livestock	Level 3	8	Reregistered
Elective	116213 Organise shearing shed activities	Level 3	4	Draft - Prep for P Comment
Elective	116215 Apply basic artificial insemination practices	Level 3	5	Draft - Prep for P Comment
Elective	116228 Explain dairy production	Level 3	6	Draft - Prep for P Comment
Elective	116258 Communicate agri/ecotourism principles and concepts effectively and adapt to needs	Level 3	5	Draft - Prep for P Comment

Elective	116270 Manage sites for bee keeping	Level 3	2	Draft - Prep for P Comment
Elective	116273 Apply blade-shearing skills and prepare blade-shearing equipment	Level 3	8	Draft - Prep for P Comment
Elective	116277 Apply machine-shearing skills and prepare shearing equipment	Level 3	8	Draft - Prep for P Comment
Elective	116637 Determine livestock mass	Level 3	2	Draft - Prep for P Comment
Elective	116645 Control feedbunker and water trough quality	Level 3	6	Draft - Prep for P Comment
Elective	116647 Demonstrate an understanding of the feedlot environment	Level 3	10	Draft - Prep for P Comment
Elective	116653 Demonstrate an understanding of feedlot feed ingredient and blends	Level 3	6	Draft - Prep for P Comment
Elective	116279 Implement a permaculture site design	Level 4	7	Draft - Prep for P Comment
Fundamental	7455 Identify and work with simple forms of complex numbers	Level 3	1	Reregistered
Fundamental	7456 Use mathematics to investigate and monitor the financial aspects of personal, business and national issues	Level 3	2	Registered
Fundamental	7458 Find the derivatives of a range of simple functions and apply these to problems involving tangents to curves and rates of change	Level 3	2	Reregistered
Fundamental	8968 Accommodate audience and context needs in oral communication	Level 3	5	Registered
Fundamental	8969 Interpret and use information from texts	Level 3	5	Registered
Fundamental	8970 Write texts for a range of communicative contexts	Level 3	5	Registered
Fundamental	8973 Use language and communication in occupational learning programmes	Level 3	5	Registered
Fundamental	9012 Investigate life and work related problems using data and probabilities	Level 3	5	Registered
Fundamental	9013 Describe, apply, analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts	Level 3	4	Registered
Fundamental	14106 Demonstrate understanding of real and imaginary numbers and real number systems	Level 3	2	Reregistered
Fundamental	116222 Incorporate basic concepts of sustainable farming systems into practical farm activities	Level 3	7	Draft - Prep for P Comment
Fundamental	116269 Supervise the collection of agricultural data	Level 3	5	Draft - Prep for P Comment

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Certificate: Plant Production

SAQA QUAL ID	*QUALIFICATION TITLE*	
49052	National Certificate: Plant Production	
SGB NAME	SGB Primary Agriculture	
ABET BAND	*PROVIDER NAME*	
Undefined		
QUALIFICATION CODE	*QUAL TYPE*	*SUBFIELD*
AGR-3-National Certificate	National Certificate	Primary Agriculture
MINIMUM CREDITS	*NQF LEVEL*	*QUALIFICATION CLASS*
120	Level 3	Regular-Unit Stds Based
SAQA DECISION NUMBER	*REGISTRATION START DATE*	*REGISTRATION END DATE*

PURPOSE OF THE QUALIFICATION

A learner assessed as competent against this qualification will have the necessary competence to supervise and lead a working team performing the agricultural processes as applicable to plant husbandry. Furthermore, the learner will be able to take responsible decisions based on a sound understanding of the basic principles of agri-business and good agricultural practices, in meeting the set objectives and targets within the broader farm plan which includes the economical application of general resources, agricultural production and technical knowledge and skills. The learner will also be able to adhere to and implement according to the level of supervision as well as the relevant quality, safety and hygiene standards as applicable within the industry.

In addition they will be well positioned to extend their learning and practice into other areas of agricultural commodities within a context of either agronomy, or horticulture as applicable to the agricultural commodity, or to strive towards agricultural management standards and practice at higher levels.

Competent qualifying learners in this qualification will oversee the production of quality agricultural products whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

Rationale:

This qualification provides learners the opportunity to gain a qualification in Plant Production. The range of typical learners that will enter this qualification will vary and includes:
> Farm operators who wish to progress to the level of supervisor within farming operations in Plant Production;
> Farm owners, in possession of an equivalent qualification at NQF 2;
> Learners in possession of different levels of practical experience in farming operations, which will be assessed and RPL'ed;
> Possible candidates for promotion identified by the community as leaders.
> Learners may come from both genders.

The learner will engage in supervision and operational activities relevant to Plant Production.

Requests and expressions of need for this qualification, coming from the broad, but also specific farming communities (Plant Production) forms the basis for the development of this qualification.

This qualification will form the basis for learners to extend their learning into more specialised areas of plant production and provides the basis of the establishment of sustainable farming operations through the inclusion of a whide spectrum of competencies required by farmers in South Africa. Whilst technical production orientated competencies are ensured, other aspects such as agri-business and good agricultural

practices are included in the range of competencies required by farmers in order to enable them to strive towards agricultural management standards and practices at higher levels.

Competent qualifying learners in this qualification will oversee quality agricultural products in Plant Production whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

It is assumed that a learner entering a programme leading to this qualification has achieved numeracy, literacy and communication equivalent to NQF 2 and technical skills pertaining to agricultural activities equivalent to NQF 2.

Recognition of prior learning:

This qualification may be achieved in part or in whole through the recognition of prior learning. Credit will be given to learning, which has already been acquired, through the appropriate process of assessment.

For example:

> Learners who have acquired skills and competencies in this qualification through for instance experience in the industry will be assessed against the unit standards the qualification comprises of prior to entering learning. Credits will be allocated to those unit standards and exit level outcomes in which the learner is found competent. The outstanding unit standards will then be sequenced according to an appropriate learning programme.

> Should a new entrant into the industry wish to enter this learning programme, recognition will be given to al appropriate learning acquired through the schooling system.

> In terms of fundamental unit standards, competencies could be acquired through life experience.

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to take.

QUALIFICATION RULES

Fundamental
> A minimum of 48 credits should be achieved in fundamental. All unit standards listed are compulsory.

Core
> 64 credits should be achieved in core.

Elective
> A minimum of 8 credits should be achieved in Elective, depending on the context of application of the unit standards.

EXIT LEVEL OUTCOMES

Exit Level Outcomes are divided into four categories of competencies, namely:

> Fundamental Competencies
> Agri-business
> Good Agricultural Practices
> Plant Production

Fundamental Competencies

1. Communication.
2. Maths Literacy.
3. Recognise, interpret and report on a range of deviations during the data collection process.
4. Incorporate basic concepts of sustainable farming systems into practical farm activities.

Agri-business

5. Maintain stores and agro-inputs in stores.
6. Participate in the production planning process on a day-to-day basis.
7. Apply the components of the marketing cycle in an alternative agricultural marketing environment.
8. Determine viability of agri-business.
9. Assist with the management of human resources in an agricultural environment.
10. Interpret the factors influencing agricultural enterprises and enterprise selection and production, and of planning accordingly.

Agricultural Practices

11. Monitor and supervise the implementation of food safety and quality, production, environmental and social practices, and awareness within the agricultural supply chain.
12. Apply the principles of water quality management and adjust systems to ensure appropriate levels of quality.
13. Apply a routine maintenance and servicing plan.
14. Monitor practices to conserve the environment, including natural resources whereby ensuring optimal utilization of national resources on the farm.
15. Decide on appropriate land capability options for a given field.

Plant Production

16. Identify and describe the physiological processes and anatomical structures of a plant.
17. Soil nutrient preparations are performed in a safe, effective and responsible manner for the benefit of plant/crop growth with consideration to the environment.
18. Plants are propagated in a limited range of conditions
19. Apply basic control measures for insects, plant diseases and common weeds.
20. Monitor and co-ordinate the harvesting of crops.
21. Monitor and supervise the manipulation of plants by applying a broad range of techniques.

ASSOCIATED ASSESSMENT CRITERIA

Fundamental Competencies

1.
> Determined by selection.

2.
> Determined by selection.

3.
> Data is collected correctly.
> Tools and equipment required for data collection is utilised correctly.
> Data reports are submitted.

4.
> A sustainable farming system is defined and described.
> The nature of a system is explained.
> The balance of sustainability, productivity and conservation of resources is explained.
> The sustainability of a whole farming system is monitored and re-evaluated.

Agri-business

5.
> Orders are received.
> Records are updated.
> Stock levels are maintained.
> Stock are issued.
> Suppliers are evaluated.
> Safety regulations are observed.

6.

> Production schedules are planned.
> Production choices are explained.
> The links between scheduling and financial planning is explained.
> Different scheduling techniques are explained.

7.

> The managerial vision of the agribusiness is explained.
> Alternative marketing environments are described.
> The variables of the marketing cycle are explained.
> Characteristics and critical success factors of marketing is explained.
> The supply chain is modified according to the requirements of alternative markets.

8.

> Sources of income are identified and explained.
> Costs are identified and explained.
> Break-even budgets are developed.
> Whole farm budgets are developed.
> Financial outcomes are predicted.

9.

> HR rules, policies and procedures are applied.
> Explain the role of stakeholders.
> Contracts are interpreted and prepared.
> Employment relations are explained in an agricultural context.

10.

> Requirements re natural resources and infrastructure for the selection of the relevant enterprise is recognized and interpreted.
> Infrastructure for the selection of the enterprise is categorized.
> Appropriate crops and/or animals for the relevant enterprise are determined.
> The production procedures (including harvesting and post harvesting activities) are interpreted.

Agricultural Practices

11.

> An understanding of the concept of traceability in the agricultural supply chain is demonstrated.
> Non-conformances with respect to food safety, production, environmental, and social practices in the agricultural environment are reported.
> Internal audits in the agricultural environment are explained.
> Food safety and quality principles as related to the agricultural supply chain are applied.

12.

> Abnormalities in water quality are recorded and interpreted.
> Environmental aspects of water quality management are explained.
> Corrective actions are taken to ensure the appropriate quality.
> Quality assurance systems are implemented and maintained.

13.

> Scheduling of routine maintenance is explained.
> A service plan is implemented.
> Maintenance procedures are applied.
> Tools, equipment and machinery are maintained.

14.

> The elements of an ecosystem and a food chain are explained.
> The occurrence of different types of fauna and flora and the sustainable utilisation thereof is monitored.
> Soil maintenance and water management practices are monitored.
> The energy cycle is explained.
> A 2 dimentional map of the direct vicinity is interpreted.

15.

> Soil survey results and physical observation are interpreted and used in decision-making.
> A land capability analysis to serve as the basis for appropriate enterprise selection for the farm is

prepared.

Plant Production

16.
> The basic functioning and structure of the plant cell.
> The effects of the environment on the physiology and germination of seed is explained.
> The anatomy and function of roots is explained.
> The anatomy and physiology of the leaf is explained.
> The anatomy and physiology of flowers and fruit are explained.

17.
> Soil nutrients are applied by using specialized equipment.
> The collection of samples, storage and dispatch of samples to appropriate service providers is supervised.
> The impact of the properties of soil on plant nutrition and soil preparation is explained.
> Nutritional deficiencies in various crops are interpreted and remediation is suggested.

18.
> Environmental requirements for the propagation of plants are described.
> General propagation procedures are demonstrated.
> Environmental conditions are monitored correctly.
> The appropriate tools and equipment are applied during propagation.

19.
> Common pests are identified and described.
> Unfamiliar insects are collected.
> Disease symptoms are described.
> Incidence of weeds are reported.

20.
> The use of harvesting tools and equipment is explained.
> Maturity indexing is explained.
> Specific procedures for the harvesting of crops is explained.
> Health, hygiene and safety plan is implemented.
> Waste collection and disposal plan is implemented.
> The care and maintenance of tools and harvesting equipment is described.

21.
> The use of appropriate tools / equipment is monitored.
> Framework development as part of plant manipulation is monitored.
> Flower and fruit manipulation is monitored.
> Pruning as vegetative plant manipulation methods are monitored.

NOTE: Assessment should be specific to the area of operation (i.e. Either horticulture or agronomy including but not limited to arable and/or dry land production)

Integrated Assessment:

Integrated assessment at the level of the qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is relevant and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

Generic nature of the unit standards and the context of assessment:

Because of the diverse nature of the primary agricultural sector, a generic approach to ceveloping the unit standards has been adopted. This resulted in generic unit standards which should be contextualised within a specific area of operation, a specific agricultural commodity or specific agricultural system. Assessment therefore, should not be divorced from the context of application. All assessment tools, such as guides as well as the interpretation of unit standards and specifically range statements, should be contextualised within a specific agricultural commodity and/or system.

INTERNATIONAL COMPARABILITY

In the case of the primary agricultural context it is difficult to compare the qualification and unit standards because of the vast differences in the level of mechanisation, the level of literacy of the farm operators, climate and other conditions as well as the variety in commodities.

However, Nieu Zeeland and Australian qualifications and unit standards were sourced and evaluated for applicability. Also, during two separate study visits, agricultural practices were compared in the Netherlands and France.

An example of the differences in plant production would be where climatic conditions require the production of different cultivars and markets require the production of different crops.

However, there are similarities in terms of the floriculture and viticulture processes and unit standards.

ARTICULATION OPTIONS

A learner will be able to progress horisontally from one category to another, namely horticulture, agronomy, hydroponics, etc. He/she will be able to do this without re-doing the whole qualification, but by only completing the necessary elective unit standards.

This qualification builds on the relevant qualification on NQF 2 (refer to the SGB's brief and matrix) and gives access to the relevant qualification at NQF 4. In terms of competencies, the learner will progress from farming operation skills to basic managerial skills to managerial skills. The scope of practice will also increase.

The learner will be able to articulate with other occupations within the agricultural pharmaceutical operations such as laboratory assistant, marketing and selling of agricultural pharmaceutical products and fertilisers. The learner will also be able to move to the secondary agricultural field.

MODERATION OPTIONS

> Anyone assessing a learner against this qualification must be registered as an assessor with the PAETA ETQA.

> Any institution offering learning that will enable achievement of this qualification, or assessment against this qualification must be accredited as a provider with the PAETA ETQA.

> Moderation of assessment will be overseen by the PAETA ETQA according to agreed ETQA procedures.

Therefore anyone wishing to be assessed against this qualification may apply to be assessed by any assessment agency, assessor or provider institution which is accredited by the PAETA ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Assessors need:
> A minimum of 2 (two) years' practical experience;
> Practical experience in the specific agricultural commodity and/or system.
> Competence in the generic assessor unit standards; and
> Technical competence at, at least one NQF level above the assessee.

NOTES

Areas of specialisation:

Areas of specialisation of the qualification in Plant Production include but are not limited to:
> Organic production,
> Hydroponic production,
> Perma-culture production,
> Agronomy,
> Horticulture,
> Natural resources harvesting.

UNIT STANDARDS
(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	LEVEL	CREDITS	STATUS
Core	116125 Apply crop protection and animal health products effectively and responsibly	Level 2	4	Draft - Prep for P Comment
Core	116212 Maintain water quality parameters	Level 3	2	Draft - Prep for P Comment
Core	116214 Interpret factors influencing agricultural enterprises and plan accordingly	Level 3	3	Draft - Prep for P Comment
Core	116218 Explain the planning and scheduling of tasks in a production environment	Level 3	3	Draft - Prep for P Comment
Core	116220 Explain the propagation of plants	Level 3	4	Draft - Prep for P Comment
Core	116237 Explain costing and the viability of an agri-business	Level 3	3	Draft - Prep for P Comment
Core	116240 Explain store inputs categories, labeling and storage methods	Level 3	3	Draft - Prep for P Comment
Core	116257 Explain human resource policies and procedures	Level 3	3	Draft - Prep for P Comment
Core	116259 Explain application of marketing principles within an alternative and dynamic agricultural marketing environment	Level 3	3	Draft - Prep for P Comment
Core	116263 Monitor natural resource management practices	Level 3	4	Draft - Prep for P Comment
Core	116264 Monitor plant manipulation	Level 3	3	Draft - Prep for P Comment
Core	116265 Monitor pests, diseases and weeds on crops	Level 3	2	Draft - Prep for P Comment
Core	116266 Monitor the operation and maintenance of irrigation systems	Level 3	3	Draft - Prep for P Comment
Core	116267 Manage soil fertility and plant nutrition	Level 3	5	Draft - Prep for P Comment
Core	116268 Monitor and co-ordinate the harvesting of agricultural products	Level 3	4	Draft - Prep for P Comment
Core	116271 Monitor and supervise a food safety and quality management system in the agricultural supply chain	Level 3	3	Draft - Prep for P Comment
Core	116272 Demonstrate a basic understanding of the physiological functioning of the anatomical structures of the plant	Level 3	4	Draft - Prep for P Comment
Core	116274 Assist in farm planning and layout for conservation and rainwater harvesting	Level 3	3	Draft - Prep for P Comment
Core	116275 Apply routine maintenance and servicing plans and procedures	Level 3	3	Draft - Prep for P Comment
Elective	116258 Communicate agri/ecotourism principles and concepts effectively and adapt to needs	Level 3	5	Draft - Prep for P Comment
Elective	116261 Introduction to organic certification and internal control systems	Level 3	4	Draft - Prep for P Comment
Elective	116262 Maintain and support sustainable wild flower harvesting practices	Level 3	5	Draft - Prep for P Comment
Elective	116221 Identify and apply permaculture principles	Level 4	5	Draft - Prep for P Comment
Elective	116314 Produce crop in a hydroponic system	Level 4	4	Draft - Prep for P Comment
Fundamental	7455 Identify and work with simple forms of complex numbers	Level 3	1	Reregistered
Fundamental	7456 Use mathematics to investigate and monitor the financial aspects of personal, business and national issues	Level 3	2	Registered
Fundamental	7458 Find the derivatives of a range of simple functions and apply these to problems involving tangents to curves and rates of change	Level 3	2	Reregistered
Fundamental	8968 Accommodate audience and context needs in oral communication	Level 3	5	Registered
Fundamental	8969 Interpret and use information from texts	Level 3	5	Registered

Fundamental	8970 Write texts for a range of communicative contexts	Level 3	5	Registered
Fundamental	8973 Use language and communication in occupational learning programmes	Level 3	5	Registered
Fundamental	9012 Investigate life and work related problems using data and probabilities	Level 3	5	Registered
Fundamental	9013 Describe, apply, analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts	Level 3	4	Registered
Fundamental	14106 Demonstrate understanding of real and imaginary numbers and real number systems	Level 3	2	Reregistered
Fundamental	116222 Incorporate basic concepts of sustainable farming systems into practical farm activities	Level 3	7	Draft - Prep for P Comment
Fundamental	116269 Supervise the collection of agricultural data	Level 3	5	Draft - Prep for P Comment

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Certificate: Animal Production

SAQA QUAL ID	*QUALIFICATION TITLE*	
48979	National Certificate: Animal Production	
SGB NAME	SGB Primary Agriculture	
ABET BAND	*PROVIDER NAME*	
Undefined		
QUALIFICATION CODE	*QUAL TYPE*	*SUBFIELD*
AGR-4-National Certificate	National Certificate	Primary Agriculture
MINIMUM CREDITS	*NQF LEVEL*	*QUALIFICATION CLASS*
120	Level 4	Regular-Unit Stds Based
SAQA DECISION NUMBER	*REGISTRATION START DATE*	*REGISTRATION END DATE*

PURPOSE OF THE QUALIFICATION

The purpose of this qualification is to allow Supervisors to progress towards a Junior Farm Manager position with specific reference to Animal Production. The contexualised purpose and usage of the qualification is as follows:

> A learner assessed against this qualification will have the necessary competence to manage Supervisors and working teams, performing the agricultural processes as applicable to animal production in a range of Animal Production taking responsibility for the quality and quantity of outputs.

> The Learner will be able to take complete responsibility for her/his own actions and also take responsibility for supervising others at lower levels within an Animal Production context under broad guidance and evaluation.

> Competency will be gained in any of the specialized sub-fields of Animal Production as specified under Areas Of Specialization (i.e. Small stock, Large Stock, Dairy Production, Aqua Culture, etc.) with a strong focus on management.

> The learner will be able to take responsible decisions within a wide range based on a sound understanding of the basic principles of agri-business and good agricultural practices, in meeting the set objectives and targets within the broader farm plan which includes the economical application of general resources, agricultural production and technical knowledge and skills, all in an Animal Production context.

> The Learner will be able to oversee the implementation of a wide range of procedures and will be able to ensure the relevant safety, quality, hygiene and technical standards as applicable within the industry.

> In addition to the above, the learner will be well positioned to extend learning and practice into other sub-fields such as Plant Production and Mixed Farming, since such efforts will only require additional learning within the elective scope of other qualifications at this level.

> The learner will be well positioned to progress towards higher levels of Management and Technical production practices as defined by qualifications at the next level.

> Learners will be enabled to actively participate in the Primary Agricultural Sector through the production of quality agricultural products, enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

> This qualification will allow qualifying learners to become economically active in farming practices that will have a direct impact on Local Economic Development through the production of food, the improvement of household food security and access to mainstream agriculture.

> Finally, Learners will be able to guide and direct others in terms of the planning, implementation and control of development projects within an Animal Production context.

Rationale:

The range of typical learners that will enter this qualification will vary and includes:

> Farm operators who wish to progress to the level of junior farm manager;
> Learners in possession of different levels of practical experience in farming operations, which will be assessed and RPL'ed;
> School leavers (Gr. 12) from agricultural schools; and
> Learners may come from both genders.

The learner will engage in farm management and operational activities relevant to Animal Production.

Requests and expressions of need for this qualification, coming from the broad, but also specific farming communities (Animal Production) forms the basis for the development of this qualification.

This qualification will form the basis for learners to extend their learning into more specialised areas of animal production and provides the basis of the establishment of sustainable farming operations through the inclusion of a wide spectrum of competencies required by farmers in South Africa. Whilst technical production orientated competencies are ensured, other aspects such as agri-business and good agricultural practices are included in the range of competencies required by farmers in order to enable them to strive towards agricultural management standards and practices at higher levels.

Competent qualifying learners in this qualification will oversee quality agricultural products in Animal Production whereby enhancing the overall agricultural process and gain opportunities to access local, national and international agricultural markets.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

It is assumed that a learner entering a programme leading to this qualification has achieved numeracy, literacy and communication equivalent to NQF 2 and technical skills pertaining to agricultural activities equivalent to NQF 3.

Recognition of Prior Learning:

This qualification may be achieved in part or in whole through the recognition of prior learning. Credit will be given to learning, which has already been acquired, through the appropriate process of assessment.

For example:

> Learners who have acquired skills and competencies in this qualification through for instance experience in the industry will be assessed against the unit standards the qualification comprises of prior to entering learning. Credits will be allocated to those unit standards and exit level outcomes in which the learner is found competent. The outstanding unit standards will then be sequenced according to an appropriate learning programme.

> Should a new entrant into the industry wish to enter this learning programme, recognition will be given to al appropriate learning acquired through the schooling system.

> In terms of fundamental unit standards, competencies could be acquired through life experience.

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to take.

QUALIFICATION RULES

Fundamental
> A minimum of 48 credits should be achieved in fundamental.

Core
> 58 credits should be achieved in core.

Elective
> A minimum of 14 credits should be achieved in Elective, depending on the context of application or on the combination of the unit standards.

EXIT LEVEL OUTCOMES

Exit Level Outcomes are divided into four categories of competencies, namely:

> Fundamental Competencies
> Agri-business
> Good Agricultural Practices
> Animal Production

Fundamental Competencies:

1. Apply communication skills in an agricultural environment.
2. Apply mathematical calculations within the agricultural environment.
3. Implement a data collection plan in the agricultural sector.
4. Plan and maintain environmentally sound agricultural processes by identifying knowledge processes and patterns of the environment in the region, and understanding the limitations of resources and how their management contributes to sustainable interactive agriculture, using environmental indicators.

Agri-business;

5. Manage stores and agro-inputs in stores.
6. Implement quality control aspects of an agribusiness
7. Demonstrate ability to development of an integrated marketing plan.
8. Demonstrate the ability to develop an integrated whole farm budget.
9. Apply principles of human resources management in an agricultural environment.
10. Participate in the analysis, planning and management of an agri-business
11. Describe the historical and current structure of the relevant industry within secondary agriculture.
12. Evaluate and adjust the enterprise and production processes of animal and crop enterprises.

Agricultural Practices:

13. Implement a management system related to food safety, production practices, as well as demonstrate environmental and social awareness within the agricultural supply chain.
14. Apply principles to design, prepare and implement basic operational procedures for the maintenance and storage of equipment, implements and infrastructure.
15. Implement corrective actions to ensure water quality.
16. Implement a natural resource management plan of the farm in relation to area wide planning.
17. Maintain the most appropriate land-use on a farm by continuously assessing the natural resource base.

Animal Production:

18. Evaluate and manage animals according to specific criteria related to anatomical and physiological systems.
19. Describe the scientific and technical principles of animal nutrition, feed, technology and feeding management.
20. Apply basic genetic principles in the planning and maintenance of animal breeding systems.
21. Describe potential damage and harmful effects to animal products and suggest alternatives.
22. Apply repetitive and basic clinical procedures and apply correct dosages for the treatment of common diseases.
23. Describe the historic and geographic origin and distribution of animal species and its use by man.

ASSOCIATED ASSESSMENT CRITERIA

Fundamental Competencies:

1.
> Simple presentations are made.

> Situations, reasons, implications, concepts, underlying principles, and check for understanding and adjust message are explained.
> Conditions, situations and events, using data are reported on.
> Work instructions are given.
> Events, situations and conditions are summarised over time.

2.
> Data is represented in graph and table form.
> Trends are plotted.
> Percentages from collected data (statistical calculations) are determined.
> Measurements are accurately.
> Calculations per area performed.
> Financial implications of personal and business related issues are investigated and monitored.
> Ratios are determined according to prescribed parameters e.g. mixtures, crops.

3.
> A data collection plan is interpreted.
> A data collection plan is implemented.
> Collected data is analysed
> Collected data is presented.

4.
> Sustainable agricultural processes and/or practices are planned and maintained, taking into account the four components of the environment.
> Practical and efficient natural resource use is applied.
> Environmental indicators are identified and used.

Agri-business:

5.
> Agricultural inputs are received and checked.
> Records are updated and shortcomings identified.
> Payment is processed.
> Re-ordering is scheduled.
> Agricultural inputs are issued.
> Legislation is enforced.
> Equipment and facilities are inspected and maintained.

6.
> Availability of resources is determined.
> Sustainable resource utilisation is ensured.
> The size of the enterprise is determined.
> Quality control is integrated into the production process.

7.
> A marketing plan is structured.
> A risk plan is structured.
> Remedial actions is identified.

8.
> Whole farm budget is prepared.
> A sensitivity analysis is demonstrated.
> An information system is developed.
> Managerial information is extracted from information system.

9.
> HR Policy is developed.
> Practices, principles, policies and procedures is communicated.
> Implementation plan is developed.
> A HR monitoring plan is implemented.

10.
> The general management functions as related to agri-business is described.

> A systems approach to agricultural production is explained.
> The components of a rolling agri-business plan is explained.
> An information management system is implemented.
> A risk plan is described and implemented.

11.
> The historical and current framework of the industry is explained.
> Useful media is identified.
> Relevant Government Departments is identified.
> Legislation pertaining to the specific industry is described.
> Supportive resources is identified.
> The various relationships within the industry is explained.

12.
> The production processes, stock, harvest procedures and post harvest factors are evaluated and adjusted.
> The production processes, stock, harvest procedures and post harvest factors are integrated within the relevant enterprise.
> Enterprise processes are evaluated and adjusted so that natural resources required for the relevant enterprises are managed sustainably.

Agricultural Practices:

13.
> Good agricultural practices (GAP) associated with good manufacturing practices (GMP), good health practices (GHP), good social practices (GSP) and good environmental practices (GEP) are maintained.
> Reported non-conformances in respect of food safety, production, environmental and social practices and implement corrective action in the agricultural environment are remedied.
> Internal audits according to the specifications of the trade/market in the agricultural environment are conducted.
> Standard operational procedures with regard to agro-chemicals, food safety, quality production practices, environmental and social awareness within the agricultural supply chain are maintained.

14.
> A task related maintenance programme is developed.
> Basic operational procedures for storage and maintenance is explained and implemented.
> Problem solving system is implemented.
> Safety regulations are implemented.
> The adaptation of equipment, implements and technology is explained.

15.
> Corrective actions are taken based on a correct analysis of water quality data.
> The impact of corrective actions is explained.
> Corrective measures are implemented correctly.
> The effects of corrective measures are explained.

16.
> Routine natural resource management practices and/or applications on the farm are assessed for efficiency.
> Preventative and/or rehabilitation measures are selected and applied.
> Activities related to alien eradication, erosion control, seasonal and climatic conditions, utilisation of natural resources are scheduled.
> Contributions are made to the strategic plan of the farm.

17.
> Collected and recorded information that informs the infrastructure development of an agricultural enterprise is categorized.
> High and low yield potential areas are identified according to a range of land use options and criteria.
> Maintenance tasks related to the natural resource base of a farm are organized.
> Sustainability-based farm layout innovations are monitored and maintained.

Animal Production:

18.
> Processes of various anatomical systems are described.
> The influence of anatomical systems on animal production is explained.
> Systems and processes based on anatomical systems are explained.
> The effect of nutrition and animal health on anatomical systems is explained.

19.
> The composition and function of specific nutrient components are explained.
> The nutrient requirements of different animals are described.
> The calibration and adjustment of feed manufacturing and processing equipment is demonstrated.
> The principles of feed preservation are explained.
> The variation in standard of different feed components is explained.
> The effects of feeding management decisions are explained.
> Feed flow planning principles is explained.

20.
> Basic genetic principles pertaining to farm animals are explained.
> The planning and maintenance of animal breeding systems is explained.
> Different breeding systems are compared and explained.
> A breeding management programme is developed.

21.
> Quality issues in animal processing systems are described. Processing systems are evaluated.
> Alternative processing practices is described.
> Quality control systems are explained an implemented.

22.
> Correct practices of disease prevention are demonstrated.
> Basic clinical procedure is demonstrated.
> Instruments are calibrated correctly.
> Dosages are administered correctly.
> Correct vaccination procedure is demonstrated.
> Pre-planned programmes are described.

23.
> The historical origin of animal species is described.
> The geographical distribution of animal species is described.
> The classification system for the animal kingdom is described.
> The historic, traditional and current use of animals is described.
> Basic biological concepts related to geographical, traditional and historical distribution is described.

NOTE: Assessment should be specific to the area of operation (i.e. Either large livestock, small livestock, pigs, poultry, etc.)

Integrated Assessment:

Integrated assessment at the level of the qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is relevant and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

Generic nature of the unit standards and the context of assessment:

Because of the diverse nature of the primary agricultural sector, a generic approach to developing the unit standards has been adopted. This resulted in generic unit standards which should be contextualised within a specific area of operation, a specific agricultural commodity or specific agricultural system. Assessment therefore, should not be divorced from the context of application. All assessment tools, such as guides as well as the interpretation of unit standards and specifically range statements, should be contextualised within a specific agricultural commodity and/or system.

INTERNATIONAL COMPARABILITY

In the case of the primary agriculture context it is difficult to compare the qualification and unit standards against similar international qualifications due to the vast differences in levels of mechanization and literacy of farm operators. It should also be noted that climatic and market conditions differ considerably between South Africa and other countries and the variety in commodities is therefore significant.

This qualification and associated unit standards have been evaluated against comparable qualifications and unit standards of the following Qualifications Authorities:

> Australian AQF
> New Zealand NQF, and
> British NVQ's.

During this comparison the following was found:

Australian AQF: This qualification is comparable to an AQF Certificate IV in Agriculture (General cross-sector qualification) in an animal production context. Packaging of the AQF qualification reflects the need for sector specific content of a qualification to remain flexible, a quality that has also been captured in this qualification. The AQF qualification requires the inclusion of Units of Competency, similar to the unit standards reflected in the South African qualification. It should however be noted that the qualification of the AQF contains considerably more Elective type Units of Competency since these units have been developed for specific sub-fields. In the case of this qualification a more generic approach have been followed, allowing contexualisation of fewer unit standards across a wide range of sub-fields. It could be concluded that there are numerous similarities between the Units of Competency and the Unit Standards reflected in the SA qualification covering similar sub-fields.

New Zealand NQF: This qualification is comparable to a NZNQF National Certificate in Agriculture (Level 4) in an animal production context. It should be noted that the NZQF qualification has been developed for a specific sub-field of specialization whilst a more generic approach is taken in this qualification allowing for contexualisation of the qualification across a wider range of sub-fields. In the NZQF qualification focus is given to local conditions, practices and approaches to agriculture whilst this qualification focuses on agriculture within a South African context.

British NVQ: The level of this qualification is too low to be compared with any Agricultural Qualification of the NVQ since levels of literacy and learning assumed to be in place is considerably higher than in South Africa.

Furthermore, input to the development of this qualification has been compared against international standards and qualifications and is evidenced in the following:

> Qualifications and competency units as defined by the New South Wales Department of Education and Training.
> The wide and narrow consultative process as well as the contributions made by role players from Universities and Technicons whom have a specific requirement for internationally comparable qualifications.

ARTICULATION OPTIONS

A learner will be able to progress horizontally from one category to another, namely small stock, large stock or pig production, etc. (Please refer to the list mentioned under "Areas of Specialisation") He/she will be able to do this without re-doing the whole qualification, but by only completing the necessary elective unit standards.

Furthermore, the learner will be able to progress horizontally to the following qualifications:

> National Certificate in Plant Production, NQF 4;

This qualification allows access to the agricultural sector (refer to the SGB's brief and matrix) and gives access to the relevant agricultural qualification at NQF 5, namenly:
> National Certificate in Animal Production, NQF 5.

In terms of competencies, the learner will progress from farming operation skills to basic managerial skills to managerial skills. The scope of practice will also increase.

The learner will be able to articulate with other occupations within the agricultural pharmaceutical operations such as laboratory assistant, assistance in the marketing and selling of agricultural pharmaceutical products and fertilisers. The learner will also be able to move to the secondary agricultural field.

MODERATION OPTIONS

> Anyone assessing a learner against this qualification must be registered as an assessor with the relevant ETQA.

> Any institution offering learning that will enable achievement of this qualification, or assessment against this qualification must be accredited as a provider with the relevant ETQA.

> Moderation of assessment will be overseen by the relevant ETQA according to agreed ETQA procedures.

Therefore anyone wishing to be assessed against this qualification may apply to be assessed by any assessment agency, assessor or provider institution which is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Assessors need:

> A minimum of 2 (two) years' practical experience in animal production practices relevant to an area of specialisation mentioned below;

> Practical experience in the specific agricultural commodity (which might include the list of "Areas of Specialisation" mentioned below or a specific commodity such as abelone, fish, ostriches, etc.) and/or system such as permaculture, organic production, etc.

> Technical competence in animal production practices at, at least one NQF level above the assessee.

NOTES

Areas of specialisation of the qualification in Animal Husbandry include but are not limited to:
> Small stock production,
> Large stock production,
> Dairy production,
> Pig production,
> Poultry production,
> Game,
> Aqua / mari culture,
> Commercial insects
> Animal fibres harvesting,
> Bee keeping,
> Natural resources harvesting
> Organic production,
> Perma-culture production,
> Eco/Agri Tourism,
> Agro Chemicals,
> Horse Breeding,
> Etc.

UNIT STANDARDS

(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	LEVEL	CREDITS	STATUS
Core	116278 Implement a food safety and quality management system in the agricultural supply chain	Level 4	3	Draft - Prep for P Comment
Core	116281 Explain animal classification and natural history	Level 4	2	Draft - Prep for P Comment
Core	116282 Explain intermediate animal nutrition	Level 4	4	Draft - Prep for P Comment
Core	116285 Explain functional animal anatomy and physiology	Level 4	3	Draft - Prep for P Comment
Core	116286 Give an overview of the industry structure	Level 4	2	Draft - Prep for P Comment
Core	116288 Execute sustainable resource use and quality control	Level 4	3	Draft - Prep for P Comment
Core	116290 Establish a plan for the monitoring, safe use and maintenance of equipment implements, technology and infrastructure	Level 4	3	Draft - Prep for P Comment
Core	116291 Participate in the development and management of an agri business plan	Level 4	3	Draft - Prep for P Comment
Core	116293 Evaluate, adjust and implement factors influencing agricultural enterprises	Level 4	3	Draft - Prep for P Comment
Core	116300 Apply procedures to manage damage control in animals and victims	Level 4	2	Draft - Prep for P Comment
Core	116302 Assume co-responsibility and participation in human resource management	Level 4	3	Draft - Prep for P Comment
Core	116303 Implement a natural resource management plan	Level 4	3	Draft - Prep for P Comment
Core	116307 Manage the quality of the harvesting of animal products	Level 4	3	Draft - Prep for P Comment
Core	116308 Implement animal health and bio-security programs	Level 4	3	Draft - Prep for P Comment
Core	116309 Implement integrated farm layout and site selection	Level 4	3	Draft - Prep for P Comment
Core	116318 Plan and maintain breeding systems	Level 4	3	Draft - Prep for P Comment
Core	116319 Prepare a whole farm budget and establish a proper integrated information system for an agri-business	Level 4	3	Draft - Prep for P Comment
Core	116321 Procure and manage agricultural input	Level 4	3	Draft - Prep for P Comment
Core	116322 Manage water quality parameters	Level 4	3	Draft - Prep for P Comment
Core	116684 Participate in the development and management of an agricultural marketing plan	Level 4	3	Draft - Prep for P Comment
Elective	10976 Convey livestock	Level 3	8	Reregistered
Elective	116298 Develop bee sites	Level 4	2	Draft - Prep for P Comment
Elective	116299 Apply advanced pig husbandry practices	Level 4	5	Draft - Prep for P Comment
Elective	116304 Manage agricultural export logistics	Level 4	4	Draft - Prep for P Comment
Elective	116310 Implement dairy production operations	Level 4	6	Draft - Prep for P Comment
Elective	116313 Supervise artificial insemination practices	Level 4	5	Draft - Prep for P Comment
Elective	116315 Recognise agri/ecotourism within the strategic environment	Level 4	5	Draft - Prep for P Comment
Elective	116649 Control feedlot production unit	Level 4	32	Draft - Prep for P Comment
Elective	116402 Effective and responsible control of problem animals	Level 5	8	Draft - Prep for P Comment
Fundamental	7466 Represent and operate on complex numbers in non-trivial situations	Level 4	2	Registered
Fundamental	7468 Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues	Level 4	2	Registered
Fundamental	7470 Work with a wide range of patterns and inverses of functions and solve related problems	Level 4	6	Registered
Fundamental	7483 Solve problems involving sequences and series in real and simulated situations	Level 4	2	Registered

Fundamental	8974 Engage in sustained oral communication and evaluate spoken texts	Level 4	5	Registered
Fundamental	8975 Read analyse and respond to a variety of texts	Level 4	5	Registered
Fundamental	8976 Write for a wide range of contexts	Level 4	5	Registered
Fundamental	8979 Use language and communication in occupational learning programmes	Level 4	5	Registered
Fundamental	12417 Measure, estimate & calculate physical quantities & explore, critique & prove geometrical relationships in 2 and 3 dimensional space in the life and workplace of adult with increasing responsibilities	Level 4	4	Reregistered
Fundamental	116312 Implement a data collection plan	Level 4	4	Draft - Prep for P Comment
Fundamental	116320 Plan and maintain environmentally sound agricultural processes	Level 4	8	Draft - Prep for P Comment

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 1

Apply basic agricultural enterprise selection principles

SAQA US ID	*UNIT STANDARD TITLE*
116158	Apply basic agricultural enterprise selection principles

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Name natural resources required for the selection of the relevant enterprise.

SPECIFIC OUTCOME 2

Describe infrastructure requirements for the selection of the relevant enterprise.

SPECIFIC OUTCOME 3

Identify appropriate crops and/or animals for the relevant enterprise.

SPECIFIC OUTCOME 4

Identify production cycle within relevant enterprise.

SPECIFIC OUTCOME 5

Identify harvest practice within the relevant enterprise.

SPECIFIC OUTCOME 6

Identify post harvest practice within relevant enterprise.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 2

Apply basic dairy production practices

SAQA US ID	*UNIT STANDARD TITLE*
116207	Apply basic dairy production practices

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	6

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate the ability to bring animals to a milking station, restrain them and allow them out agai

SPECIFIC OUTCOME 2

Demonstrate the ability to clean the working area.

SPECIFIC OUTCOME 3

The ability to ensure the free movement of wastewater away from the working area is demonstrated.

SPECIFIC OUTCOME 4

Demonstrate the ability to remove solid waste to designated sites.

SPECIFIC OUTCOME 5

Demonstrate the ability to clean dairy utensils effectively.

SPECIFIC OUTCOME 6

Demonstrate basic routines for fly control.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 3

Apply basic food safety practices

SAQA US ID	*UNIT STANDARD TITLE*
116166	Apply basic food safety practices

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	1

Specific Outcomes:

SPECIFIC OUTCOME 1

Apply good personal hygiene practices.

SPECIFIC OUTCOME 2

Demonstrate an understanding of risk factors in food contamination.

SPECIFIC OUTCOME 3

Apply preventative measures against food contamination.

SPECIFIC OUTCOME 4

Understand and adhere to warning signs regarding product safety (where applicable).

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 4

Apply basic human resource management principles and practices applicable in an agricultural environment

SAQA US ID	*UNIT STANDARD TITLE*
116160	Apply basic human resource management principles and practices applicable in an agricultural environment

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Name and define human resource management rules and procedures applicable to the immediate working e

SPECIFIC OUTCOME 2

Name and identify labour legislation applicable to the immediate working environment.

SPECIFIC OUTCOME 3

Identify and describe the different types of contracts and agreements applicable to the workplace.

SPECIFIC OUTCOME 4

Describe the different human resource benefits applicable at the workplace.

SPECIFIC OUTCOME 5

Know and describe the health and safety rules and practices applicable at the workplace.

SPECIFIC OUTCOME 6

Demonstrate basic knowledge on the filing of applicable human resource information.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 5

Apply basic pig husbandry practices

SAQA US ID	*UNIT STANDARD TITLE*
116153	Apply basic pig husbandry practices

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate the procedures to be followed in the preparation of the farrowing house.

SPECIFIC OUTCOME 2

Demonstrate the procedures to be followed in the preparation of the sows for the farrowing house.

SPECIFIC OUTCOME 3

Apply appropriate feeding practices to different stages of pig production.

SPECIFIC OUTCOME 4

Demonstrate the ability to clean and disinfect pig housing.

SPECIFIC OUTCOME 5

Ensure the observance of bio-security in the piggery.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 6

Apply elementary farm layout and infrastructure

SAQA US ID	*UNIT STANDARD TITLE*
116172	Apply elementary farm layout and infrastructure

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Recognise veld, planted pasture and arable land, and understand the need to fence vegetation types s

SPECIFIC OUTCOME 2

The animal life, the impact of farm animals and humans are recognised and the need for the conservat

SPECIFIC OUTCOME 3

The need to plan the farm and infrastructure to limit the impact on natural resources and ensure sus

SPECIFIC OUTCOME 4

Construct prevention structures and elementary infrastructure as planned for farm layout.

SPECIFIC OUTCOME 5

Maintain prevention structures and report major problems to a supervisor.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 7

Apply standard animal feeding procedures

SAQA US ID	*UNIT STANDARD TITLE*
116191	Apply standard animal feeding procedures

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	6

Specific Outcomes:

SPECIFIC OUTCOME 1

Follow correct on-farm procedures to maintain feed quality.

SPECIFIC OUTCOME 2

Apply feed level control and record keeping.

SPECIFIC OUTCOME 3

Selection of appropriate feed type and quantity as per instruction.

SPECIFIC OUTCOME 4

Observe and report on feed quality before allowing animals access to the feed.

SPECIFIC OUTCOME 5

Apply correct feeding practices under supervision.

SPECIFIC OUTCOME 6

Identify and report abnormal feeding behaviour in animals.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 8

Collect agricultural data

SAQA US ID	*UNIT STANDARD TITLE*
116156	Collect agricultural data

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge of different elementary methods of data collection.

SPECIFIC OUTCOME 2

Collect and report on collected agricultural data by using prescribed collection methods.

SPECIFIC OUTCOME 3

Use and maintain data collection equipment correctly.

SPECIFIC OUTCOME 4

Apply health and safety measures applicable to the collection method and equipment.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 9

Define production and understand the basic activities of production / conversion in the agri-business environment

SAQA US ID	*UNIT STANDARD TITLE*
116165	Define production and understand the basic activities of production / conversion in the agri-business environment

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Describe the rudiments and components of the agricultural production environment.

SPECIFIC OUTCOME 2

Identify the components and purposes of basic production systems.

SPECIFIC OUTCOME 3

Identify basic production factors used in the agricultural production process.

SPECIFIC OUTCOME 4

Define the production and conversion process in terms of an agricultural business environment.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 10

Demonstrate a basic understanding of the structure and function of a plant in relation to its environment

SAQA US ID	*UNIT STANDARD TITLE*
116199	Demonstrate a basic understanding of the structure and function of a plant in relation to its environment

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Locate and identify the different parts of a plant.

SPECIFIC OUTCOME 2

Describe the role of the different parts of the plant.

SPECIFIC OUTCOME 3

Describe how the plant relates to the environment.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 11

Demonstrate an understanding of agri/ecotourism as a system at micro level

SAQA US ID	*UNIT STANDARD TITLE*
116209	Demonstrate an understanding of agri/ecotourism as a system at micro level

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Have a basic knowledge about the tourism industry.

SPECIFIC OUTCOME 2

Identify the Agri/Ecotourist on the local site (micro level - farm/reserve).

SPECIFIC OUTCOME 3

Recognize the needs of the tourist at this (local) level.

SPECIFIC OUTCOME 4

Identify and locate the tourism infrastructure, attractions and activities on the agri/eco site.

SPECIFIC OUTCOME 5

State operational, organizational and tourism practices on the Agri/Ecotourism site.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 12

Demonstrate an understanding of the basic concepts of sustainable farming systems

SAQA US ID	*UNIT STANDARD TITLE*
116157	Demonstrate an understanding of the basic concepts of sustainable farming systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Recognise basic environmental patterns and processes.

SPECIFIC OUTCOME 2

Demonstrate an elementary comprehension of farming systems and design.

SPECIFIC OUTCOME 3

Identify and describe measurable indicators of sustainability.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 13

Demonstrate an understanding of the importance of marketing

SAQA US ID	*UNIT STANDARD TITLE*
116164	Demonstrate an understanding of the importance of marketing

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Understand what is meant by "marketing concept".

SPECIFIC OUTCOME 2

Understand the differences between and the value of demand and production driven farming practices.

SPECIFIC OUTCOME 3

Identify the principles and factors of demand and supply and therefore basic price formulation.

SPECIFIC OUTCOME 4

The principles of marketing as demonstrated by the needs of customers/clients.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 14

Evaluate basic external animal anatomy and morphology

SAQA US ID	*UNIT STANDARD TITLE*
116173	Evaluate basic external animal anatomy and morphology

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify and name the class, species and type of animal according to criteria and under supervision.

SPECIFIC OUTCOME 2

Identify and name the components and the externally visible divisions or parts of an animal and iden

SPECIFIC OUTCOME 3

Understand the basic concepts of further anatomical systems within animals according to criteria.

SPECIFIC OUTCOME 4

Identify and describe the morphological attributes of animals by which they are classified.

SPECIFIC OUTCOME 5

Identify and describe the animal's life cycle.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 15

Fertilise soil and attend to basic plant nutrition

SAQA US ID	*UNIT STANDARD TITLE*
116206	Fertilise soil and attend to basic plant nutrition

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	5

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

Understand how to make compost and when to use it.

SPECIFIC OUTCOME 3

Identify basic symptoms of nutritional deficiencies in different crops.

SPECIFIC OUTCOME 4

Demonstrate a basic understanding of soil properties.

SPECIFIC OUTCOME 5

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

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 16

Handle inputs and stock in agri-business

SAQA US ID	*UNIT STANDARD TITLE*
116163	Handle inputs and stock in agri-business

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to receive agricultural inputs into an appropriate store at the appropriate time.

SPECIFIC OUTCOME 2

Source information about inputs with respect to types, quality and quantity.

SPECIFIC OUTCOME 3

Keep accurate records and handle stock.

SPECIFIC OUTCOME 4

Demonstrate understanding of input costs and inventory cost.

SPECIFIC OUTCOME 5

Identify legislation regarding different inputs.

SPECIFIC OUTCOME 6

Observe safety regulations.

SPECIFIC OUTCOME 7

Schedule supply of inputs with regards to consumption.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 17

Harvest agricultural crops

SAQA US ID	*UNIT STANDARD TITLE*
116201	Harvest agricultural crops

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Use appropriate tools / equipment for pre-determined harvesting method.

SPECIFIC OUTCOME 2

Carry out sampling for maturity indexing according to pre-determined requirements.

SPECIFIC OUTCOME 3

Harvest crops following specific prescribed procedures.

SPECIFIC OUTCOME 4

Adhere to personal health, hygiene and safety during harvesting.

SPECIFIC OUTCOME 5

Dispose of waste.

SPECIFIC OUTCOME 6

Care for and maintain equipment used during harvesting under close supervision.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 18

Harvest animal products

SAQA US ID	*UNIT STANDARD TITLE*
116198	Harvest animal products

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Understand and describe the origin of animal products for harvesting and use.

SPECIFIC OUTCOME 2

Understand and describe the indicators and their status used to describe the readiness of the animal

SPECIFIC OUTCOME 3

Understand and describe the names, identification and potential of various animal products to be har

SPECIFIC OUTCOME 4

Describe and demonstrate correct procedures for the harvesting of specific animal products.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 19

Identify and explain permaculture principles

SAQA US ID	*UNIT STANDARD TITLE*
116150	Identify and explain permaculture principles

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	8

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify site elements and resources and list their inputs and outputs.

SPECIFIC OUTCOME 2

Perform routine tasks related to the use of biotic and abiotic resources under close supervision.

SPECIFIC OUTCOME 3

Recognise and describe ecological processes and cycles.

SPECIFIC OUTCOME 4

Identify sustainable living practices.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 20

Identify the need for capital and understand the need for the recording of the income and different costs in an agri-business

SAQA US ID	*UNIT STANDARD TITLE*
116159	Identify the need for capital and understand the need for the recording of the income and different costs in an agri-business

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Describe the need for investment capital, where it can be acquired and how it can be categorised wit

SPECIFIC OUTCOME 2

Explain the flow of money in an agric-business.

SPECIFIC OUTCOME 3

Describe the flow of costs in an agri-business.

SPECIFIC OUTCOME 4

Identify the basic components of financial information and record keeping system and the basic admin

SPECIFIC OUTCOME 5

Provide inputs to a simple record keeping system for an agri-business, and be able to extract manage

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 21

Maintain basic water quality

SAQA US ID	*UNIT STANDARD TITLE*
116168	Maintain basic water quality

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	1

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate a basic ability to sample and observe water quality.

SPECIFIC OUTCOME 2

An ability to perform maintenance tasks on certain operational technical systems is demonstrated.

SPECIFIC OUTCOME 3

The ability to handle systems to maintain water quality is demonstrated.

SPECIFIC OUTCOME 4

Record basic observations and applications regarding water quality.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 22

Manipulate plants

SAQA US ID	*UNIT STANDARD TITLE*
116203	Manipulate plants

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Use tools and / or equipment for a pre-determined manipulation method in the correct way.

SPECIFIC OUTCOME 2

Develop frameworks as part of plant manipulation methods.

SPECIFIC OUTCOME 3

Understand flower and fruit manipulation principles.

SPECIFIC OUTCOME 4

Apply correct simple pruning principles appropriate to the crop.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 23

Observe and handle animals

SAQA US ID	*UNIT STANDARD TITLE*
116197	Observe and handle animals

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Observe, record and report behaviour and physical attributes.

SPECIFIC OUTCOME 2

Evaluate animal behaviour and attributes regarding abnormalities.

SPECIFIC OUTCOME 3

Move animals to and into a holding facility.

SPECIFIC OUTCOME 4

Restrain animals in a restraint facility.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 24

Operate and maintain irrigation systems

SAQA US ID	*UNIT STANDARD TITLE*
116202	Operate and maintain irrigation systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	2

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

Operate an irrigation system according to set procedures.

SPECIFIC OUTCOME 3

Identify the basic factors affecting crop growth under irrigation.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 25

Perform basic routine operations in a defined hydroponic context

SAQA US ID	*UNIT STANDARD TITLE*
116148	Perform basic routine operations in a defined hydroponic context

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare a production area for crop establishment.

SPECIFIC OUTCOME 2

Establish a hydroponic crop.

SPECIFIC OUTCOME 3

Identify the basic differences i.e. hydroponic and conventional (soil) production.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 26

Plant the crop under supervision

SAQA US ID	*UNIT STANDARD TITLE*
116200	Plant the crop under supervision

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	4

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

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

SPECIFIC OUTCOME 3

Describe the basic effects of the environment on specific crops.

SPECIFIC OUTCOME 4

Plant planting stock at correct spacing between rows, between individual plants, and at the correct

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 27

Propagate plants

SAQA US ID	*UNIT STANDARD TITLE*
116205	Propagate plants

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify the propagation environment within a specific agricultural production context.

SPECIFIC OUTCOME 2

Prepare propagation material and propagation media according to specific instructions.

SPECIFIC OUTCOME 3

Carry out routine propagation procedures within the specific agricultural propagation context under

SPECIFIC OUTCOME 4

Carry out routine post propagation procedures within the specific production context under supervisi

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 28

Recognise basic breeding behaviour of farm animals

SAQA US ID	*UNIT STANDARD TITLE*
116174	Recognise basic breeding behaviour of farm animals

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	6

Specific Outcomes:

SPECIFIC OUTCOME 1

Recognise normal mating behaviour in breeding animals.

SPECIFIC OUTCOME 2

Observe abnormal mating behaviour in breeding animals.

SPECIFIC OUTCOME 3

Identify successful mating amongst breeding animals.

SPECIFIC OUTCOME 4

Observe breeding animals for post breeding behaviour.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 29

Recognise defensive behavior in animals

SAQA US ID	*UNIT STANDARD TITLE*
116190	Recognise defensive behavior in animals

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Understand and describe behaviour of specific animals.

SPECIFIC OUTCOME 2

Identify symptoms of defensive behaviour.

SPECIFIC OUTCOME 3

Describe management protocol for relevant animals to minimise defensive behaviour.

SPECIFIC OUTCOME 4

List relevant equipment required to manage relevant animals.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 30

Recognise pests, diseases and weeds on crops

SAQA US ID	*UNIT STANDARD TITLE*
116204	Recognise pests, diseases and weeds on crops

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Distinguish between insects and other classes of animals.

SPECIFIC OUTCOME 2

Describe the general anatomy of an insect and where the crop damaging appendages are found.

SPECIFIC OUTCOME 3

Explain the different life cycles of an insect.

SPECIFIC OUTCOME 4

Identify and explain the damage insects cause.

SPECIFIC OUTCOME 5

Scout for insects (pests and beneficial insects), disease symptoms and weeds.

SPECIFIC OUTCOME 6

Recognize that not all insects are pests, and that not all pests are insects.

SPECIFIC OUTCOME 7

Name what causes diseases in plants and explain the basic life cycles of microbial diseases.

SPECIFIC OUTCOME 8

Explain the ways in which insects, diseases and weeds can spread.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 31

Select, use and care for hand tools and basic equipment and infrastructure

SAQA US ID	*UNIT STANDARD TITLE*
116167	Select, use and care for hand tools and basic equipment and infrastructure

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Select and use appropriate equipment and implements for a specific agricultural task.

SPECIFIC OUTCOME 2

Recognise and act on problems related to the use of hand tools and basic equipment in an agricultura

SPECIFIC OUTCOME 3

Perform routine maintenance tasks to agricultural equipment.

SPECIFIC OUTCOME 4

Store equipment correctly and safely.

SPECIFIC OUTCOME 5

Identify and apply the correct safety measures when using hand tools and basic agricultural equipmen

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 32

Sort and handle animal fibre

SAQA US ID	*UNIT STANDARD TITLE*
116161	Sort and handle animal fibre

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate the picking up and casting of a fleece.

SPECIFIC OUTCOME 2

Show the ability to skirt a fleece to remove inferior wool.

SPECIFIC OUTCOME 3

Identify the different components of a fleece and class the fleece accordingly.

SPECIFIC OUTCOME 4

Identify and class skirtings, belly pieces and lox pieces.

SPECIFIC OUTCOME 5

Demonstrate the pressing, closing and marking of bales.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 33

Understand how sustainable farming systems conserve natural resources

SAQA US ID	*UNIT STANDARD TITLE*
116169	Understand how sustainable farming systems conserve natural resources

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of the impact of farming operations and practices on the environment.

SPECIFIC OUTCOME 2

Identify farm and domestically generated waste and pollutants and apply environmentally friendly met

SPECIFIC OUTCOME 3

Apply practices to maintain and increase biodiversity.

SPECIFIC OUTCOME 4

Control invasive alien plant species and noxious weeds.

SPECIFIC OUTCOME 5

Prevent the spread of veld fires using on farm firebreaks and/or fireguards.

SPECIFIC OUTCOME 6

Apply basic control and preventative measures to enhance the soil's capacity to hold water and preve

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 34

Understand organic market requirements

SAQA US ID	*UNIT STANDARD TITLE*
116149	Understand organic market requirements

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Be familiar with basic requirements of the local and organic markets.

SPECIFIC OUTCOME 2

Be aware of local market outlets.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 35

Understand the basic practices of beekeeping and the benefit thereof for agriculture

SAQA US ID	*UNIT STANDARD TITLE*
116208	Understand the basic practices of beekeeping and the benefit thereof for agriculture

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 1	1

Specific Outcomes:

SPECIFIC OUTCOME 1

Understand and describe the origin of nectar, pollen and propolis in plants.

SPECIFIC OUTCOME 2

Understand and describe the effects of environmental factors on the production of nutrient and produ

SPECIFIC OUTCOME 3

Understand and describe the names, identification of the most important known nutritional resource p

SPECIFIC OUTCOME 4

Understand and describe the potential of the most important known bee-plants.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 36

Administer livestock processing treatments

SAQA US ID	*UNIT STANDARD TITLE*
116643	Administer livestock processing treatments

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	8

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare for administering livestock processing treatments.

SPECIFIC OUTCOME 2

Select vaccines and pharmaceuticals.

SPECIFIC OUTCOME 3

Administer treatments.

SPECIFIC OUTCOME 4

Complete livestock processing treatments.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 37

Apply animal products harvesting procedures

SAQA US ID	*UNIT STANDARD TITLE*
116144	Apply animal products harvesting procedures

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify the estimated qualitative and quantitative value of various animal products.

SPECIFIC OUTCOME 2

Observe, illustrate and report on observations in animals regarding animal products and their origin

SPECIFIC OUTCOME 3

Identify and illustrate the core animal product and the parts of the product that are waste (if any)

SPECIFIC OUTCOME 4

Demonstrate the harvesting of the specific animal products.

SPECIFIC OUTCOME 5

Identify and demonstrate the basic methodology regarding the separation of the core product from the

SPECIFIC OUTCOME 6

Identify and demonstrate the basic methodologies regarding the processing of animal products for pre

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 38

Apply crop protection and animal health products effectively and responsibly

SAQA US ID	*UNIT STANDARD TITLE*
116125	Apply crop protection and animal health products effectively and responsibly

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Implement a pre-application plan.

SPECIFIC OUTCOME 2

Mix correct pest control products at correct dose rate.

SPECIFIC OUTCOME 3

Apply pest control product to crop or farm animals.

SPECIFIC OUTCOME 4

Take the necessary safety and health precautions whilst applying pest control products.

SPECIFIC OUTCOME 5

Apply post-application procedures.

SPECIFIC OUTCOME 6

Monitor and report on the process, problems and unusual occurrences to the supervisor.

SPECIFIC OUTCOME 7

Deal appropriately and effectively with emergencies.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 39

Apply layout principles for conservation and infrastructure

SAQA US ID	*UNIT STANDARD TITLE*
116127	Apply layout principles for conservation and infrastructure

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Recognise veld and soil types, animal and human behaviour and demarcate appropriate areas for sustai

SPECIFIC OUTCOME 2

Construct the infrastructure and relate the physical and chemical characteristics of soil, landscape

SPECIFIC OUTCOME 3

Understand the design of farm layout according to agricultural, water catchment and environmental co

SPECIFIC OUTCOME . 4

Design and construct basic infrastructure using simple tools and equipment at appropriate spacings w

SPECIFIC OUTCOME 5

Maintain, report faults, and where appropriate repair them under instruction.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 40

Apply marketing principles in agriculture

SAQA US ID	*UNIT STANDARD TITLE*
116126	Apply marketing principles in agriculture

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Understand the value of marketing research.

SPECIFIC OUTCOME 2

Apply the marketing mix (product, promotion, place, price and people) to a selected enterprise.

SPECIFIC OUTCOME 3

Take limited and shared responsibility for the marketing budget.

SPECIFIC OUTCOME 4

Have an awareness and understanding of the importance of effective distribution channels for a speci

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 41

Apply plant manipulation methods

SAQA US ID	*UNIT STANDARD TITLE*
116128	Apply plant manipulation methods

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of the selection and use of appropriate tools and equipment for a pre-d

SPECIFIC OUTCOME 2

Illustrate a basic knowledge of framework development principles as part of plant manipulation metho

SPECIFIC OUTCOME 3

Demonstrate an intermediate understanding of flower and fruit manipulation principles.

SPECIFIC OUTCOME 4

Illustrate a basic knowledge pruning principles as a vegetative plant manipulation method appropriat

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 42

Apply sustainable farming practices to conserve the ecological environment

SAQA US ID	*UNIT STANDARD TITLE*
116121	Apply sustainable farming practices to conserve the ecological environment

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of natural resources and recognise how sound management contributes tow

SPECIFIC OUTCOME 2

Eradicate alien plant species and noxious weeds.

SPECIFIC OUTCOME 3

Prevent the spread of veld fires by making firebreaks and/or fireguards on the farm.

SPECIFIC OUTCOME 4

Recognise harmful and useful fauna and flora and their purpose and/or effect on the farm.

SPECIFIC OUTCOME 5

Recognise eroded areas and potential soil erosion and carry out minor control measures.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 43

Consider plant botany during the placement of bee hives

SAQA US ID	*UNIT STANDARD TITLE*
116123	Consider plant botany during the placement of bee hives

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify the estimated qualitative and quantitative nutritional value of various plants providing nu

SPECIFIC OUTCOME 2

Identify the environmental requirements of various plants that provide nutrition for bees.

SPECIFIC OUTCOME 3

Observe, illustrate and report on observations regarding bees foraging on specific plants for specif

SPECIFIC OUTCOME 4

Expand the knowledge and range of names, identification and potential of known important qualitative

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 44

Control inputs and stock in agribusiness

SAQA US ID	*UNIT STANDARD TITLE*
116122	Control inputs and stock in agribusiness

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Plan to receive inputs into a store at the appropriate time.

SPECIFIC OUTCOME 2

Keep accurate records and manage stock.

SPECIFIC OUTCOME 3

Identify legislation regarding different inputs.

SPECIFIC OUTCOME 4

Observe safety regulations.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 45

Control pests, diseases and weeds on all crops effectively and responsibly

SAQA US ID	*UNIT STANDARD TITLE*
116124	Control pests, diseases and weeds on all crops effectively and responsibly

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Recognize and report on common insects associated with the specific agricultural enterprise.

SPECIFIC OUTCOME 2

Recognize common symptoms of diseases.

SPECIFIC OUTCOME 3

Identify by common name the types of weeds present in the field.

SPECIFIC OUTCOME 4

Old and new damage is observed and distinguished between and reported on.

SPECIFIC OUTCOME 5

Notice and assist with monitoring of pests (scouting) and explaining if pest levels have not decreas

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 46

Define and understand production systems and production management

SAQA US ID	UNIT STANDARD TITLE
116115	Define and understand production systems and production management

SGB NAME	ABET BAND	PROVIDER NAME
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
AGR-PAG-0-SGB PA	Regular	Level 2	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Understand production system in an agri-business environment.

SPECIFIC OUTCOME 2

Understand and define the basic managerial tasks.

SPECIFIC OUTCOME 3

Understand and define the additional production management tasks.

SPECIFIC OUTCOME 4

Understand the process of setting goals and objectives related to systems within an agricultural bus

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 47

Demonstrate an understaning of plant propagation

SAQA US ID	*UNIT STANDARD TITLE*
116119	Demonstrate an understaning of plant propagation

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Recognise the environmental requirements for propagation in a specific agricultural production conte

SPECIFIC OUTCOME 2

Identify appropriate propagation methods, applicable tools and equipment for specific agricultural p

SPECIFIC OUTCOME 3

Distinguish between successful and unsuccessful propagation under specific agricultural production c

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 48

Evaluate external animal anatomy and morphology

SAQA US ID	*UNIT STANDARD TITLE*
116117	Evaluate external animal anatomy and morphology

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify and name various levels of the standard nomenclature of the animal kingdom.

SPECIFIC OUTCOME 2

Identify and understand the names and purposes of the external divisions or parts of animals and ide

SPECIFIC OUTCOME 3

Identify and understand the composition and structure of the external divisions or parts of animals

SPECIFIC OUTCOME 4

Identify and name the basic composition and structures of further anatomical systems according to cr

SPECIFIC OUTCOME 5

Identify and describe the life cycles of the specific animal.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 49

Explain basic pig husbandry practices

SAQA US ID	*UNIT STANDARD TITLE*
116120	Explain basic pig husbandry practices

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify and describe abnormalities occurring in the sows and boars in a piggery.

SPECIFIC OUTCOME 2

Identify and describe abnormalities occurring in piglets in a piggery.

SPECIFIC OUTCOME 3

Demonstrate the ability to weigh pigs of all ages, record data and report to appropriate supervisor.

SPECIFIC OUTCOME 4

Recognise and apply appropriate boar management practices in the piggery.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 50

Explain dairy production cleanliness

SAQA US ID	*UNIT STANDARD TITLE*
116110	Explain dairy production cleanliness

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify, mix and use suitable cleaning materials.

SPECIFIC OUTCOME 2

State the importance of rapid cooling of freshly drawn milk.

SPECIFIC OUTCOME 3

Demonstrate the ability to assess milk quality.

SPECIFIC OUTCOME 4

Demonstrate the ability to make use of different milking methods.

SPECIFIC OUTCOME 5

Demonstrate the ability to clean the milk equipment effectively.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 51

Explain principles of human resources management and practices in agriculture

SAQA US ID	*UNIT STANDARD TITLE*
116113	Explain principles of human resources management and practices in agriculture

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an awareness and basic understanding of the farm's Human Resources policy with specific

SPECIFIC OUTCOME 2

Explain and identify labour legislation applicable at the work situation.

SPECIFIC OUTCOME 3

Explain and interpret contracts and agreements applicable at the workplace.

SPECIFIC OUTCOME 4

Explain and adhere to health and safety rules and practices.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 52

Harvest agricultural crops: Procedures

SAQA US ID	*UNIT STANDARD TITLE*
116111	Harvest agricultural crops: Procedures

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Select and use appropriate tools / equipment for pre-determined harvesting method.

SPECIFIC OUTCOME 2

Carry out sampling for maturity indexing according to established and familiar procedures.

SPECIFIC OUTCOME 3

Harvest crops.

SPECIFIC OUTCOME 4

Harvest crops considering the necessary health, hygiene and safety during the procedure.

SPECIFIC OUTCOME 5

Ensure the collection and transportation of waste.

SPECIFIC OUTCOME 6

Care and maintain equipment used in cooperation with, and guiding others.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 53

Harvest natural flora

SAQA US ID	*UNIT STANDARD TITLE*
116114	Harvest natural flora

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate a basic understanding of local habitat ecology and management principles.

SPECIFIC OUTCOME 2

Read a map including pinpoint position on the ground and indicate harvest sites on the map.

SPECIFIC OUTCOME 3

Recognise target and non-target species and minimize the impact on non-target species.

SPECIFIC OUTCOME 4

Implement appropriate harvesting techniques.

SPECIFIC OUTCOME 5

Demonstrate an understanding of the need to record and monitor harvesting practices and associated i

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 54

Identify and recognise factors influencing agricultural enterprise selection

SAQA US ID	*UNIT STANDARD TITLE*
116081	Identify and recognise factors influencing agricultural enterprise selection

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Name and recognise natural resources required for the selection of the relevant enterprise.

SPECIFIC OUTCOME 2

Describe and recognise infrastructural requirements for the selection of the relevant enterprise.

SPECIFIC OUTCOME 3

Identify and recognise stock required for the relevant enterprise.

SPECIFIC OUTCOME 4

Recognise and describe production cycles within relevant enterprise.

SPECIFIC OUTCOME 5

Identify and recognise harvest practices within relevant enterprise.

SPECIFIC OUTCOME 6

Describe and recognise post harvest practices within relevant enterprise.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 55

Identify basic breeding practices for farm animals

SAQA US ID	*UNIT STANDARD TITLE*
116107	Identify basic breeding practices for farm animals

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify standing oestrus of female breeding animals where appropriate.

SPECIFIC OUTCOME 2

Observe the libido of the male breeding animal where appropriate.

SPECIFIC OUTCOME 3

Recognise the signs of giving birth in female breeding animals.

SPECIFIC OUTCOME 4

Identify abnormal behaviour of breeding animals during the birth process.

SPECIFIC OUTCOME 5

Observe and monitor post-partum behaviour of breeding animals.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 56

Illustrate and understand the basic layout of financial statements

SAQA US ID	*UNIT STANDARD TITLE*
116083	Illustrate and understand the basic layout of financial statements

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Define and understand the gross margin statement and distinguish between direct and indirect costs,

SPECIFIC OUTCOME 2

Define and understand the income statement.

SPECIFIC OUTCOME 3

Define and understand the balance sheet.

SPECIFIC OUTCOME 4

Define and understand the structure of a cash-flow budget and statement.

SPECIFIC OUTCOME 5

Demonstrate an understanding of the legal responsibilities of an agri-business owner.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 57

Interpret and illustrate permaculture principles

SAQA US ID	*UNIT STANDARD TITLE*
116109	Interpret and illustrate permaculture principles

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the inter-relationship between different site components and resources in a Permaculture des

SPECIFIC OUTCOME 2

Define important functions in a Permaculture design and illustrate how these can be met in a number

SPECIFIC OUTCOME 3

Monitor and support the use of biotic and abiotic resources in a Permaculture system.

SPECIFIC OUTCOME 4

Interpret ecological processes and cycles that can be used in a Permaculture system.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 58

Introduce organic certification and internal control systems

SAQA US ID	*UNIT STANDARD TITLE*
116076	Introduce organic certification and internal control systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Be acquainted with the organic certification process.

SPECIFIC OUTCOME 2

Understand the functioning of an Internal Control System.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 59

Load livestock for transport

SAQA US ID	*UNIT STANDARD TITLE*
116641	Load livestock for transport

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Determine the truckload mass on an assized weighbridge.

SPECIFIC OUTCOME 2

Load livestock on to a truck.

SPECIFIC OUTCOME 3

Record livestock numbers and seal the truck.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 60

Mix and deliver feedlot feed to bunker

SAQA US ID	*UNIT STANDARD TITLE*
116638	Mix and deliver feedlot feed to bunker

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Collect relevant feed ingredients at loading point.

SPECIFIC OUTCOME 2

Mix ingredients in mixer into correct blend.

SPECIFIC OUTCOME 3

Discharge the mixed feed into designated bunker.

SPECIFIC OUTCOME 4

Record location and volume discharged.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 61

Monitor the establishment of a crop

SAQA US ID	*UNIT STANDARD TITLE*
116079	Monitor the establishment of a crop

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Select, use and care for the appropriate tools and equipment used in the planting of a specific crop

SPECIFIC OUTCOME 2

Monitor the handling of planting material for successful establishment according to required procedu

SPECIFIC OUTCOME 3

Understand the impact of environmental conditions on the successful establishment of crops.

SPECIFIC OUTCOME 4

Monitor the planting of plant material at correct spacing between rows, and individual plants, and a

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 62

Monitor water quality

SAQA US ID	*UNIT STANDARD TITLE*
116077	Monitor water quality

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of water quality management.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the importance of water quality to agriculture.

SPECIFIC OUTCOME 3

Demonstrate an ability to monitor and perform basic water quality tests and analyses.

SPECIFIC OUTCOME 4

Demonstrate an ability to perform and understand maintenance tasks on certain operational technical

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 63

Monitor, collect and collate agricultural data

SAQA US ID	*UNIT STANDARD TITLE*
116080	Monitor, collect and collate agricultural data

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify and collect the required data.

SPECIFIC OUTCOME 2

Collate the collected data.

SPECIFIC OUTCOME 3

Record collated data and create a report in the required format.

SPECIFIC OUTCOME 4

Apply health and safety measures applicable to the collection method and equipment used.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 64

Observe and inspect animal health

SAQA US ID	*UNIT STANDARD TITLE*
116074	Observe and inspect animal health

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Inspect, identify and report abnormal behaviour.

SPECIFIC OUTCOME 2

Supervise the movement and restraint of animals for basic procedures.

SPECIFIC OUTCOME 3

Perform basic procedures under full supervision.

SPECIFIC OUTCOME 4

Apply basic principles of basic Bio-Security.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 65

Operate and maintain specific irrigation systems

SAQA US ID	*UNIT STANDARD TITLE*
116066	Operate and maintain specific irrigation systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Perform pre-start up inspection applicable to the relevant irrigation system.

SPECIFIC OUTCOME 2

Perform start-up and shut down procedures applicable to specific irrigation system.

SPECIFIC OUTCOME 3

Irrigate crop according to given guidelines.

SPECIFIC OUTCOME 4

Care and maintenance of equipment and tools used during irrigation.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 66

Operate and support a food safety and quality management system in the agricultural supply chain

SAQA US ID	*UNIT STANDARD TITLE*
116070	Operate and support a food safety and quality management system in the agricultural supply chain

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Apply basic food safety practices.

SPECIFIC OUTCOME 2

Illustrate basic knowledge to distinguish and report non-conformances and deviations in food safety,

SPECIFIC OUTCOME 3

Understanding basic health and social issues in the agricultural environment.

SPECIFIC OUTCOME 4

Demonstrate an understanding of risk factors in food safety and quality related to the agricultural

SPECIFIC OUTCOME 5

Demonstrate basic understanding of record keeping activities on the farm.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 67

Participate in agri/ecotourism practices at both micro and meso levels to tourists

SAQA US ID	*UNIT STANDARD TITLE*
116069	Participate in agri/ecotourism practices at both micro and meso levels to tourists

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Put the farm/reserve into a meso-level context - that is to be able to integrate the farm within its

SPECIFIC OUTCOME 2

Identify and distinguish between the needs of tourists at micro and meso level.

SPECIFIC OUTCOME 3.

Identify and locate tourism infrastructure, attractions and activities on the agri/eco-site and loca

SPECIFIC OUTCOME 4

Describe operational, organizational (social) and tourism practices on the Agri/Eco site and at meso

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 68

Perform routine operations and identify basic problems in hydroponic systems

SAQA US ID	*UNIT STANDARD TITLE*
116072	Perform routine operations and identify basic problems in hydroponic systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify various growing media.

SPECIFIC OUTCOME 2

Plants are manupilated as per instruction in the hydroponic production system.

SPECIFIC OUTCOME 3

Identify and report basic problems in the production system.

SPECIFIC OUTCOME 4

Basic understanding of hydroponics.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 69

Prepare a shearing shed for shearing

SAQA US ID	*UNIT STANDARD TITLE*
116062	Prepare a shearing shed for shearing

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Describe the process to be followed to clean the shearing shed under supervision.

SPECIFIC OUTCOME 2

Recognise the different potential contaminant materials that can cause contamination problems in a s

SPECIFIC OUTCOME 3

Organise and place shearing equipment correctly to ensure a streamlined shearing process.

SPECIFIC OUTCOME 4

Observe and report any structural deficiencies of the shed prior to the shearing process.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 70

Recognise and identify the basic functions of the ecological environment

SAQA US ID	*UNIT STANDARD TITLE*
116064	Recognise and identify the basic functions of the ecological environment

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Recognise patterns and processes of the environment and how they relate to the sustainable utilisati.

SPECIFIC OUTCOME 2

Demonstrate an understanding of natural resources and recognise their limitations within the agricul

SPECIFIC OUTCOME 3

Demonstrate an understanding of sustainable agricultural principles.

SPECIFIC OUTCOME 4

Recognise environmental degradation indicators.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 71

Respond correctly to control defensive behaviour in animals

SAQA US ID	*UNIT STANDARD TITLE*
116063	Respond correctly to control defensive behaviour in animals

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Illustrate under supervision the possible responses to defensive behaviour.

SPECIFIC OUTCOME 2

Observe, illustrate and report on observations regarding defensive behaviour.

SPECIFIC OUTCOME 3

Explain correct reactions to minimise risk when working with animals.

SPECIFIC OUTCOME 4

List correct procedures when working with animals.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 72

Store and control agrochemical products effectively and responsibly

SAQA US ID	*UNIT STANDARD TITLE*
116065	Store and control agrochemical products effectively and responsibly

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Receive, store and issue agrochemicals as advised.

SPECIFIC OUTCOME 2

Categorise and segregate agrochemical stock according to a set of requirements.

SPECIFIC OUTCOME 3

Implement appropriate safety and security measures.

SPECIFIC OUTCOME 4

Keep record of all stock.

SPECIFIC OUTCOME 5

Maintain cleanliness and hygiene of the storage facility and containers.

SPECIFIC OUTCOME 6

Deal appropriately and effectively with emergencies.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 73

Understand animal nutrition

SAQA US ID	*UNIT STANDARD TITLE*
116055	Understand animal nutrition

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	7

Specific Outcomes:

SPECIFIC OUTCOME 1

Understand basic nutrient groups, functions, feed ingredients and groups.

SPECIFIC OUTCOME 2

Following correct on-farm storage procedures to maintain feed quality.

SPECIFIC OUTCOME 3

Apply stock control and records.

SPECIFIC OUTCOME 4

Feed processing for on-farm use.

SPECIFIC OUTCOME 5

Evaluate feed quality before allowing animals access to the feed.

SPECIFIC OUTCOME 6

Apply correct feeding practices.

SPECIFIC OUTCOME 7

Identify abnormal feeding behaviour.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 74

Understand basic soil fertility and plant nutrition

SAQA US ID	*UNIT STANDARD TITLE*
116053	Understand basic soil fertility and plant nutrition

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Accurately prepare and measure the appropriate quantity and quality of required soil nutrient prepar

SPECIFIC OUTCOME 2

Take an appropriate sample for nutrient analysis.

SPECIFIC OUTCOME 3

Understand the properties of soil and soil composition.

SPECIFIC OUTCOME 4

Identify and interpret the basic symptoms of nutritional deficiencies in crops.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 75

Understand the structure and functions of a plant

SAQA US ID	*UNIT STANDARD TITLE*
116057	Understand the structure and functions of a plant

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify the basic parts that make up a seed and its basic function.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the different root systems and its basic function.

SPECIFIC OUTCOME 3

Demonstrate an understanding of different stem types.

SPECIFIC OUTCOME 4

The different types of leaves and the role leaves play in food production for the plant are identifi

SPECIFIC OUTCOME 5

Identify the different parts of the flower and their basic functions.

SPECIFIC OUTCOME 6

Demonstrate an understanding of the different types and parts of a fruit.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 76

Utilise and perform minor repair and maintenance tasks on implements, equipment and infrastructure

SAQA US ID	*UNIT STANDARD TITLE*
116060	Utilise and perform minor repair and maintenance tasks on implements, equipment and infrastructure

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 2	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Select the appropriate tools, implements and/or equipment, from a limited range, to use in a specifi

SPECIFIC OUTCOME 2

Monitor the good working order and perform minor repairs to the use of tools, implements and/or equi

SPECIFIC OUTCOME 3

Maintain and store tools, implements, equipment and/or machinery according to specifications.

SPECIFIC OUTCOME 4

Explain and apply the necessary safety measures in the use of agricultural tools, equipment and/or i

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 77

Apply advanced breeding practices for farm animals

SAQA US ID	*UNIT STANDARD TITLE*
116216	Apply advanced breeding practices for farm animals

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify and classify the signs of giving birth and problem births in female breeding animals.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the different breeding methods in farm animals.

SPECIFIC OUTCOME 3

Demonstrate an understanding of the basic reproductive cycles of farm animals.

SPECIFIC OUTCOME 4

Define the factors affecting the reproductive cycles of farm animals.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 78

Apply basic artificial insemination practices

SAQA US ID	*UNIT STANDARD TITLE*
116215	Apply basic artificial insemination practices

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Apply basic artificial insemination practices to animals.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 79

Apply blade-shearing skills and prepare blade-shearing equipment

SAQA US ID	*UNIT STANDARD TITLE*
116273	Apply blade-shearing skills and prepare blade-shearing equipment

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	8

Specific Outcomes:

SPECIFIC OUTCOME 1

Set up and maintain hand-shears and stoning equipment.

SPECIFIC OUTCOME 2

Apply general safety measures and deal with emergencies in the shearing shed.

SPECIFIC OUTCOME 3

Prepare the shearing area.

SPECIFIC OUTCOME 4

Catch, handle and hold sheep for searing purposes.

SPECIFIC OUTCOME 5

Shear sheep by applying correct blade-shearing techniques.

SPECIFIC OUTCOME 6

Apply basic health and fitness measures/principles.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 80

Apply machine-shearing skills and prepare shearing equipment

SAQA US ID	*UNIT STANDARD TITLE*
116277	Apply machine-shearing skills and prepare shearing equipment

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	8

Specific Outcomes:

SPECIFIC OUTCOME 1

Erect and set up a shearing machine.

SPECIFIC OUTCOME 2

Set and maintain a hand piece.

SPECIFIC OUTCOME 3

Set up and maintain a grinder.

SPECIFIC OUTCOME 4

Apply general safety measures and deal with emergencies in the shearing shed.

SPECIFIC OUTCOME 5

Prepare the shearing area.

SPECIFIC OUTCOME 6

Catch, handle and hold sheep for shearing purposes.

SPECIFIC OUTCOME 7

Shear sheep by applying correct machine-shearing techniques.

SPECIFIC OUTCOME 8

Apply basic health and fitness measures/principles.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 81

Apply pig husbandry practices

SAQA US ID	*UNIT STANDARD TITLE*
116276	Apply pig husbandry practices

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Distinguish and treat malnutrition, anorexia in pigs and vaccinate pigs against diseases.

SPECIFIC OUTCOME 2

Describe and demonstrate post-farrowing husbandry practices in piglets.

SPECIFIC OUTCOME 3

Identify problems at farrowing and provide assistance where necessary.

SPECIFIC OUTCOME 4

Identify the need for cross fostering and implement where necessary.

SPECIFIC OUTCOME 5

Apply basic artificial insemination practices to pigs.

SPECIFIC OUTCOME 6

Recognise and ensure normal mating behaviour in breeding pigs.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 82

Apply routine maintenance and servicing plans and procedures

SAQA US ID	*UNIT STANDARD TITLE*
116275	Apply routine maintenance and servicing plans and procedures

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Understand and schedule the implementation of a routine maintenance plan.

SPECIFIC OUTCOME 2

Implement a service maintenance plan.

SPECIFIC OUTCOME 3

Apply maintenance and service procedures according to specified policies.

SPECIFIC OUTCOME 4

Ensure the application of appropriate safety measures in the use of agricultural equipment and imple

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 83

Assist in farm planning and layout for conservation and rainwater harvesting

SAQA US ID	*UNIT STANDARD TITLE*
116274	Assist in farm planning and layout for conservation and rainwater harvesting

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Assist in a land capability analysis to serve as the basis for development of an area or an enterpri

SPECIFIC OUTCOME 2

Design and construct prevention structures and infrastructure necessary for the farm area or the far

SPECIFIC OUTCOME 3

Design and construct all structures using simple tools and equipment.

SPECIFIC OUTCOME 4

Monitor implementation of principles for natural resource management and infrastructure maintenance.

SPECIFIC OUTCOME 5

Maintain, report faults, and where appropriate repair them under supervision.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 84

Communicate agri/ecotourism principles and concepts effectively and adapt to needs

SAQA US ID	*UNIT STANDARD TITLE*
116258	Communicate agri/ecotourism principles and concepts effectively and adapt to needs

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify and describe the contribution of amenities to the Agri/Ecotourism destination.

SPECIFIC OUTCOME 2

Identify and describe the contribution of access structures to the Agri/Ecotourism destination.

SPECIFIC OUTCOME 3

Identify and describe the contribution of auxiliary services to the Agri/Ecotourism destination.

SPECIFIC OUTCOME 4

Identify and describe the contribution of attractions to the Agri/Ecotourism destination.

SPECIFIC OUTCOME 5

Communicate the relationship between the components of a successful Agri/Ecotourism destination.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 85

Control feedbunker and water trough quality

SAQA US ID	*UNIT STANDARD TITLE*
116645	Control feedbunker and water trough quality

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	6

Specific Outcomes:

SPECIFIC OUTCOME 1

Assess bunker feed levels.

SPECIFIC OUTCOME 2

Evaluate bunker feed quality.

SPECIFIC OUTCOME 3

Schedule feed bunker and water trough cleaning programmes.

SPECIFIC OUTCOME 4

Evaluate water trough level and water quality.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 86

Demonstrate a basic understanding of the physiological functioning of the anatomical structures of the plant

SAQA US ID	*UNIT STANDARD TITLE*
116272	Demonstrate a basic understanding of the physiological functioning of the anatomical structures of the plant

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of the structure and basic functioning of a plant cell.

SPECIFIC OUTCOME 2

Describe the effect of the environmental on the physiology and germination of the seed.

SPECIFIC OUTCOME 3

Describe the anatomy of the root and stem in relation to its function in the translocation of water

SPECIFIC OUTCOME 4

Demonstrate an understanding of the anatomy and physiology of a leaf.

SPECIFIC OUTCOME 5

Identify and describe the anatomical structures of a flower in relation to fruit and seed developmen

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 87

Demonstrate an understanding of feedlot feed ingredient and blends

SAQA US ID	*UNIT STANDARD TITLE*
116653	Demonstrate an understanding of feedlot feed ingredient and blends

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	6

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify basic feedlot feed ingredients.

SPECIFIC OUTCOME 2

Distinguish between blended feedlot feeds.

SPECIFIC OUTCOME 3

Identify quality of blends.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 88

Demonstrate an understanding of the feedlot environment

SAQA US ID	*UNIT STANDARD TITLE*
116647	Demonstrate an understanding of the feedlot environment

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	10

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify and describe industry role players and structures.

SPECIFIC OUTCOME 2

Evaluate livestock purchase regions.

SPECIFIC OUTCOME 3

Demonstrate an understanding of relevant legislation applicable to the livestock industry.

SPECIFIC OUTCOME 4

Apply feedlot production and slaughter norms.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 89

Determine livestock mass

SAQA US ID	*UNIT STANDARD TITLE*
116637	Determine livestock mass

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare the weighing facility.

SPECIFIC OUTCOME 2

Determine livestock mass.

SPECIFIC OUTCOME 3

Record and submit determined mass.

SPECIFIC OUTCOME 4

Restore the weighing facility to inoperative status.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 90

Explain animal anatomy and physiology

SAQA US ID	*UNIT STANDARD TITLE*
116260	Explain animal anatomy and physiology

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify and understand the structures, composition and physical and biological components of the va

SPECIFIC OUTCOME 2

Identify the interrelated activities pertaining to the various anatomical systems.

SPECIFIC OUTCOME 3

Identify, understand and evaluate symptomatic variations and abnormalities within living animals, in

SPECIFIC OUTCOME 4

Identify, understand and evaluate and the probable causes of abnormalities and deviations in the ana

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 91

Explain application of marketing principles within an alternative and dynamic agricultural marketing environment

SAQA US ID	*UNIT STANDARD TITLE*
116259	Explain application of marketing principles within an alternative and dynamic agricultural marketing environment

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an awareness of the managerial vision of the agribusiness with specific relation to the

SPECIFIC OUTCOME 2

Monitor the alternative marketing environment and determine variables in marketing cycle for a speci

SPECIFIC OUTCOME 3

Distinguish the characteristics and critical success factors of alternative markets for a specific a

SPECIFIC OUTCOME 4

Modify the marketing supply chain cycle for alternative markets of a specific agricultural commodity

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 92

Explain costing and the viability of an agri-business

SAQA US ID	*UNIT STANDARD TITLE*
116237	Explain costing and the viability of an agri-business

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify the various sources of income generation available to the agri-business.

SPECIFIC OUTCOME 2

Identify and budget for the various costs impacting on the agri-business.

SPECIFIC OUTCOME 3

Demonstrate an understanding of the utilization of break-even budgets to calculate break-even points

SPECIFIC OUTCOME 4

Demonstrate the utilisation of whole farm budgets to predict and focus financial outcomes of an agri

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 93

Explain dairy production

SAQA US ID	*UNIT STANDARD TITLE*
116228	Explain dairy production

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	6

Specific Outcomes:

SPECIFIC OUTCOME 1

Describe the acceptable standard range of components of whole milk.

SPECIFIC OUTCOME 2

Identify and briefly describe the common end products of milk processing.

SPECIFIC OUTCOME 3

Identify the main types of market outlets for the milk producer.

SPECIFIC OUTCOME 4

Critically assess parlour hygiene routines.

SPECIFIC OUTCOME 5

Critically monitor efficiency of milk cooling devices.

SPECIFIC OUTCOME 6

Critically assess milking methods in use.

SPECIFIC OUTCOME 7

Ensure regular recording routines are applied.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 94

Explain elementary animal nutrition

SAQA US ID	*UNIT STANDARD TITLE*
116225	Explain elementary animal nutrition

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	6

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of the nutritional role of nutrient components.

SPECIFIC OUTCOME 2

Identify specific feed ingredients.

SPECIFIC OUTCOME 3

Demonstrate an understanding of the basic concepts of animal stimulation, maintenance and production

SPECIFIC OUTCOME 4

Demonstrate the ability to prepare, produce and mix feed ingredients.

SPECIFIC OUTCOME 5

Demonstrate an understanding of feed security.

SPECIFIC OUTCOME 6

Identify and apply sensory indicators of quality in feed.

SPECIFIC OUTCOME 7

Demonstrate the ability to interpret and apply corrective measures for abnormal feeding behaviour.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 95

Explain human resource policies and procedures

SAQA US ID	*UNIT STANDARD TITLE*
116257	Explain human resource policies and procedures

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of Human Resource rules, policies and procedures.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the various stakeholders and their roles within an organisation.

SPECIFIC OUTCOME 3

Demonstrate involvement with the preparation and interpretation of contracts and agreements applicab

SPECIFIC OUTCOME 4

Demonstrate an understanding of employment relations in an organisation.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 96

Explain store inputs categories, labeling and storage methods

SAQA US ID	*UNIT STANDARD TITLE*
116240	Explain store inputs categories, labeling and storage methods

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Receive orders of agro-inputs appropriately.

SPECIFIC OUTCOME 2

Update records correctly.

SPECIFIC OUTCOME 3

Maintain levels of agro-inputs within acceptable limits and complete requisition forms correctly.

SPECIFIC OUTCOME 4

Explain the issuing of stock (agro-inputs) correctly.

SPECIFIC OUTCOME 5

Observe legislation regarding handling and storage of agro-inputs to avoid penalties.

SPECIFIC OUTCOME 6

Schedule the flow of agro-inputs to avoid deterioration and wastage.

SPECIFIC OUTCOME 7

Evaluate alternative suppliers for efficiency, product quality and price.

SPECIFIC OUTCOME 8

Inspect, issue and check returned equipment.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 97

Explain the harvesting of animal products

SAQA US ID	*UNIT STANDARD TITLE*
116217	Explain the harvesting of animal products

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Evaluate animal products that are suitable for harvesting based on their availability and value.

SPECIFIC OUTCOME 2

Create infrastructure to facilitate the harvesting of animal products.

SPECIFIC OUTCOME 3

Maintain animal harvesting systems.

SPECIFIC OUTCOME 4

Evaluate animal harvesting systems and suggest alternative methods, processes or steps in animal pro

SPECIFIC OUTCOME 5

Understand and describe the processing of harvested products with special reference to adding value

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 98

Explain the planning and scheduling of tasks in a production environment

SAQA US ID	*UNIT STANDARD TITLE*
116218	Explain the planning and scheduling of tasks in a production environment

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain production planning and the different levels of planning that can be used in production plan

SPECIFIC OUTCOME 2

Demonstrate an understanding of scheduling.

SPECIFIC OUTCOME 3

Demonstrate production optimisation techniques.

SPECIFIC OUTCOME 4

Demonstrate the ability to make meaningful comments on the planning and scheduling process.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 99

Explain the prevention and treatment of animal diseases

SAQA US ID	*UNIT STANDARD TITLE*
116219	Explain the prevention and treatment of animal diseases

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Perform animal restraint and related procedures.

SPECIFIC OUTCOME 2

Perform basic veterinary procedures.

SPECIFIC OUTCOME 3

Treat and vaccinate animals under supervision.

SPECIFIC OUTCOME 4

Supervise the carrying out of basic principles of bio-security.

SPECIFIC OUTCOME 5

Carry out pre-planned programmes.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 100

Explain the propagation of plants

SAQA US ID	*UNIT STANDARD TITLE*
116220	Explain the propagation of plants

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of the function of environmental requirements for propagation within a

SPECIFIC OUTCOME 2

Demonstrate an understanding of the general propagation procedures and select appropriate procedures

SPECIFIC OUTCOME 3

Monitor environmental conditions in the propagation area within a specific agricultural production c

SPECIFIC OUTCOME 4

Choose and apply the necessary tools for the propagation within a specific agricultural production c

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 101

Incorporate basic concepts of sustainable farming systems into practical farm activities

SAQA US ID	*UNIT STANDARD TITLE*
116222	Incorporate basic concepts of sustainable farming systems into practical farm activities

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	7

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify the basic components of sustainable farming systems.

SPECIFIC OUTCOME 2

Demonstrate an understanding of a system and the nature of a system.

SPECIFIC OUTCOME 3

Demonstrate an understanding of the balance of sustainability, productivity and conservation of reso

SPECIFIC OUTCOME 4

Define and describe a sustainable farming system.

SPECIFIC OUTCOME 5

Monitor and re-evaluate sustainability of a whole farming system.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 102

Interpret factors influencing agricultural enterprises and plan accordingly

SAQA US ID	*UNIT STANDARD TITLE*
116214	Interpret factors influencing agricultural enterprises and plan accordingly

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Interpret and categorise natural resources required for the selection of the relevant enterprise.

SPECIFIC OUTCOME 2

Categorise and maintain infrastructural requirements for the selection of the enterprise.

SPECIFIC OUTCOME 3

Determine stock required for the relevant enterprise.

SPECIFIC OUTCOME 4

Define and interpret production procedures within the relevant enterprise.

SPECIFIC OUTCOME 5

Determine and apply harvest procedures within relevant enterprises.

SPECIFIC OUTCOME 6

Compare and interpret post harvest procedures within relevant enterprises.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 103

Introduction to organic certification and internal control systems

SAQA US ID	*UNIT STANDARD TITLE*
116261	Introduction to organic certification and internal control systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Carry out basic organic farm inspection of a small farm unit.

SPECIFIC OUTCOME 2

Support the Farmers Association with the application of organic rules.

SPECIFIC OUTCOME 3

Identify the requirements of specific certification bodies in terms of Internal Control Systems.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 104

Maintain and support sustainable wild flower harvesting practices

SAQA US ID	*UNIT STANDARD TITLE*
116262	Maintain and support sustainable wild flower harvesting practices

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Supervise and manage a local harvesting operation.

SPECIFIC OUTCOME 2

Demonstrate an understanding and working knowledge of relevant legislation.

SPECIFIC OUTCOME 3

Recognise target and non-target species and minimize the impact on non-target species.

SPECIFIC OUTCOME 4

Implement appropriate harvesting techniques.

SPECIFIC OUTCOME 5

Demonstrate the ability to pick according to a harvesting schedule and keep appropriate records.

SPECIFIC OUTCOME 6

Demonstrate a good knowledge of harvesting principles and an understanding of local habitat ecology

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 105

Maintain water quality parameters

SAQA US ID	*UNIT STANDARD TITLE*
116212	Maintain water quality parameters

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Read, record and interpret certain parameters and abnormalities in water quality.

SPECIFIC OUTCOME 2

Demonstrate an understanding of critical control points in water quality management.

SPECIFIC OUTCOME 3

Enable corrective action to occur on certain operational systems that control specific physical and

SPECIFIC OUTCOME 4

Ensure that quality assurance systems related to water quality are in place and maintained.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 106

Manage sites for bee keeping

SAQA US ID	*UNIT STANDARD TITLE*
116270	Manage sites for bee keeping

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Evaluate environmental niches that are suitable as bee sites or for bee placement.

SPECIFIC OUTCOME 2

Create infrastructure to facilitate the establishment of a bee site or placement.

SPECIFIC OUTCOME 3

Maintain bee sites or placements.

SPECIFIC OUTCOME 4

Demonstrate an understanding and describe basic pollination biology with specific reference to necta

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 107

Manage soil fertility and plant nutrition

SAQA US ID	*UNIT STANDARD TITLE*
116267	Manage soil fertility and plant nutrition

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare for soil nutrient applications using specialized equipment.

SPECIFIC OUTCOME 2

Supervise the collection of samples, storage and dispatch of samples to appropriate service provider

SPECIFIC OUTCOME 3

Demonstrate an understanding of the properties of soil and how these impact on plant nutrition and s

SPECIFIC OUTCOME 4

Identify and interpret symptoms of nutritional deficiencies in different crops and make basic recomm

SPECIFIC OUTCOME 5

Supervise and implement soil preparation and remediation.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 108

Minimise risk in animal management

SAQA US ID	*UNIT STANDARD TITLE*
116211	Minimise risk in animal management

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Evaluate risks inherent in handling specific animals or a range of animals.

SPECIFIC OUTCOME 2

Demonstrate an understanding of systems required to manage or contain animals or a range of animals.

SPECIFIC OUTCOME 3

Evaluate animal management systems and suggest alternatives methods, processes or steps in safe mana

SPECIFIC OUTCOME 4

Demonstrate an understanding and describe correct treatment of individuals who have been injured or

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 109

Monitor and co-ordinate the harvesting of agricultural products

SAQA US ID	*UNIT STANDARD TITLE*
116268	Monitor and co-ordinate the harvesting of agricultural products

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Select harvesting equipment and tools for specific agricultural enterprise.

SPECIFIC OUTCOME 2

Demonstrate an understanding of sampling for maturity indexing.

SPECIFIC OUTCOME 3

Demonstrate an understanding of the harvesting of crops according to harvesting plan.

SPECIFIC OUTCOME 4

Implement a health, hygiene and safety plan during harvesting.

SPECIFIC OUTCOME 5

Implement the waste collection and disposal plan.

SPECIFIC OUTCOME 6

Manage the care and maintenance of harvesting equipment.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 110

Monitor and supervise a food safety and quality management system in the agricultural supply chain

SAQA US ID	*UNIT STANDARD TITLE*
116271	Monitor and supervise a food safety and quality management system in the agricultural supply chain

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of the concept of traceability in the agricultural supply chain.

SPECIFIC OUTCOME 2

Perform basic record keeping activities on the farm.

SPECIFIC OUTCOME 3

Report non-conformances with respect to food safety, production, environmental, and social practices

SPECIFIC OUTCOME 4

Understanding basic health, social and environmental issues which relate to the agricultural environ

SPECIFIC OUTCOME 5

Demonstrate a basic understanding of internal audits in the agricultural environment.

SPECIFIC OUTCOME 6

Operate food safety and quality principles as related to the agricultural supply chain.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 111

Monitor natural resource management practices

SAQA US ID	*UNIT STANDARD TITLE*
116263	Monitor natural resource management practices

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Know and monitor the occurrence of key types of fauna and flora and their environmental requirements

SPECIFIC OUTCOME 2

Demonstrate an understanding of the elements of an ecosystem and a food chain.

SPECIFIC OUTCOME 3

Identify the key fauna and flora types and their sustainable management.

SPECIFIC OUTCOME 4

Identify the different soil categories, the utilisation and maintenance thereof.

SPECIFIC OUTCOME 5

Monitor and implement principles of water management.

SPECIFIC OUTCOME 6

Demonstrate a basic understanding of the energy cycle.

SPECIFIC OUTCOME 7

Read a two dimensional map of the direct vicinity.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 112

Monitor pests, diseases and weeds on crops

SAQA US ID	*UNIT STANDARD TITLE*
116265	Monitor pests, diseases and weeds on crops

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Monitor the common pests prevalent in the specific agricultural enterprise.

SPECIFIC OUTCOME 2

Demonstrate a basic knowledge of trapping, monitoring and recording the incidence of pests, diseases

SPECIFIC OUTCOME 3

Collect insects not familiar and that had been identified.

SPECIFIC OUTCOME 4

Monitor the symptoms of disease associated with the agricultural enterprise.

SPECIFIC OUTCOME 5

Monitor and report the incidence of weeds in the agricultural enterprise.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 113

Monitor plant manipulation

SAQA US ID	*UNIT STANDARD TITLE*
116264	Monitor plant manipulation

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Monitor and supervise the use of appropriate tools and / or equipment for plant training and manipul

SPECIFIC OUTCOME 2

Monitor and supervise framework development principles as part of plant manipulation methods.

SPECIFIC OUTCOME 3

Monitor and supervise flower and fruit manipulation principles.

SPECIFIC OUTCOME 4

Monitor and supervise pruning principles as vegetative plant manipulation methods appropriate to the

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 114

Monitor the operation and maintenance of irrigation systems

SAQA US ID	*UNIT STANDARD TITLE*
116266	Monitor the operation and maintenance of irrigation systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Obtain, implement and, if necessary, modify irrigation schedules for various crops.

SPECIFIC OUTCOME 2

Ensure the efficient operation of irrigation systems.

SPECIFIC OUTCOME 3

Collect and record data pertaining to irrigation of crops.

SPECIFIC OUTCOME 4

Prepare maintenance programmes for irrigation systems.

SPECIFIC OUTCOME 5

Supervise irrigation activities.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 115

Organise shearing shed activities

SAQA US ID	*UNIT STANDARD TITLE*
116213	Organise shearing shed activities

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Plan and supervise the procedures prescribed for cleaning of the shearing shed.

SPECIFIC OUTCOME 2

Plan the shearing shed layout.

SPECIFIC OUTCOME 3

Supervise handling and sorting of fibres.

SPECIFIC OUTCOME 4

Recommend procedures to deal with the different potential contaminant materials that can cause conta

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 116

Supervise the collection of agricultural data

SAQA US ID	*UNIT STANDARD TITLE*
116269	Supervise the collection of agricultural data

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 3	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Ensure that data collected correctly.

SPECIFIC OUTCOME 2

Ensure that the equipment and tools required for data collection are on hand.

SPECIFIC OUTCOME 3

Ensure that collated data and reports are submitted as required.

SPECIFIC OUTCOME 4

Ensure that the required health and safety regulations are followed.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 117

Apply advanced pig husbandry practices

SAQA US ID	*UNIT STANDARD TITLE*
116299	Apply advanced pig husbandry practices

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Decide on the treatment of unhealthy pigs.

SPECIFIC OUTCOME 2

Plan the vaccination programme of pigs and piglets appropriately.

SPECIFIC OUTCOME 3

Design the processes to assist farrowing and cross fostering.

SPECIFIC OUTCOME 4

Integrate artificial insemination practices.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 118

Apply effective and responsible integrated pest, disease and weed control

SAQA US ID	*UNIT STANDARD TITLE*
116301	Apply effective and responsible integrated pest, disease and weed control

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate a basic understanding of the principles of integrated pest management.

SPECIFIC OUTCOME 2

Identify and differentiate between economically damageable pests, sporadic pests, diseases and sympt

SPECIFIC OUTCOME 3

Understand the different types of control measures that can be applied in integrated pest management

SPECIFIC OUTCOME 4

Assist in developing a plan to assist the decision making process on the type of control to apply.

SPECIFIC OUTCOME 5

Execute post-application monitoring.

SPECIFIC OUTCOME 6

Apply environmental and community considerations.

SPECIFIC OUTCOME 7

Oversee the management of an agrochemical storage facility effectively and responsibly.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 119

Apply procedures to manage damage control in animals and victims

SAQA US ID	*UNIT STANDARD TITLE*
116300	Apply procedures to manage damage control in animals and victims

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Investigate animal defence mechanisms and evaluate related management procedures.

SPECIFIC OUTCOME 2

Communicate evaluations and findings concerning animal damage, to superiors and react with understan

SPECIFIC OUTCOME 3

Suggest alternative practices or control systems that will ensure safe management of animals.

SPECIFIC OUTCOME 4

Maintain systems implemented to ensure safe handling and containment procedures.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 120

Assume co-responsibility and participation in human resource management

SAQA US ID	*UNIT STANDARD TITLE*
116302	Assume co-responsibility and participation in human resource management

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Participate in the development of Human Resources related to policy and procedures.

SPECIFIC OUTCOME 2

Communicate the principle, practices, policies and procedures.

SPECIFIC OUTCOME 3

Participate in the implementation plan of agreed policies, contracts and □agreements applicable at t

SPECIFIC OUTCOME 4

Contributes to the monitoring and evaluation of Human Resource principles, plans, practices, policie

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 121

Control feedlot production unit

SAQA US ID	*UNIT STANDARD TITLE*
116649	Control feedlot production unit

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	32

Specific Outcomes:

SPECIFIC OUTCOME 1

Oversee herd health and production.

SPECIFIC OUTCOME 2

Evaluate production performance.

SPECIFIC OUTCOME 3

Oversee pen maintenance programme.

SPECIFIC OUTCOME 4

Record livestock pen numbers and movements between pens.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 122

Demonstrate a basic understanding of the physiological processes in plant growth and development

SAQA US ID	*UNIT STANDARD TITLE*
116295	Demonstrate a basic understanding of the physiological processes in plant growth and development

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of the processes involved in cell division with relation to growth and

SPECIFIC OUTCOME 2

Describe the process of transpiration and its role in water uptake by a plant.

SPECIFIC OUTCOME 3

Describe the process of respiration in relation to gaseous exchange in the plant.

SPECIFIC OUTCOME 4

Demonstrate an understanding of the process of photosynthesis.

SPECIFIC OUTCOME 5

Demonstrate an understanding of the maturity and ripening of fruit.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 123

Develop a harvesting plan for the specific agricultural crop

SAQA US ID	*UNIT STANDARD TITLE*
116297	Develop a harvesting plan for the specific agricultural crop

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify, plan and obtain tools / equipment for the harvesting of the crop of the agricultural enter

SPECIFIC OUTCOME 2

Develop a maturity-indexing plan and interpret the data.

SPECIFIC OUTCOME 3

Develop the harvesting plan for the crops according to the maturity indexing data.

SPECIFIC OUTCOME 4

Develop health, hygiene and safety plans, for the harvesting operation and moving the product to the

SPECIFIC OUTCOME 5

Develop the plan for the disposal of waste as prescribed by the different rules and regulations and

SPECIFIC OUTCOME 6

Develop a plan for the proper care and maintenance of the equipment used.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 124

Develop and manage an agricultural marketing plan

SAQA US ID	*UNIT STANDARD TITLE*
116296	Develop and manage an agricultural marketing plan

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Structure a marketing plan using a systems approach.

SPECIFIC OUTCOME 2

Structure a rolling marketing plan for a specific agricultural commodity.

SPECIFIC OUTCOME 3

Structure a risk plan to accommodate variable and uncertainties in a marketing plan for a specific a

SPECIFIC OUTCOME 4

Monitor the marketing plan and apply remedial actions.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 125

Develop bee sites

SAQA US ID	*UNIT STANDARD TITLE*
116298	Develop bee sites

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Investigate areas where sites may be developed or bees placed.

SPECIFIC OUTCOME 2

Initiate communication with the landowner regarding a land-use or rental agreement.

SPECIFIC OUTCOME 3

Develop sites, site infrastructure, site utilisation and site security.

SPECIFIC OUTCOME 4

Continuously evaluate bee sites regarding their value and relevance.

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PART 2 OF 2

AIDS HELPLINE: 0800-0123-22 Prevention is the cure

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 126

Ensure sustainable wild flower harvesting operations

SAQA US ID	*UNIT STANDARD TITLE*
116289	Ensure sustainable wild flower harvesting operations

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate a broad knowledge of sustainable harvesting and eco system sustainability.

SPECIFIC OUTCOME 2

Demonstrate compliance with regards to relevant legislation.

SPECIFIC OUTCOME 3

Manage, analyse and integrate relevant data into operating procedures and regional monitoring progra

SPECIFIC OUTCOME 4

Develop and manage a harvesting plan for a farm.

SPECIFIC OUTCOME 5

Demonstrate the ability to do research and enhance current potential of harvesting products to keep

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 127

Establish a plan for the monitoring, safe use and maintenance of equipment implements, technology and infrastructure

SAQA US ID	*UNIT STANDARD TITLE*
116290	Establish a plan for the monitoring, safe use and maintenance of equipment implements, technology and infrastructure

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Develop a basic task related work program related to the scheduling and allocation of equipment and

SPECIFIC OUTCOME 2

Prepare and implement basic operational procedures for the cleaning, storage and proper maintenance

SPECIFIC OUTCOME 3

Recognise, identify and solve problems related to the use of implements and equipment in an agricult

SPECIFIC OUTCOME 4

Draw up plans to ensure that safety regulations are implemented as prescribed for the use of impleme

SPECIFIC OUTCOME 5

Adapt equipment, implements and technology to suit different agricultural situations and processes.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 128

Evaluate, adjust and implement factors influencing agricultural enterprises

SAQA US ID	*UNIT STANDARD TITLE*
116293	Evaluate, adjust and implement factors influencing agricultural enterprises

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Evaluate and adjust production processes so that natural resources required are managed sustainably.

SPECIFIC OUTCOME 2

Compare and evaluate infrastructural factors affecting requirements.

SPECIFIC OUTCOME 3

Evaluate and adjust required stock.

SPECIFIC OUTCOME 4

Evaluate and adjust harvest procedures required.

SPECIFIC OUTCOME 5

Compare and integrate the post harvest factors.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 129

Execute sustainable resource use and quality control

SAQA US ID	*UNIT STANDARD TITLE*
116288	Execute sustainable resource use and quality control

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Determine availability of resources and maintain sustainable resource use.

SPECIFIC OUTCOME 2

Determine the scope of the enterprise / production unit.

SPECIFIC OUTCOME 3

Apply the principles of quality management systems.

SPECIFIC OUTCOME 4

Integrate the concept of quality control into the production process.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 130

Explain animal classification and natural history

SAQA US ID	*UNIT STANDARD TITLE*
116281	Explain animal classification and natural history

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Describe the historical origin of the specific animal species, based on evidence.

SPECIFIC OUTCOME 2

Describe the geographical distribution of the specific animal species, based on its preferences.

SPECIFIC OUTCOME 3

Describe the specific animal species' position within the classification system of the animal kingdo

SPECIFIC OUTCOME 4

Describe the historic, traditional and current use of the specific animal species by man.

SPECIFIC OUTCOME 5

Describe the basic biological and behavioural concepts that will illuminate the geographical, tradit

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 131

Explain functional animal anatomy and physiology

SAQA US ID	*UNIT STANDARD TITLE*
116285	Explain functional animal anatomy and physiology

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify and understand in detail the processes active within the various anatomical systems in anim

SPECIFIC OUTCOME 2

Identify and understand how anatomical systems within animals influence production of various animal

SPECIFIC OUTCOME 3

Monitor and advise others on animal systems and production processes based on anatomical systems.

SPECIFIC OUTCOME 4

Understand how animal health and nutrition affects animal anatomical systems.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 132

Explain intermediate animal nutrition

SAQA US ID	*UNIT STANDARD TITLE*
116282	Explain intermediate animal nutrition

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Describe the composition and functions of specific nutrient components and feed ingredients.

SPECIFIC OUTCOME 2

Interpret the nutrient requirements of different animal species and categories.

SPECIFIC OUTCOME 3

Perform the calibration and adjustment of feed manufacturing and processing equipment.

SPECIFIC OUTCOME 4

Explain the principles of feed preservation.

SPECIFIC OUTCOME 5

Apply quality control measures that affect feeds.

SPECIFIC OUTCOME 6

Apply the relevant standards of different purchased feed ingredients and complete feeds.

SPECIFIC OUTCOME 7

Interpret the effects of feed evaluation results towards feeding management decisions and future foo

SPECIFIC OUTCOME 8

Apply feed flow planning principles.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 133

Give an overview of the industry structure

SAQA US ID	*UNIT STANDARD TITLE*
116286	Give an overview of the industry structure

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the historical and current framework structure of the industry.

SPECIFIC OUTCOME 2

List media published from time to time within, for, about, on and on behalf of the industry.

SPECIFIC OUTCOME 3

List all relevant Government Departments that affect the specific industry.

SPECIFIC OUTCOME 4

Name all legislation pertaining to the specific industry.

SPECIFIC OUTCOME 5

Name and describe supportive resources, associations, groups, networks and services available to ass

SPECIFIC OUTCOME 6

Describe the various relationships within the industry as well as between the specific industry and

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 134

Identify and apply permaculture principles

SAQA US ID	*UNIT STANDARD TITLE*
116221	Identify and apply permaculture principles

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify Permaculture site elements and resources and integrate these with each other.

SPECIFIC OUTCOME 2

Recognise and use local biotic and abiotic resources in a Permaculture context.

SPECIFIC OUTCOME 3

Use ecological processes and cycles in Permaculture applications.

SPECIFIC OUTCOME 4

Select appropriate sustainable living practices that reflect Permaculture ethics.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 135

Implement a data collection plan

SAQA US ID	*UNIT STANDARD TITLE*
116312	Implement a data collection plan

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Interpret a data collection plan.

SPECIFIC OUTCOME 2

Implement a data collection plan.

SPECIFIC OUTCOME 3

Interpret and analyse collected data.

SPECIFIC OUTCOME 4

Present collated data coherently.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 136

Implement a food safety and quality management system in the agricultural supply chain

SAQA US ID	*UNIT STANDARD TITLE*
116278	Implement a food safety and quality management system in the agricultural supply chain

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Manage a traceability system demonstrating operational efficiency in the agricultural supply chain.

SPECIFIC OUTCOME 2

Implement a record system on the farm.

SPECIFIC OUTCOME 3

Manage and maintain good agricultural practices (GAP) associated with good manufacturing practices (

SPECIFIC OUTCOME 4

Take decisions on reported non-conformances in respect of food safety, production, environmental, an

SPECIFIC OUTCOME 5

Conduct internal audits according to the specifications of the trade/market in the agricultural envi

SPECIFIC OUTCOME 6

Maintain standard operational procedures with regard to agro-chemicals, food safety, quality, and pr

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 137

Implement a natural resource management plan

SAQA US ID	*UNIT STANDARD TITLE*
116303	Implement a natural resource management plan

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Assess the efficiency of the routine natural resource management practices and/or applications on th

SPECIFIC OUTCOME 2

Select and apply (from a range of preventative and/or rehabilitation measures) the most appropriate

SPECIFIC OUTCOME 3

Contribute to strategic planning in terms of natural resource management as relevant to the farm.

SPECIFIC OUTCOME 4

Schedule activities related to alien eradication, erosion control, seasonal and climatic conditions,

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 138

Implement a permaculture site design

SAQA US ID	*UNIT STANDARD TITLE*
116279	Implement a permaculture site design

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	7

Specific Outcomes:

SPECIFIC OUTCOME 1

Implement the integration of site elements and resources as outlined in a Permaculture Design.

SPECIFIC OUTCOME 2

Apply the use of local biological and other available resources according to a Permaculture Site Des

SPECIFIC OUTCOME 3

Apply ecological processes and cycles according to plans outlined in a Permaculture Design.

SPECIFIC OUTCOME 4

Apply sustainable living practices as outlined in a Permaculture site design.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 139

Implement animal health and bio-security programs

SAQA US ID	*UNIT STANDARD TITLE*
116308	Implement animal health and bio-security programs

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Supervise animal disease prevention and ensure correct practices are in place.

SPECIFIC OUTCOME 2

Ensure that basic clinical examination is done correctly.

SPECIFIC OUTCOME 3

Ensure correct dosage rates and calibrate and use instruments correctly.

SPECIFIC OUTCOME 4

Ensure that vaccination and treatment are done correctly.

SPECIFIC OUTCOME 5

Ensure that pre-planned programmes are carried out.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 140

Implement dairy production operations

SAQA US ID	*UNIT STANDARD TITLE*
116310	Implement dairy production operations

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	6

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge of milking theory.

SPECIFIC OUTCOME 2

Demonstrate knowledge of the principles of hygiene.

SPECIFIC OUTCOME 3

Demonstrate a knowledge of milk cooling devices.

SPECIFIC OUTCOME 4

Demonstrate the ability to critically assess parlour records and make basic operational decisions fr

SPECIFIC OUTCOME 5

Evaluate cause of tainted milk and take remedial action.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 141

Implement integrated farm layout and site selection

SAQA US ID	*UNIT STANDARD TITLE*
116309	Implement integrated farm layout and site selection

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare and categorise collected and recorded information in an agricultural environment to support

SPECIFIC OUTCOME 2

Demonstrate the ability to identify high and low yield potential areas according to a range of land

SPECIFIC OUTCOME 3

Organise and plan infrastructure maintenance tasks related to the natural resource base of a farm, i

SPECIFIC OUTCOME 4

Demonstrate the ability to monitor and maintain sustainability-based farm layout innovations that ha

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 142

Implement soil fertility and plant nutrition practices

SAQA US ID	*UNIT STANDARD TITLE*
116311	Implement soil fertility and plant nutrition practices

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Interpret recommendations and set up a nutritional programme based on recommendations.

SPECIFIC OUTCOME 2

Implement soil utilization plan for specified crops.

SPECIFIC OUTCOME 3

Identify and interpret symptoms of nutritional deficiencies, and make full recommendations.

SPECIFIC OUTCOME 4

Manage soil improvement according to soil properties.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 143

Manage agricultural export logistics

SAQA US ID	*UNIT STANDARD TITLE*
116304	Manage agricultural export logistics

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Understand the export cycle and role of various role players.

SPECIFIC OUTCOME 2

Define the requirements of a good sales contract.

SPECIFIC OUTCOME 3

Appraise the use of appropriate Incoterms in terms of risk, responsibility and cost to structure sal

SPECIFIC OUTCOME 4

Understand taxes, incentives and payments within the export process.

SPECIFIC OUTCOME 5

Identify documentation needed within the agricultural export process.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 144

Manage organic certification and internal control systems

SAQA US ID	*UNIT STANDARD TITLE*
116306	Manage organic certification and internal control systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Analyse national agricultural markets, and the factors that affect organic prices at local, provinci

SPECIFIC OUTCOME 2

Be aware of main international market requirements for organic produce.

SPECIFIC OUTCOME 3

Manage preparation for farm inspection and certification processes.

SPECIFIC OUTCOME 4

Interpret the functioning and requirements of Internal Control Systems, and apply these to the manag

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 145

Manage plant manipulation methods of an agricultural crop

SAQA US ID	*UNIT STANDARD TITLE*
116305	Manage plant manipulation methods of an agricultural crop

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Interpret a plant manipulation management plan.

SPECIFIC OUTCOME 2

Create and implement a plant manipulation schedule.

SPECIFIC OUTCOME 3

Supervise the implementation of a plant manipulation schedule.

SPECIFIC OUTCOME 4

Maintain appropriate hygiene and health standards.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 146

Manage the quality of the harvesting of animal products

SAQA US ID	*UNIT STANDARD TITLE*
116307	Manage the quality of the harvesting of animal products

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Investigate animal product processing systems with regard to quality issues.

SPECIFIC OUTCOME 2

Communicate evaluations and findings regarding processing systems and the quality of harvested anima

SPECIFIC OUTCOME 3

Suggest alternative practices or quality control systems that will ensure retention of product quali

SPECIFIC OUTCOME 4

Maintain systems implemented to ensure animal product quality.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 147

Manage water quality parameters

SAQA US ID	*UNIT STANDARD TITLE*
116322	Manage water quality parameters

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Correctly assess, analyze and evaluate water quality data and independentlydecide on the corrective

SPECIFIC OUTCOME 2

Demonstrate a thorough understanding of the reasons, impacts and implications of specific corrective

SPECIFIC OUTCOME 3

Implement corrective actions related to the quality of water and water quality systems.

SPECIFIC OUTCOME 4

Evaluate the effects of corrective actions or adjustments on the water quality requirements.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 148

Participate in the development and management of an agri business plan

SAQA US ID	*UNIT STANDARD TITLE*
116291	Participate in the development and management of an agri business plan

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of the general management functions within an agri-business.

SPECIFIC OUTCOME 2

Use a systems approach to structure an agri-business plan.

SPECIFIC OUTCOME 3

Structure a rolling agri-business plan.

SPECIFIC OUTCOME 4

Structure an agri supply chain to optimise the production to marketing flow.

SPECIFIC OUTCOME 5

Implement an information system as planning and management support.

SPECIFIC OUTCOME 6

Demonstrate an understanding of and implement risk planning within the monitoring process.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 149

Participate in the development and management of an agricultural marketing plan

SAQA US ID	*UNIT STANDARD TITLE*
116684	Participate in the development and management of an agricultural marketing plan

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Structure a marketing plan using a systems approach.

SPECIFIC OUTCOME 2

Structure a rolling marketing plan for a specific agricultural commodity.

SPECIFIC OUTCOME 3

Structure a risk plan to accommodate variable and uncertainties in a marketing plan for a specific a

SPECIFIC OUTCOME 4

Monitor the marketing plan and apply remedial actions.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 150

Plan and maintain breeding systems

SAQA US ID	*UNIT STANDARD TITLE*
116318	Plan and maintain breeding systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain and understand the basic genetic principles pertaining to farm animals.

SPECIFIC OUTCOME 2

Plan and maintain breeding systems for farm animals.

SPECIFIC OUTCOME 3

Compare and understand the different breeding methods that can be applied to farm animals.

SPECIFIC OUTCOME 4

Explain and maintain a breeding management programme for farm animals.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 151

Plan and maintain environmentally sound agricultural processes

SAQA US ID	*UNIT STANDARD TITLE*
116320	Plan and maintain environmentally sound agricultural processes

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	8

Specific Outcomes:

SPECIFIC OUTCOME 1

Plan and maintain sustainable agricultural processes and/or practices taking into account the four c

SPECIFIC OUTCOME 2

Demonstrate broad knowledge of the processes of the environment.

SPECIFIC OUTCOME 3

Apply practical and efficient natural resource use in an agricultural context.

SPECIFIC OUTCOME 4

Understand sustainable agriculture.

SPECIFIC OUTCOME 5

Identify and use environmental indicators

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 152

Prepare a whole farm budget and establish a proper integrated information system for an agri-business

SAQA US ID	*UNIT STANDARD TITLE*
116319	Prepare a whole farm budget and establish a proper integrated information system for an agri-business

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare an integrated whole farm budget.

SPECIFIC OUTCOME 2

Utilise sensitive analysis (what-if functions) to determine the economic and financial viability of

SPECIFIC OUTCOME 3

Develop an information system for a commercially driven agri-business.

SPECIFIC OUTCOME 4

Utilise the information system to generate managerial information for improved decision-making.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 153

Procure and manage agricultural input

SAQA US ID	*UNIT STANDARD TITLE*
116321	Procure and manage agricultural input

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Check, receive and store a range of agricultural inputs appropriately.

SPECIFIC OUTCOME 2

Check updated records and identifies shortcomings where applicable.

SPECIFIC OUTCOME 3

Order stock and process payment.

SPECIFIC OUTCOME 4

Schedule the re-ordering of agricultural inputs.

SPECIFIC OUTCOME 5

Issue various agricultural inputs from stores timely to prevent deterioration, spoilage and waste.

SPECIFIC OUTCOME 6

Enforce legislation regarding handling and storage of agricultural inputs.

SPECIFIC OUTCOME 7

Inspect and organise maintenance of equipment facilities and infrastructure.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 154

Produce crop in a hydroponic system

SAQA US ID	*UNIT STANDARD TITLE*
116314	Produce crop in a hydroponic system

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify the properties of various growing media, for their use different hydroponic production cont

SPECIFIC OUTCOME 2

Prepare fertilizer / nutrient solution as per instructions.

SPECIFIC OUTCOME 3

Monitor PH and EC of the fertilizer solution.

SPECIFIC OUTCOME 4

Identify the characteristics of the hydroponic operation structure.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 155

Propagate plants in a variety of situations

SAQA US ID	*UNIT STANDARD TITLE*
116316	Propagate plants in a variety of situations

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Recognise and use propagation structures, facilities and materials under supervision and do problem

SPECIFIC OUTCOME 2

Propagate a variety of plant types using different asexual methods.

SPECIFIC OUTCOME 3

Experiment with different types of propagation media and environment.

SPECIFIC OUTCOME 4

Establish a process for the post propagation activities.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 156

Recognise agri/ecotourism within the strategic environment

SAQA US ID	*UNIT STANDARD TITLE*
116315	Recognise agri/ecotourism within the strategic environment

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify the strengths of the Agri/Ecotourism venture as part of the strategic plan.

SPECIFIC OUTCOME 2

Identify the weaknesses of the Agri/Ecotourism venture as part of the strategic plan.

SPECIFIC OUTCOME 3

Identify the opportunities of the Agri/Ecotourism venture as part of the strategic plan.

SPECIFIC OUTCOME 4

Identify the threats of the Agri/Ecotourism venture as part of the strategic plan.

SPECIFIC OUTCOME 5

Maintain, appraise and make recommendations on success factors within the strategic plan towards man

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 157

Schedule the operation and maintenance of irrigation systems

SAQA US ID	*UNIT STANDARD TITLE*
116317	Schedule the operation and maintenance of irrigation systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	3

Specific Outcomes:

SPECIFIC OUTCOME 1

Install an irrigation system.

SPECIFIC OUTCOME 2

Maintain and evaluate an irrigation system.

SPECIFIC OUTCOME 3

Efficiently operate an irrigation system.

SPECIFIC OUTCOME 4

Collate data pertaining to the long-term efficient management of an irrigation system.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 158

Supervise artificial insemination practices

SAQA US ID	*UNIT STANDARD TITLE*
116313	Supervise artificial insemination practices

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 4	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Monitor and evaluate artificial insemination procedures.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 159

Analyse and interpret the financial statements and physical records in an agri-business to generate managerial information

SAQA US ID	*UNIT STANDARD TITLE*
116428	Analyse and interpret the financial statements and physical records in an agri-business to generate managerial information

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	11

Specific Outcomes:

SPECIFIC OUTCOME 1

Use financial and physical information to compile financial statements and physical data to compile

SPECIFIC OUTCOME 2

Conduct a proper analysis of the financial statements and physical records of an agri-business

SPECIFIC OUTCOME 3

Compare financial and economic criteria with historical results and deduct the necessary managerial

SPECIFIC OUTCOME 4

Set objectives for the different ratios and do an interpretation of the different ratios.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 160

Apply and plan animal nutrition

SAQA US ID	*UNIT STANDARD TITLE*
116430	Apply and plan animal nutrition

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	12

Specific Outcomes:

SPECIFIC OUTCOME 1

Nutrition Theory: Understand the metabolism of nutrient components and factors influencing it.

SPECIFIC OUTCOME 2

Nutrition Theory: Understand the principles of qualifying nutrient requirements.

SPECIFIC OUTCOME 3

Nutrition Theory: Understand evaluation criteria for feed ingredients.

SPECIFIC OUTCOME 4

Nutrition Theory: Understand and apply feed formulation principles.

SPECIFIC OUTCOME 5

Nutrition Theory: Calculate feeding levels for different animal species and categories.

SPECIFIC OUTCOME 6

Feed Technology: Understand en determine quality control and corrective measures in feed conservatio

SPECIFIC OUTCOME 7

Feed Technology: Interpret analysis, supply and availability of ingredients and feeds in animal main

SPECIFIC OUTCOME 8

Nutrition Management: Interpret feed evaluation results for use in animal production and feed flow m

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 161

Apply integrated pest management principles

SAQA US ID	*UNIT STANDARD TITLE*
116429	Apply integrated pest management principles

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	10

Specific Outcomes:

SPECIFIC OUTCOME 1

Supervise the monitoring, trapping and recording of pest, disease and/or weed information for the de

SPECIFIC OUTCOME 2

Collate the data for the use in an integrated management plan.

SPECIFIC OUTCOME 3

Implement an integrated pest, disease and weed management plan.

SPECIFIC OUTCOME 4

Assist with data management for the auditing towards certification for Good Agricultural Practices s

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 162

Describe biological processes in plant physiology

SAQA US ID	*UNIT STANDARD TITLE*
116431	Describe biological processes in plant physiology

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	9

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the role of carbon compounds in cells and describe the ground rules of metabolism.

SPECIFIC OUTCOME 2

Explain the movement of water and solutes within a plant.

SPECIFIC OUTCOME 3

Describe the biochemistry of the energy acquiring pathways of a plant (photosynthesis).

SPECIFIC OUTCOME 4

Understand the energy releasing pathways (respiration) and its role in the plant.

SPECIFIC OUTCOME 5

Demonstrate knowledge of the different hormones and the role they play in the growth and development

SPECIFIC OUTCOME 6

Describe plant responses to the environment.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 163

Design a natural resource management plan

SAQA US ID	*UNIT STANDARD TITLE*
116425	Design a natural resource management plan

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	8

Specific Outcomes:

SPECIFIC OUTCOME 1

Design integrated natural resource management practices and plans to combat and prevent environmenta

SPECIFIC OUTCOME 2

Introduce innovative natural resource management practices to ensure the sustainability of an agricu

SPECIFIC OUTCOME 3

A natural resource management strategic plan for a farm is developed and/or updated.

SPECIFIC OUTCOME 4

Manage preventative and control measures according to a management plan.

SPECIFIC OUTCOME 5

Determine company/farm policy on natural resource management.

SPECIFIC OUTCOME 6

Assist in the development of area wide planning and local government □structures and policies.

SPECIFIC OUTCOME 7

Demonstrate an in-depth knowledge of natural resource management practices and principles.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 164

Develop a production and strategic plan for the agricultural business

SAQA US ID	*UNIT STANDARD TITLE*
116426	Develop a production and strategic plan for the agricultural business

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	11

Specific Outcomes:

SPECIFIC OUTCOME 1

Gather intelligence, information and data related to production processes, technology and markets in

SPECIFIC OUTCOME 2

Evaluate the influence that market trends have on the production process in the agricultural busines

SPECIFIC OUTCOME 3

Evaluate the influence that technology has on the production process in the agricultural business en

SPECIFIC OUTCOME 4

Develop a production plan.

SPECIFIC OUTCOME 5

Develop and implement a strategic plan.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 165

Develop a propagation plan for any agricultural production system

SAQA US ID	*UNIT STANDARD TITLE*
116427	Develop a propagation plan for any agricultural production system

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	9

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify the appropriate propagation environment for specific categories of crops.

SPECIFIC OUTCOME 2

Do basic tissue culture.

SPECIFIC OUTCOME 3

Develop a plan for different propagation processes within the agricultural systems appropriate to sp

SPECIFIC OUTCOME 4

Identify reasons for failure of propagated material / Identify problems that may be encountered with

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 166

Develop and implement a food safety and quality management system in an agricultural supply chain

SAQA US ID	*UNIT STANDARD TITLE*
116419	Develop and implement a food safety and quality management system in an agricultural supply chain

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	7

Specific Outcomes:

SPECIFIC OUTCOME 1

Analyse existing food safety and quality management systems in the agricultural environment.

SPECIFIC OUTCOME 2

Correctly interpret current market requirements in the agricultural supply chain.

SPECIFIC OUTCOME 3

Develop a food safety and quality management system to meet market requirements within the agricultu

SPECIFIC OUTCOME 4

Implement and manage a food safety and quality management system in the agricultural supply chain.

SPECIFIC OUTCOME 5

Evaluate, take corrective action and make improvements to ensure the effectiveness / efficiency of t

SPECIFIC OUTCOME 6

Design a traceability system for operational efficiency in the agricultural supply chain.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 167

Develop and implement plant manipulation methods

SAQA US ID	*UNIT STANDARD TITLE*
116409	Develop and implement plant manipulation methods

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	8

Specific Outcomes:

SPECIFIC OUTCOME 1

Maintain the efficiency use of appropriate tools / equipment for pre-determined manipulation method.

SPECIFIC OUTCOME 2

Incorporate framework development principles as part of plant manipulation methods if appropriate.

SPECIFIC OUTCOME 3

Analyse existing and optimise manipulation flower and fruit manipulation principles.

SPECIFIC OUTCOME 4

Plan the implementation of the pruning principles as vegetative plant manipulation methods appropria

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 168

Develop and manage a data collection plan to support an agricultural enterprise

SAQA US ID	*UNIT STANDARD TITLE*
116412	Develop and manage a data collection plan to support an agricultural enterprise

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	4

Specific Outcomes:

SPECIFIC OUTCOME 1

Select appropriate experimental designs as required by the agricultural enterprise.

SPECIFIC OUTCOME 2

Manage the implementation of data collection plans.

SPECIFIC OUTCOME 3

Interpret data collection reports and make recommendations based on findings.

SPECIFIC OUTCOME 4

Manage a data gathering team.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 169

Develop suitable irrigation systems

SAQA US ID	*UNIT STANDARD TITLE*
116414	Develop suitable irrigation systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	10

Specific Outcomes:

SPECIFIC OUTCOME 1

Select an appropriate irrigation system.

SPECIFIC OUTCOME 2

Efficiently and cost effectively manage an extended irrigation operation.

SPECIFIC OUTCOME 3

Implement appropriate task related technology in the irrigated agricultural environment (scheduling/

SPECIFIC OUTCOME 4

Manage appropriate seasonal/year irrigation related work programmes with reference to crop water req

SPECIFIC OUTCOME 5

Recommend a safety, servicing and replacement policy of all irrigation systems with reference to exp

SPECIFIC OUTCOME 6

Ensure that all irrigation practices are environmentally sensitive (e.g. Eurepgap and related Agreem

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 170

Develop, implement and manage a permaculture site design

SAQA US ID	*UNIT STANDARD TITLE*
116405	Develop, implement and manage a permaculture site design

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	10

Specific Outcomes:

SPECIFIC OUTCOME 1

Optimise site resources and productivity by integrating elements on a specific site.

SPECIFIC OUTCOME 2

Maximise the use of local biotic and abiotic resources on a specific site.

SPECIFIC OUTCOME 3

Integrate ecological processes and cycles on a specific site.

SPECIFIC OUTCOME 4

Integrate sustainable living practices into the plans for a specific site.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 171

Dissect animals

SAQA US ID	*UNIT STANDARD TITLE*
116399	Dissect animals

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate the use and understanding of humane animal killing techniques and methods.

SPECIFIC OUTCOME 2

Demonstrate the use and understanding of how to use dissection equipment and implements.

SPECIFIC OUTCOME 3

Demonstrate knowledge of what is to be dissected.

SPECIFIC OUTCOME 4

Demonstrate knowledge of how to dissect a specific animal.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 172

Effective and responsible control of problem animals

SAQA US ID	*UNIT STANDARD TITLE*
116402	Effective and responsible control of problem animals

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	8

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify the natural behaviour of problem animals causing erosion.

SPECIFIC OUTCOME 2

Distinguish between various control practices applied to problem animals causing erosion on farms.

SPECIFIC OUTCOME 3

Selection of the relevant control practices for controlling various problem animals causing erosion

SPECIFIC OUTCOME 4

Identify post control practices of problem animals.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 173

Evaluate and coordinate area wide sustainable wild flower harvesting

SAQA US ID	*UNIT STANDARD TITLE*
116398	Evaluate and coordinate area wide sustainable wild flower harvesting

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	8

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate a detailed knowledge of sustainable harvesting practises and ecosystem sustainability.

SPECIFIC OUTCOME 2

Recommend compliance procedures to landowners and contractors.

SPECIFIC OUTCOME 3

Input into relevant legislation and policy reform.

SPECIFIC OUTCOME 4

Develop appropriate training programs and manage a regional harvesting plan, incorporating habitat m

SPECIFIC OUTCOME 5

Inform landowners of market and industry trends.

SPECIFIC OUTCOME 6

Manage and evaluate spatial and non-spatial data on a regional scale to support and promote best pra

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 174

Evaluate animal anatomy and physiology systems

SAQA US ID	*UNIT STANDARD TITLE*
116388	Evaluate animal anatomy and physiology systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	10

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify and understand the structures, composition, physical, bio-chemical and biological component

SPECIFIC OUTCOME 2

Identify, understand and evaluate symptomatic variations and abnormalities within living animals, in

SPECIFIC OUTCOME 3

Utilise the knowledge about animal anatomy, morphology and physiology to determine opportunities for

SPECIFIC OUTCOME 4

Utilise the knowledge about animal anatomy, morphology and physiology to create and develop animal p

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 175

Evaluate animal health systems

SAQA US ID	*UNIT STANDARD TITLE*
116393	Evaluate animal health systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	8

Specific Outcomes:

SPECIFIC OUTCOME 1

Evaluate the health of animals.

SPECIFIC OUTCOME 2

Develop, implement and maintain animal disease prevention and management procedures.

SPECIFIC OUTCOME 3

Develop, implement and maintain disease treatment and management procedures.

SPECIFIC OUTCOME 4

Assist with the development of animal disease prevention and treatment and production systems.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 176

Harvest animal products: animal products systems

SAQA US ID	*UNIT STANDARD TITLE*
116390	Harvest animal products: animal products systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	9

Specific Outcomes:

SPECIFIC OUTCOME 1

Understand and identify all principles related to animal product production.

SPECIFIC OUTCOME 2

Identify and understand animal production systems and the effects of harvesting animal products on t

SPECIFIC OUTCOME 3

Identify and utilise opportunities in the animal product production environment that will allow the

SPECIFIC OUTCOME 4

Understand and implement processes and systems that will allow for the harvesting and processing of

SPECIFIC OUTCOME 5

Identify, understand and implement specific management of animals to produce products of constant qu

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 177

Implement and manage human resource and labour relations policies and acts

SAQA US ID	*UNIT STANDARD TITLE*
116394	Implement and manage human resource and labour relations policies and acts

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	9

Specific Outcomes:

SPECIFIC OUTCOME 1

Be responsible for the development and maintenance of effective human resource policies and practice

SPECIFIC OUTCOME 2

Be responsible for the drafting of job descriptions, recruitment, selection panels, and employment c

SPECIFIC OUTCOME 3

Be responsible for the institute and facilitation of disciplinary policies, actions and hearings.

SPECIFIC OUTCOME 4

Develop, facilitate and monitor disciplinary policy, process and procedures.

SPECIFIC OUTCOME 5

Institute performance evaluation committees and manage the performance evaluation process.

SPECIFIC OUTCOME 6

Participate in the implementation of applicable labour legislation.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 178

Integrate sustainable breeding and selection methods

SAQA US ID	*UNIT STANDARD TITLE*
116385	Integrate sustainable breeding and selection methods

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	10

Specific Outcomes:

SPECIFIC OUTCOME 1

Integrate advanced breeding practices into a breeding management programme.

SPECIFIC OUTCOME 2

Combine advanced selection methods into a breeding management programme.

SPECIFIC OUTCOME 3

Incorporate the use of fertility and pregnancy diagnosis into a breeding management programme.

SPECIFIC OUTCOME 4

Develop and manage a sustainable breeding management programme.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 179

Integrate sustainable systems into planning and management processes

SAQA US ID	*UNIT STANDARD TITLE*
116387	Integrate sustainable systems into planning and management processes

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	8

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate understanding of "hard" (biophysical) and "soft" (human) systems.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the concept of sustainability as a trade-off between productivity an

SPECIFIC OUTCOME 3

Use the systems approach to design interactive soil, plant and animal management.

SPECIFIC OUTCOME 4

Monitor and re-evaluate sustainability of whole farming systems.

SPECIFIC OUTCOME 5

Develop a comprehensive plan for a whole farming system.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 180

Investigate life threatening hazards when handling animals

SAQA US ID	*UNIT STANDARD TITLE*
116381	Investigate life threatening hazards when handling animals

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	8

Specific Outcomes:

SPECIFIC OUTCOME 1

Understand and identify all principles related to animal behaviour.

SPECIFIC OUTCOME 2

Identify and understand animal behaviour systems and the effects of inappropriate management on the

SPECIFIC OUTCOME 3

Identify and utilise resources that will allow the safe containment and shelter of animals.

SPECIFIC OUTCOME 4

Understand and implement processes and systems that will show an understanding of the causes and eff

SPECIFIC OUTCOME 5

Identify, understand and implement specific management systems to allow for safe animal management

SPECIFIC OUTCOME 6

Develop and manage programmes that cater for the treatment of injured animals and their human manage

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 181

Manage a hydroponic production unit

SAQA US ID	*UNIT STANDARD TITLE*
116383	Manage a hydroponic production unit

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	10

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate a thorough understanding of the hydroponic production environment.

SPECIFIC OUTCOME 2

Demonstrate a thorough understanding of crop's fertilization requirements..

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 182

Manage an input chain

SAQA US ID	*UNIT STANDARD TITLE*
116382	Manage an input chain

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	6

Specific Outcomes:

SPECIFIC OUTCOME 1

Plan the flow chain of agricultural inputs.

SPECIFIC OUTCOME 2

Implement a plan on the flow of agricultural inputs.

SPECIFIC OUTCOME 3

Schedule Human Resources to attend to inputs.

SPECIFIC OUTCOME 4

Evaluate and resolve eventualities that emerge during the flow of agricultural inputs.

SPECIFIC OUTCOME 5

Give accurate reports on the agricultural input flow chain.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 183

Manage and control resources in a sustainable manner

SAQA US ID	*UNIT STANDARD TITLE*
116384	Manage and control resources in a sustainable manner

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	5

Specific Outcomes:

SPECIFIC OUTCOME 1

Modify and/or re-design appropriate equipment and implements to execute a specific agricultural task

SPECIFIC OUTCOME 2

Identify and set specifications for equipment / implements that will be suitable for a specific task

SPECIFIC OUTCOME 3

Develop a maintenance and storage plan for implements, equipment and infrastructure.

SPECIFIC OUTCOME 4

Develop and implement safety policies and regulations.

SPECIFIC OUTCOME 5

Develop appropriate task-related technology in the agricultural environment.

SPECIFIC OUTCOME 6

Design and manage an appropriate seasonal and/or year work program with reference to equipment, impl

SPECIFIC OUTCOME 7

Draft a replacement policy with reference to expenditure implications.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 184

Manage dairy production systems

SAQA US ID	*UNIT STANDARD TITLE*
116370	Manage dairy production systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	10

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate planning and budgeting processes relative to Dairy Production.

SPECIFIC OUTCOME 2

Direct operations in the milking parlour.

SPECIFIC OUTCOME 3

Manage the herd production cycle.

SPECIFIC OUTCOME 4

Manage the feeding programme.

SPECIFIC OUTCOME 5

"Trouble shoot" and take corrective action.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 185

Manage hive placement and bee pollination

SAQA US ID	*UNIT STANDARD TITLE*
116372	Manage hive placement and bee pollination

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	2

Specific Outcomes:

SPECIFIC OUTCOME 1

Understand and identify the botanical systems of agricultural and environmental plants related to re

SPECIFIC OUTCOME 2

Identify and understand plant production systems and the effects of bees on production and the subse

SPECIFIC OUTCOME 3

Identify and utilise opportunities in the plant production environment that will allow the placement

SPECIFIC OUTCOME 4

Understand and implement the logistical systems related to pollination services.

SPECIFIC OUTCOME 5

Identify, understand and implement specific management of bees to effect efficient and effective pol

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 186

Manage soil systems

SAQA US ID	*UNIT STANDARD TITLE*
116371	Manage soil systems

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	10

Specific Outcomes:

SPECIFIC OUTCOME 1

Interpret soil and leaf analysis and make appropriate nutrient application recommendations.

SPECIFIC OUTCOME 2

Optimise soil utilization plan according to crop and soil requirements.

SPECIFIC OUTCOME 3

Keep all records regarding soil properties and use to build a database for future reference.

SPECIFIC OUTCOME 4

Design a soil systems management strategy.

SPECIFIC OUTCOME 5

Create and implement a database for soil management.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 187

Manage the harvesting process of agricultural crops

SAQA US ID	*UNIT STANDARD TITLE*
116373	Manage the harvesting process of agricultural crops

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	10

Specific Outcomes:

SPECIFIC OUTCOME 1

Investigate new tools / equipment and methods of harvesting to compliment existing plan and procedur

SPECIFIC OUTCOME 2

Manage the maturity-indexing (MI) process and decide on procedures.

SPECIFIC OUTCOME 3

Manage the harvesting of crops according to specified market needs and logistics.

SPECIFIC OUTCOME 4

Manage the health, hygiene and safety plan according to GAP.

SPECIFIC OUTCOME 5

Manage the disposal of waste according to specified procedures in accordance with good agricultural

SPECIFIC OUTCOME 6

Manage the care and maintenance of equipment used.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 188

Optimise and integrate various farming systems and trends within related enterprises

SAQA US ID	*UNIT STANDARD TITLE*
116337	Optimise and integrate various farming systems and trends within related enterprises

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	11

Specific Outcomes:

SPECIFIC OUTCOME 1

Optimise and integrate the natural resources required for the relevant farming systems and enterpris

SPECIFIC OUTCOME 2

Plan and optimise infrastructural requirements for the relevant enterprise system.

SPECIFIC OUTCOME 3

Optimise and maintain stock required for the relevant enterprises.

SPECIFIC OUTCOME 4

Innovate and plan production systems within relevant enterprises.

SPECIFIC OUTCOME 5

Plan and maintain harvest system within relevant farming systems and enterprises.

SPECIFIC OUTCOME 6

Plan and maintain post harvest systems within relevant farming enterprise.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 189

Optimise water quality

SAQA US ID	*UNIT STANDARD TITLE*
116369	Optimise water quality

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	6

Specific Outcomes:

SPECIFIC OUTCOME 1

Develop, design and optimize water quality systems.

SPECIFIC OUTCOME 2

Demonstrate an ability to devise solutions to water quality management problems.

SPECIFIC OUTCOME 3

Demonstrate a thorough ability to maintain and calibrate all monitoring and adjusting equipment.

SPECIFIC OUTCOME 4

Demonstrate a thorough ability to manage infrastructure related to water quality systems.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 190

Plan a farm and select a site

SAQA US ID	*UNIT STANDARD TITLE*
116324	Plan a farm and select a site

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	9

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify and use appropriate technology to determine sustainable farm layout and infrastructure plac

SPECIFIC OUTCOME 2

Identify relevant service providers who can render specific services.

SPECIFIC OUTCOME 3

Research information relevant to the natural resources of a site.

SPECIFIC OUTCOME 4

Implement necessary conservation and natural resource management and harvesting practices.

SPECIFIC OUTCOME 5

Apply the principles of sustainability in terms of the layout and infrastructure placement in an agr

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 191

The effective and responsible arial application of agrochemical products

SAQA US ID	*UNIT STANDARD TITLE*
116328	The effective and responsible arial application of agrochemical products

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	14

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of the principles of aerial application of agrochemical products.

SPECIFIC OUTCOME 2

Explain legal and regulatory aspects of aerial application of agrochemical products.

SPECIFIC OUTCOME 3

Analyse and evaluate the spraying performance of the aircraft and implement the necessary technologi

SPECIFIC OUTCOME 4

Demonstrate an understanding of and implement effective and responsible flying skills.

SPECIFIC OUTCOME 5

Manage effective and responsible preparation of spray mixture.

SPECIFIC OUTCOME 6

Deal with emergencies.

SPECIFIC OUTCOME 7

Perform post-operational practices.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 192

The optimisation of agri / ecotourism strenghts and opportunities and negation of threats and weaknesses

SAQA US ID	*UNIT STANDARD TITLE*
116327	The optimisation of agri / ecotourism strenghts and opportunities and negation of threats and weaknesses

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	6

Specific Outcomes:

SPECIFIC OUTCOME 1

Collate strategic inputs from all relevant information sources into an integrated strategic/business

SPECIFIC OUTCOME 2

Disseminate action plan(s) to the operational level of the Agri/Ecotourism business.

SPECIFIC OUTCOME 3

Implement the action plans.

SPECIFIC OUTCOME 4

Monitor and evaluate the strategic plan for all components in successful Agri/Ecotourism business.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 193

Understand juvinile animal rearing practices

SAQA US ID	*UNIT STANDARD TITLE*
116336	Understand juvinile animal rearing practices

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 5	8

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate full understanding of use and care or maintenance of all equipment used in the nursery.

SPECIFIC OUTCOME 2

Demonstrate the ability to plan and integrate systems to effect juvenile animal rearing.

SPECIFIC OUTCOME 3

Posses a detailed knowledge of the biology of the species including reproduction.

SPECIFIC OUTCOME 4

Have complete knowledge of the feeding requirements of the juvenile animal species.

SPECIFIC OUTCOME 5

Have full knowledge of and follow strict procedures for the rearing phases and be able to trouble sh

SPECIFIC OUTCOME 6

Know and apply correct hygiene procedures for the whole facility.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD: 194

Effective and responsible advice, recommendation and sale of agrochemical products

SAQA US ID	*UNIT STANDARD TITLE*
116400	Effective and responsible advice, recommendation and sale of agrochemical products

SGB NAME	*ABET BAND*	*PROVIDER NAME*
SGB Primary Agriculture	Undefined	

FIELD DESCRIPTION	*SUBFIELD DESCRIPTION*
Agriculture and Nature Conservation	Primary Agriculture

UNIT STANDARD CODE	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
AGR-PAG-0-SGB PA	Regular	Level 6	12

Specific Outcomes:

SPECIFIC OUTCOME 1

Advising on the management of an agrochemical storing facility.

SPECIFIC OUTCOME 2

Classify and categorise insects, pests and weeds affecting the agricultural enterprise or assist wit

SPECIFIC OUTCOME 3

Apply an in-depth knowledge of integrated pest management (IPM).

SPECIFIC OUTCOME 4

Apply an in-depth knowledge on the different methods of product application and the identification o

SPECIFIC OUTCOME 5

Execute post-application monitoring.

SPECIFIC OUTCOME 6

Advise on environmental and community considerations.

SPECIFIC OUTCOME 7

Make effective, economical, responsible and legal recommendations on product selection and use.