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**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 Organising Field 01, Agriculture and Nature Conservation, publishes the following Qualification for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the Qualification. The full Qualification can be accessed via the SAQA web-site at www.saq.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the Qualification and Unit Standards should reach SAQA at the address below and **no later 3 December 2007**. All correspondence should be marked **Standards Setting – Primary Agriculture** and addressed to

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SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:
Bachelor of Agricultural Extension

SAQA QUAL ID	QUALIFICATION TITLE		
59388	Bachelor of Agricultural Extension		
ORIGINATOR	PROVIDER		
SGB Agricultural Extension			
QUALIFICATION TYPE	FIELD	SUBFIELD	
National First Degree	1 - Agriculture and Nature Conservation	Primary Agriculture	
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUAL CLASS
Undefined	360	Level 6	Regular-ELOAC

PURPOSE AND RATIONALE OF THE QUALIFICATION**Purpose:**

This qualification will enable extension officers to improve professionalism and enhance the quality and effectiveness of the services. This qualification reflects the need and demand within the extension management environment for professionals who will be able to perform operational, managerial and leadership functions involving complex skills and attributes, with clear understanding of procedures and legislation contextualised within the agricultural extension environment.

This qualification includes broader and specialised competencies in terms of communication, behaviour change, facilitation, leadership and group dynamics, adult learning, technology transfer, project planning and management, extension evaluation and community development. It also includes client orientation and customer focus, service delivery innovation, problem solving, honesty and integrity and people management and empowerment.

A learner acquiring this qualification will be able to:

- Apply the principles and philosophy of extension in practice.
- Implement a communication strategy by applying the principles of communication, leadership skills and group dynamics in extension for the benefit of the target group.
- Facilitate behaviour change and adoption of innovation for impact on Local Economic Development through the production of food, the improvement of household food security and access to mainstream agriculture.
- Design and implement an integrated development/extension project that improves and sustains agricultural production and the livelihoods of clients.
- Implement an integrated, sustainable Agri-business management plan by applying business principles through utilising agricultural, financial, marketing and production conversion information.
- Implement an integrated, sustainable farming systems plan by applying natural resource management principles.
- Apply animal husbandry practices to ensure the quality of livestock production on a farm.
- Apply production practices to plant systems to ensure the quality of the yield on a farm.

Rationale:

One of the major problems impeding the effectiveness of agricultural extension services in Africa is the low level of training of a large proportion of extension staff. Most extension staff is in need

of the knowledge and skills to work in the complex and rapidly changing agricultural environment.

The Department of Agriculture initiated this initiative based on a research study conducted in all the provinces suggesting active skills enhancement. The research culminated in "An Agricultural Education and Training Strategy which outlines the need for training of extension officers to support small scale farmers to be able to produce for profit including addressing poverty, managing food security and natural resources.

This qualification is aimed at learners seeking to improve their current extension training AND supports the national initiative of the Department of Agriculture as explained in the strategic document: "Norms and Standards" and the objective that at least 60% of currently employed Extension Officers should have at least a three year first degree by 2010. Currently Agricultural and other technicians in the industry are effectively blocked from furthering their studies and advancing to a higher position due to lack of relevant qualifications for career development. Therefore, this qualification will support the Extension Officers in gaining and/or formalising their extension competence as well as a technical animal and/or plant production competence. The above was confirmed by employees from provinces who participated in the standards generating process.

Learners for this qualification also include school leavers who wants to pursue a career in extension or learners who wants to change their career path to extension coming from adult education and other development sectors.

The above information serves as evidence that this qualification supports the NQF principles of Progression, Access and Transformation.

This qualification provides benefits to the economy and society as it addresses the skills shortage as identified in the National Skills Development Act of 1998 and the Critical and Scarce skills identified by the Department of Labour. Furthermore, it supports the national initiatives of the National Department of Agriculture as explained in the following strategic documents:

- National Education and Training Strategy for Agriculture and Rural Development in South Africa-Department of Agriculture 2005.
- Norms and Standards for Extension and Advisory Services in Agriculture-Department of Agriculture June 2005.
- The Strategic Plan for South African Agriculture-Department of Agriculture 2003.

It would further the participation of (target) communities in development programmes and increase the sustainability of specific development projects and programmes for improved and accelerated upliftment of their livelihoods.

The qualification serves as a basis for post graduate degree or diploma development in Extension or in the specialisation in Agriculture taken as a major.

The assumptions and the characteristics regarding the concept of extension and the underlying qualifications and standards regarding extension in South Africa are the following:

- Extension is recognised to be multi- and inter-disciplinary in nature. Extension is an applied discipline; it focuses on the application of theory in practice for the change of behaviour and improved innovation of technology. To be effective in this regard the extension discipline borrows from or relies on usable theories and models from human and natural science disciplines to promote technology innovation, transfer and its adoption in the agricultural sector and thus can be termed an inter- or multi-discipline.

- Extension is a professional activity. This characteristic emphasis that Extension originates from organisations with the explicit function to deliver an extension service and for which its personnel is specially trained. Norms and Standards have been developed for this profession outlining expected extension competence and parameters for the practice.

The qualification provides the learners with opportunities for professional development and career advancement within the broad agricultural extension profession. This will improve their self confidence in interacting with their peers, the communities they serve and other stakeholders thus broadly enhancing their image and performance. This will positively contribute to the overall status of the profession, which is currently lacking.

According to the "Norms and Standards" document learners can be employed by the four-tier levels of the Department of Agriculture; national and provincial, District Services, Local Municipality and others such as Development Centres, producer organisations, NGOs, Private Sector, Higher Education and research institutes.

RECOGNIZE PREVIOUS LEARNING?

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LEARNING ASSUMED IN PLACE

It is assumed that the learner is competent in Mathematical Literacy and Communication at NQF Level 4.

Recognition of Prior Learning:

- Part of the qualification can be obtained through RPL, which includes assessment of the learning outcomes achieved through formal, non-formal, informal and work experience. A maximum of 50% can be received through RPL credits.

Access to Qualification:

- Open access.

QUALIFICATION RULES

This qualification consists of:

- Core component: 240 credits derived from Exit Level Outcomes 1-6.
- Elective component consists of 120 credits derived from Exit Level Outcomes 7 and 8, which relate to either animal production or plant production.

To obtain this qualification a total number of 360 credits is required.

EXIT LEVEL OUTCOMES

1. Apply the principles and philosophy of extension in practice to implement policies and strategies related to extension and advisory services in agriculture.
2. Implement a communication strategy by applying the principles of communication, leadership skills and group dynamics in extension for the benefit of the target group.
3. Facilitate behaviour change and adoption of innovation for impact on local economic development through the production of food, the improvement of household food security and access to mainstream agriculture.
4. Design and implement an integrated development/extension project that improves and sustains agricultural production and the livelihoods of clients.

5. Implement an integrated, sustainable agri-business management plan by applying business principles through utilising agricultural, financial, marketing and production-conversion information.
6. Implement an integrated, sustainable farming systems plan by applying natural resource management principles.
7. Apply animal production practices to ensure the quality of livestock on a farm.
8. Apply production practices to plant systems to ensure the quality of the yield on a farm.

Critical Cross-field Outcomes:

- Identify and solve problems using critical and creative thinking to address Agricultural extension project contingencies.
- Work effectively with others when participating on project teams.
- Organize and manage one-self and activities when participating as project team member.
- Collect, organise and evaluate information when delivering reports.
- Communicate effectively and responsibly whilst reporting on project milestones.
- Use science and technology when on agricultural practices.
- Demonstrate an understanding of the world as a set of related systems when functioning in the agricultural extension environment.
- Be culturally and aesthetically sensitive across a range of social contexts when interacting with communities.

ASSOCIATED ASSESSMENT CRITERIA

Associated Assessment Criteria for Exit Level Outcome 1:

- 1.1 Extension approaches are compared and recommended in terms of relevance to the 'client', the particular issue being addressed and alignment towards policies and strategies relevant to agriculture.
- 1.2 Relevant policy documents are interpreted according to the principles and philosophy of extension.
- 1.3 Extension project plans are interpreted and evaluated according to the principles and philosophy of extension.

Associated Assessment Criteria for Exit Level Outcome 2:

- 2.1 A communication plan in extension is developed, managed and evaluated for the purpose and outcomes of the service to be delivered.
- 2.2 The selection and application of written, verbal and non-verbal communication techniques and tools in extension are evaluated for applicability to diverse situations.
- 2.3 The principles of communication are applied to optimise the impact and effectiveness of the extension project.
- 2.4 Group techniques and tools are selected and applied to attain previously set objectives.
- 2.5 Conflict resolution techniques and tools are identified, selected and applied to attain previously set objectives in diverse situations.
- 2.6 Group discussions are facilitated in decision-making by applying the theories, principles, techniques and tools of group dynamics to optimise the impact and effectiveness of the extension project.
- 2.7 The leadership principles and skills are applied in facilitation of a group to promote participation and progress in decision-making.

Associated Assessment Criteria for Exit Level Outcome 3:

3.1 Theories and processes are selected and applied amongst diverse clientele to optimise the impact of extension in community development interventions.

- Range: Theories and processes refer to behaviour change, diffusion and adoption of innovations, participatory technology innovation/development, and decision-making.

3.2 Multi and inter-disciplinary teams are established and facilitated to optimise extension service delivery through the interfacing of research, extension, and farmer/producers and input suppliers for increased participation.

3.3 An intervention plan which supports improvement of production of food, household food security and access to mainstream agriculture is designed, implemented, managed and assessed for impact on local economic development.

- Range: Intervention refers to behaviour change, diffusion and adoption of innovations, participatory technology innovation/development, and decision-making.

3.4 Indigenous knowledge and practices are identified and integrated with agricultural science innovation strategies.

3.5 Beneficiaries are enabled to access information in lobbying and mobilising required resources to improve production and livelihood.

Associated Assessment Criteria for Exit Level Outcome 4:

4.1 Selected and applied extension approaches are relevant to the target individual/group and the particular issue being addressed.

4.2 Extension projects are designed according to the principles and philosophy of extension and in accordance with relevant national and provincial strategies, including identified goals, descriptions and main elements of the project.

4.3 Resources needed to complete the plan are acquired and mobilised according to the requirements of processes and systems in extension.

4.4 Extension projects are implemented in accordance with the plan and in the context of the particular work place.

4.5 Extension projects are managed to ensure that the aims of the project are realised.

4.6 Extension projects are evaluated in terms of the intended outcomes of the project plan are clearly articulated and are integrated with parallel extension plans.

4.7 Behaviour change and innovation are facilitated to realise the outcomes of the extension project are realised.

4.8 Project information is recorded, reported and stored according to required formats and protocol and are current, complete, and concise.

Associated Assessment Criteria for Exit Level Outcome 5:

5.1 Sustainable agricultural systems are integrated into planning and management processes of entrepreneurial and enterprise activities.

5.2 An agri-business management plan is developed for an enterprise which includes input for production, processing and value adding processes.

5.3 A plan is developed and implemented for food safety and quality practices in an agricultural supply chain.

5.4 The marketing and distribution component is integrated as a part of the total agri-business.

5.5 A data collection plan is developed and implemented for farming enterprises.

5.6 Financial information is analysed and interpreted on an ongoing basis to support of growth in the agri-business.

Associated Assessment Criteria for Exit Level Outcome 6:

6.1 Sustainable systems thinking is integrated into planning and management processes of an agricultural enterprise.

6.2 Farming systems are optimised and integrated to ensure sustainable resource allocation and utilisation.

6.3 Describe the process of optimisation of agricultural and environmental resources for quality and quantity in a sustainable farming system.

6.4 A natural resource management plan of the farm is implemented in relation to area wide planning of local government structures and policies.

Associated Assessment Criteria for Exit Level Outcome 7:

7.1 Animals are evaluated and managed according to specific criteria related to anatomical, physiological, physical and biochemical systems.

7.2 Health care, prevention and treatment procedures are developed and implemented to maintain and enhance the condition of livestock.

7.3 A strategic animal nutrition plan is developed to support the production of livestock and animal products.

7.4 Advanced breeding and selection practices are applied and integrated into a breeding management programme.

7.5 Guidance is provided during the harvesting of animal products. The responses of plants to the environment and how it impact on growth and production is determined by applying the basic biochemistry processes involved in the anatomy and physiology of a plant.

Associated Assessment Criteria for Exit Level Outcome 8:

8.1 The responses of plants to the environment and how it impact on growth and production is determined by applying the basic biochemistry processes involved in the anatomy and physiology of a plant.

8.2 A soil fertility, irrigation and plant nutrition plan is developed for growth and maximise plant health.

8.3 Plants are propagated in a variety of production systems by applying different processes and methods to optimise yield.

8.4 Integrated pest management principles are applied by identifying, monitoring and controlling pests and plant diseases to conserve the environment.

8.5 Weeds are controlled through the application of a variety of methods for environmental conservation.

8.6 A plant manipulation management plan is applied and managed to maximise growth and yield.

8.7 Different harvesting plans are implemented and co-ordinated to minimize damage and enhance and ensure quality of the end product.

Integrated Assessment:

- To ensure that assessment practices are open, transparent, fair, valid, and reliable and to ensure that no learner is disadvantaged in any way whatsoever, an integrated assessment approach is incorporated into the qualification.
- Integrated assessment at the level of the qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and applications across exit level outcomes to achieve competence that is relevant and coherent in relation to the purpose of the qualification. This is reflected in the assessment criteria defined for each exit level outcome.
- 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.
- 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.
- Assessment should ensure that all theoretical, practical knowledge and critical cross field outcomes are evaluated in an integrated manner.
- Practical, applied, foundational and reflective competencies should be assessed in an integrated manner by applying formative and summative assessment.

INTERNATIONAL COMPARABILITY

At level 6 comparisons are more possible internationally, but still limited within the SADC region.

Comparison with SADC:

The Universities of Namibia and Swaziland offer a 3-year diploma in agriculture in which agricultural extension features significantly. The areas of learning covered are similar to those in the SAQA qualification but to a very limited degree.

Within South Africa all of the agricultural colleges offer Level 6 Diplomas in Agriculture. Most of them have very limited coverage of agricultural extension. The agricultural extension modules tend to fall in line with the communications unit standards of the SAQA qualification.

The Cape Peninsula University offers a National Diploma in Agricultural Management at Level 6 in which Agricultural Extension is required together with, agricultural communication, animal production and crop production.

The Universities of Fort Hare, Free State, KwaZulu-Natal and Zululand and Elsenburg College in association with Stellenbosch University offer B Agric degrees (NQF Level 6) with varying extension components most of which run along traditional extension lines.

Comparison with other International Institutions:

Alemaya University, Ethiopia offers a Level 6 qualification (Bachelor of Science Agricultural Extension) which is comparable to the SAQA qualification. Similar to the SAQA qualification, it is aimed at Training front-line mid-career extension workers at B.Sc. level in the field of agricultural extension; Improving the effectiveness of grass root level workers involved in the agricultural development programs of the nation; and upgrading the academic and professional qualifications of front-line extension workers by equipping them with up-to-date theoretical and practical knowledge in the field that can make them meet the challenges of the ever-increasing and sophisticated multi-dimensional issues in agricultural development.

The University of the South Pacific offers a B Agric at Level 6. The degree is similar to the SAQA qualification in that it addresses Agricultural Extension Program Design and it aims to help learners:

- Acquire knowledge of selected models of extension organisation and management and the process for developing agricultural extension programs.
- Develop their ability to design agricultural extension programs.
- Acquire knowledge and skills in some office management procedures.
- Understand and practice T and V models of extension organisation and management.
- Plan non-formal education programme for farmers.
- Conduct need assessment technique, situation analysis and priority setting.
- Write programme objectives, designing programme instructional plans, action plans and evaluation techniques.
- Plan and develop an extension programme.

The University of Melbourne, Australia offers a Level 6 B Agric aimed at training agricultural extension practitioners. The Study areas include agribusiness, agricultural economics and marketing, animal behaviour and welfare, animal nutrition, animal management, biochemistry, biotechnology, crop science, ecology, equine management, food production horticulture (fruits, nuts and vegetables), food science and technology, genetics and breeding, irrigation and water management, microbiology, molecular biology, plant pathology, soils, viticulture. There is no visible inclusion of agricultural extension in the curriculum.

Conclusion:

In conclusion, the proposed Honours compares very favourably with similar level extension qualifications offered by numerous institutions internationally. It is consistent with the approach of providing extension training to learners with a previous relevant technical qualification such as a diploma in agriculture. It covers the essential areas of extension that are used internationally, but it is unique in two ways:

- It is designed to address transformational issues peculiar to South Africa particularly in agriculture, land reform and Black economic empowerment.
- Specifically, it is not (as are most extension qualifications internationally) tied strictly to agriculture, but can be applied to a broader range of specializations thereby increasing access and applicability to South Africa's development needs.

ARTICULATION OPTIONS

The Bachelor of Agricultural Extension Level 6 articulates directly with the following learning programmes, unit standards and qualifications in the "Extension field".

Horizontal articulation is possible with:

- ID: 3399; B Sc: Agriculture.
- ID: 2479; B Agriculture.

Vertical articulation is possible with:

- ID: 14495; B Honors: Extension Level 7.

It also opens the possibility for further learning in the sub-field of Primary Agriculture and other related fields.

MODERATION OPTIONS

- A person assessing a learner or moderating the assessment of a learner against this Qualification must be registered as an assessor with the relevant ETQA.
- Any institution offering learning that will enable the achievement of this Qualification must be accredited as a provider with the relevant ETQA.
- Assessment and moderation of assessment will be overseen by the relevant ETQA and/or HEQC according to the ETQAs and/or HEQC policies and guidelines for assessment and moderation; in terms of agreements reached around assessment and moderation between ETQAs and/or HEQC (including professional bodies); and in terms of the moderation guideline.
- Moderation must include both internal and external moderation of assessments at exit points of the qualification, unless ETQA and/or HEQC policies specify otherwise. Moderation should also encompass achievement of the competence described both in individual unit standards, exit level outcomes as well as the integrated competence described in the qualification.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

All assessors need to be:

- Experienced (at least 2 years) in extension and the related technical field.
- Qualified one level higher in extension and the related technical field.
- Registered with the relevant ETQA and/or HEQC.
- Competent in the learning outcomes of the unit standard "Plan and Conduct Assessments" (Level 5).

NOTES

Areas of specialisation of the qualification in Animal and Plant Production 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.
 - Agronomy.
 - Hydroponic production.
 - Horticulture.
 - Relevant other.
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- Suggestions of streams of specialisation in either plant or animal production.
 - This qualification is a whole qualification and a large component in the CORE is from Agri-business.
 - Learners will be required to specialize in either Plant Production or Animal Production whilst Extension and Agri-Business competencies are compulsory.

UNIT STANDARDS

This qualification is not based on Unit Standards.