

BQA NCQF QUALIFICATION TEMPLATE

SECTION A: QUALIFICATION DETAILS																		
QUALIFICATION DEVELOPER (S)			Madirelo Training and Testing Centre															
TITLE		Certificate V in Livestock Farming and Management							NCQF LEVEL		5							
STRANDS (where applicable)		N/A																
FIELD		Agriculture and Nature Conservation							CREDIT VALUE		120							
SUB FIELD		Animal Production																
New Qualification		✓		Legacy Qualification					Renewal Qualification									
									Registration Code									
SUB-FRAMEWORK		General Education					TVET		✓		Higher Education							
QUALIFICATION TYPE		Certificate		I		II		III		IV		V	✓	Diploma			Bachelor	
		Bachelor Honours					Post Graduate Certificate					Post Graduate Diploma						
		Masters									Doctorate/ PhD							
RATIONALE AND PURPOSE OF THE QUALIFICATION																		
<p>RATIONALE:</p> <p>The Botswana Vision 2036 states that the development of the human capital the informal sector and the micro and small enterprises (MSES) are essential in achieving the VISION 2036 pillars, in particular Sustainable Economic Development and Human and Social Development. Although Botswana has been fortunate to experience unprecedented economic growth since independence, this has not generated enough jobs to reduce unemployment.</p>																		

The Botswana Education and Training Sector Strategic Plan (ETSSP 2015-2020) marks a significant milestone in our collective efforts as a nation to bring about a more diversified, knowledge-based economy. Through a planned and careful development of human capital, the ETSSP seeks to refocus education and training on the fulfilment of social and economic aspirations identified in our Revised National Policy on Education (RNPE)1994, the National Development Plan, Vision 2036 and as well as the Millennium Development Goals. In particular, the ETSSP is intended to strengthen the match between qualifications and labour market requirements, thereby ensuring that education and training outputs are more closely aligned with the socio-economic development needs of the country.

In line with this strategic goal, the Human Resource Council (HRDC 2022) report on top occupations in demand has identified Farm managers and workers as one of the priority skills for the Agriculture Sector. This curriculum is intended to address the HRDC recommendations which amongst others advocate for curriculum and programme development aligned to the top occupations in high demand identified by the employer in the agriculture sector, and livestock section namely farm managers and farm workers to improve their quality and job readiness.

TVET in consultation with the livestock industries and/or other relevant stakeholders sanctioned the development of a curriculum, underpinning the success of livestock production, modernizing it to meet market desires such as quality products (sustainable food security), it will promote the general benefits people derive from a healthy companion animal population, and also contribute to advancing social and economic transformation by providing accessible opportunities for individuals and career development to people from all social and cultural groups for the workforce of the 21st century and beyond.

PURPOSE:

The purpose of this qualification is to produce graduates with broad technical knowledge skills and competences to:

1. Perform day to day dairy, beef and small-stock production tasks to enhance sustainable food security.
2. Perform animal disease surveillance as a vital role in disease management and prevention as per codes of practice.
3. Use a wide range of farm machinery to accomplish a variety of tasks independently.

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4. Apply practical skills of fodder production for sustainable livestock food production.
5. Process dairy and beef products following the stated procedures and safety rules.
6. Implement sustainable practices in forestry entrepreneurship, considering environmental stewardship and social responsibility.

MINIMUM ENTRY REQUIREMENTS (including access and inclusion)

- Certificate IV, NCQF Level 4
- There will be provision for access through RPL and CAT in line with relevant ETP policies.

(Note: Please use Arial 11 font for completing the template)

SECTION B QUALIFICATION SPECIFICATION	
GRADUATE PROFILE (LEARNING OUTCOMES)	ASSESSMENT CRITERIA
1. Apply broad technical skills in a dairy farming enterprise for sustainable food security displaying self-direction.	<p>1.1 Adhere and promote safety in all operations regarding animal handling ethics.</p> <p>1.2 Manage dairy stock – based on herd health, feeding, watering and husbandry practices concepts.</p> <p>1.3 Apply proper milking techniques (hand and machine milking).</p> <p>1.4 Apply proper milking hygiene based on utensils, animals, personnel and the environment.</p> <p>1.5 Process milk to ensure quality by pasteurization and sterilization.</p> <p>1.6 Keep proper records of production, breeding, health and feeding.</p> <p>1.7 Market the milk at the farm and marketplace.</p>

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<p>2. Apply broad practical skills in a Beef farming enterprise for sustainable food security displaying self-direction.</p>	<p>2.1 Adhere and promote safety in all operations regarding animal handling ethics.</p> <p>2.2 Manage beef production stock based on herd health, feeding, watering and husbandry practices concepts.</p> <p>2.3 Manage a feedlot.</p> <p>2.4 Keep proper records of production, breeding, health and feeding.</p> <p>2.5 Market beef animals at the farm and marketplace.</p>
<p>3. Manage Dairy goats for sustainable food security adhering to standard codes of practice.</p>	<p>3.1 Adhere and promote safety in all operations regarding animal handling ethics.</p> <p>3.2 Identify and select dairy goats suitable for a specified geographic area.</p> <p>3.3 House dairy goats according to the set standards.</p> <p>3.4 Manage dairy goats based on herd health, feeding, watering and husbandry practices concepts.</p> <p>3.5 Manage sire's health, feeding, watering and husbandry practices concepts.</p> <p>3.6 Care for kids' health, feeding, watering and husbandry practices as per standard codes.</p> <p>3.7 Milk dairy goats (hand and machine milking)</p> <p>3.8 Market the milk at the farm and marketplace</p> <p>3.9 Keep records of production, breeding, health and feeding</p>
<p>4. Use broad technical knowledge of animal disease diagnosis for effective disease surveillance and control.</p>	<p>4.1 Adhere and promote safety in all operations regarding animal handling ethics.</p> <p>4.2 Identify common/notifiable diseases of livestock in Botswana.</p> <p>4.3 Classify diseases according to their causal agents.</p>

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	4.4 Identify and treat or control the common diseases as per the standard codes.
5. Use practical skills in farm machinery to perform a broad range of farm operations safely.	5.1 Adhere and promote safety in all operations regarding animal handling ethics. 5.2 Use common farm machinery as per manufacturer's specifications. 5.3 Perform routine checks of the machines.
6. Produce quality fodder and preserve it for use during drought.	6.1 Adhere and promote safety in all operations regarding animal handling ethics. 6.2 Grow fodder crops (any) as per the set standard. 6.3 Maintain fodder crop as per the set standard. 6.4 Harvest the fodder crop properly as per the set standard. 6.5 Make hay accordingly. 6.6 Make silage as per the standard codes. 6.7 Preserve fodder.
7. Apply practical skills of Dairy Products processing for sustainable food security ensuring a profitable project.	7.1 Adhere and promote safety in all operations regarding animal handling ethics. 7.2 Identify different dairy products. 7.3 Process different dairy products as per the required standard. 7.4 Package and store products appropriately. 7.5 Market the products at the farm and marketplace
8. Apply practical skills in Beef Products processing for sustainable food security ensuring a profitable project.	8.1 Adhere and promote safety in all operations regarding animal handling ethics. 8.2 Identify different beef products. 8.3 Produce different beef products as per the required standards. 8.4 Package and store products appropriately.

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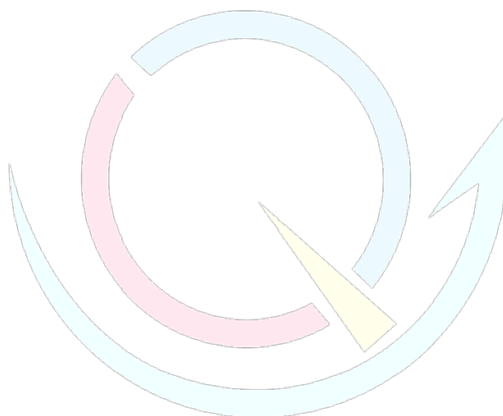
	8.5 Market the products at the farm and marketplace
9. Assess the viability of a chosen venture and develop its business plan and implementation schedule for submission to potential financiers.	<p>9.1 Identify and assess a venture of interest.</p> <p>9.2 Conduct a market survey to assess the viability of the project in its target area.</p> <p>9.3 Develop a plan for the chosen venture including an overview of the business, operations, marketing, human resources and financial projections adequate for funders.</p> <p>9.4 Schedule for implementation of the business plan in the form of a Gantt chart (or any suitable presentation technique).</p>
10. Apply effective fundamental and problem-solving skills while performing assigned duties/tasks according to the set industry standards in an actual work environment.	<p>10.1 Communicate and negotiate and with stakeholders to initiate an industrious work-based learning experience.</p> <p>10.2 Perform assigned vocation related tasks to the required standards.</p> <p>10.3 Apply effective fundamental (core) skills throughout the duration of the work based learning program.</p> <p>10.4 Adhere to health and safety requirements at all times.</p> <p>10.5 Demonstrate problem solving skills as and when problems are encountered during the work process.</p> <p>10.6 Contribute effectively to teamwork. initiatives within the work environment.</p> <p>10.7 Evaluate the work-based learning experience, to determine its benefits and or limitations.</p>

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SECTION C		QUALIFICATION STRUCTURE			
COMPONENT	TITLE	Credits Per Relevant NCQF Level			Total Credits
		Level []	Level []	Level [V]	
FUNDAMENTAL COMPONENT Subjects/ Courses/ Modules/Units	Entrepreneurship			11	11
CORE COMPONENT Subjects/Courses/ Modules/Units	Dairy Production			12	12
	Beef Production			12	12
	Small-stock Production II – Dairy goats			5	5
	Animal Diseases I			15	15
	Farm Machinery			5	5
	Range management II – Fodder Production			8	8
	Work-based Placement			48	48
STRANDS/ SPECIALIZATION	Subjects/ Courses/ Modules/Units	Credits Per Relevant NCQF Level			Total Credits
		Level []	Level []	Level [V]	
1.					
2.					

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Electives	Dairy products processing			4	4
	Beef products processing			4	4



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SUMMARY OF CREDIT DISTRIBUTION FOR EACH COMPONENT PER NCQF LEVEL

TOTAL CREDITS PER NCQF LEVEL

NCQF Level	Credit Value
5	120
TOTAL CREDITS	120

Rules of Combination:

(Please Indicate combinations for the different constituent components of the qualification)

Fundamentals Level 5	11 Credits
Core Level 5	105 Credits
Elective Level 5	4 Credits
Total	120 Credits

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ASSESSMENT ARRANGEMENTS

The weightings for the assessment will be as follows:

- a) Formative assessment

The weighting of formative assessment is 60% of the final assessment mark.

- b) Summative Assessment

The weighting of summative assessment is 40% of the final assessment mark

MODERATION ARRANGEMENTS

Internal and external moderators perform assessments of the qualification. Both internal and external moderators are done in-line with relevant ETP policies. Anyone moderating a learner against this qualification must be registered as a moderator with BQA.

RECOGNITION OF PRIOR LEARNING

There shall be provision for award of the qualification through Recognition of Prior Learning (RPL) in accordance with institutional policies.

CREDIT ACCUMULATION AND TRANSFER

Credit Accumulation and Transfer will be administered in line with institutional policies and will be administered towards the award of qualification

PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)

Horizontal Articulation

- Certificate IV in Animal Production
- Certificate IV in Animal Science
- Certificate IV in Animal Health

Vertical Articulation

- Diploma in Livestock farming
- Diploma in Animal Production
- Diploma in Animal Science

Diploma in Animal Health

Employment Pathways

- Technical Assistant
- Farm Manager
- Farm Supervisor

QUALIFICATION AWARD AND CERTIFICATION

Minimum standards of achievement for the award of the qualification

A candidate is required to achieve the stipulated total of 120 credits to be awarded Certificate V in Livestock Farming & Management

Certification

A Candidates meeting prescribed requirements will be awarded Certificate in addition to transcript.

SUMMARY OF REGIONAL AND INTERNATIONAL COMPARABILITY

This qualification compares favourably to SGB Primary Agriculture – National Diploma in Animal Production NQF level 5 and PITO - Certificate in Animal Technology NZQF level 5 in terms of exit outcomes.

Though the titles differ, the contents of the qualifications are almost similar. The exit – outcomes target livestock production and management of a range of livestock emphasizing teamwork and supervisory skills aimed at quantity and quality livestock produce. The two (2) qualifications address common concepts of large and small stock, agribusiness, good practices of animal welfare, animal nutrition, health and safety, and animal health.

Qualifications compared have some common modules/subjects such as animal production, animal health, health and safety, and nutrition.

The assessment strategies being theories and practical assessment in all qualifications encourage learners to apply themselves, be accountable, and take responsibility for their actions and learning. Qualifications rules of all qualifications stipulate certificate IV as the entry requirement and the achievement of the minimum stated credits for the award. The qualifications also build to the same employment pathways of technicians and managers. All qualifications compared have industrial exposure as well as the developed qualification.

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However, all qualifications compared differ in terms of the minimum credits for the award. The NQF Level 5 is at 240 credits and NZQF Level 5 is at 120 credits compared to the 120 credits for the developed qualification. This variation may be due to differences in the frameworks of different countries.

The NQF qualification is at NQF level 5 titled National Diploma in Animal Production, and the NZQF is at level 5 titled Certificate in Animal Technology while the developed NCQF qualification is at level 5 titled Certificate V in Livestock Farming Management though different titles they cover similar content and target the same competencies.

The other noted difference is in combinations (generics, core, and electives) with NQF and NCQF having generics, core, and fundamentals while the NZQF has core and elective strands with no generics.

The developed qualification may be considered superior to the compared qualifications as it has modules on fodder production and mechanization which SGB and PITO don't have and they are considered crucial in modern agriculture.

The developed qualification compares well with the benchmarks as they emphasize the same or similar competencies, attributes, and educational pathways. Graduates may proceed horizontally to Certificate V in similar qualifications Animal Production, Animal Science, and Animal Health, or vertically to Diploma in Livestock Farming, Animal Production, Animal Science, and Animal Health. Graduates with this qualification would be eligible for employment as farm supervisors, farm managers, and Technical Assistants which are key positions in livestock production enterprises. The qualification will produce competent individuals who can direct farm operations/processes aimed at maximizing the production of different animal production enterprises.

The developed qualification compares well with the foreign qualifications examined above in that it emphasizes the same or similar competencies and attributes and that it follows a structure typical of similar types and levels of qualifications.

REVIEW PERIOD

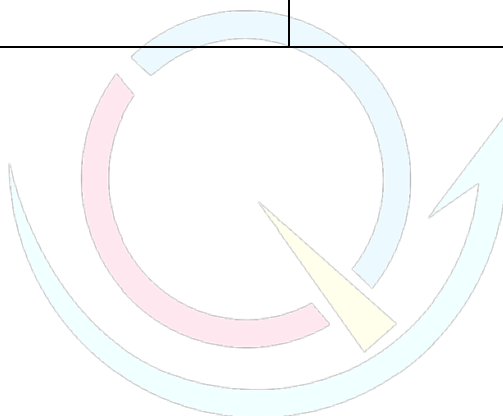
This qualification shall be reviewed every five (5) years

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For Official Use Only:

CODE (ID)			
REGISTRATION STATUS	BQA DECISION NO.	REGISTRATION START DATE	REGISTRATION END DATE
LAST DATE FOR ENROLMENT		LAST DATE FOR ACHIEVEMENT	



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