

BQA NCQF QUALIFICATION TEMPLATE

SECTION A: QUALIFICATION DETAILS																		
QUALIFICATION DEVELOPER (S)				Madirelo Training and Testing Centre														
TITLE		Certificate IV in Livestock Farming and Management										NCQF LEVEL		4				
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, informal sector 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> <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,</p>																		

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, livestock section namely farm managers and farm workers to improve their quality and job readiness.

TVET in consultation with the livestock industries and other relevant stakeholders sanctioned the development of a curriculum, underpinning the success of livestock production, modernising it to meet market desires such as quality products (food security) and the workforce of the 21st century and beyond.

PURPOSE: (itemize exit level outcomes)

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

- Use the knowledge and skills of animal production enterprises to maximize throughput in line with sustainable food security taking into account the rangelands and/or physical resources displaying quality supervisory functions.
- Produce quality chicks as per the set poultry production standards.
- Produce quality calves through Artificial Insemination (AI) adhering to the set AI practice standards to realize the herd calving percentage
- Apply practical entrepreneurial concepts, essential entrepreneurial qualities and current support structures for successful entrepreneurial undertakings.
- Use ICT for information retrieval and processing as well as communication and collaboration with others.
- Apply effective fundamental and problem-solving skills while performing assigned duties/tasks according to the set industry standards in an actual work environment.

MINIMUM ENTRY REQUIREMENTS (including access and inclusion)

- Any qualification equivalent to Certificate III, NCQF level 3 (TVET/GE) is acceptable.
- There will be provision for Recognition of Prior Learning (RPL) and Credit Accumulation Transfer (CAT) for entry according to the national RPL and CAT policy.

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SECTION B QUALIFICATION SPECIFICATION	
GRADUATE PROFILE (LEARNING OUTCOMES)	ASSESSMENT CRITERIA
1. Apply broad knowledge of practical concepts and processes in cattle farming (beef and dairy) enterprise to maximize production	1.1 Adhere and promote safety in all operations regarding animal handling ethics 1.2 Execute cattle husbandry practices in line with standard procedures 1.3 Provide housing for cattle following the set standards 1.4 Implement cattle management practices following the set standards
2. Carry out small stock (sheep, goats and pigs) Production Management process using relevant techniques to harvest quality products.	2.1 Adhere and promote safety in all operations regarding animal handling ethics 2.2 Execute small-stock routine practices following the set standards 2.3 Provide housing for different small stock following set standards 2.4 Implement small stock management practices in line with the set standards independently displaying supervisory functions.
3. Apply broad knowledge of practical concepts to perform and manage any Poultry enterprise to adequately exploit the venture	3.1 Adhere and promote safety in all operations regarding animal handling ethics 3.2 Use broad knowledge to Identify different breeds of poultry 3.3 Provide suitable housing for poultry per the recognised standards 3.4 Carry out the practical concepts to prepare for the arrival of day-old chicks and manage the batch up to market weight independently displaying supervisory functions. 3.5 Keep records and market the products 3.6 Carry out the practical concepts to prepare for the arrival of pullets and manage the batch up to the end of their production period per the set standards independently displaying supervisory functions. 3.7 Perform egg grading by selecting relevant techniques to achieve intended goals. 3.8 Keep records and market the produce
4. Carry out practical knowledge of Range Management to make the best use of the rangelands	4.1 Adhere and promote safety in all operations regarding the rangelands. 4.2 Identify common grasses, shrubs, legumes and forbs. 4.3 Calculate the stocking rate and determine the carrying capacity.

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	<p>4.4 Construct different types of fences displaying independence to perform the task with less or no supervision</p> <p>4.5 Manage and conserve the rangeland based on practical concepts per the set standards, independently displaying supervisory functions.</p>
5. Use broad Practical knowledge of a hatchery unit adhering to procedures and techniques to produce quality chicks	<p>5.1 Adhere and promote safety in all operations regarding the hatchery.</p> <p>5.2 Handle eggs for hatching appropriately</p> <p>5.3 Hatch poultry eggs as per the set conditions</p> <p>5.4 Manage a hatchery unit putting into practice a range of daily tasks to realize the intended goals.</p> <p>5.5 Carry out the practical and cognitive tasks to manage the chicks ensuring their survival until they reach the market per the set standards independently displaying supervisory functions.</p>
6. Execute the broad knowledge of practical concepts to perform Artificial Insemination (AI) to harvest the best quality breeds	<p>6.1 Adhere and promote safety in all operations regarding animal handling.</p> <p>6.2 Display the ability to select tools/equipment for Artificial Insemination</p> <p>6.3 Display the ability to select animals ready for Artificial Insemination.</p> <p>6.4 Perform artificial insemination using the relevant procedures and techniques following the set standards independently displaying supervisory functions.</p> <p>6.5 Perform post Artificial Insemination assessment to determine whether the animal is pregnant</p>
7. Apply broad practical entrepreneurial concepts, essential entrepreneurial qualities and current policies/support structures for entrepreneurial success in Botswana.	<p>7.1 Examine broad entrepreneurial concepts and contemporary issues that have an impact on present-day entrepreneurial success.</p> <p>7.2 Conduct a self-assessment in line with identifying necessary qualities for successful entrepreneurship</p> <p>7.3 Identify business opportunities in a field of interest and select appropriate investment strategies to adopt, considering the associated risks.</p> <p>7.4 Compile documents required for an entrepreneur to establish a company and take advantage of available support structures.</p>
8. Apply Information and Communication Technology for efficient information retrieval, processing as well as communication and collaboration in the context of the Livestock Farming and Management industry.	<p>8.1 Read and analyse data from a prepared database.</p> <p>8.2 Enter and manipulate data using ICT tools.</p> <p>8.3 Display data electronically through charts.</p> <p>8.4 Manipulate and present information through the selection of appropriate spreadsheet tools</p>

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<p>9. Apply effective fundamental and problem-solving skills while performing assigned duties/tasks according to the set industry standards in an actual work environment.</p>	<p>9.1 Communicate and negotiate with stakeholders to initiate an industrious work-based learning experience</p> <p>9.2 Perform assigned vocation-related tasks to the required standards</p> <p>9.3 Apply effective fundamental (core) skills throughout the duration of the work-based learning program.</p> <p>9.4 Adhere to health and safety requirements at all times</p> <p>9.5 Demonstrate problem-solving skills as and when problems are encountered during the work process</p> <p>9.6 Contribute effectively to teamwork initiatives within the work environment</p> <p>9.7 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 [4]	Level []	
FUNDAMENTAL COMPONENT Subjects/ Courses/ Modules/Units	Entrepreneurship I		2		2
	Information and Communication Technology II (ICT II)		2		2
CORE COMPONENT Subjects/Courses/ Modules/Units	Cattle production		30		30
	Small – stock production I		20		20
	Poultry production		15		15
	Range Management I		12		12
	Work-based placement		32		32
STRANDS/ SPECIALIZATION	Subjects/ Courses/ Modules/Units	Credits Per Relevant NCQF Level			Total Credits
		Level []	Level []	Level []	
1.					
Electives	1. Hatchery Management		7		
	2. Artificial insemination		7		

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SUMMARY OF CREDIT DISTRIBUTION FOR EACH COMPONENT PER NCQF LEVEL

TOTAL CREDITS PER NCQF LEVEL

NCQF Level	Credit Value
NCQF LEVEL 4	120
TOTAL CREDITS	120

Rules of Combination:

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

This qualification consists of Fundamentals 4 Credits, Core 77 Credits, Elective Components 7 Credits and 32 credits of industrial attachment. To be awarded the qualification, learners are required to obtain a minimum of 120.

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ASSESSMENT ARRANGEMENTS

The weightings for the assessment will be as follows:

1. Formative assessment

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

2. Summative Assessment

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

Internal and external assessments are performed in the qualification. Both internal and external assessments are done in line with the national assessment policy expectations. Assessors must be registered with a recognised relevant regulatory body.

MODERATION ARRANGEMENTS

Internal and external moderation are performed in assessments for the qualification. Both internal and external moderation are done in line with the national moderation policy expectations. moderator must be registered with a recognised relevant regulatory body.

RECOGNITION OF PRIOR LEARNING

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

CREDIT ACCUMULATION AND TRANSFER

Credits Accumulated and Transfer will be applicable for gaining credits towards graduation and shall be carried out as per ETP policy which is aligned with BQA / national policy.

PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)

Horizontal Articulation (related qualifications of similar level that graduates may consider)

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

Vertical Articulation (qualifications to which the holder may progress)

Certificate V in Livestock farming
Certificate V in Animal Production
Certificate V in Animal Science
Certificate V in Animal Health

EMPLOYMENT

Junior farm manager
Farm Supervisor
Technical Assistant

QUALIFICATION AWARD AND CERTIFICATION

Minimum standards of achievement for the award of the qualification

A candidate is required to achieve a minimum of the stipulated 120 credits to be awarded Certificate IV in Livestock Farming & Management inclusive of the 4 credits for fundamentals, 77 credits for core components, 32 credits for work-based learning and 7 credits for electives. Candidates will be awarded certificates.

Certification

A certificate will be awarded upon successful completion.

SUMMARY OF REGIONAL AND INTERNATIONAL COMPARABILITY

Both the SGB Primary Agriculture – National Certificate in Animal Production NQF level 4 and PITO – National Certificate in Agriculture NZQF level 4 compare well with the developed qualification 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 III 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 qualifications.

However, all qualifications compared differ slightly in terms of the minimum credits for the award. The NQF Level 4 is at 140 credits and NZQF Level 4 ranges from 82 - 130 credits compared to the 120 credits for the developed qualification. This variation may be due to differences in the module content of frameworks. The developed qualification may be considered superior to the compared qualifications as it has a module on Information Communication and Technology (ICT) which SGB and PITO don't have and it is considered crucial in modern agriculture.

The qualification developed for Botswana compare well with the foreign qualifications as they emphasize the same or similar competencies, attributes, and educational pathways. Graduates may proceed horizontally to Certificate IV in similar qualifications Animal Production, Animal Science, and Animal Health, or vertically to Certificate V 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.

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Generally, the developed compares well with the foreign qualifications studied 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.

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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	