

BQA NCQF QUALIFICATION TEMPLATE

SECTION A: QUALIFICATION DETAILS													
QUALIFICATION DEVELOPER (S)				Madirelo Training and Testing Centre									
TITLE		Certificate IV in Forestry						NCQF LEVEL		4			
STRANDS (where applicable)		N/A											
FIELD		Agriculture and Nature Conservation						CREDIT VALUE		140			
SUB FIELD		Nature Conservation											
New Qualification				Legacy Qualification				Renewal Qualification		√			
								Registration Code		Q0388			
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

RATIONALE:

The Certificate IV in Forestry was reviewed to provide learners with advanced technical, supervisory, environmental, and operational competencies required within the forestry, conservation, agroforestry, nursery, and natural resource management sectors. The qualification builds on competencies acquired at Certificate III level and prepares graduates for skilled operational and supervisory responsibilities within forestry operations.

The Human Resource Development Council (HRDC) Priority Skills Report 2025 emphasizes the importance of developing skills that support environmental sustainability, climate resilience, natural resource management, biodiversity conservation, ecological restoration, Geographic Information Systems (GIS), and green economic development in Botswana. The report highlights the growing need for skilled personnel capable of managing natural ecosystems, combating land degradation, supporting climate change adaptation initiatives, and contributing to sustainable utilization of forestry and environmental resources.

The qualification is aligned with the International Standard Classification of Occupations (ISCO-08), particularly occupational areas associated with Forestry Technicians, Forestry Supervisors, Nursery Supervisors, Conservation Officers, and Skilled Forestry Workers under Major Group 3 and Major Group 6.

Regionally, SADC countries continue to strengthen sustainable forestry, agroforestry, climate resilience, and natural resource management initiatives as part of green economic development strategies. Forestry contributes significantly to employment creation, tourism, environmental conservation, and community livelihoods. Regional TVET systems promote competency-based training that supports entrepreneurship, labour mobility, environmental sustainability, and youth empowerment.

Locally, the qualification supports Botswana Vision 2036, ETSSP, National Development Plans, and environmental sustainability initiatives aimed at economic diversification, climate resilience, and sustainable natural resource utilization. Botswana requires skilled forestry personnel capable of

supporting afforestation projects, nursery production, rangeland rehabilitation, wildfire management, forest protection, landscaping, and conservation programmes.

The Certificate IV in Forestry further supports employability, self-employment, and progression into higher qualifications by equipping graduates with competencies in forestry operations supervision, silviculture, environmental management, nursery production, communication, ICT, and sustainable forestry practices.

PURPOSE:

The purpose of the qualification is to produce graduates with broad knowledge of practical concepts, processes, and capacity to:

1. Apply advanced soil science, agroforestry, and environmental conservation practices.
2. Perform tree propagation, plantation establishment, forest maintenance, and forest protection operations.
3. Apply forestry measurement, inventory, and basic forest management techniques.
4. Apply entrepreneurial principles and computer concepts to support effective task execution and problem-solving in the workplace

MINIMUM ENTRY REQUIREMENTS (including access and inclusion)

Certificate III, NCQF Level 3 or equivalent.

There shall be access in inclusion through Credit Accumulation Transfer and Recognition Prior Learning in line with ETP policies.

SECTION B		QUALIFICATION SPECIFICATION	
GRADUATE OUTCOMES)	PROFILE (LEARNING	ASSESSMENT CRITERIA	
1. Apply occupational health, safety, environmental, and quality assurance procedures in forestry operations.		1.1 Apply occupational health and safety regulations during forestry activities. 1.2 Conduct hazard identification and risk assessment procedures. 1.3 Implement environmental conservation and wildfire prevention measures. 1.4 Apply emergency procedures and incident reporting requirements. 1.5 Maintain quality assurance standards within forestry operations.	
2. Supervise forestry tools, machinery, and operational activities according to forestry standards.		2.1 Select and supervise the use of forestry tools and equipment for specific operations. 2.2 Apply maintenance procedures for forestry tools and mechanized equipment. 2.3 Monitor operational efficiency during forestry activities. 2.4 Implement safe operating procedures during mechanized forestry operations.	
3. Apply soil science and agroforestry principles in forestry management.		3.1 Conduct soil analysis and interpret soil test results to determine soil composition. 3.2 Apply soil conservation and improvement techniques to support sustainable forestry and environmental management practices.	

BQA NCQF QUALIFICATION TEMPLATE

	3.3 Determine suitable forestry and agroforestry practices based on soil conditions to promote sustainable land use, improve productivity, and support ecosystem conservation. 3.4 Apply sustainable land management techniques within forestry operations.
4. Perform tree propagation, nursery management, and plantation establishment operations.	4.1 Apply advanced seed collection, treatment, and storage techniques to maintain seed viability, improve germination rates, and support the production of high-quality planting materials. 4.2 Apply vegetative propagation methods according to species requirements to produce quality planting stock and support sustainable forest establishment. 4.3 Maintain forest plantations according to forestry standards to support sustainable forest management objectives. 4.4 Maintain nursery and plantation records for monitoring and evaluation purposes to support decision-making in forestry operations.
5. Apply botanical and silvicultural principles in forest management activities.	5.1 Identify indigenous and exotic tree species using botanical characteristics. 5.2 Apply silvicultural techniques to improve sustainable forest management practices. 5.3 Conduct basic forest inventory and tree measurements to support forest resource assessment and management planning.

BQA NCQF QUALIFICATION TEMPLATE

	5.4 Apply forest protection and conservation practices to ensure sustainable management and preservation of forest ecosystems.
6. Apply broad practical entrepreneurial concepts, essential entrepreneurial qualities and current policies/support structures for entrepreneurial success in Botswana.	6.1 Examine broad entrepreneurial concepts and contemporary issues that have an impact on present day entrepreneurial success 6.2 Conduct a self-assessment in line with identifying necessary qualities for successful entrepreneurship 6.3 Identify business opportunities in a field of interest and select appropriate investment strategies to adopt, considering the associated risks. 6.4 Apply basic principles in accounting for SMME operations. 6.5 Compile documents required for an entrepreneur to establish a company and take advantage of available support structures
7. Apply computer concepts to solve real world problems.	7.1 Use basic computer concepts to perform technical and professional tasks 7.2 Perform ethical and safe practices in the use of ICT ensuring digital activities are secure. 7.3 Produce documents using ICT applications in compliance with organizational standards. 7.4 Communicate using digital technologies to share information, collaborate, and connect effectively.

BQA NCQF QUALIFICATION TEMPLATE

SECTION C		QUALIFICATION STRUCTURE			
COMPONENT	TITLE	Credits Per Relevant NCQF Level			Total Credits
		Level [4]	Level []	Level []	
FUNDAMENTAL COMPONENT Subjects/ Courses/ Modules/Units	Entrepreneurship	10			10
	Computer Skills	10			10
CORE COMPONENT Subjects/Courses/ Modules/Units	Forestry Operations and Equipment	10			10
	Occupational Safety, Health and Environmental Management	10			10
	Advanced Soil Science and Agroforestry	20			20
	Tree Propagation and Nursery Management	13			13
	Botany and Silviculture	15			15
	Forest Conservation and Protection	20			20
	Workbased learning	32			32
STRANDS/ SPECIALIZATION	Subjects/ Courses/ Modules/Units	Credits Per Relevant NCQF Level			
		Level []	Level []	Level []	

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1.					
2.					
Electives					



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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	140
TOTAL CREDITS	140

Rules of Combination:

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

A candidate must achieve a minimum of 140 credits being 20 credits for fundamental components and 120 credits for core components inclusive of 32 credits for Work Based Learning, to be awarded the qualification. Qualification does not have elective components.

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ASSESSMENT ARRANGEMENTS

Assessment shall be conducted by persons registered with Botswana Qualifications Authority (BQA) as assessors preferably with a qualification higher than Certificate III in Painting and Decorating or related in line with ETP assessment policies.

The weightings for the assessment will be as follows:

- a) Formative assessment

The weighting of formative assessment is 60%.

- b) Summative Assessment

The weighting of summative assessment is 40%.

MODERATION ARRANGEMENTS

Moderation shall be conducted by persons registered with Botswana Qualifications Authority (BQA) as moderators preferably with a qualification higher than Certificate III in Painting and Decorating or related in line with ETP moderation policies.

RECOGNITION OF PRIOR LEARNING

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

CREDIT ACCUMULATION AND TRANSFER

Credits Accumulated and Transfer (CAT) will be administered in line with the Educational Training Provider (ETP) policy and will be administered towards the award of qualification

PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)

Horizontal Articulation

- Certificate IV in Environmental Management
- Certificate IV Crop Production
- Certificate IV in Wildlife Management

Vertical Articulation

- Certificate V in Forestry
- Certificate V in Crop Framing

Employment Pathways

Graduates may work as

- Forestry Technician Assistant
- Nursery Supervisor
- Agroforestry Assistant
- Forest Ranger Assistant

QUALIFICATION AWARD AND CERTIFICATION

Minimum standards of achievement for the award of the qualification

A candidate is required to achieve the stipulated minimum of 140 credits inclusive of 20 credits for fundamental and 120 credits for core components inclusive of 32 credits Work Based Learning, to be awarded the qualification.

SUMMARY OF REGIONAL AND INTERNATIONAL COMPARABILITY

The reviewed qualification was benchmarked:

- Regionally: Certificate in Forestry of Zimbabwe College of Forestry (Zimbabwe).
- Internationally: Certificate IV in Forestry of University of Tasmania (Australia).

Title of Qualification

The reviewed Certificate IV in Forestry has a title comparable to the benchmarks, in that all qualifications have the key word Forestry.

NQF Level

All three qualifications are at NQF Level 4. These shows relatively equal level of difficulty of these qualifications.

Credit Value or Duration

All three qualifications fall within the same credit value range of 120 to 150 credits. This reflects equivalent training volumes and trade-level competencies.

Main Exit Outcome(s)

Graduates of the reviewed and benchmark qualifications should be able to undertake silvicultural practices, carry out fire prevention and control strategies harvesting operations and workplace safety practices. The reviewed qualification furthermore builds competence in the study of plants and application of advanced soil science and agroforestry principles in forestry management to produce versatile graduates.

Domains/Modules/Courses/Subjects Covered

The reviewed qualification combines harvesting processes from the benchmarks. It furthermore, incorporates entrepreneurship fundamental into the qualification while embedding environmental compliance practices as core modules. Therefore, the reviewed qualification has an integrated approach, producing versatile graduates with skills in forest harvesting, environmental management as well as silvicultural techniques.

Assessment Strategies and Weightings

The reviewed qualification applies 60% formative and 40% summative assessment whereas the Zimbabwe qualification applies 40% formative and 60% summative assessment, while the Australian qualification uses units with 0% formative and 100% summative assessment. Therefore, the reviewed qualification shows significant differences in assessment strategies and weightings with the benchmarks whereas the alignment is observed between the reviewed qualification with the Zimbabwe qualification in that they assess both formative and summative assessments.

Qualification Rules and Minimum Standards

The qualification rules and minimum standards of the reviewed qualification are aligned with those of the Certificate in Forestry (ZNQF Level 4, Zimbabwe) and Certificate IV in Forestry (AQF Level 4, Australia). The reviewed qualification requires that learners be competent in all the modules whereas the benchmarks require that learners be competent in all core modules and a select of electives.

REVIEW PERIOD

This qualification shall be reviewed every 5 years.

BQA NCQF QUALIFICATION TEMPLATE

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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