

	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.GD02
		Issue No.	01
		Effective Date	04/02/2020

SECTION A: QUALIFICATION DETAILS													
QUALIFICATION DEVELOPER (S)				MINISTRY OF EMPLOYMENT, LABOUR PRODUCTIVITY AND SKILLS DEVELOPMENT									
TITLE		CERTIFICATE IV IN FORESTRY						NCQF LEVEL		4			
FIELD		AGRICULTURE AND NATURE CONSERVATION		SUB-FIELD		FORESTRY		CREDIT VALUE		60			
New Qualification						√		Review of Existing Qualification					
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 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 our education and training towards fulfilment of social and economic aspirations identified in our Revised National Policy on Education (RNPE), 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 to socio economic development needs of the country. In line with this strategic goal, the HRDC</p>													

	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.GD02
		Issue No.	01
		Effective Date	04/02/2020

report on top occupations of 2016 has identified Forestry as some of the priority skills for the Agriculture and Nature Conservation sector.

Forest and rangeland resources provide multiple benefits and have direct and measurable impacts on people's lives and the national economy as envisioned by Vision 2036 of Botswana (Government of Botswana, 2016). They play important roles in the livelihoods of rural people by providing employment, energy, nutritious foods and a wide range of goods (FAO, 2014; Teketay et al., 2016). If managed well, these forests and rangelands offer tremendous potential to contribute to sustainable development and a greener economy. These potentials of forests and range resources, if exploited sustainably, will be instrumental in the realization of Botswana having healthy ecosystems that support the economy, livelihoods and cultural heritage as well as enhanced resilience to climate change as stipulated in Vision 2036. The multi-functional role of biodiversity is also recognized in Vision 2036 of Botswana as economic resource, providing life supporting services and enhancing community resilience. To this effect, programmes to improve the status of the species (flora and fauna) have been planned to be put in place during NDP 11, and it is stated that a deliberate effort will be made to: (i) improve the legislative framework; (ii) develop appropriate standards; (iii) improve inventory; and (iv) intensify compliance efforts by monitoring the status and diversity of species within the predetermined localities. Public education and awareness will be intensified with the aim of attaining sustainable environment.

According to the Agricultural Sector Human Resource Development Plan (HRDC, 2015), compared with other sectors, fisheries and the forest sector are largely underdeveloped with most producers located in the northern part of the country on a seasonal and subsistence basis. Therefore, the need to do more to develop aquaculture and agroforestry has been emphasized.

Realization of the potential contributions of forests and rangelands to economic and social development, poverty eradication, food and energy security, environmental health as well as the United Nations Sustainable Development Goals (SDGs: Goals 2, 6, 7, 8, 13 and 15), as envisaged in Vision 2036, will require human, financial and physical resources, appropriate and better knowledge and information, functioning markets, well organised institutions, enabling policies as well as effective and enforced legislation.

	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.GD02
		Issue No.	01
		Effective Date	04/02/2020

PURPOSE:

The purpose of this qualification is to produce candidate who have knowledge, skills and competences to:

- Carry out different operations in a forestry setup
- Perform routine work in Forestry under minimal supervision
- Use ICT for information retrieval, processing and management.
- Start up an Entrepreneurship in accordance with established codes of practice and relevant legislation.

ENTRY REQUIREMENTS (including access and inclusion)

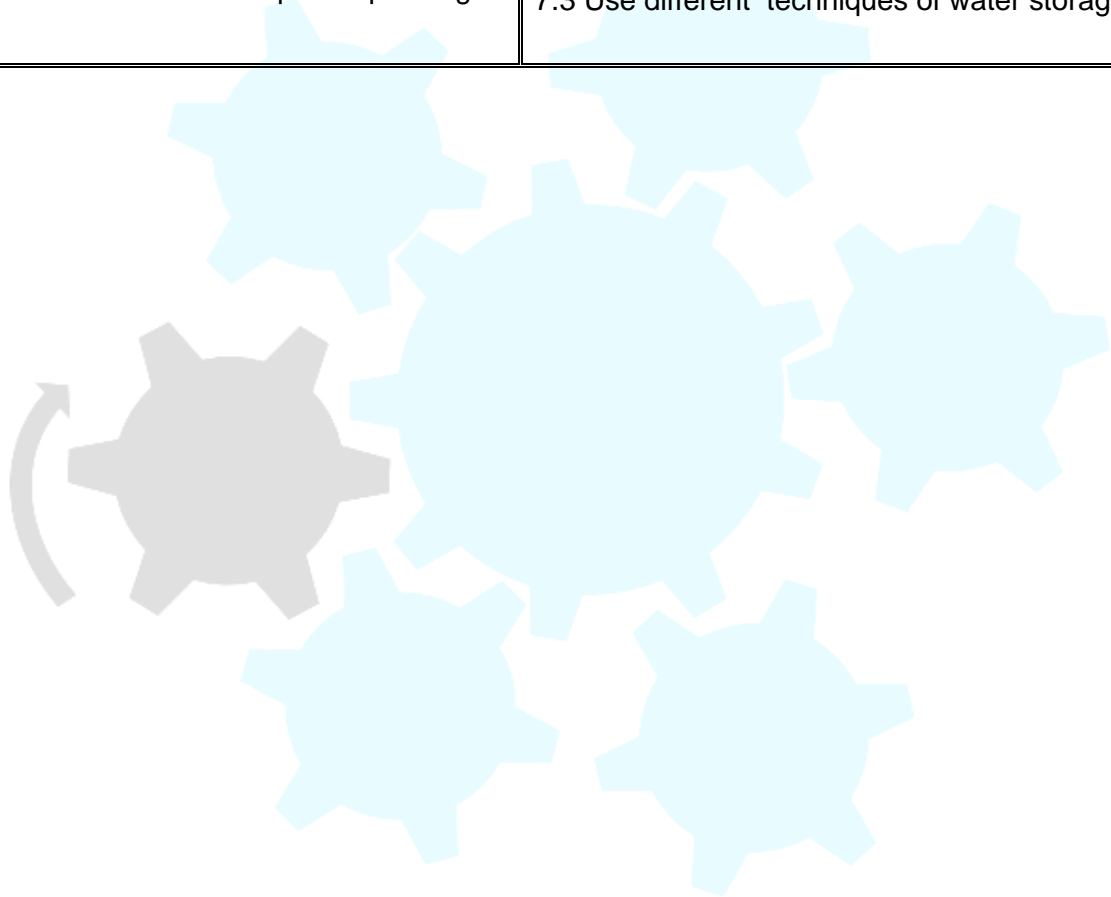
- NCQF level 3 is acceptable to the Institution e.g. JC and equivalent qualification.
- Candidates with relevant unaccredited prior learning may be considered for access and or exemption through Recognition of Prior Learning (RPL) policies and CATS policies.

	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.GD02
		Issue No.	01
		Effective Date	04/02/2020

SECTION B QUALIFICATION SPECIFICATION	
GRADUATE PROFILE (LEARNING OUTCOMES)	ASSESSMENT CRITERIA
LO.1 Use ICT for information retrieval, processing and management.	1.1 Analyse data from a prepared data base. 1.2 Manipulate data using ICT tools. 1.3 Display data electronically through chats. 1.4 Present information through the selection of appropriate spreadsheet tools through.
LO 2 Apply basic entrepreneurial concepts associated with the establishment of a venture.	2.1 Identify entrepreneurship/business opportunities in making use of brainstorming and environmental scanning techniques. 2.2 Compile documentation required for the establishment of a venture using support structures and policies available for entrepreneurs. 2.3 Assess the various investment strategies and risks associated with your identified business opportunity.
LO.3 Operate a chain saw as per required specification.	3.1 Identify chainsaw parts. 3.2 Operate a chainsaw to cut a log according to the required specification. 3.3 Carry out Maintenance of the chainsaw. 3.4 Adhere to safety, health and environmental measures.
LO.4 Construct a wire fence in accordance with job specifications.	4.1 Calculate quantity of fencing materials required for a specified fence. 4.2 Prepare post holes according to correct dimensions 4.3 Erect a wire fence. 4.4 Adhere to safety precautions when constructing a wire fence.
LO.5 Demonstrate the basic fire prevention and control measures.	5.1 Draw forest fire plan. 5.2 Construct fire line. 5.3 Perform prescribed burning Mop- up.
LO.6 Establish garden components using various materials guided by a plan.	6.1 Prepare a landscaping plan. 6.2 Prepare the land for land scaping. 6.3 Establish landscaping components as per the plan. 6.4 Maintain the garden.

	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.GD02
		Issue No.	01
		Effective Date	04/02/2020

LO.7 Apply various Irrigation systems and techniques in accordance with specific planting system.	7.1 Assess the area to be irrigated. 7.2 Apply the appropriate irrigation techniques. 7.3 Use different techniques of water storage.
---	--



	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.GD02
		Issue No.	01
		Effective Date	04/02/2020

SECTION C	QUALIFICATION STRUCTURE				
COMPONENT	TITLE	Credits Per Relevant NCQF Level			Total (Per Subject/ Course/ Module/ Units)
		Level []	Level []	Level []	
FUNDAMENTAL COMPONENT <i>Subjects/ Courses/ Modules/Units</i>	Entrepreneurship I	4			2
	Information and Communications Technology II (ICT II)	4			2
CORE COMPONENT <i>Subjects/Courses/ Modules/Units</i>	Chainsaw Operations	4			5
	Fence Construction	4			5
	Forest Fire Management	4			5
	Landscaping	4			5
	Irrigation Systems	4			4
	Work based Placement/Attachment	4			32
ELECTIVE/ OPTIONAL COMPONENT <i>Subjects/Courses/ Modules/Units</i>					

	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.GD02
		Issue No.	01
		Effective Date	04/02/2020

SUMMARY OF CREDIT DISTRIBUTION FOR EACH COMPONENT PER NCQF LEVEL	
TOTAL CREDITS PER NCQF LEVEL	
NCQF Level	Credit Value
Fundamental components	4
Core components	56
Elective components	0
TOTAL CREDITS	60
Rules of Combination: (Please Indicate combinations for the different constituent components of the qualification)	
<p>Candidates are required to achieve a minimum of 60 credits for Forestry Level 4 qualification inclusive of 4 credits for fundamental units, 56 credits for Core and 0 credit for electives.</p>	

	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.GD02
		Issue No.	01
		Effective Date	04/02/2020

ASSESSMENT ARRANGEMENTS

All assessments, formative and summative, leading/contributing to the award of credits or a qualification should be based on learning outcomes and/or sub-outcomes. All forms of assessments and moderations will be conducted by BQA accredited specialists.

Formative assessment

The contribution of formative assessment to the final grade shall be 60%.

Summative assessment

The final examination for each course contributes 40 % of the final mark for that course.

MODERATION ARRANGEMENTS

Both internal and external moderation will be done in accordance with applicable policies and regulations by BQA accredited specialist areas as assessors and moderators.

RECOGNITION OF PRIOR LEARNING

Candidates may submit evidence of prior learning and current competence and/or undergo appropriate forms of RPL assessment for the award of credits towards the qualification in accordance with the ETP, RPL Policy, BQA RPL policies and relevant national-level policy and legislative framework. Implementation of RPL shall also be consistent with requirements, if any, prescribed for the field or sub-field of study by relevant national, regional or international professional bodies.

Candidates with relevant prior learning through formal, informal and non-formal education shall be considered for award and or exemption through recognition of prior learning (RPL), this involves assessment such as pre post interviews, portfolio development or evidence and proficiency test and certificate of workshops attended where applicable in line with the Institution's admissions.

	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.GD02
		Issue No.	01
		Effective Date	04/02/2020

CREDIT ACCUMULATION AND TRANSFER

Any relevant part qualification at NCQF level 4 may render the candidate eligible for exemptions or credit transfer in accordance with applicable policies.

PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)

Learning Pathways

Horizontal Articulation

- Certificate IV in Crop Farming

Vertical Articulation

- Certificate V in Forestry

Employment Pathways

Graduate may pursue the following job titles but not limited to:

- Landscaper
- Nursery Attendant
- Forestry Technical Assistant
- Fellers
- Fire fighters
- Log Makers
- Loaders

QUALIFICATION AWARD AND CERTIFICATION

Minimum standards of achievement for the award of the Certificate 4 in Forestry qualification:

A candidate is required to achieve 60 credits of the stipulated total of 60 credits inclusive of the fundamental, core and elective components, to be awarded the certificate 4 in Forestry.

Certification

	BQA NCQF QUALIFICATION TEMPLATE	Document No.	DNCQF.QIDD.GD02
		Issue No.	01
		Effective Date	04/02/2020

Candidates meeting prescribed requirements will be awarded the Certificate IV in Forestry qualification in accordance with standards prescribed for the award of the qualification and applicable policies. Candidates who do not meet the prescribed minimum standards may, where applicable, be considered for appropriate exit awards in accordance with applicable policies.

REGIONAL AND INTERNATIONAL COMPARABILITY

Differences observed between the two qualifications are that New Zealand qualification does not have assessment strategies while the South Africa Qualification Authority (SAQA) has well defined assessment strategies.

Both qualifications have well outlined exit outcomes and main domains. They also have credits values well stipulated.

Comparability and articulation of the proposed qualification with the ones examined

The proposed qualification generally compares well with the two qualifications studied in terms of exit comes and main domains. In all qualifications, integrated assessment at the level of the qualification provides an opportunity for learners to show that they can integrate concepts, actions and ideas achieved across a range of unit standards and contexts. What sets this qualification apart from the ones studied is that it is anchored on a competency and credit-based qualifications framework.

REVIEW PERIOD

This qualification shall be reviewed every 5 years.