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|  | BQA NCQF QUALIFICATION TEMPLATE | Document No. | DNCQF.QIDD.GD02 |
| | | Issue No. | 01 |
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| SECTION A: QUALIFICATION DETAILS | | | | | | | | | | | | | | |
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| QUALIFICATION DEVELOPER (S) | | | Ministry of Employment, Labour Productivity and Skills Development | | | | | | | | | | | |
| TITLE | | Certificate III in Forestry | | | | | | | | | | NCQF LEVEL | | 3 |
| FIELD | | Agriculture and Nature Conservation | | SUB-FIELD | | Forestry | | | | CREDIT VALUE | | 40 | | |
| New Qualification | | | | | <input checked="" type="checkbox"/> | | Review of Existing Qualification | | | | | | | |
| SUB-FRAMEWORK | | | General Education | | | <input type="checkbox"/> | | TVET | | | <input checked="" type="checkbox"/> | | Higher Education | |
| QUALIFICATION TYPE | | Certificate | I | II | III | <input checked="" type="checkbox"/> | IV | V | Diploma | Bachelor | | | | |
| | | Bachelor Honours | | | Post Graduate Certificate | | | | | Post Graduate Diploma | | | | |
| | | Masters | | | | | Doctorate/ PhD | | | | | | | |
| RATIONALE AND PURPOSE OF THE QUALIFICATION | | | | | | | | | | | | | | |
| RATIONALE: <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</p> | | | | | | | | | | | | | | |

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development needs of the country. In line with this strategic goal, the HRDC 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 organized Institutions, enabling policies as well as effective and enforced legislation.

PURPOSE:

The purpose of this qualification is to equip graduates with knowledge, skills and competences to:

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- Communicate effectively with clients and colleagues.
- Perform routine tasks in landscaping using appropriate tools.
- Propagate different species using different techniques.
- Use different parts of trees to identify the species.
- Adhere to occupational health and safety in accordance with established codes of practice and relevant legislation.

ENTRY REQUIREMENTS (including access and inclusion)

- NCQF level 2 is acceptable to the Institution e.g. JC and equivalent qualification.
- Candidates with relevant uncredited prior learning may be considered for access and or exemption through Recognition of Prior Learning (RPL) policies and CATS policies.

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| SECTION B QUALIFICATION SPECIFICATION | |
|---|---|
| GRADUATE PROFILE (LEARNING OUTCOMES) | ASSESSMENT CRITERIA |
| <p>LO 1. Communicate with clients, colleagues and others using appropriate forms of communication techniques.</p>  | <p>1.1 Use written, verbal, non-verbal communication appropriate to the target audience.</p> <p>1.2 Interpret stipulated instructions or requirements.</p> <p>1.3 Apply information acquired in the performance of tasks or discussions with other people.</p> <p>1.4 Present information using appropriate language and formats.</p> <p>1.5. Construct clear sentences to produce a written logical and coherent piece of writing.</p> <p>1.6 Use appropriate presentation formats and styles of writing to produce error free business documents.</p> |
| <p>LO 2. Use ICT for information retrieval and processing as well as communication and collaboration with others.</p> | <p>2.1. Use ICT responsibly and ethically.</p> <p>2.2 Manage information using ICT.</p> <p>2.3 Organize and synthesize information using ICT.</p> <p>2.4 Implement data loss prevention strategies using ICT.</p> <p>2.5. Present information in a variety of formats using ICT.</p> |
| <p>Lo 3. Apply basic knowledge of soil science in relation to suitability to plants.</p> | <p>3.1 Identify suitable soil types for specific plants.</p> <p>3.2 Prepare the soil for plants.</p> <p>3.3 Plant a tree.</p> <p>3.4 Carry out processes of maintaining suitability of the soil.</p> |
| <p>LO 4. Use appropriate forestry hand tools and equipment for specific task.</p> | <p>4.1 Examine the nature of work to be done.</p> <p>4.2 Select appropriate hand tools and equipment.</p> |

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| | 4.3 Use appropriate hand tools and equipment in line with job specification. |
| LO 5. Identify indigenous and exotic tree species. | <p>5.1 Identify indigenous tree species by common names and scientific names.</p> <p>5.2 Identify exotic tree species by common names and scientific names.</p> <p>5.3 Identify seeds for different tree species.</p> |
| LO 6. Use different propagation techniques to produce different tree species. | <p>6.1 Prepare propagation materials.</p> <p>6.2 Prepare seedbed in accordance with the propagation method.</p> <p>6.3 Perform the appropriate propagation method (asexual or sexual).</p> <p>6.4 Apply different methods of pot filling.</p> <p>6.5 Prick out seedlings.</p> <p>6.7 Provide plant with the required plant growth requirements.</p> |

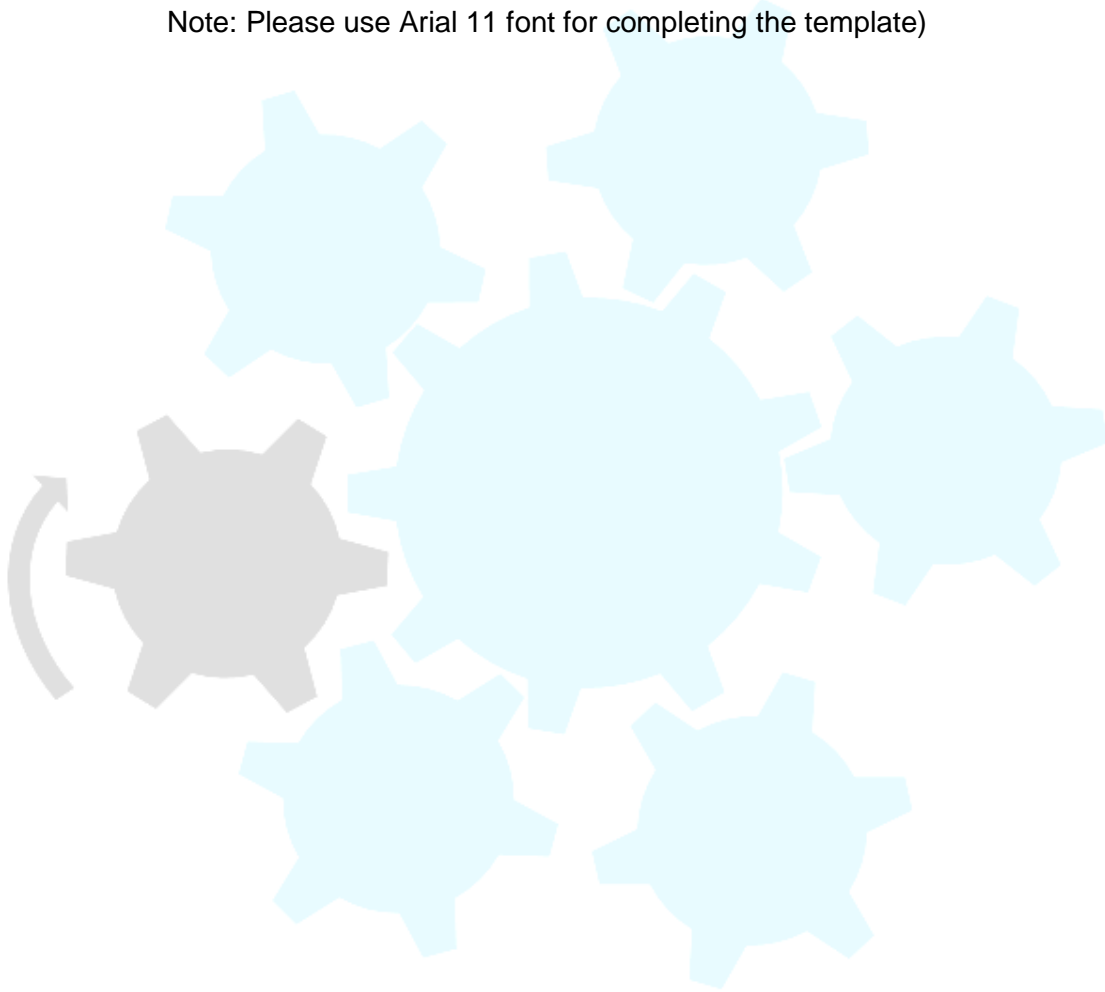
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|  BOTSWANA Qualifications Authority | BQA NCQF QUALIFICATION TEMPLATE | Document No. | DNCQF.QIDD.GD02 |
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| SECTION C | QUALIFICATION STRUCTURE | | | | |
|---|---|---------------------------------|-----------|-----------|--|
| COMPONENT | TITLE | Credits Per Relevant NCQF Level | | | Total (Per Subject/ Course/ Module/ Units) |
| | | Level [] | Level [] | Level [] | |
| FUNDAMENTAL COMPONENT Subjects/ Courses/ Modules/Units | Communication Skills | 3 | | | 3 |
| | Information and Communications Technology | 3 | | | 3 |
| | | | | | |
| CORE COMPONENT Subjects/Courses/ Modules/Units | Introduction to Soil Sciences | 3 | | | 9 |
| | Forestry hand tools and Equipment | 3 | | | 7 |
| | Botany | 3 | | | 6 |
| | Plant propagation | 3 | | | 12 |
| | | | | | |
| ELECTIVE/ OPTIONAL COMPONENT Subjects/Courses/ Modules/Units | | | | | |
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| SUMMARY OF CREDIT DISTRIBUTION FOR EACH COMPONENT PER NCQF LEVEL | |
|--|---------------------|
| TOTAL CREDITS PER NCQF LEVEL | |
| NCQF Level | Credit Value |
| Fundamental components | 6 |
| Core components | 34 |
| Elective components | 0 |
| TOTAL CREDITS | 40 |
| Rules of Combination: (Please Indicate combinations for the different constituent components of the qualification) | |
| <p>Candidates are required to achieve a minimum of 40 credits for the qualification inclusive of 6 credits for fundamental units, 34 credits for core and 0 credits for electives.</p> | |

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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 qualified and 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. To pass a course, a candidate must achieve a minimum of 60%.

MODERATION ARRANGEMENTS

The following shall apply for both internal and external moderation in accordance with applicable policies and regulations done by specialist accredited by BQA or any other recognized quality assurance entity 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.

CREDIT ACCUMULATION AND TRANSFER

Any relevant part qualification at NCQF level 3 may render the candidate eligible for exemptions or credit transfer in accordance with applicable policies.

PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)

Learning Pathways

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Horizontal Articulation

- Certificate III in Crop Farming

Vertical Articulation

- Certificate in IV IN Forestry

Employment Pathways

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

- Landscaper
- Nursery Attendant
- Forestry Technical Assistant
- Planters
- Pruners

QUALIFICATION AWARD AND CERTIFICATION

Minimum standards of achievement for the award of Forestry Certificate Level 3.

A candidate is required to achieve a minimum of 40 credits of the stipulated total 40 credits.

Certification

Candidates meeting prescribed requirements will be awarded a qualification in Certificate III in Forestry 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 SAQA has well defined assessment strategies. Content covered in New Zealand qualification covers important points on cultural relationship with community.

Both qualifications have well outlined, and similar exit outcomes and main domains and they also have credits values well stipulated. They also cover well the aspect of a well-planned and supervised timber harvesting operations and the importance of teamwork.

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REVIEW PERIOD

This qualification shall be reviewed every 5 years.

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