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|  |  | **Unit ID: ORG17** |
| **Domain** | **Farm Ecosystem Management** |  |
| **Title:** | **Apply techniques of beekeeping** |  |
| **Level: 3** |   |  **Credits: 3** |

**Purpose**

This unit standard specifies the competencies required to apply techniques of beekeeping. It is intended for those who manage beekeeping enterprises as well as people in other occupations that work in bee products establishments.

* Use beekeeping equipment and Personal Protective Equipment
* Manage a beehive
* Demonstrate techniques of processing bee products

**Special Notes**

1. Entry information

Prerequisites:

* *ORG16 – Demonstrate knowledge on beekeeping*
1. This unit standard is to be delivered and assessed in the context of agricultural operations and can be assessed in conjunction with other relevant technical unit standards.
2. The evidence required to demonstrate competency in this unit must be relevant to workplace operations.
3. Assessment evidence may be collected from a real workplace in which agricultural operations are carried out. Practical assessment evidence can be based on a Portfolio of evidence in conjunction with the quality check of the final product.
4. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with workplace guidelines and instructions.
5. Demonstration of competence, at a minimum, requires evidence in demonstrating management methods/techniques of hives, harvesting bee products and processing at least one bee product.
6. Glossary of terms
* *‘Beehive’* may include, but is not limited to a box-like structure in which the bees live. It can be a natural habitat, a natural shelter, made by the bees or human-made.
* *‘Beekeeping’* includes, but is not limited to, the care and maintenance of bee colonies by humans.
* 'Apiary' refers to a place where bees are kept, a collection of beehives.
* *Hazards’* may include, but are not limited to, bee attacks, toxicity, fumes, health hazards, damage to non-target organisms, environmental damage, residues in food or feedstuffs, uneven surfaces, manual handling, solar radiation, tools and equipment, dusts and noise.
* *'Safety requirements'* may include, but are not limited to, safe systems and procedures for handling, transporting and storing bee products, safe operation of bee-keeping equipment, safe procedures for handling bees and risk control, manual handling, maintaining personal hygiene, safety procedures for protecting others, outdoor work and the use of personal protective equipment.
* *'Workplace procedures'* may include, but are not limited to; work notes, plans, product labels, manufacturer’s specifications, operator’s manuals, safety plans, fire control, waste disposal, recycling, re-use guidelines, workplace productivity standards and supervisor’s oral or written instructions.
1. Regulations and legislation relevant to this unit standard include the following:
* Labour Act, No. 11, 2007
* Regulations relating to the Health and Safety of employees at work, 1997
* Namibia Agriculture Policy, 2015
* Fertilisers, farm feeds and agriculture and stock remedies Act, No. 46, 1998
* Biosafety Act, No. 7, 2006
* Water Resources Management Act, No. 24, 2004
* Environmental Management Act, No. 7, 2007
* Pollution Control and Waste Management Bill, 2003
* National Policy on Human and Wildlife Conflict Management, 2009
* Agronomic Industry Act, 20, 1992
* Climate Change Policy, 2011
* Standards Act 18, 2005, Standards Regulations: Standards Act, 2005 and relevant Namibian Standards as established
* All current sets of *Good Agricultural Practices* (GAP) to which Namibia subscribes and Global GAP that regulate agricultural products entering a country to which Namibian producers may export.

and all subsequent amendments to any of the above

**Quality Assurance Requirements**

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority on [www.namqa.org](http://www.namqa.org) and the Namibia Training Authority on [www.nta.com.na](http://www.nta.com.na).

**Elements and Performance Criteria**

**Element 1. Use beekeeping equipment and Personal Protective Equipment**

**Range**

Personal Protective Equipment (PPE) may include, but are not limited to, boots, rubber boots, bee hats, overalls, beekeeping protective jacket, bee suit, and gloves.

**Performance criteria**

1.1 Beekeeping equipment is selected.

1.2. Beekeeping PPE is selected.

**Element 2. Manage a beehive**

**Range**

Environmental requirements at a minimum includes climate, nutrient base, natural enemies and protection against various adverse conditions.

**Performance criteria**

2.2 Selection of (apiary) is demonstrated.

2.3 Capturing and placing a swarm in a beehive is demonstrated.

2.4 Hazards are identified, risks assessed, and suitable controls mitigated.

2.5 Caring for a beehive and housing a colony of honeybees is demonstrated.

**Element 3.** **Demonstrate techniques of processing of bee products**

**Range**

Processing includes harvesting, preparing, packaging, labelling and storing.

Products of the bees may include but are not limited to, honey, bee wax, pollen, royal jelly, and propolis.

**Performance criteria**

3.1 Bee products to be processed are recalled.

3.2 Bee and beehive products are harvested.

3.3 Bee product processing techniques are demonstrated.

**Registration Data**

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| **Subfield:** | Natural Resource Management |
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| **Date first registered:** |  |
| **Date this version registered:** |  |
| **Anticipated review:** |  |
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| **Body responsible for review:** | Namibia Training Authority |