

**NATIONAL COUNCIL FOR TECHNICAL AND VOCATIONAL EDUCATION AND
TRAINING**



FEBRUARY 2023

PROPOSED OCCUPATIONAL STANDARDS

OCCUPATION: TEA PRODUCTION AND PROCESSING TECHNICIAN

LEVEL: NTA 4

TABLE OF CONTENT

CONTENTS

ABBREVIATIONS	ii
GLOSSARY OF TERMS.....	iii
1.0. INTRODUCTION	1
2.0. OCCUPATIONAL STANDARD DEVELOPMENT PROCESS.....	2
3.0. THE SCOPE AND OVERVIEW OF THE OCCUPATION STANDARDS FOR TEA PRODUCTION AND PROCESSING TECHNICIANS	3
4.0. VALIDITY PERIOD.....	4
5.0. OCCUPATIONAL STANDARDS	4
5.1 OCCUPATIONAL STANDARDS FOR TEA PRODUCTION AND PROCESSING TECHNICIAN - NTA 4.....	5
TABLE 1: DACUM CHARTS FOR TEA PRODUCTION AND PROCESSING TECHNICIAN - NTA 4	21

ABBREVIATIONS

B.O.P	Broken Orange Pekoe
B.P	Broken Pekoe
CTC	Crush, Tear, Curl (A method of processing broken black tea with a tea leaf cutter)
F.B.O.P	Flowery Broken Orange Pekoe
F.O.P	Flowery Orange Pekoe
LTP	Laurie Tea Processer
NACTVET	National Council for Technical and Vocational Education and Training
NOS	National Occupational Standards
O.P	Orange Pekoe
OS	Occupational Standards
TET	Technical Education and Training
TVET	Technical and Vocational Education and Training

GLOSSARY OF TERMS

Circumstantial Knowledge:	Detailed knowledge, which allows the decision-making in regard to different circumstances and cross cutting issues.
Competence:	The competence to use knowledge, understanding, practical, and thinking skills to perform effectively to the workplace standards required in employment.
Competency:	A description of the ability one possesses when able to perform a given occupational task effectively and efficiently.
Competency-based Education:	An instructional programme that derives its content from validated tasks and bases assessment on the learner's performance.
Curriculum:	A description or composite of statements about "what is to be learned" by the trainee/student in a particular instructional programme; a product that states the "intended learning outcomes".
Educational/Training Programme:	The complete curriculum and instruction (what and how) that is designed to prepare a person for employment in a job or other particular performance situation.
Occupation:	A specific position requiring the performance of specific tasks - essentially the same tasks are performed by all employees having the same title.
Occupational Area:	This is a broad grouping of related jobs. (Example: catering service).
Occupational Standards:	Specific requirements of competences for personnel in a particular occupational area, including knowledge and relevant attitudes. They also act as performance tools of assessment of the prescribed outcomes.
Occupational/Job Analysis:	A process used to identify the tasks that are important to employees in any given occupation.
Performance Criteria:	Indicate expected end results or outcomes in the form of evaluative statements.
Skills:	The ability to perform occupational tasks with a high degree of proficiency within a given occupation. Skill is conceived of as a

composite of three completely interdependent components: cognitive, affective, and psychomotor.

Standards:	A set of statements, which, if proved true under working conditions, means that an individual is meeting an expected level and type of performance.
Task Analysis:	The process of analysing each task to determine the steps, circumstantial knowledge, attitudes, performance criteria, tools and materials needed, as well as safety concerns required for the employees performing it. Task: A work activity that has a definite beginning and ending, is observable or measurable, consists of two or more definite steps, and leads to products, service, or decisions.
Underpinning Knowledge:	Crucial knowledge that an individual must acquire in order to demonstrate competences that are associated in performing a given task.
Verification Process:	The process of having experts review and confirm the importance of the task (competency) statements identified through occupational analysis. Other questions, such as the degree of task learning difficulty are also frequently asked. This process is also sometimes referred to as validation.
Occupational Competence:	The application of knowledge and skills that consistently meet the standards required by the working conditions.

1.0. INTRODUCTION

Technical Education and Training (TET) is one of the most important education sub-sectors in Tanzania, responsible for developing a skilled workforce to support the country's industrialization economic agenda. *Tanzania's Development Vision 2025* intends to raise the country's economy to a middle-income status. This requires a skilled workforce that is aligned with the needs of the public and private sectors of the economy. The National Council for Technical Education has begun the job of drafting Occupational Standards that will eventually be adopted as National Occupational Standards for TET in order to ensure that it meets the needs of the labour market and the country's economic agenda.

National Occupational Standards (NOS) are performance criteria that are matched with labour market demands. Each National Occupation Standard describes functions, performance standards, and knowledge/understanding for one important function or task. They combine skills, knowledge, and attitudes to describe best practice. They are useful tools for establishing job roles, personnel recruiting, supervision, and appraisal, as well as TET standards. They're also helpful for benchmarking and harmonizing qualifications on a national and international level. Standards, in general, provide a solid framework for high-quality TET that is labour market-relevant, current, and consistent in delivery across all public and private institutions.

However, it must be noted that, Occupational Standards and Training standards/qualifications standards are different. Occupational standards are defined in terms of activities performed by a person in a selected occupation and they are usually defined by employers following procedures agreed upon by all stakeholders. Education and training standards are developed from the activities defined in occupational standards, and they include learning objectives to ensure that the necessary skills and knowledge are developed by a person to enable him or her to function at an agreed level in an occupation. Education and Training standards are used to define curricula in training institutions. It is however critical that there must be a direct link between the occupational standards and the training standards to respond to the demands of the labour market.

In TET delivery, Tanzania adopted the Competence Based Education and Training (CBET) approach. The CBET approach focuses on providing learners with the skills and knowledge required to meet the occupational standards. Occupational standards are thus the starting point for developing

competency-based training (CBET) programmes. TET institutions will be required to benchmark their curricula with relevant occupational standards.

Occupational Standards are developed based on a given occupation's current and future demands. As a result, they serve as a means of bridging the gap between the worlds of employment and technical education and training (TET).

Tea Production and Processing Technician has its own set of occupational standards. The document explains how the occupational standards were developed, as well as the scope, the occupational profile in the form of DACUM charts, and the Occupational Standards.

2.0. OCCUPATIONAL STANDARD DEVELOPMENT PROCESS

The Occupational standard development process began with an examination of major documents that guide Tanzanian skill development. The *10-year National Skills Development Strategy (2016-2026)* was one of the documents reviewed, and it outlined six (6) economic sectors that should be prioritized when developing skills development programmes.

These sectors include: Transport and Logistics, Tourism and Hospitality, Agribusiness, Construction, Energy and ICT. NACTE labour market reports were also used in the literature review to determine the skills demand in the Tanzanian labour market as a whole.

After the literature review, a workshop comprised of expert workers and educators with substantial knowledge and experience in the occupation conducted an occupational analysis utilizing the DACUM approach to produce the occupational profile. The analysis resulted in DACUM Charts, which are attached as **Appendix 1** to this document.

The occupational standards were then developed. Experts in Occupational Analysis and the Development of Occupational Standards facilitated the workshop. Interviews, online surveys, and a stakeholder forum were used to validate the Occupational Standards. Engineers, Supervisory Technicians on the job, and experienced Tea Production and Processing Technicians were key informants in the survey to discover occupational trends. This information was used to gain insight from the workplaces regarding trends and changes in the profession, including how well graduates are prepared for working in the occupation. A total of ... online surveys were completed by experts from the labour market across the country. Apart from the surveys aiding in defining the scope for

the occupational analysis, they also served to engage a wide cross-section of experts in the occupation. Apart from this, the stakeholders' forum was attended by ... participants from different parts of the country representing various companies.

3.0. THE SCOPE AND OVERVIEW OF THE OCCUPATION STANDARDS FOR TEA PRODUCTION AND PROCESSING TECHNICIANS

These standards cover a broad range of duties and tasks that can be performed by a Tea Production and Processing Technician. However, the occupational standards are not meant to replace individual job descriptions. Instead, they are to be used for guidance in defining skill levels and knowledge for the technician in specific settings or positions. The Tea Production and Processing Technician may perform tasks in a number of key areas of the Occupational Standards, but not necessarily in all areas. For example, in the process of tea quality control, other individuals may be employed or designated to perform specific tasks.

Tea Production and Processing Technicians should be engaged in tea garden production and management, processing fresh tea leaves into primary and refined tea products, tea packaging and storage, tea quality control, tea sales and cost accounting.

Generally, Tea Production and Processing Technician performs the following responsibilities:

- a) Tea tree pruning
- b) Tea picking and preservation
- c) Tea processing preparation
- d) Tea garden construction
- e) Tea garden management
- f) Equipment operation and maintenance
- g) Tea packaging and storage
- h) Disease and insect pest control of tea trees
- i) Work safety in tea gardens
- j) Tea processing technology control

- k) Tea quality control
- l) Tea marketing and cost accounting and control

The Occupational Standards have been clustered into NTA qualification levels i.e. NTA level 4, 5 and 6.

4.0. VALIDITY PERIOD

Due to the rapid development of technology, the validity period of occupational standards is 3-5 years. The review will proceed in the same manner as the one before it, with new occupational standards being developed based on current trends of the labour market.

5.0. OCCUPATIONAL STANDARDS

5.1 OCCUPATIONAL STANDARDS FOR TEA PRODUCTION AND PROCESSING TECHNICIAN - NTA 4

OCCUPATION	TEA PRODUCTION AND PROCESSING TECHNICIAN	OCCUPATION CODE	
DUTY TITLE	TEA TREE PRUNING	DUTY NO.	401
TASK TITLE	LIGHT PRUNING OF TEA TREES	TASK NO.	4011
PERFORMANCE CRITERIA	The person performing this task must be able to perform the light pruning of tea trees in accordance with the standards and technical requirements for the light pruning of tea trees.		
RANGE STATEMENT	The task can be performed in the tea gardens under the supervision of the Senior Tea Production and Processing Technician. The tools and equipment to be used include: 1. Tea tree cropper.		
EVIDENCE REQUIREMENT			
PRACTICAL PERFORMANCE		UNDERPINNING KNOWLEDGE	
The person performing this task must be able to do the following: 1. Confirm the cycles and time of the light pruning of tea trees; 2. Prepare and test the tea tree cropper; 3. Clean up messy branches; 4. Adjust the tree shape; 5. Promote the growth of new shoots; 6. Retain appropriate leaves; 7. Provide care after pruning; 8. Clean up the pruning debris and residues; 9. Monitor growth status.		Detailed knowledge about: 1.0 Methods The person performing this task must be able to explain how to: 1.1 Remove dead and diseased branches; 1.2 Correct the tree crown; 1.3 Retain new shoots and control branches; 1.4 Avoid excessive pruning; 1.5 Smear pruning wounds; 1.6 Regularly observe the growth of tea trees. 2.0 Principles The person performing this task must be able to explain the following principles: 2.1 The principle of the relationship between the light pruning standard of tea trees and the growth and development of tea trees; 2.2 The principle of the relationship between the light pruning cycle and time of tea trees and the growth and development of tea trees. 3.0 Theories The person performing this task must be able to	

	explain the following: 3.1 Cultivation of tea tree crowns; 3.2 The relationship between the light pruning shape of tea trees and tea yield. 4.0 Essential Skills 4.1 Communication skills; 4.2 Teamwork skills; 4.3 Independent thinking skills.
DESCRIPTION OF THE END PRODUCT / SERVICE	The light pruning of tea trees is completed through independent use of a cropper in accordance with pruning standards.
CIRCUMSTANTIAL KNOWLEDGE	Detailed knowledge about: 1. Occupational safety and health; 2. Use and maintenance of tea tree croppers; 3. Climatic conditions; 4. Cultivation and maintenance of tea garden soil; 5. Diseases and insect pest control.

OCCUPATION	TEA PRODUCTION AND PROCESSING TECHNICIAN	OCCUPATION CODE	
DUTY TITLE	TEA TREE PRUNING	DUTY NO.	401
TASK TITLE	STEREOTYPE PRUNING OF TEA TREES	TASK NO.	4012
PERFORMANCE CRITERIA	The person performing this task must be able to perform stereotype pruning in accordance with the standards for tea tree stereotype pruning.		
RANGE STATEMENT	The task can be performed in the tea gardens under the supervision of the Senior Tea Production and Processing Technician. The tools and equipment to be used include: 1. Pruner; 2. Tea tree cropper.		
EVIDENCE REQUIREMENT			
PRACTICAL PERFORMANCE		UNDERPINNING KNOWLEDGE	
The person performing this task must be able to do the following: 1. Determine the period and frequency of the stereotype pruning of tea trees; 2. Prepare and test pruners or tea tree croppers; 3. Determine the standards and methods for stereotype pruning of tea trees; 4. Determine the pruning height; 5. Use pruning tools to complete the stereotype pruning of tea trees; 6. Provide care after pruning; 7. Clean up the pruning debris; 8. Perform fertilization and watering; 9. Monitor the growth of tea trees.		Detailed knowledge about: 1.0 Methods The person performing this task must be able to explain how to: 1.1 Remove dead and diseased branches; 1.2 Prune weak and intersecting branches, internal branches, and branches with excessive growth; 1.3 Prune the top and trunk; 1.4 Smear an appropriate amount of pruning cream to the pruning area; 1.5 Clean up the cut branches. 2.0 Principles The person performing this task must be able to explain the following principles: 2.1 The principle of unifying the standards for the stereotype pruning of tea trees with the requirements for high-quality tree crowns; 2.2 The principle of unifying the period and frequency of tea tree stereotype pruning with the requirements for high-quality tree crowns.	

	3.0 Theories The person performing this task must be able to explain the following: 3.1 The apical dominance of tea tree growth; 3.2 The cultivation of tea tree crowns. 4.0 Essential Skills 4.1 Communication skills; 4.2 Teamwork skills; 4.3 Independent thinking skills.
DESCRIPTION OF THE END PRODUCT / SERVICE	The pruning tools are independently selected, and the stereotype pruning of tea trees is carried out in accordance with the standard for the stereotype pruning of tea trees at different times.
CIRCUMSTANTIAL KNOWLEDGE	Detailed knowledge about: 1. Occupational safety and health; 2. Use and maintenance of tea tree croppers; 3. Climatic conditions; 4. Cultivation and maintenance of tea garden soil; 5. Diseases and insect pest control.

OCCUPATION	TEA PRODUCTION AND PROCESSING TECHNICIAN	OCCUPATION CODE	
DUTY TITLE	TEA TREE PRUNING	DUTY NO.	401
TASK TITLE	DEEP PRUNING OF TEA TREES	TASK NO.	4013
PERFORMANCE CRITERIA	The person performing this task must be able to perform deep pruning in accordance with the standards for tea tree deep pruning.		
RANGE STATEMENT	The task can be performed in the tea gardens under the supervision of the Senior Tea Production and Processing Technician. The tools and equipment to be used include: 1. Tea tree cropper.		
EVIDENCE REQUIREMENT			
PRACTICAL PERFORMANCE		UNDERPINNING KNOWLEDGE	
The person performing this task must be able to do the following: 1. Determine the deep pruning cycle and standards for tea trees; 2. Prepare and test the tea tree cropper; 3. Remove dead and weak branches; 4. Determine the pruning height; 5. Prune the trunk; 6. Prune the lateral branches; 7. Treat the pruning wound; 8. Perform fertilization and watering; 9. Organise the pruning waste; 10. Monitor the growth process.		Detailed knowledge about: 1.0 Methods The person performing this task must be able to explain how to: 1.1 Determine specific goals for pruning; 1.2 Prune the top and lateral branches; 1.3 Combine short pruning and long pruning to prune; 1.4 Determine the pruning angle; 1.5 Clean up the pruning debris; 1.6 Perform close monitoring of growth. 2.0 Principles The person performing this task must be able to explain the following principles: 2.1 The principle of the relationship between the deep pruning of tea trees and the growth and development of tea trees. 3.0 Theories The person performing this task must be able to explain the following: 3.1 Cultivation of tea tree crowns; 3.2 The relationship between the deep pruning of tea trees and tea yield. 4.0 Essential Skills 4.1 Communication skills; 4.2 Teamwork skills;	

	4.3 Independent thinking skills.
DESCRIPTION OF THE END PRODUCT / SERVICE	The deep pruning of tea trees is completed through independent use of a cropper in accordance with pruning standards.
CIRCUMSTANTIAL KNOWLEDGE	Detailed knowledge about: 1. Occupational safety and health; 2. Use and maintenance of tea tree croppers; 3. Climatic conditions; 4. Cultivation and maintenance of tea garden soil; 5. Diseases and insect pest control.

OCCUPATION	TEA PRODUCTION AND PROCESSING TECHNICIAN	OCCUPATION CODE	
DUTY TITLE	TEA PICKING AND PRESERVATION	DUTY NO.	402
TASK TITLE	MANUAL PICKING OF TEA LEAVES	TASK NO.	4021
PERFORMANCE CRITERIA	The person performing this task must be able to manually pick tea in accordance with the picking standards and picking techniques.		
RANGE STATEMENT	The task can be performed in the tea gardens under the supervision of the Senior Tea Production and Processing Technician. The tools and equipment to be used include: 1. Breathable storage and transportation tools such as bamboo baskets and pack baskets; 2. Electric tea clippers and other picking and cutting tools.		
EVIDENCE REQUIREMENT			
PRACTICAL PERFORMANCE		UNDERPINNING KNOWLEDGE	
The person performing this task must be able to do the following: 1. Determine the tea picking period and standards; 2. Choose tea-picking tools; 3. Choose tea leaves; 4. Choose manual tea picking methods, such as pinching and picking, and raising hand plucking; 5. Using manual tea picking methods for tea picking, such as topping picking, retaining true leaf picking, and retaining fish leaf picking.		Detailed knowledge about: 1.0 Methods The person performing this task must be able to explain how to: 1.1 Prepare electric tea clippers and other picking and cutting tools, as well as breathable storage and transportation tools such as bamboo baskets and pack baskets; 1.2 Choose tender leaves and shoot tips; 1.3 Choose pinching and picking, and raising hand plucking; 1.4 Place tea leaves in containers in a reasonable manner to avoid squeezing. 2.0 Principles The person performing this task must be able to explain the following principles: 2.1 The principle of unifying picking standards and quality requirements; 2.2 The principle of coordination between picking period and production and processing. 3.0 Theories The person performing this task must be able to explain the following: 3.1 The relationship between different fresh leaf tenderness and tea quality; 3.2 The effect of picking methods on the growth	

	and development of tea trees. 4.0 Essential Skills 4.1 Communication skills; 4.2 Teamwork skills; 4.3 Independent thinking skills.
DESCRIPTION OF THE END PRODUCT / SERVICE	The picking tools are independently selected, the picking period is determined, and the manual picking of tea is carried out in accordance with the picking standards.
CIRCUMSTANTIAL KNOWLEDGE	Detailed knowledge about: 1. Occupational safety and health; 2. Use and maintenance of picking tools; 3. Characteristics of tea storage and transportation tools; 4. Climatic conditions.

OCCUPATION	TEA PRODUCTION AND PROCESSING TECHNICIAN	OCCUPATION CODE	
DUTY TITLE	TEA PICKING AND PRESERVATION	DUTY NO.	402
TASK TITLE	MECHANICAL PICKING OF TEA	TASK NO.	4022
PERFORMANCE CRITERIA	The person performing this task must be able to mechanically pick tea in accordance with the picking standards and picking techniques.		
RANGE STATEMENT	The task can be performed in the tea gardens under the supervision of the Senior Tea Production and Processing Technician. The tools and equipment to be used include: 1. Tea-picking machine; 2. Breathable storage and transportation tools such as bamboo baskets, and storage and transportation bags.		
EVIDENCE REQUIREMENT			
PRACTICAL PERFORMANCE		UNDERPINNING KNOWLEDGE	
The person performing this task must be able to do the following: 1. Choose tea-picking machinery; 2. Conduct equipment debugging and testing; 3. Determine the tea picking period; 4. Prepare tea gardens; 5. Use tea-picking machines for tea picking; 6. Carry out regular inspection and maintenance of equipment; 7. Record and analyse data.		Detailed knowledge about: 1.0 Methods The person performing this task must be able to explain how to: 1.1 Confirm that the tea-picking machine can operate normally; 1.2 Pick in spring or autumn; 1.3 Set mechanical parameters; 1.4 Carry out mechanical picking. 2.0 Principles The person performing this task must be able to explain the following principles: 2.1 The working principle of tea-picking machine. 3.0 Theories The person performing this task must be able to explain the following: 3.1 The relationship between different fresh leaf tenderness and tea component contents; 3.2 The relationship between different picking standards and tea quality. 4.0 Essential Skills 4.1 Communication skills; 4.2 Teamwork skills; 4.3 Independent thinking skills.	
DESCRIPTION OF THE END		The tea-picking machines are independently	

PRODUCT / SERVICE	selected, the picking period is determined, and the manual picking of tea is carried out in accordance with the picking standards.
CIRCUMSTANTIAL KNOWLEDGE	Detailed knowledge about: 1. Occupational safety and health; 2. Use and maintenance of tea-picking machine; 3. Characteristics of tea storage and transportation tools; 4. Climatic conditions.

OCCUPATION	TEA PRODUCTION AND PROCESSING TECHNICIAN	OCCUPATION CODE	
DUTY TITLE	TEA PICKING AND PRESERVATION	DUTY NO.	402
TASK TITLE	STORAGE AND PRESERVATION OF FRESH TEA LEAVES	TASK NO.	4023
PERFORMANCE CRITERIA	The person performing this task must be able to timely store and transport the picked fresh leaves to the factory while keeping them fresh, and hand them over for processing.		
RANGE STATEMENT	The task can be performed in the tea gardens under the supervision of the Senior Tea Production and Processing Technician. The tools and equipment to be used include: 1. Breathable storage and transportation tools such as bamboo baskets, bamboo crates, and mesh bags; 2. Transfer vehicles.		
EVIDENCE REQUIREMENT			
PRACTICAL PERFORMANCE		UNDERPINNING KNOWLEDGE	
The person performing this task must be able to do the following: 1. Determine the freshness of fresh leaves; 2. Conduct fresh leaf sorting/bagging; 3. Conduct timely transportation of fresh leaves in batches; 4. Spread and wither fresh leaves after entering the factory; 5. Clean the storage environment.		Detailed knowledge about: 1.0 Methods The person performing this task must be able to explain how to: 1.1 Determine the storage temperature of fresh tea leaves; 1.2 Determine the storage humidity of fresh tea leaves; 1.3 Determine the thickness of fresh tea leaves stored and spread; 1.4 Avoid mechanical damage to fresh leaves. 2.0 Principles The person performing this task must be able to explain the following principles: 2.1 Principles for quality control of fresh tea. 3.0 Theories The person performing this task must be able to explain the following: 3.1 Postharvest fresh leaf respiration; 3.2 Factors affecting the quality of fresh leaves after harvest. 4.0 Essential Skills 4.1 Communication skills;	

	4.2 Teamwork skills; 4.3 Independent thinking skills.
DESCRIPTION OF THE END PRODUCT / SERVICE	Under the premise of ensuring the quality of fresh leaves, the harvested fresh leaves are independently selected and stored in suitable utensils and transported to the factory.
CIRCUMSTANTIAL KNOWLEDGE	Detailed knowledge about: 1. Occupational safety and health; 2. Vehicle driving and maintenance; 3. Characteristics of tea storage and transportation tools; 4. Climatic conditions.

OCCUPATION	TEA PRODUCTION AND PROCESSING TECHNICIAN	OCCUPATION CODE	
DUTY TITLE	TEA PROCESSING PREPARATION	DUTY NO.	403
TASK TITLE	PREPARATION OF RAW MATERIALS OF FRESH LEAVES	TASK NO.	4031
PERFORMANCE CRITERIA	The person performing this task must be able to prepare raw materials of fresh tea leaves in accordance with processing requirements.		
RANGE STATEMENT	The task can be performed in the fresh leaf workshops under the supervision of the Senior Tea Production and Processing Technician. The tools and equipment to be used include: 1. Record book; 2. Weighing equipment; 3. Fresh leaf storage equipment and utensils; 4. Temperature and humidity control equipment; 5. Fresh leaf graders and fresh leaf dehydrators.		
EVIDENCE REQUIREMENT			
PRACTICAL PERFORMANCE		UNDERPINNING KNOWLEDGE	
The person performing this task must be able to do the following: 1. Weigh and record; 2. Complete the pre-inspection and grading of fresh leaf raw materials; 3. Remove deteriorated fresh leaves and non tea debris; 4. Spread and dry fresh leaves.		Detailed knowledge about: 1.0 Methods The person performing this task must be able to explain how to: 1.1 Accurately record the quality of fresh leaves; 1.2 Complete the pre-inspection and grading of fresh leaves; 1.3 Remove deteriorated fresh leaves and non tea debris; 1.4 Determine the thickness, temperature, humidity, time, and other conditions for spreading fresh leaves. 2.0 Principles The person performing this task must be able to explain the following principles: 2.1 Water loss characteristics of fresh leaves. 3.0 Theories The person performing this task must be able to explain the following: 3.1 The relationship between water loss and quality of fresh leaves; 3.2 The standard for moderately spreading fresh leaves.	

	4.0 Essential Skills 4.1 Communication skills; 4.2 Teamwork skills; 4.3 Independent thinking skills.
DESCRIPTION OF THE END PRODUCT / SERVICE	The fresh leaf raw materials are prepared in accordance with the tea processing requirements before processing.
CIRCUMSTANTIAL KNOWLEDGE	Detailed knowledge about: 1. Occupational safety and health; 2. Use and debugging of weighing equipment; 3. Operating procedures for fresh leaf graders and fresh leaf dehydrators; 4. Quality control of fresh leaves.

OCCUPATION	TEA PRODUCTION AND PROCESSING TECHNICIAN	OCCUPATION CODE	
DUTY TITLE	TEA PROCESSING PREPARATION	DUTY NO.	403
TASK TITLE	PREPARATION OF TOOLS, EQUIPMENT AND SITES	TASK NO.	4032
PERFORMANCE CRITERIA	The person performing this task must be able to prepare tools, equipment and sites in accordance with the tea processing requirements.		
RANGE STATEMENT	The task can be performed in the tea processing workshops under the supervision of the Senior Tea Production and Processing Technician. The tools and equipment to be used include: 1. Cleaning tools; 2. Tea making auxiliary tools; 3. Equipment debugging tools.		
EVIDENCE REQUIREMENT			
PRACTICAL PERFORMANCE		UNDERPINNING KNOWLEDGE	
The person performing this task must be able to do the following: 1. Clean the processing site; 2. Clean and arrange equipment and auxiliary tools; 3. Check the power supply, switches, speed control devices, etc. of mechanical equipment.		Detailed knowledge about: 1.0 Methods The person performing this task must be able to explain how to: 1.1 Clean the processing site; 1.2 Arrange equipment and auxiliary tools; 1.3 Check the power supply, switches, speed control devices, etc. of mechanical equipment to ensure that the processing site has sufficient electricity and water sources. 2.0 Principles The person performing this task must be able to explain the following principles: 2.1 The safety production principle of tea; 2.2 The working principle of tea processing equipment. 3.0 Theories The person performing this task must be able to explain the following: 3.1 Tea processing process flow; 3.2 Equipment usage and operation specifications; 3.3 Requirements for the use of tea-making tools.	

	4.0 Essential Skills 4.1 Communication skills; 4.2 Teamwork skills; 4.3 Independent thinking skills.
DESCRIPTION OF THE END PRODUCT / SERVICE	Before processing, tools, equipment and sites are prepared in accordance with the tea processing requirements.
CIRCUMSTANTIAL KNOWLEDGE	Detailed knowledge about: 1. Occupational safety and health; 2. Environmental and equipment hygiene requirements for tea processing; 3. The role of tea-making auxiliary tools and materials; 4. Basic knowledge of electrical safety.

TABLE 1: DACUM CHARTS FOR TEA PRODUCTION AND PROCESSING TECHNICIAN
- NTA 4

DUTIES	TASKS	ENABLERS
1.0 Tea tree pruning	1.1 Light pruning of tea trees.	General skills and knowledge • Characteristics of tea tree growth and development • Types of tea tree pruning • Standards and techniques of tea tree pruning Tools and equipment • Tea tree croppers • Pruners Materials • Safety production equipment such as gloves, safety shoes, and masks • Lubricating oil • Gasoline Requirements for employees • Teamwork spirit, communication, and independent thinking
	1.2 Stereotype pruning of tea trees.	
	1.3 Deep pruning of tea trees.	
2.0 Tea picking and preservation	2.1 Manual picking of tea leaves.	General skills and knowledge • Characteristics of tea tree growth and development • Determination of tea tenderness • Types of tea picking • Standards and methods for tea picking • Postharvest fresh leaf respiration • Quality control of fresh leaves Tools and equipment • Tea-picking machines • Electric tea clippers and other picking and cutting tools • Breathable storage and transportation tools such as bamboo baskets and pack baskets
	2.2 Mechanical picking of tea.	
	2.3 Storage and preservation of fresh tea leaves.	

		• Transfer vehicles Materials • Safety production equipment such as gloves and protective shoes • Gasoline • Lubricating oil • Bamboo and bags Requirements for employees • Teamwork spirit, communication, and independent thinking
3.0 Tea processing preparation	3.1 Preparation of raw materials of fresh leaves.	General skills and knowledge • Requirements for spreading fresh tea leaves • Tea processing process flow • Preparation of tea processing tools, equipment and sites Tools and equipment • Record book • Weighing equipment • Fresh leaf storage equipment and utensils • Temperature and humidity control equipment • Fresh leaf graders and fresh leaf dehydrators • Cleaning tools • Tea making auxiliary tools • Equipment testing tools Materials • Clean production equipment such as shoe covers, masks and hats • Raw materials of fresh tea leaves • Tea processing equipment Requirements for employees • Teamwork spirit, communication, and independent thinking
	3.2 Preparation of tools, equipment and sites.	

