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# PINE NUTS PROCESSOR

## Competency Standard

### National Vocational Certificate Level 1-4

Version 1 - February 2020



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## 1. Introduction

Pakistan is ranked as the second biggest producer of Pine nuts just after China. Chilgoza / Pine nut. It is found in western Himalayan forests of Pakistan and Afghanistan. Chilgoza/Pines have similar appearance as stone Pines; featuring long slender, pointed kernels. These are famous around the globe for variety, quality taste and color. Major importers of Pakistani Pine nuts are China, US, UK, Scandinavian countries, Middle East and Europe.

Several countries of the Far East, Central Asia and Russian Federation also import Pine nuts in bulk quantity from Pakistan despite serious challenges of lingual and taxation barriers.

Pine trees grow in the wild cold and taiga forest regions of the northern hemisphere. Interestingly, they are huge, straight erect trees with large stem and may reach up to 75 feet in height with pyramidal or umbrella like dense foliage cover. Even then Pakistani Pine nuts remain successful in attracting very good response from the local buyers than Pine nuts of other countries on the basis of a peculiar taste and fragrance. Pine nut kernels are, indeed, very good source of plant derived nutrients, essential minerals, vitamins and heart friendly mono-unsaturated fatty acids that help benefit in reducing cholesterol levels in the blood.

Pine nuts grow under special weather conditions and in specific region therefore regards as rear and precious commodity. One of the important reasons of loses among Pine nuts is not availability of any skill training for its harvesting/cutting, roasting and processing. The process of value addition in the same region will also boost its value and provide more benefits to the growers and processors. The locals of Waziristan Agency try to sow its seed but only 3-5 % seeds are successful during cultivation. Moreover, growers do not use appropriate techniques to cut the cones from trees and as a result a lot of damage is made to the cones. Similarly, wrong methods of extracting Pine nuts from cone and while grading and packing of its nuts make it more vulnerable. Keeping in mind these harms and damages it is mandatory to introduce comprehensive competency based trainings for Pine nut processing.

Competency based national vocational qualifications have been developed by NAVTTTC to train the unskilled men and women on technical and entrepreneurial skills to be employed



/ self-employed and inevitably set sustainable impact on their lives by increase in their livelihood income.

Training in the course is based on defined competency standards, which are industry oriented.

## 2. Purpose of Qualification

In this training program trainee will learn and acquire specialized knowledge and skills required to function as a Pine Nuts Processor both at domestic and commercial levels. Pine Nuts processor will be responsible to maintain safety, maintain tools & equipment, Collection of Pine Cones, extracting Pine Cones, Peeling of Pine Nuts, Roasting of Pine Nuts, Storing of Pine Nuts and Marketing of Pine Nuts as per the procedures involved. The specific objectives of developing these qualifications are as under:

- Improve the overall quality of training delivery and setting national benchmarks for training of Pine Nuts Processor in the country
- Provide flexible pathways and progressions to learners enabling them to receive relevant, up-to-date and recent skills
- Provide basis for competency-based assessment which is recognized and accepted by employers
- Establish a standardized and sustainable system of training for Pine Nuts Processor in the country

## 3. Date of Validation

These national qualifications have been validated by the Qualification Validation Committee (QVC) on 02-03 November, 2017 and will remain currency until December, 2020.

## 4. Date of Review

These national qualifications may be reviewed in November, 2023.



## 5. Code of Qualification

The International Standard Classification of Education (ISCED) is a framework for assembling, compiling, and analyzing cross-nationally comparable statistics on education and training, ISCED codes for these qualifications as assigned as follow:

Qualification Title	Code
National Vocational Certificate Level – 1, in (Food Processing) “Pine nut / Chilgoza Processor	0721DNP00
National Vocational Certificate Level – 2, in (Food Processing) “Pine nut / Chilgoza Processor”	0721DNP01
National Vocational Certificate Level – 3, in (Food Processing) “Pine nut / Chilgoza Processor”	0721DNP02
National Vocational Certificate Level – 4, in (Food Processing) “Pine nut / Chilgoza Processor”	0721DNP03



## 6. Qualification Development Committee

The Qualifications Development Committee consisted of following members:

Sr. No.	Name	Designation	Organization	Email	Contact No.
1.	Mr. Muhammad Tufail	Project Director	FATADA, Peshawar	<a href="mailto:Aco-khyber@fatada.gov.pk">Aco-khyber@fatada.gov.pk</a>	03459509506
2.	Mr. Imran Khan	Training Coordinator	FATADA, Peshawar	<a href="mailto:tcoskills@fatada.gov.pk">tcoskills@fatada.gov.pk</a>	03339611644 4
3.	Mr. Arshad Farooq	Manager Skills	FATADA, Peshawar	<a href="mailto:managerskills@fatada.gov.pk">managerskills@fatada.gov.pk</a>	03335233490
4.	Mr. Sohail	CBT Section In charge	KP-TTB, Peshawar	<a href="mailto:Sohail.printing@gmail.com">Sohail.printing@gmail.com</a>	03009029806
5.	Mr. Zahid Durrani	Nuts Dealer / Exporter	Hunza Organics, Lahore	<a href="mailto:hunzaorganics@hotmail.com">hunzaorganics@hotmail.com</a>	03334349488
6.	Ms. Nighat Ara	Master Trainer / Expert	MDS Malakand	<a href="mailto:nighat2472@gmail.com">nighat2472@gmail.com</a>	03449614469
7.	Dr. Qazi Ihsan Mahboob	Professor	Agriculture University,	<a href="mailto:Qazi148@gmail.com">Qazi148@gmail.com</a>	03329769601
8.	Mr. Din Muhammad Wazir	Trainer	Wana Welfare Association		03331682400
9.	Mr. Sher Zaman Wazir	Chairman	Forest Deptt. Wana		09652122356 0343-9362581
10.	Mr. Zair Muhammad	Principal	Wana Welfare Association		095211326
11.	Mr. Saeed Sardar	Secretary	KP-TTB, Peshawar	<a href="mailto:Saeed_srdr@yahoo.com">Saeed_srdr@yahoo.com</a>	03339196510
12.	Mr. Tahir Bashir	M.D	Al Fareed Traders, Peshawar	<a href="mailto:Tahirbashir75@live.com">Tahirbashir75@live.com</a>	03218584999
13.	Mr. Hakim Khan	Master Trainer	MDS Peshawar	<a href="mailto:Hakimkhan72@gmail.com">Hakimkhan72@gmail.com</a>	03005700191
14.	Mr. Saeed Sardar	Secretary	KP-TTB, Peshawar	<a href="mailto:Saeed_srdr@yahoo.com">Saeed_srdr@yahoo.com</a>	03339196510
15.	Mr. Mushtaq Ahmed	AM Trainings	Punjab TEVTA, HQs Lahore		
16.	Syed Salman Shah	Manager Curriculum	P-TEVTA, HQs Lahore		
17.	Mr. Khalid Khan	Value Chain	MDS, Peshawar	<a href="mailto:Khalid.khatki@gmail.com">Khalid.khatki@gmail.com</a>	03009035100





## 7. Entry Requirements

The entry requirement for Pine Nuts Processor is given below.

Title of Qualification	Entry requirements
National Vocational Certificate level-1, in (Food Processing) “Pine nut / Chilgoza Processor”	Entry for assessment / training for this qualification is open. However, entry into formal training institutes, based on this qualification may require skills and knowledge equivalent to primary or literate preferably Middle with some working knowledge of this field.
<b>(0721DNP01)</b> National Vocational Certificate level-2, in (Food Processing) “Pine nut / Chilgoza Processor”	Entry for this qualification is person having National Vocational Certificate level 1, in (Food Processing) “Pine nut / Chilgoza Processor”.
<b>(0721DNP02)</b> National Vocational Certificate level-3, in (Food Processing) “Pine nut / Chilgoza Processor”	Entry for this qualification is person having National Vocational Certificate level 2, in (Food Processing) “Pine nut / Chilgoza Processor”.
<b>(0721DNP03)</b> National Vocational Certificate level-4, in (Food Processing) “Pine nut / Chilgoza Processor”	Entry for this qualification is person having National Vocational Certificate level 3, in (Food Processing) “Pine nut / Chilgoza Processor”. In addition to this the person must have matriculation with fundamental knowledge of marketing of Pine nuts (Demand and supply sides). In addition to this he/she must be computer literate and have knowledge of food standards.



## 8. Regulations for the Qualification and Schedule of Units

- Pine nuts Product foods and hazards
- Product health and analysis
- Aflatoxins and its harms
- Food material good storage practices.
- ISO 9001:2008 Including core standards for health.
- Pakistan Standard and Quality Control Authority (PSQCA) Standards.
- Workplace regulations 1992 Ministry of Labor, Govt of Pakistan
- Deal with hazards in accordance with workplace instructions and legal requirements.
- The Management of Health and Safety at Work Regulations 1992 (dermatitis and asthma).
- Environment Protection Agency.
- Basic food and corporate social responsibility standards i.e.
  - Hazard Analysis and Critical Control Point HACCP
  - Global GAPoSA-8000



## 9. Summary of Competency Standards

Code	Name of Duty or (Module)	Level	Credit	Category
002100828	Develop Basic Literacy and Numeracy Skills	1	13	Generic
071300615	Maintain Personal Safety		04	Functional
0721DNP00A	Maintain Tools and Equipment		04	Technical
061100856	Develop Basic Computer Operating Skills	2	16	Generic
001100851	Develop Basic Communication Skills		04	Generic
102200843	Maintain Workplace Safety		04	Functional
0721DNP01	Collect Cones from Trees		06	Technical
0721DNP02A	Extract Pine Nuts from Cones	3	09	Technical
0721DNP02B	Perform Roasting of Pine Nuts		08	Technical
0721DNP02C	Perform Peeling of Pine Nuts for Kernel		08	Technical
0721DNP02D	Perform Handling and Storage		05	Technical
0721DNP03A	Assure Quality of Pine Nuts	4	17	Technical
041600460	Develop Professionalism		03	Generic
041300860	Develop Entrepreneurial Skills		10	Generic



## 10. Packaging of Qualification

The details of NCSs packaged in this qualification are as under:

<p style="text-align: center;"><b>(0721 DNP 03)</b> National Vocational Certificate Level – 4 in Pine nut / Chilgoza Processor</p>	<b>Develop Entrepreneurial Skills</b>
	0721DNP03B Develop Professionalism
	Develop Basic Computer Operating skills
	0721DNP02A Perform Handling and Storage
<p style="text-align: center;"><b>(0721 DNP 02)</b> National Vocational Certificate Level – 3 in Pine nut / Chilgoza Processor</p>	0721DNP02C Perform Peeling of Pine Nuts for Kernel
	0721DNP02B Perform Roasting of Pine Nuts
	0721DNP01B Extract Pine Nuts from Cones
<p style="text-align: center;"><b>(0721 DNP 01)</b> National Vocational Certificate Level – 2 in Pine nut / Chilgoza Processor</p>	0721DNP01A Collect Cones from Trees
	Maintain Workplace Safety
	Develop Basic Communication Skills
<p style="text-align: center;">National Vocational Certificate Level – 1 in Pine nut / Chilgoza Processor</p>	Maintain Tools and Equipment
	Maintain Personal Safety
	Develop Basic Literacy and Numeracy Skills



## 11. Detail of Competency Standards

### A: Develop Basic Literacy and Numeracy Skills

**Overview:** This competency standard covers the skills and knowledge required to apply basic Literacy & Numeracy skills, perform measurement and performs mathematical calculations.

Competency Units	Performance Criteria
<b>CU1. Apply basic Urdu Literacy skills</b>	<b><i>Trainee will be able to:</i></b> <b>P1</b> Apply basic reading skills <b>P2</b> Apply basic writing skills <b>P3</b> Apply speaking skills
<b>CU2. Apply basic English Literacy skills</b>	<b><i>Trainee will be able to:</i></b> <b>P1</b> Apply basic reading skills <b>P2</b> Apply basic writing skills <b>P3</b> Apply speaking skills
<b>CU3. Perform basic Numeracy skills</b>	<b><i>Trainee will be able to:</i></b> <b>P1</b> Perform Addition <b>P2</b> Perform Subtraction <b>P3</b> Perform Multiplication <b>P4</b> Perform Division
<b>CU4. Perform Basic Measurement Skills</b>	<b><i>Trainee will be able to:</i></b> <b>P1.</b> Collect appropriate measuring tools <b>P2.</b> Identify inch foot and yard <b>P3.</b> Identify millimeter, centimeter and meter

### Knowledge & Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore, he/she must be able to:

- K1.** Recognize Alphabets
- K2.** Prepare words from Alphabets
- K3.** Learn Meanings of words



- K4. Prepare sentences from words
- K5. Write simple sentences
- K6. Perform Basic speaking skills
- K7. Learn basic principles of addition, subtraction, multiplication and division
- K8. Describe measuring tools
- K9. Describe Basic measuring units and it's inter conversion.

### Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Read a text
- Write a text
- Speak
- Perform addition
- Perform subtraction
- Perform multiplication
- Perform division
- Record the results
- Inter convert measuring units.
- Calculate Volume.



## B: Maintain Personal Safety

**Overview:** This competency standard covers the skills and knowledge required to maintain personal protective equipment (PPE), Maintain First aid Box, Maintain Firefighting equipment, Prepare for emergencies and Respond to emergencies

Competency Units	Performance Criteria
<b>CU1. Maintain personal protective equipment (PPE)</b>	<b><i>Trainee will be able to:</i></b> <b>P1</b> Arrange PPEs as per requirement. <b>P2</b> Wear proper PPE as per nature of job. <b>P3</b> Store PPE at appropriate place after use.
<b>CU2. Maintain First aid Box</b>	<b><i>Trainee will be able to:</i></b> <b>P1</b> Ensure availability of first aid box. <b>P2</b> Check first aid box for requisite emergency medicines against checklist. <b>P3</b> Check expiry date of medicines. <b>P4</b> Perform mock exercise against electric shock. <b>P5</b> Perform mock exercise against minor injuries (bandages).
<b>CU3. Maintain Firefighting equipment</b>	<b><i>Trainee will be able to:</i></b> <b>P1</b> Check expiry of fire extinguisher <b>P2</b> Operate fire extinguisher <b>P3</b> Replace fire extinguisher
<b>CU4. Prepare for emergencies</b>	<b><i>Trainee will be able to:</i></b> <b>P1</b> Ensure emergency response exercises <b>P2</b> Perform mock exercise for first aid and Cardio Respiratory Resuscitation (CPR)
<b>CU5. Respond to emergencies</b>	<b><i>Trainee will be able to:</i></b> <b>P1</b> Follow emergency plan <b>P2</b> Communicate instructions <b>P3</b> Assess risk and determine course of action <b>P4</b> Operate emergency equipment and supplies



### **Knowledge & Understanding:**

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore he/she must be able to:

- Describe different types of PPE's.
- Explain the importance of use of PPE's.
- Describe First-Aid-Box.
- Describe the treatment process for minor injuries.
- Describe the Process for treatment of electric shock.
- Describe different kinds of Fire Extinguisher and their uses.
- Describe procedure for CPR?
- Describes steps in case of Emergency?
- Define Hazard and its different types?

### **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Prepare a list of PPEs
- Demonstrate the use of at least one of the PPEs in front of assessor as per assessors' directions
- Perform first aid treatment against electric shock/minor injury.
- Explain safety procedure at workplace





## C: Maintain Tools & Equipment

**Overview:** This Competency Standard covers the skills and knowledge required to arrange tools/equipment, maintain tool box, calibrate measuring tools and manage inventory of tools and equipment.

Competency Units	Performance Criteria
<b>CU1. Arrange Tools and Equipment</b>	<b><i>Trainee will be able to:</i></b> <b>P1.</b> Prepare list of tools and equipment as per requirement <b>P2.</b> Identify tools and equipment <b>P3.</b> Collect tools and equipment from store
<b>CU2. Maintain Tool Box</b>	<b><i>Trainee will be able to:</i></b> <b>P1.</b> Check physical conditions of tools and equipment before use <b>P2.</b> Perform preventive maintenance as per standards <b>P3.</b> Perform corrective maintenance of tools as per requirements <b>P4.</b> Clean tools and equipment after use <b>P5.</b> Place tools and equipment at appropriate place
<b>CU3. Calibrate measuring tools</b>	<b><i>Trainee will be able to:</i></b> <b>P1.</b> Check calibration status of the measuring tools <b>P2.</b> Perform calibration of measuring tools as per standards <b>P3.</b> Record calibration test results
<b>CU4. Manage Inventory of tools and equipment</b>	<b><i>Trainee will be able to:</i></b> <b>P1.</b> Check tools and equipment as per record <b>P2.</b> Report for faulty tools and equipment to supervisor <b>P3.</b> Generate demand for defective tools and equipment <b>P4.</b> Maintain all records of tools and equipment

### Knowledge and Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore he/she must be able to:

- K1:** Define various tools and equipment and their functions
- K2:** Differentiate between corrective and preventive maintenance



- K3:** Describe arrangements of tools and equipment in tool box
- K4:** Explain storage methods of tools and equipment
- K5:** Define insulation procedure
- K6:** Describe types of insulation
- K7:** Describe methods of insulated tools and equipment
- K8:** Describe types of calibration
- K9:** Describe methods of equipment calibration
- K10:** Explain methods of tools and equipment inventory
- K11:** Elaborate writing of faulty tools and equipment

### Critical Evidence(s) Required

The candidates need to produce following critical evidence(s) in order to be competent in this competency standard:

- Demonstrate various tools and equipment
- Storage methods of tools and equipment
- Types of insulation
- Use of insulated tools and equipment
- Method of equipment calibration
- Methods of report writing



## D: Develop basic computer operating skills

**Overview:** This competency standard covers the skills and knowledge required to Operate MS word, Operate MS Excel, Operate MS Power Point, Perform Browsing and Print Document.

Competency Units	Performance Criteria
<b>CU1. Operate MS word</b>	<p><b>P1</b> Perform Microsoft basic commands in MS word</p> <p><b>P2</b> Open File</p> <p><b>P3</b> Format a file</p> <ul style="list-style-type: none"> <li>i. Font (Type/size/bold/Italic)</li> <li>ii. Header Footer</li> <li>iii. Page number</li> <li>iv. Insert pics / table/hyperlink</li> </ul> <p><b>P4</b> Save a File</p> <p><b>P5</b> Save a folder</p>
<b>CU2. Operate MS Excel</b>	<p><b>P1</b> Perform basic commands in Microsoft MS Excel</p> <p><b>P2</b> Open a worksheet</p> <p><b>P3</b> Sum functions</p> <p><b>P4</b> If functions</p> <p><b>P5</b> Basic calculations</p> <p><b>P6</b> Table and graphs</p> <p><b>P7</b> Save a worksheet/folder</p>
<b>CU3. Operate MS Power Point</b>	<p><b>P1</b> Prepare Microsoft power point presentation with basic commands</p> <p><b>P2</b> Make a power point file</p> <p><b>P3</b> Insert pics/table/hyperlink</p> <p><b>P4</b> Design a theme for slides</p> <p><b>P5</b> Save a power point file</p>
<b>CU4. Perform Browsing</b>	<p><b>P1</b> Perform browsing on the internet as per needs</p> <p><b>P2</b> Perform search online on new trends in the market with the help of internet</p>
<b>CU5. Print Document</b>	<p><b>P1.</b> Select Printer</p> <p><b>P2.</b> Select page setup</p> <p><b>P3.</b> Print relevant pages</p>



## Knowledge and Understanding

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out tasks covered in this competency standard. This includes the knowledge of:

- Define Basic parts of computers
- Describe the Importance and uses of MS Word
- Describe the Importance and uses of MS Excel
- Describe the Importance and uses of MS Power Point
- Describe the importance of Internet.
- Describe Printing Procedure.

## Critical Evidence(s)

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- ✓ Operate MS word
- ✓ Operate MS Excel
- ✓ Operate MS Power Point



## E: Develop basic communication Skill.

**Overview:** This competency standard covers the skills and knowledge required to adopt effective Listening, Develop Nonverbal Communication Skill, develop verbal communication skill, and Develop Written Communication Skills.

Competency Units	Performance Criteria
<b>CU1. Adopt effective Listening</b>	<b><i>Trainee will be able to:</i></b> <b>P1</b> Practice active listening. <b>P2</b> Ask clarifying questions. <b>P3</b> Listen and understand with other person.
<b>CU2. Develop Nonverbal Communication Skill</b>	<b><i>Trainee will be able to:</i></b> <b>P1</b> Adopt hand gestures if required. <b>P2</b> Encourage others to speak openly with you. <b>P3</b> Make eye contact with communicator. <b>P4</b> Make relaxed, open stance during communication. <b>P5</b> Perform friendly tone during communication.
<b>CU3. Develop verbal communication Skill</b>	<b><i>Trainee will be able to:</i></b> <b>P1.</b> Adopt face to face conversations <b>P2.</b> Convey your message clearly and directly. <b>P3.</b> Adopt phrases as simple as demonstrate <b>P4.</b> Respect others and their ideas
<b>CU4. Develop Written Communication Skills</b>	<b><i>Trainee will be able to:</i></b> <b>P1.</b> Convey your message in few words. <b>P2.</b> Convey message through live phone calls. <b>P3.</b> Convey message through WhatsApp. <b>P4.</b> Convey message through email. <b>P5.</b> Convey message through writing.



## Knowledge & Understanding

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out tasks covered in this competency standard. This includes the knowledge of:

- Define effective Listening.
- Describe various types of effective listening.
- Define Nonverbal Communication
- Types of Nonverbal Communication.
- Enlist various communications Medium.

## Critical Evidence(s)

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Adopt effective Listening
- Develop Nonverbal Communication
- Develop verbal communication
- Develop Confidence
- Pick the Right Medium



## F: Maintain Workplace Safety

**Overview:** This Competency Standard identifies the competencies required to Identify Hazards at Workplace, Comply with Occupational Health and Safety, Perform safe Work practices at workplace Dispose of hazardous/Waste materials and Follow emergency procedures at work place

Competency Unit	Performance Criteria
<b>CU1. Identify Hazards at Workplace</b>	<b>Trainee will be able to:</b> <b>P1</b> Interpret work processes and procedures correctly to identify risk of hazards at workplace <b>P2</b> Recognize processes, tools, equipment and consumable materials that have the potential to cause harm <b>P3</b> Identify any potential hazards and take appropriate action to minimize the risk
<b>CU2. Comply with Occupational Health and Safety</b>	<b>Trainee will be able to:</b> <b>P1</b> Complying with health and safety precautions. <b>P2</b> Keep work area clean and clear of obstructions. <b>P3</b> Store tools and equipment as per the procedure of industry to overcome any incident. <b>P4</b> Remove personal articles (jewelry, watch, cell phone, etc.)
<b>CU3. Perform safe Work practices at workplace</b>	<b>Trainee will be able to:</b> <b>P1</b> Follow industry workplace safety policy (rules/regulations). <b>P2</b> Interpret safety workplace handbook. <b>P3</b> Repair equipment timely for avoiding damage or injuries
<b>CU4. Dispose of hazardous/Waste materials</b>	<b>Trainee will be able to:</b> <b>P1</b> Identify hazardous waste need to be disposed off <b>P2</b> Collect hazardous or non-hazardous waste carefully from the designated area as per approved procedure <b>P3</b> Dispose-off hazardous waste as per procedure <b>P4</b> Ensure masks and gloves while dispose-off hazardous waste as per standard operating procedure
<b>CU5. Follow emergency procedures at work place</b>	<b>Trainee will be able to:</b> <b>P1</b> Follow emergency plan



- P2** Communicate instructions to co workers
- P3** Assess risk and determine course of action
- P4** Operate emergency equipment and supplies

### Knowledge and Understanding

The candidate must possess underpinning knowledge and understanding required to carry out tasks covered in this competency standard. Therefore he/she must be able to:

- Describe safety rules and regulations for Occupational Health and Safety.
- Describe list of safety equipment in Working area
- Follow safety signs and symbols
- Explain different disposal techniques related to the waste
- Explain work place specific guidelines for uniform
- Define physical hazards
- Define chemical hazards
- Define electrical hazards
- Differentiate between physical, chemical and electrical hazards
- Describe Treatments of various hazards.
- Describe emergency plan.

### Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) to be competent in this competency standard:

- Health and safety precautions
- Types of hazards that are most likely to cause harm to health and safety
- Identify Health and safety signs and symbols
- Techniques and methods to identify the risks of hazards at workplace
- Dealing with hazards to avoid any accident or injury
- Use of Personal Protective Equipment (PPE)
- Safe methods of handling heavy loads





**G: Collect Pine nut cones from trees**

**Overview:** This competency standard covers the skills and knowledge required to Arrange Tools and equipment for cutting Pine nut cones, Adopt Health and Safety measures, Select appropriate Cones for cutting, Cut Pine nut cones from trees and Sort Pine nut cones according to grades

Competency Units	Performance Criteria
<b>CU1. Arrange Tools and equipment for cutting Pine nut cones</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Identify the required tools and equipment for cutting Pine Nuts cones.</p> <p><b>P2</b> Secure the tools for safe carrying to the work place</p> <p><b>P3</b> Clean and Store the Tools and equipment after use.</p>
<b>CU2. Adopt Health and Safety measures</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Identify the hazardous at work place</p> <p><b>P2</b> Remove hazardous materials properly.</p> <p><b>P3</b> Wear the safety equipment accurately.</p> <p><b>P4</b> Ensure the work place is safe to wok.</p>
<b>CU3. Select appropriate Cones for cutting</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Identify the appropriate trees for cutting the cones.</p> <p><b>P2</b> Identify the appropriate cones for cutting.</p>
<b>CU4. Cut Pine nut cones from trees</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Wear proper Personal Protective Equipment (PPEs) for cutting of Pine nut cones.</p> <p><b>P2</b> Cut cones from Pine nut trees without damaging the immature cones (Next year).</p> <p><b>P3</b> Place Pine nut cones at appropriate point.</p>
<b>CU5. Sort Pine nut cones according to grades</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Segregate Pine nut cones by sizes correctly</p> <p><b>P2</b> Remove defective Pine nut cones</p> <p><b>P3</b> Put the cones in bags</p> <p><b>P4</b> Place Pine nut cones at dry place in a ventilated room / shelter</p>



### **Knowledge and Understanding**

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out the tasks covered in this competency standard. This includes the knowledge of:

- K1.** Define Harvesting season
- K2.** Describe Cones maturity and colour
- K3.** Define Proper cutting techniques
- K4.** Describe Types and uses of cutting tools
- K5.** Describe identification of Male and Female cones
- K6.** Describe difference between healthy and infected cones
- K7.** Define Harms of contamination

### **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Cut at least three cones as per standard (Color, size, maturity) and explain reasons and method of cutting
- Used proper PPEs during cutting of Pine nut cones



## H: Extract Pine nuts from cones

**Overview:** This competency standard covers the skills and knowledge required to prepare surface for placement of Pine nut cones, Dry Pine nut cones for extraction, Separate Pine nuts from cones, Reduce excessive moisture from Pine nuts, Remove Foreign Material from Pine nuts (Impurities) and .Place the Pine Nuts in boxes

Competency Units	Performance Criteria
<b>CU1. Prepare surface for placement of Pine nut cones</b>	<p><b><i>Trainee will be able to:</i></b></p> <p><b>P1</b> Identify the appropriate place for drying</p> <p><b>P2</b> Smooth the surface with mud plaster (Lippai)</p> <p><b>P3</b> Ensure Dryness of surface for placement of cones.</p>
<b>CU2. Dry Pine nut cones for extraction</b>	<p><b><i>Trainee will be able to:</i></b></p> <p><b>P1</b> Select required tools/equipment for drying the nuts.</p> <p><b>P2</b> Adopt proper heating/Drying method.</p> <p><b>P3</b> Heat the Pine cones for extraction of Pine nuts as per SOP</p> <p><b>P4</b> Ensure the Pine Nut cones are dried.</p>
<b>CU3. Separate Pine nuts from cones</b>	<p><b><i>Trainee will be able to:</i></b></p> <p><b>P1</b> Select appropriate tools for separating Pine nuts from Cones</p> <p><b>P2</b> Spread semi opened cones at perforated surface.</p> <p><b>P3</b> Beat cones with wooden stick to extract the Pine nuts.</p> <p><b>P4</b> Extract rest of the Pine nuts with the help of wooden pointer / wooden hammer from semi opened cones, one by one correctly.</p>
<b>CU4. Reduce excessive moisture from Pine nuts</b>	<p><b><i>Trainee will be able to:</i></b></p> <p><b>P1</b> Spread Pine nuts in open air in thin layers to reduce excessive moisture</p> <p><b>P2</b> Shuffle the Pine nuts on regular intervals for Uniformity.</p> <p><b>P3</b> Ensure the dryness of Pine nuts.</p>
<b>CU5. Remove Foreign Material from Pine nuts (Impurities)</b>	<p><b><i>Trainee will be able to:</i></b></p> <p><b>P1</b> Remove foreign material from Pine nuts with fan /blower (air treatment)</p> <p><b>P2</b> Remove foreign material from Pine nuts with the help of sieves</p> <p><b>P3</b> Manually remove foreign material from Pine nuts</p> <p><b>P4</b> Grade the Pine nuts according to their size and colour</p>



**CU6. Place the Pine Nuts in boxes**

**Trainee will be able to:**

- P1** Identify the different grades of the Pine Nuts
- P2** Use appropriate boxes placing the Pine nuts.
- P3** Ensure the filled boxes are place at safe place.
- P4** Shift the Pine nuts for roasting.

**Knowledge and Understanding**

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out the tasks covered in this competency standard. This includes the knowledge of:

- K1.** Extraction methods, techniques and related Standard Operating Procedure (SOP)
- K2.** Drying techniques of Pine nuts
- K3.** Harms of infected Pine nuts and their preventive measures during extraction.
- K4.** Types and uses of Pine nuts extraction tools including mechanical extraction machinery.
- K5.** Health and safety guidelines for extraction (Gloves, Goggles, Masks, Socks)

**Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Extracted Pine nuts from cones with all three methods by:
  - Hands
  - Beating with wooden stick
  - Wooden pointer /hammer
- Graded 2 Kg Pine nuts by removing foreign materials as per:
  - Size (A,B and Categories)
  - Colour (White, Brown and Black)



**I: Perform roasting of Pine nuts with Shell**

**Overview:** This competency standard covers the skills and knowledge required to Arrange tools and equipment for roasting Pine nuts, Adopt health and safety measures for roasting, Roast Pine nuts as per requirements, Remove infected Pine nuts, Pack roasted Pine nuts as per requirement and Transport roasted Pine nuts to the desired destination

Competency Units	Performance Criteria
<b>CU1. Arrange tools and equipment for roasting Pine nuts</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Identify the required tools and equipment for roasting Pine Nuts cones.</p> <p><b>P2</b> Clean and Store the Tools and equipment after use.</p>
<b>CU2. Adopt health and safety measures for roasting</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Identify the hazardous at work place</p> <p><b>P2</b> Remove hazardous properly.</p> <p><b>P3</b> Wear the safety equipment accurately.</p> <p><b>P4</b> Ensure the work place is safe to wok.</p>
<b>CU3. Roast Pine nuts as per requirements</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Select roasting equipment as per instructions</p> <p><b>P2</b> Ensure the required temperature for roasting the Pine nuts.</p> <p><b>P3</b> Roast the Pine nuts as per requirement</p> <p><b>P4</b> Clean roasting equipment after use</p> <p><b>P5</b> Place/Store roasting equipment at designated point</p>
<b>CU4. Remove infected Pine nuts</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Remove infected Pine nuts with fan / Air blower as per SOP</p> <p><b>P2</b> Remove infected Pine nuts with the help of sieves</p> <p><b>P3</b> Manually remove infected Pine nuts</p>
<b>CU5. Pack roasted Pine nuts as per requirement</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Select packing material as per requirement</p> <p><b>P2</b> Weigh-out the roasted Pine nuts for packing</p> <p><b>P3</b> Pack the Pine nuts according to requirements</p> <p><b>P4</b> Make a record of the packed Pine nuts quantity.</p>



**CU6. Transport roasted Pine nuts to the desired destination**

***Trainee will be able to:***

**P1** Select suitable transport means

**P2** Load the Pine nuts on selected transport as per instructions

**P3** Despatch Pine nuts to desired market

**Knowledge and Understanding**

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out the tasks covered in this competency standard. This includes the knowledge of:

- K1.** Types and uses of Pine nuts roasting equipment.
- K2.** Pine nuts roasting methods and techniques.
- K3.** Packaging of Pine nuts

**Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Performed roasting of 2 Kg Pine nuts as per instructions
- Packed 2 Kg roasted Pine nuts according to guideline



## J: Perform peeling of Pine nuts for Kernel

**Overview:** This competency standard covers the skills and knowledge required to Roast Pine nuts for Kernel, Perform peeling of Pine nuts for Kernels extractions, Dry Kernels for removing membrane, Sort Kernels as per requirements and Perform Packing of Kernels

Competency Units	Performance Criteria
<b>CU1. Perform peeling of Pine nuts for Kernels extractions</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Soak roasted Pine nuts in warm water as per requirements</p> <p><b>P2</b> Remove shells (Peeling) of soaked Pine nuts correctly</p> <p><b>P3</b> Spread peeled Kernels on appropriate surface as per requirements to reduce moisture</p>
<b>CU2. Dry Kernels for removing membrane</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Spread the Kernels for drying to remove Kernel membrane</p> <p><b>P2</b> Remove Kernel membrane by rubbing gently with a neat cloth</p> <p><b>P3</b> Remove Kernel membrane by the help of blower</p>
<b>CU3. Roast Pine nuts for Kernel</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Select roasting equipment for Pine nuts</p> <p><b>P2</b> Select Pine nuts for roasting kernels</p> <p><b>P3</b> Roast the Pine nuts, as per requirement.</p> <p><b>P4</b> Clean the roasting equipment</p> <p><b>P5</b> Store the roasting equipment at designated point</p>
<b>CU4. Sort Kernels as per requirements</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Sort Kernels with the help of sieves for grading.</p> <p><b>P2</b> Separate the unhealthy Kernels manually</p> <p><b>P3</b> Separate the unhealthy Kernels with the help of machine.</p>
<b>CU5. Perform Packing of Kernels</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1</b> Select the packing material as per requirement</p> <p><b>P2</b> Pack the Kernels as per requirements.</p> <p><b>P3</b> Make a record of weight and quantity of the Packed Pine nuts</p>



## **Knowledge and Understanding**

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out the tasks covered in this competency standard. This includes the knowledge of:

- K1.** Pine nuts roasting techniques for Kernel
- K2.** Peeling techniques
- K3.** Types and uses of personal protective equipment

## **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Performed roasting of 1 Kg Pine nuts for Kernels, as per instructions
- Performed peeling of 50 Pine nuts





## K: Perform handling & storage

**Overview:** This competency standard covers the skills and knowledge required to Sort Pine nuts as per grading, Pack Pine nuts as per requirements, Develop record of quantity of Pine nuts Transport Pine nuts to the desired destination and Ensure Safe Storage.

Competency Units	Performance Criteria
<b>CU1. Sort Pine nuts as per grading</b>	<p><b><i>Trainee will be able to:</i></b></p> <p><b>P1</b> Sort Pine nuts according to size (A,B and C category)</p> <p><b>P2</b> Sort Pine nuts according to colour (White, Brown and Black)</p> <p><b>P3</b> Remove infected Pine nuts from the lot</p>
<b>CU2. Pack Pine nuts as per requirements</b>	<p><b><i>Trainee will be able to:</i></b></p> <p><b>P1</b> Select packing material according to instructions</p> <p><b>P2</b> Measure the required weight of Pine Nuts</p> <p><b>P3</b> Fill the Pine nuts in the packing material</p>
<b>CU3. Develop record of quantity of Pine nuts</b>	<p><b>P1</b> Develop the Stock Record Register sheet.</p> <p><b>P2</b> Count the number of packs according to the weight category.</p> <p><b>P3</b> Develop the record of the available stock.</p>
<b>CU4. Transport Pine nuts to the desired destination</b>	<p><b><i>Trainee will be able to:</i></b></p> <p><b>P1</b> Select suitable transport means</p> <p><b>P2</b> Ensure the safe loading of Pine nuts on selected transport as per instructions</p> <p><b>P3</b> Despatch Pine nuts to the desired market</p>
<b>CU5. Ensure Safe Storage.</b>	<p><b><i>Trainee will be able to:</i></b></p> <p><b>P1</b> Ensure the storage place is clean.</p> <p><b>P2</b> Ensure the storage place safe.</p> <p><b>P3</b> Ensure the required temperature and humidity level for storage.</p> <p><b>P4</b> Ensure the store is locked securely.</p>



## Knowledge and Understanding

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out the tasks covered in this competency standard. This includes the knowledge of:

- K1.** Types of Pine nuts packaging material
- K2.** Importance of packaging material for Pine nuts
- K3.** Moisture levels in Pine nuts
- K4.** Customers’ requirements for packing of Pine nuts

## Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Graded 2 Kg Pine nuts by removing foreign materials as per:
  - Size (A,B and Categories)
  - Colour (White, Brown and Black)
- Packed 2 Kg Pine nuts as per instructions and explain the importance of packing materials and mark for traceability



## L. Assure Quality of Pine nuts

**Overview:** This Competency standard covers the skills and knowledge required to Check the quality of Pine Nut Cones before roasting, Assure the quality of Pine nuts after the extraction from cones, Check quality of Pine nuts with shell after roasting, Check quality of Pine nuts Kernel during Peeling, Check quality of Packaging of Pine nuts and pine nuts Kernels. And Maintain laboratory standards

Competency Units	Performance Criteria
<b>CU1. Check the quality of Pine Nut Cones before roasting</b>	<p><b>P1. Arrange partition for Sample of pine nut cones.</b></p> <p><b>P2. Collect Sample of pine nut cones randomly.</b></p> <p><b>P3. Prepare representative and working sample from composite Sample</b></p> <p><b>P4. Label the sample to include the information like date of sampling, sampler name and lot of Pine nut cone</b></p> <p><b>P5. Seal the sample to intact the condition of sample</b></p> <p><b>P6. Perform critical laboratory tests for quality of pine nut cones such as</b></p> <ul style="list-style-type: none"><li>○ <b>Moisture content</b></li><li>○ <b>Color</b></li><li>○ <b>Proportion of damages</b></li><li>○ <b>Shrinkage</b></li><li>○ <b>Grade &amp; Size</b></li></ul> <p><b>P7. Prepare report of the results of analytical tests.</b></p>
<b>CU2. Assure the quality of Pine nuts after the extraction from cones.</b>	<p><b>P1. Collect random samples of Pine nuts.</b></p> <p><b>P2. Prepare the composite sample from primary samples</b></p> <p><b>P3. Make representative and working sample from composite sample</b></p> <p><b>P4. Label the samples properly</b></p> <p><b>P5. Check the quality of Pine nuts by analyzing the parameters such as</b></p> <ul style="list-style-type: none"><li>● <b>Moisture content</b></li></ul>



	<ul style="list-style-type: none"><li>• Color</li><li>• Grade /Size</li><li>• Weight</li><li>• Proportion of damages</li><li>• Foreign matters</li></ul> <p><b>P6.</b> Prepare report of the results</p>
<b>CU3. Check quality of Pine nuts with shell after roasting</b>	<p><b>P1.</b> Wear personal protective equipment.</p> <p><b>P2.</b> Collect the samples of pine nuts with shell after roasting.</p> <p><b>P3.</b> Ensure cleanness during sampling.</p> <p><b>P4.</b> Check safety measures during Sampling</p> <p><b>P5.</b> Inspect the presence of any un desirable material like</p> <ul style="list-style-type: none"><li>• Hairs</li><li>• Metals</li><li>• Straws</li><li>• Thread</li><li>• Rubber band.</li></ul> <p><b>P6.</b> Check and maintain the hygienic conditions of workers in processing area</p> <p><b>P7.</b> Inspect the whole roasting activity at regular intervals</p> <p><b>P8.</b> Check the quality of pine nuts with shell after roasting by analyzing the parameters such as</p> <ul style="list-style-type: none"><li>• Moisture content</li><li>• Weight</li><li>• Grade/size</li><li>• Color</li><li>• Removal of Foreign matters or infected pine nuts</li></ul> <p><b>P9.</b> Develop report of the results.</p> <p><b>P10.</b> Respond at unexpected results</p>



<b>CU4. Check quality of Pine nuts Kernel during Peeling.</b>	<p><b>P1.</b> Examine the personnel hygiene of workers in peeling area.</p> <p><b>P2.</b> Check temperature of warm water for soaking of pine nuts with shell.</p> <p><b>P3.</b> Check process of shells removal (Peeling) of soaked pine nuts.</p> <p><b>P4.</b> Collect samples of Pine nuts Kernel randomly.</p> <p><b>P5.</b> Prepare representative and working sample</p> <p><b>P6.</b> Label the sample to include the information like date of sampling, sampler name.</p> <p><b>P7.</b> Perform the analytical tests on the samples of finished product such as</p> <ul style="list-style-type: none"><li>• Removal of kernels membrane.</li><li>• Moisture content.</li><li>• Grade/size</li><li>• Weight.</li><li>• Softness.</li><li>• Color</li></ul>
<b>CU5. Check quality of Packaging of Pine nuts and pine nuts Kernels.</b>	<p><b>P1</b> Examine the personnel hygiene of workers in packaging area</p> <p><b>P2</b> Segregate and label different kernel lots carefully</p> <p><b>P3</b> Check the labelling details such as</p> <ul style="list-style-type: none"><li>• Retail price</li><li>• Net weight</li><li>• Company monogram</li><li>• Damaged boxes</li><li>• Improper sealing</li><li>• Absence or misprinting</li><li>• substandard packaging</li></ul> <p><b>P4</b> Check hygienic conditions of stores</p>
<b>CU6. Maintain Laboratory standards</b>	<p><b>P1.</b> Avoid following at laboratory</p> <ul style="list-style-type: none"><li>• Smoking</li><li>• Eating</li><li>• Drinking</li></ul> <p><b>P2.</b> Avoid gathering of unauthorized persons in laboratory</p>



- P3.** Prepare and maintain the record of followings
  - Chemicals
  - Equipment
  - Accessories
  - Calibration
  - Test reports
- P4.** Meet the requirements during specific tests. For example, wear lab coat, gloves and mask during aflatoxin analysis
- P5.** Assist the main analyst
- P6.** Keep the glassware including beaker, flask, pipette, cylinder carefully
- P7.** Use glassware where needed
- P8.** Follow the precautionary measures for instrument handling
- P9.** Keep the operational and maintenance manuals of equipment in a proper place.
- P10.** Maintain the conditions of laboratory (like temperature, dust free etc.) required for equipment

## Knowledge and Understanding

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out tasks covered in this competency standard. This includes the knowledge of:

- K1.** Techniques of sampling
- K2.** Grading Techniques
- K3.** Knowledge of Pine nuts grade/size, weight, color and moisture content
- K4.** Assurance of quality parameters
- K5.** Assurance of hygienic conditions at processing area.
- K6.** Knowledge of infected Pine nuts
- K7.** Knowledge of soaking time
- K8.** Knowledge of Kernel membrane of Pine nuts
- K9.** Safety measures
- K10.** Preparation of different types of samples like Random samples, Composite samples, Sub samples and Working samples
- K11.** Impact of proper labelling
- K12.** Importance of Hygienic conditions of Packaging material
- K13.** Procedure of sampling
- K14.** Determination of moisture content
- K15.** Separation of foreign matters
- K16.** Description of analytical equipment



- K17.** Operational procedures for analytical equipment  
**K18.** Quality appearances of the raw Cones for processing in to some finished products

### **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- ✓ Check the quality of Pine Nut Cones before roasting,
- ✓ Assure the quality of Pine nuts after the extraction from cones,
- ✓ Check quality of Pine nuts with shell after roasting,
- ✓ Check quality of Pine nuts Kernel during Peeling,
- ✓ Check quality of Packaging of Pine nuts and pine nuts Kernels. And Maintain laboratory standards



## M: Develop Professionalism

**Overview:** This competency standard covers the skills and knowledge required to demonstrate work ethic, Resolve problems or disagreements with others, Participate in professional development, Work with others, Work independently, Interpret documentation and Interpret rules regulation of regulatory authorities.

Competency Units	Performance Criteria
<b>CU1. Demonstrate work ethics</b>	<b>P1.</b> Follow principles of work ethics in all situations <b>P2.</b> Adopt professional behaviour
<b>CU2. Resolve disagreements with others</b>	<b>P1.</b> Communicate effectively <b>P2.</b> Adopt peaceful approach <b>P3.</b> Determine cause of problem or disagreement <b>P4.</b> Discuss and resolve issues
<b>CU3. Work in team</b>	<b>P1.</b> Work as a team member to achieve common goals <b>P2.</b> Keep open mind <b>P3.</b> Participate in work place meetings <b>P4.</b> Communicate accurately and clearly <b>P5.</b> Co-ordinate job related activities <b>P6.</b> Cooperate with others
<b>CU4. Work independently</b>	<b>P1</b> Confirm and clarify assignment <b>P2</b> Take initiative, anticipate and prepare for next steps in job <b>P3</b> Identify and resolve potential and actual problems <b>P4</b> Communicate with other site personnel <b>P5</b> Complete assignment
<b>CU5. Interpret documentation</b>	<b>P1</b> Access and maintain documents <b>P2</b> Provide complete, legible and accurate information in documents <b>P3</b> Interpret equipment inspection documentation from previous shifts before conducting pre-operational inspection





## Knowledge and Understanding

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out tasks covered in this competency standard. This includes the knowledge of:

- K1.** Define Principles of work ethic and expectations, such as be punctual, prepared for work, cooperative, honest, productive and respectful
- K2.** Describe Working conditions on work station
- K3.** Describe legislation about harassment
- K4.** Describe Conflict resolution techniques.
- K5.** What is Own role and responsibilities
- K6.** What is Roles and responsibilities of others in industry, such as supervisor, inspector, other trades people
- K7.** Define log books, safety reports, maintenance reports, inspection reports, time cards
- K8.** Describe Health and Safety Rules

## Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- ✓ Demonstrate work ethic
- ✓ Work with others
- ✓ Work independently
- ✓ Interpret documentation
- ✓ Interpret rules and regulation of regulatory authorities.



## N: Develop Entrepreneurship Skills

**Overview:** This competency standard covers the skills and knowledge required to Conduct Market survey, Establish Business opportunities, Seek for the required funds to establish the business, Prepare Business plan, Implement marketing activities, and evaluates marketing performance, Develop Business promotion technique and Develop Business competition Skills

Competency Units	Performance Criteria
<b>CU1. Conduct Market survey</b>	<p><b>P1</b> Identify market demands for Pine nuts</p> <p><b>P2</b> Study Pine nuts supply side of the market</p> <p><b>P3</b> Make a contacts list of Traders / Agents / Brokers of the Pine nuts market</p>
<b>CU2. Establish Business opportunities</b>	<p><b>P1.</b> Evaluate impacts of emerging or changing technology, including e-commerce, on the business</p> <p><b>P2.</b> Determine viability of business opportunity in line with perceived risks, resources available, financial returns and other outcomes sought</p> <p><b>P3.</b> Assess and match personal skills/attributes against those perceived as necessary for a particular business opportunity</p> <p><b>P4.</b> Identify and assess business risks according to resources available and personal preferences</p>
<b>CU3. Seek for the required funds to establish the business</b>	<p><b>P1</b> Estimate required funding to establish and run the business based on expected sales and activity levels, available finances and commitments</p> <p><b>P2</b> Investigate methods of accessing alternative sources of finance</p> <p><b>P3</b> Identify strategies for meeting financial obligations</p> <p><b>P4</b> Implement plans to access available funds as required</p>
<b>CU4. Prepare Business plan</b>	<p><b>P1.</b> Develop operational goals and targets to meet the enterprise strategic plan.</p> <p><b>P2.</b> Identify and incorporate supply chains into the business plan.</p> <p><b>P3.</b> Identify risk management needs are within the business plan.</p> <p><b>P4.</b> Incorporate trial systems in order to test budgetary impact and operational potential prior to full implementation of the business plan.</p> <p><b>P5.</b> Set clear and measureable indicators of operational performance to allow for realistic analysis of performance.</p>



<b>CU5. Implement marketing activities</b>	<b>P1</b> Develop measurable performance targets that meet business plan objectives <b>P2</b> Organize distribution channels and ensure product and service information is accurate and readily available.
<b>CU6. Evaluate marketing performance.</b>	<b>P1</b> Assess product, pricing and distribution policies in relation to market changes, marketing objectives and enterprise requirements <b>P2</b> Identify areas of positive marketing performance and take corrective action to remedy poor marketing performance areas
<b>CU7. Develop Business promotion technique</b>	<b>P1.</b> Establish marketing objectives based on current and potential product specifications. <b>P2.</b> Select appropriate distribution channel options to ensure access to target markets is achieved efficiently and appropriately <b>P3.</b> Establish time-frames for distribution and selling activities
<b>CU8. Develop Business Competition Skills</b>	<b>P1</b> Prepare and record detailed plans for promotional activities <b>P2</b> Ensure strategies take account of time management and scheduling issues, and resource constraints. <b>P3</b> Create promotional materials that enhance the product and commercial presentation

### Knowledge and Understanding

- K1.** Define Entrepreneurship
- K2.** Describe Business opportunities
- K3.** Define Business plan
- K4.** What is Business promotion technique
- K5.** What is Market survey
- K6.** What is Essential financial reports

### Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- ✓ Prepare Business plan
- ✓ Evaluate marketing performance.
- ✓ Develop Business competition Skills





## 12. List of Tools and Equipment


Sr. #	Description	Quantity
1.	Gloves	25
2.	Steel-toed footwear	25
3	Hard Hat	25
4.	Safety Gloves	25
5	Safety Glasses	25
6	High Visibility Vest	25
7	Fire Extinguisher	04
8	Fire Blanket	05
9	First Aid Box	05
10	Pine nuts cone cutters with baskets	25
11	Wooden hammer for extraction	25
12	Wooden Pointer for extraction	25
13	Heating Pit	2
14	Air blower	3
15	Generator	1
16	Pallets	5
17	Jute / Cotton bags (Air ventilation)	5
18	White Board	1
19	Multimedia	1
20	Dry roaster (Proto type)	1
21	Moisture meter	5
22	Stitching bag machine	2
23	Pedal sealers	1
24	Sieves (3 different sizes)	5 each
25	Computer	1
26	Printer	1
27	Goggles	25
28	Ladder	5
29	Safety harness for tree climbing	5
30	First Aid Box	1
31	Aprons	25
32	Weighing scale (up-to 5 kg)	2
33	Weighing scale (up-to 100 kg)	2
34	Computer systems	25

## National Vocational and Technical Training Commission (NAVTTTC)

 Plot 38, Kirthar Road, Sector H-9/4, Islamabad, Pakistan

 +92 51 9044 322

 +92 51 9044 322

 [info@navttc.org](mailto:info@navttc.org)

 [www.navttc.org](http://www.navttc.org)