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# PINE NUTS PROCESSOR

**Learner Guide** 

National Vocational Certificate Level 4

Version 1 - February 2020

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#### Introduction

Welcome to your Learner's Guide for the *Pine Nuts Processor* Program. It will help you to complete the program and to go on to complete further study or go straight into employment.

The *Pine Nuts Processor* program is to engage young people with a program of development that will provide them with the knowledge, skills and understanding to start this career in Pakistan. The program has been developed to address specific issues, such as the national, regional and local cultures, the manpower availability within the country, and meeting and exceeding the needs and expectations of their customers.

The main elements of your learner's guide are:

- Introduction:
  - This includes a brief description of your guide and guidelines for you to use it effectively
- Modules:
  - o The modules form the sections in your learner's guide
- Learning Units:
  - o Learning Units are the main sections within each module
- Learning outcomes:
  - Learning outcomes of each learning units are taken from the curriculum document
- Learning Elements:
  - This is the main content of your learner's guide with detail of the knowledge and skills (practical activities, projects, assignments, practices etc.) you will require to achieve learning outcomes stated in the curriculum
  - o This section will include examples, photographs and illustrations relating to each learning outcome
- Summary of modules:
  - o This contains the summary of the modules that make up your learner's guide
- Frequently asked questions:
  - These have been added to provide further explanation and clarity on some of the difficult concepts and areas. This further helps you in preparing for your assessment.
- Multiple choice questions for self-test:
  - o These are provided as an exercise at the end of your learner's guide to help you in preparing for your assessment.

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# PINE NUTS PROCESSOR

**Learner Guide** 

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Module-12

# **Module 12: Assure quality of Pine Nuts**

**Objective:** This module 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

Learning Unit	Learning Outcomes	Learning Elements	Materials Required
LU-1: Check the quality of Pine Nut Cones before roasting	<ul> <li>Trainee will be able to:</li> <li>Arrange partition for Sample of pine nut cones.</li> <li>Collect Sample of pine nut cones randomly.</li> <li>Prepare representative and working sample from composite Sample</li> <li>Label the sample to include the information like date of sampling, sampler name and lot of Pine nut cone</li> <li>Seal the sample to intact the condition of sample</li> <li>Perform critical laboratory tests for quality of pine nut cones such as</li> <li>Moisture content</li> <li>Color</li> <li>Proportion of damages</li> <li>Shrinkage</li> <li>Grade &amp; Size</li> <li>Prepare report of the results of analytical tests.</li> </ul>	<ul> <li>Techniques of sampling</li> <li>Preparation of different types of samples like         Random samples, Composite samples, Sub samples and Working samples</li> <li>Impact of proper labelling</li> <li>Procedure of sampling</li> <li>Determination of moisture content</li> <li>Separation of foreign matters</li> <li>Description of analytical equipment</li> <li>Operational procedures for analytical equipment</li> <li>Quality appearances of the raw Cones for processing in to a finished product</li> </ul>	<ul> <li>Stationery items pen, pencil, etc.</li> <li>Sampler</li> <li>Sample divider</li> <li>Moisture meter</li> <li>Digital balance</li> <li>Microscope</li> <li>Consumables: <ul> <li>Tags</li> <li>Bags</li> <li>Petri dishes</li> <li>Gloves</li> <li>Masks</li> <li>Logbook paper</li> <li>First aid box</li> </ul> </li> </ul>

LU-2: Assure the quality of Pine nuts after the extraction from cones.	<ul> <li>Trainee will be able to:</li> <li>Collect random samples of Pine nuts.</li> <li>Prepare the composite sample from primary samples</li> <li>Make representative and working sample from composite sample</li> <li>Label the samples properly</li> <li>Check the quality of Pine nuts by analyzing the parameters such as</li> <li>Moisture content</li> <li>Color</li> <li>Grade /Size</li> <li>Weight</li> <li>Proportion of damages</li> <li>Foreign matters</li> <li>Prepare report of the results</li> </ul>	<ul> <li>Different procedures of sampling</li> <li>Grading Techniques.</li> <li>Knowledge of Pine nuts grade/size, weight, color and moisture content</li> <li>Labelling the sample appropriately</li> <li>Assurance of quality parameters</li> </ul>	<ul> <li>Sampler</li> <li>Sample divider</li> <li>Humidity meter</li> <li>Trays</li> <li>Consumables: <ul> <li>Record books</li> <li>Bags</li> <li>Tags</li> </ul> </li> </ul>
LU-3: Check quality of Pine nuts with shell after roasting	<ul> <li>Trainee will be able to:</li> <li>Wear personal protective equipment.</li> <li>Collect the samples of pine nuts with shell after roasting.</li> <li>Ensure cleanness during sampling.</li> <li>Check safety measures during Sampling</li> <li>Inspect the presence of any un desirable material like</li> <li>Hairs</li> <li>Metals</li> <li>Straws</li> <li>Thread</li> <li>Rubber band.</li> </ul>	<ul> <li>Inspection of safety measures</li> <li>Removal of undesirable materials during processing</li> <li>Assurance of hygienic condition at processing area</li> <li>Inspection of whole processing activity</li> <li>Knowledge of infected pine nuts</li> </ul>	<ul> <li>Samplers</li> <li>Moisture meter</li> <li>Digital balance Consumables:</li> <li>Notebook Petri dishes</li> </ul>

- Check and maintain the hygienic conditions of workers in processing area
- Inspect the whole roasting activity at regular intervals
- Check the quality of pine nuts with shell after roasting by analyzing the parameters such as
  - Moisture content
  - Weight
  - Grade/size
  - Color
  - Removal of Foreign matters or infected pine nuts
- Develop report of the results.
- Respond at unexpected results

# LU-4: Check quality of Pine nuts Kernel during Peeling.

#### Trainee will be able to:

- Examine the personnel hygiene of workers in peeling area.
- Check temperature of warm water for soaking of pine nuts with shell.
- Check process of shells removal (Peeling) of soaked pine nuts.
- Collect samples of Pine Nuts Kernel randomly.
- Prepare representative and working sample
- Label the sample to include the information like date of sampling, sampler name.
- Perform the analytical tests on the samples of finished product such as
  - Removal of kernels membrane.
  - Moisture content.
  - Grade/size
  - Weight.
  - Softness.
  - o Color

- Importance of warm water temperature.
- Knowledge of Soaking time
- Knowledge of kernels membrane of pine nuts
- Testing techniques of Moisture content,
   Grade/size, Weight, Softness and Color of pine nuts kernels.

- Sampler
- Sample divider
- Moisture meter
- Digital balance
- Microscope
- Trays

#### Consumables:

- Record books
- Bags
- Tags

LU-5: Check quality of
Packaging of Pine
nuts and pine nuts
Kernels.

#### Trainee will be able to:

- Examine the personnel hygiene of workers in packaging area
- Segregate and label different kernel lots carefully
- Check the labelling details such as
  - o Retail price
  - Net weight
  - o Company monogram
  - o Damaged boxes
  - o Improper sealing
  - Absence or misprinting
  - o substandard packaging
  - Check hygienic conditions of stores

- Hygienic condition of personnel and packaging area
- Calibration of packaging machines
- Checking and inspection of weight on completion of packaging
- Proper stacking of packed material
- Importance of proper shifting of packed material to the store
- Storage requirements of the finished product
- Storage of packed material
- Importance of keeping the hygienic conditions of packed materials store
- Safety measures during packaging
- Importance of packaging
- Tagging/labelling of seeds for identification

- Stationery items pen, pencil, etc.
- Packaging and labelling machine
- Moisture meter
- Colony counter

#### Consumables:

- Packing material
- Tags
- Bags
- Logbook

## LU-6: Maintain laboratory standards

#### Trainee will be able to:

- Avoid following
- Smoking
- Eating
- Drinking
- Avoid gathering of unauthorized persons in laboratory
- Prepare and maintain the record of followings
  - Chemicals
  - Equipment
  - Accessories
  - o Calibration
  - Test reports
- Meet the requirements during specific tests.
   For example, wear lab coat, gloves and mask during aflatoxin analysis
- · Assist the main analyst
- Keep the glassware including beaker, flask, pipette, cylinder carefully
- Use glassware where needed
- Follow the precautionary measures for instrument handling
- Keep the operational and maintenance manuals of equipment in a proper place
- Maintain the conditions of laboratory (like temperature, dust free etc.) required for equipment

- General Laboratory standards
- ISO 17025 standards
- Description of different glassware such as
  - Cylinder
  - Beaker
  - Flask
  - Tube
- Handling and keeping of glassware
- General precautionary measures that must be kept in mind while handling the sophisticated equipment
- Laboratory conditions to be maintained for proper functioning of equipment
- Impact of smoking on the laboratory functioning
- Impact of usual habits that are restricted in laboratory on the analytical work and results
- Impact of substandard environmental conditions on the equipment performance, analytical results and others
- Proper placement and procedure for glassware and equipment accessories in the lab

- Instruction charts
- Standard weight
- Hand Sanitizer
- Hand dryer
- Consumables:
- Record books
- Dusters
- Soaps dispenser
- Tissue papers

## **Quality assurance**

To ensure the safety of pine nuts, growers and processors have developed a wide range of good practices. Pine nuts should be produced with consideration for quality control and international food safety standards. Careful practices have been established to control the chemical, microbiological, pesticide and contaminant content.

The following programs are endorsed by the industry:

- ➤ Good Agricultural Practices (GAPs), which provide growers guidelines and principles to apply for on-farm production and postproduction processes, to provide safe and healthy pine nuts, minimizing potential hazards, such as pathogens, contaminants and pest management materials.
- ➤ Good Manufacturing Practices (GMPs), which define procedures to be used in the processing, packaging, storing, and transport stages by handlers to ensure the quality of the product. GMPs are used by handlers to treat pine nuts under the best sanitary conditions.
- Good Storage Practices (GSP), which provide procedures that should be in place in the post-harvest, processing and transport stages by handlers to control the moisture content and temperature, and to minimize the levels of fungi (especially aflatoxins) and insects.
- Hazard Analysis Critical Control Point (HACCP), which provides a systematic preventive approach to food safety that identifies, assesses and controls the risk of biological, chemical and physical hazards in production processes.

## **SIZING**

According to UNECE Standard DDP-12, sizing is optional. When sized, size is determined by count, i.e., the number of kernels per unit of weight according to the following table.

Species	Size	Kernels per 100 grams
Pinus pinea L., Pinus gerardiana		600-700
r mae pinea z., r mae geraraiana		More than 700
Pinus koraiensis	550	500-600
T mad Keraienele	650	600-750
Pinus sibirica	850	800-900
T III de dibilité d	1100	1000-1200
Pinus yunnanensis	850	800-900
T mad yannanonolo	1200	1000-1500
Pinus wallichiana, Pinus griffithii	400	350-550
Pinus pumila	1800	1700-2400

#### **QUALITY - MINIMUM REQUIREMENTS (Kernels)**

The kernels must be:

- intact, however, slight superficial damage is not considered a defect,
- sound; produce affected by rotting or deterioration such as to make it unfit for human consumption is excluded,
- clean; practically free of any visible foreign matter,
- **sufficiently developed**; no shrunken or shriveled kernels which are extremely flat and wrinkled, or with desiccated, dried-out or tough portions affecting more than 20% of the kernel,
- free from blemishes, areas of discoloration or spread stains in pronounced contrast with the rest of the kernel affecting in aggregate more than 10% of the surface of the kernel,
- well formed,
- · free from living pests, whatever their stage of development,
- free from damage caused by pests, including the presence of dead insects and/or mites, their debris or excreta,
- free from mold filaments visible to the naked eye,
- free from rancidity,
- · free from abnormal external moisture,
- free from foreign smell and/or taste.

# PROVISIONS CONCERNING QUALITY

The purpose of the standard is to define the quality requirements of pine nuts at the export control stage after preparation and packaging.

#### A. Minimum requirements

- i. In all classes subject to the special provisions for each class, and the tolerances allowed, the pine nus must be:
  - Whole;
  - sound; produce affected by decay or with flaws which would make it unfit for consumption is excluded;
  - sufficiently developed, without signs of germination;
  - clean, brushed and washed, virtually free from visible extraneous matter, including parts of the seed coat and the shell;
  - free from living insects or mites whatever their stage of development;
  - free from visible damage by insects, mites or other parasites;
  - free from mould;
  - · free from rancidity and fermentation;
  - free from abnormal external moisture;
  - free from foreign smell and/or taste.

The condition of the pine nuts must be such as to enable them:

- to withstand transport and handling;
- and to arrive in satisfactory condition at the place of destination.
- ii. Moisture content. Pine nuts must not contain more than 6% moisture

#### B. Classification.

Pine nuts are classified in three classes defined below.

- (i) "Extra" class Pine nuts in this class must be of superior quality. They must be characteristic of the species or commercial type and be of uniform colour. They must be practically free from defects and blemishes with the exception of very slight superficial defects, provided that these do not affect the general appearance of the produce, its quality, its conservation or its presentation in the package.
- (ii) Class I Pine nuts in this class must be of good quality. They must be characteristic of the species and/or commercial type. The may has the following slight defects, provided that these do not affect the general appearance of the produce, its quality, its conservation or its presentation the package:
  - slight defects in shape
  - · slight defects in development
  - · slight defects in coloring.
- (iii) Class II This class includes pine nuts which do not qualify for inclusion in the higher classes, but which satisfy the minimum requirements specified above.

#### Sampling:

It simple terms, product sampling is the act of handing out free samples of a product to shoppers who visit a store so that they can test it out. What is more important to consider is why it works (and why you should use it).

There are many benefits to including a product sampling element in your business.

- For one, the fact that customers can test out a product for free means it's completely risk free for them. If they don't like the product, there is no buyer's remorse. If they do like it, they can add it to their basket, and you can make the sale. Additionally, they'll leave having had a better experience because you've offered them something of value.
- Another benefit is that you're giving shoppers the opportunity to directly interact with a product. The fact that they can get up close and personal with your product increases the possibility of buying your product. That's because you're connecting with your customers and creating a personality around your brand. A Product Sampling Study conducted by Arbitron and Edison Media Research confirms that. The study found that 35% of customers who sampled a product bought it the same day while 26% bought it immediately. And it doesn't matter if it's for a new product or an item that you've always stocked. In the case of an older product, by allowing your customers to familiarize themselves with it you could surprise them and persuade them to buy it going forward.
- A third benefit is that by making use of sampling, you have every opportunity to create a market and generate demand for a product that shoppers have not seen or experienced.

As the above survey pointed out, 24% of respondents claimed that they had purchased a sampled product over the item they intended to buy when they first entered the store.

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# PINE NUTS PROCESSOR

**Learner Guide** 

National Vocational Certificate Level 4

Version 1 - February 2020

Module-13

# **Module 13: Develop Professionalism**

**Objective:** This module covers the skills and knowledge required to Demonstrate work ethics, Resolve disagreements with others, Work in team, Work independently and Interpret documentation

Learning Unit	Learning Outcomes	I Aarning Flaments	Materials Required
LU1. Demonstrate	Trainee will be able to:	Describe principles of work ethics and	Multimedia
work ethics	Follow principles of work ethics in	expectations, such as be truthful,	Presentations
	all situations	punctual, prepared for work, cooperative,	Stationery
	Adopt professional behavior	honest, productive and respectful	
		Describe professional knowledge, skills	
		and attitude and how to practice	
	Trainee will be able to:	Describe how to communicate effectively	
	Communicate effectively	Describe the Importance of effective	
LU2. Resolve disagreements with others	Adopt peaceful approach	communication	Multimedia
	Determine cause of problem or	Define Conflict resolution techniques	<ul><li>Presentations</li><li>Stationery</li></ul>
	disagreement	Describe common causes of problem/	Clausinory
	Discuss and resolve issues	disagreement and their solutions	

LU3. Work in team	Trainee will be able to:	Describe importance of team work to	
	Work as a team member to	achieve common goals	
	achieve common goals	Define Roles of individuals on job site,	
	Keep open mind	such as supervisor, inspector, other trades	
	Participate in work place	people	Multimedia
	meetings	Describe importance of work place	Presentations
	Communicate accurately and	meetings, coordination and accurate	<ul><li>Stationery</li></ul>
	clearly	communication	
	Co-ordinate job related		
	activities		
	Cooperate with others		
LU4. Work	Trainee will be able to:	Describe the assignment very clearly and	
independently	Confirm and clarify assignment	responsibilities of each individual	
	Take initiative, anticipate and	Describe the importance of initiative,	
	prepare for next steps in job	anticipate and prepare for next steps in job	Multimedia
	Identify and resolve potential	Describe work place problems and how to	<ul><li>Presentations</li></ul>
	and actual problems	resolve them	<ul><li>Stationery</li></ul>
	Communicate with other site		
	personnel		
	Complete assignment		
LU5. Interpret	Trainee will be able to:	Describe types of documentation required,	• Multimedia
documentation		such as log books, safety reports,	<ul> <li>Presentations</li> </ul>
			<ul> <li>Stationery</li> </ul>

	<ul> <li>Access and maintain</li> </ul>	maintenance reports, inspection reports,	
	documents	time cards	
	<ul> <li>Provide complete, legible and</li> </ul>	Describe Importance of complete, legible,	
	accurate information in	and accurate documentation	
	documents		
	<ul> <li>Interpret equipment inspection</li> </ul>		
	documentation from previous		
	shifts before conducting pre-		
	operational inspection		
1			

# **Definition of Workplace Ethics:**

Workplace ethics are nothing but the rules and procedures that should be carried out in an office by the employer and the employees to maintain a professional company culture and to build a better relationship with their customers by providing better services. Workplace ethics plays an important role in company growth and development.

## **Work Place Ethics for Employer**

#### Rules and regulations ought to be same for everyone.

Everyone needs to attend office on time irrespective of their designation, distance of their home from the workplace, salary or status. An individual cannot come to office late just because he is the team leader and his team is already present and working on his behalf. If a day's salary of a clerk is deducted for coming late to work, it should be the same for the marketing manager as well.

Company's policies need to be communicated clearly to each and every one.

There should be transparency at all levels of hierarchy. Employees are the backbone of any organization and thus they must have a say in company's goals and objectives.

### An organization ought to respect its employees to expect the same in return.

Rules and regulations should not be too rigid. Don't expect an employee to attend office two days before his marriage date. If an employee is not keeping well, please do not ask him/her to attend office unless and until there is an emergency.

Management must not forget that money is a strong motivator for employees. Everything is important, be it career, growth, job satisfaction but what is most important is employee's salaries. Do not unnecessary hold their salaries for a long time unless and until there is really shortage of funds. In case of marketing and sales employees, conveyance and mobile bills must be cleared at the earliest. Do not ask for unnecessary bills and documents.

#### Organization should not expect employees to attend office 365 days a year.

It is the responsibility of human resource professionals to prepare the holiday calendar at the beginning of the year and circulate the same among all employees. Let employees enjoy their respective festivals and come back to work with positive energy and smile. Infact allow them to go in the festive mood two days prior to the D day. Ask them to organize pre festival bashes at the workplace. Let them dress in colourful attires and have fun. Trust me, work never suffers this way. Rather, employees feel attached to the organization and strive hard to deliver their level best every time.

### Give employees the space they require.

Key responsibility areas need to be communicated to the employees on the very first day of their joining. Roles and responsibilities need to be assigned as per an individual's expertise and experience. Do not expect an employee with one-year experience to head the marketing team. Employees need to be trained well. Organizations need to give at least six months' time to the new employees to adjust in the new environment.

It has been observed that most of the times employees crib when they are underpaid. Make sure employees get what they deserve. Salaries should be decided in the presence of the employee and also keeping in mind an individual's role in the organization, his/her gross salary in the previous organization, responsibilities within the current system and of course his/her years of experience. One of the major reasons as to why employees quit their jobs after a year or so is poor appraisal system. Increments ought to be directly proportional to the amount of hard work an employee puts in throughout the year and also his/her performance. Unnecessary favours are against the workplace ethics.

**Do not be too strict with your employees**. Do not block all social networking sites. Blocking face book and Orkut is not the ideal way to ensure employees are working and not wasting their time. Even a 24 \* 7 check would not prevent employees from wasting their time unless and until they realize it themselves. The moment, you are strict with something, people would tend to do the same more.

## **Work Place Ethics for Employee**

#### 1. Values:

The values of a person can be defined as the acts and actions which we make in our daily life. The true values of a person are devotion, respect, hard work and love. These acts of values make a person more valuable. These values tell more about a person's behavior and responsive qualities which he can possess during work.

#### 2. Morals:

Morals are the certain duties which he needs to do for the betterment of society. Moreover, these are certain duties which make society work in a synchronized manner. These morals apply to every single human being of the society and they can't be judged in a specific manner, because the things in moral are either right or wrong.

#### 3. Integrity:

Integrity means to be always honest and sincere under any circumstances. When any individual shows integrity in a professional environment and his work, it means that the person can be trusted as well as he is an honest man to rely on. The person who is honest and sincere always sustains for a longer duration in the company as compared to others.

#### 4. Character:

The character is one of the most important ethics which in short describes a person. It tells about your behavior towards others and your reactions towards the different situations. A bad thinking mind can destroy your character and a positive attitude and healthy mind always keep you with a good character.

#### 6. Dedication:

This is also a person defining ethic. The stronger dedication in work, the greater the output and results. Dedication in work makes a man stronger for tough situations and he also becomes a key player in motivating the others during the hard times.

#### 7. Accountability of responsibility:

The more a person is responsible in nature, the more efficiently and responsibly he will do the given task. Responsibility towards everything such as parents, family, society, nature, works, office, etc. are certain things which not only should be kept in mind but also these must be followed by every human being for a healthier environment.

These were the 7 ethical principles which matter the most in a professional environment and these ethics must be present in every human being so that he leads towards a successful and life.

## **Benefits of Ethics in the Workplace:**

The following mentioned are few advantages of ethics in the workplace.

#### 1. Asset Protection and Assurance:

When your workers possess an ethical working environment and ethical behavior in the workplace, your company's maintenance cost decreases to a remarkable extent because they are well aware of their duties and responsibilities towards the company. They also realize that they should not do any damage to any of the machines and equipment are given to them as they are very valuable for the company and doing damage to these things will be a wrong act, so automatically things will be taken care of and everything will work systematically.

## 2. Productivity will increase:

When the working staff and the workers value the work given to them and then they will do all the given work in time and achieve their set targets, this will greatly affect the sales and the productivity of the company. Due to this, it is assured that you will have a group of people who will sail your business even in the worst of the downfall of the market, and keep the growth of the company and business consistent.

#### 3. Team Work will develop:

When all the workers do their jobs in a responsible way, then a time comes when they have achieved the target way before the given deadline, then a question arises What Next? So the situation automatically bonds up all the individuals into a team. These individuals now work as a team and work in the benefit of the company for which they will be getting or achieving their incentives. This mutual understanding of the employees is a positive signal that the company will sustain for a very long period in the variable market conditions.

## 4. Public Image and Brand Value Increases:

Yes, if all the members of the company are dedicated to work as well as figure out their values and responsibility towards the environment, then it is for sure that the type of cleanliness and the disposal of the waste product of the company will be unbeatable in the market, hence resulting in attracting a bigger customer base due to the clean and quality of the services or products.

Moreover, an increase in the public image and an increase in the customer base is directly proportional to an increase in the brand value. In simpler words when you gain popularity amongst your customers you start to develop your company into a brand.

## 5. Adaptive to changes:

Workers with professional ethics in the workplace are definitely the master key to the lock of success. The team of understanding, trustworthy, reliable, motivate, concern and responsible people will defiantly adapt themselves into any kind of position and work they are filled with.

Moreover, in general, it has been seen worldwide that in the digressive market conditions, if the company asks for any changes in the production or changes in the kind of work then the workers oppose.

In some situations, the company is left empty-handed falling short of workers as they leave the company due to changes, but things are just opposite when you have a trustworthy and responsible bunch of people as they themselves demand changes according to the company's situation and let the company run even in the hard market situations.

## 6. Decision making and implementing is always easy:

Whenever there is a need to take a big decision then the best one made is by the advice of the employees of the company, and what will be better than every single employ respecting the decision and supporting the company to go ahead with their decision. This is the power of ethics

in the employers who respect the decision of the company and let it go along with the flow. This is very rare in the big companies but where this scene happens; the company turns big brands over the night.

## 7. Trouble-free working environment:

Generally, where everyone is unknown and moreover no one wants to know each other there are higher chances of great trouble and where there is a friendly, respectful and understanding environment between the employees there are fewer chances of least troubles from the employee's end.

If in case, a situation arises where there is some little misunderstanding between the employees, it gets solved within them due to better and strong understanding between all the employees. Even the management does not have to bother about those small little things as they know that the employees will take better care of themselves.

#### 8. The company will Touch New level of Success:

When everything is so managed and systematic along with the understanding of the employees because of their strong ethics, the company will surely touch new heights of success and even the growth of your business will be assured.

When your employees become expert in their respective works and respective fields, then their dedication and will, to do the work will show true colors and give more fruitful results.

### What Is Conflict Resolution?

Conflict resolution is the process by which two or more parties reach a peaceful resolution to a dispute. Conflict may occur between co-workers, or between supervisors and subordinates, or between service providers and their clients or customers. Conflict can also occur between groups, such as management and the labor force, or between whole departments.

#### **The Conflict Resolution Process**

The resolution of conflicts in the workplace typically involves some or all of the following processes:

- 1. Recognition by the parties involved that a problem exists.
- 2. Mutual agreement to address the issue and find some resolution.
- 3. An effort to understand the perspective and concerns of the opposing individual or group.
- 4. Identifying changes in attitude, behavior, and approaches to work by both sides that will lessen negative feelings.
- 5. Recognizing triggers to episodes of conflict.
- 6. Interventions by third parties such as Human Resources representatives or higher level managers to mediate.
- 7. A willingness by one or both parties to compromise.

## **Team Work:**

"Coming together is a beginning. Keeping together is progress. Working together is Success-Henry Ford"

The above proverb by Henry Ford can very well highlight the importance of working together in teams

#### What is a team?

A team is a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable

#### Benefits of team work

- Realistic, achievable goals can be established for the team and individual members.
- Team members commit to support each other.
- Team members understand one another's priorities.
- Communication is open.
- · Problem solving is more effective.
- · Performance feedback is more meaningful.
- Conflict is understood as normal.
- Balance is maintained between group productivity.
- The team is recognized for outstanding results.
- · Members are encouraged to test their abilities and try out ideas.
- Team members recognize the importance of disciplined work habits.
- Learning to work effectively as a team in one unit is good preparation for working as a team with other units.

#### Work Independently.

Independence is being able to complete your duties without always having a supervisor planning your next moves. Initiative is being able to plan and organize your next steps in a process to ensure your job is complete.

# **Document Management system.**

Invoices, payment reminder letters, sales brochures, email, balance sheets, spreadsheets, reports—all businesses create a variety of documents in the course of doing and keeping track of business. And to keep things organized, all businesses need to establish rules for creating documents.

For many businesses, the focus of a document management system is on the organization and storage of documents. They want to be able to store documents in an organized and secure way that still allows documents to be found easily. Document management is the process of handling documents in such a way that information can be created, shared, organized, and stored efficiently and appropriately. As such, learning how to create a document management system is critical for businesses.

For many businesses, the focus of a document management system is on the organization and storage of documents. They want to be able to store documents in an organized and secure way that still allows documents to be found easily.

There are 5 methods of filing:

- Filing by Subject / Category
- Filing in Alphabetical order
- Filing by Numbers / Numerical order
- Filing by Places / Geographical order
- · Filing by Dates / Chronological order

How can we make and keep our documents secure?

The first line of defense for document security is physically securing the business premises themselves. All businesses, even home-based ones, need to have security systems installed.

Businesses may also need or want to invest in other security devices, such as window bars, security cameras, or patrol services. You can spend all the time you want creating passwords and encrypting files in an attempt to protect your electronic files, but it doesn't matter much if someone can just wander in and steal your computer.

Additional document security measures include:

- Locking all filing cabinets after business hours (and during lunch if no one reliable is present)
- > Backing up electronic documents regularly, preferably off-site to guard against having your business data wiped out by natural disasters
- > Restricting user access to certain documents, applications, and folders on any shared computers
- > Preventing employee theft by conducting background and reference checks as a part of your hiring process

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# PINE NUTS PROCESSOR

**Learner Guide** 

National Vocational Certificate Level 4

Version 1 - February 2020

Module-14

## **Module 14: Develop Entrepreneurial skills**

**Objective:** This module 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, Evaluate marketing performance, Develop Business promotion technique and Develop Business competition Skills

Duration: 100 Hours Theory: 20 Hours Practice: 80 Hours

Durai	tion: 100 Hours	Theory: 20 Hours	Practice: 80 Hours	
Lear	ning Unit	Learning Outcomes	Learning Elements	Materials Required
LU1.	Conduct Market survey	<ul> <li>Trainee will be able to:</li> <li>Identify market demands for Pine nuts</li> <li>Study Pine nuts supply side of the market</li> <li>Make a contacts list of Traders / Agents / Brokers of the Pine nuts market</li> </ul>	<ul> <li>Describe market information and its sources.</li> <li>Explain importance of current market trends.</li> <li>Define Primary and secondary information sources.</li> </ul>	<ul><li>Multimedia</li><li>Presentations</li><li>Stationery</li></ul>
LU2.	Establish Business opportunities	<ul> <li>Trainee will be able to:</li> <li>Evaluate impacts of emerging or changing technology, including e-commerce, on the business</li> <li>Determine viability of business opportunity in line with perceived risks, resources available, financial returns and other outcomes sought</li> </ul>	<ul> <li>Importance of Modern IT sources for Market information.</li> <li>Describe business Planning and its importance.</li> <li>Describe importance of Personal development in business.</li> <li>Describe Risk assessment.</li> </ul>	<ul><li>Multimedia</li><li>Presentations</li><li>Stationery</li></ul>

		<ul> <li>Assess and match personal skills/attributes against those perceived as necessary for a particular business opportunity</li> <li>Identify and assess business risks according to resources available and personal preferences</li> <li>Trainee will be able to:</li> </ul>	Describe Financial Planning and its	
LU3.	Seek for the required funds to establish the business	<ul> <li>Estimate required funding to establish and run the business based on expected sales and activity levels, available finances and commitments</li> <li>Investigate methods of accessing alternative sources of finance</li> <li>Identify strategies for meeting financial obligations</li> <li>Implement plans to access available funds as required</li> </ul>	<ul> <li>Describe the role of financial institutes in business establishment.</li> </ul>	<ul><li>Multimedia</li><li>Presentations</li><li>Stationery</li></ul>
LU4.	Prepare Business plan	<ul> <li>Trainee will be able to:</li> <li>Develop operational goals and targets to meet the enterprise strategic plan.</li> <li>Identify and incorporate supply chains into</li> </ul>	<ul> <li>Describe strategic planning and its importance.</li> <li>Describe supply chain management.</li> <li>What are KPI's.</li> </ul>	<ul><li>Multimedia</li><li>Presentations</li><li>Stationery</li></ul>

		the business plan.		
		<ul> <li>Identify risk management needs are within</li> </ul>		
		the business plan.		
		<ul> <li>Set clear and measureable indicators of</li> </ul>		
		operational performance to allow for		
		realistic analysis of performance.		
LU5.	Implement	Trainee will be able to:	Describe importance of Monitoring and	
	marketing	Develop measurable performance targets	evaluation of business.	
	activities	that meet business plan objectives	•	<ul> <li>Multimedia</li> </ul>
		Organize distribution channels and ensure		<ul><li>Presentations</li></ul>
		product and service information is		<ul> <li>Stationery</li> </ul>
		accurate and readily available.		
		·		
LU6.	Evaluate	Trainee will be able to:	<ul> <li>Describe different marketing strategies and</li> </ul>	
	marketing performance.	<ul> <li>Assess product, pricing and distribution</li> </ul>	its importance.	
	periormance.	policies in relation to market changes,		
		marketing objectives and enterprise		<ul><li>Multimedia</li></ul>
		requirements		<ul> <li>Presentations</li> </ul>
		<ul> <li>Identify areas of positive marketing</li> </ul>		<ul> <li>Stationery</li> </ul>
		performance and take corrective action to		
		remedy poor marketing performance areas		
		Trainee will be able to:	Departies the singularity of Children	
1117	Develop		Describe the importance of Distribution	<ul> <li>Multimedia</li> </ul>
207.	Business	<ul> <li>Establish marketing objectives based on</li> </ul>	channels.	<ul> <li>Presentations</li> </ul>
		current and potential product		<ul><li>Stationery</li></ul>

promotion technique	<ul> <li>Select appropriate distribution channel options to ensure access to target markets is achieved efficiently and appropriately</li> <li>Establish time-frames for distribution and selling activities</li> </ul>		
LU8. Develop  Business  competition  Skills	<ul> <li>Trainee will be able to:</li> <li>Prepare and record detailed plans for promotional activities</li> <li>Ensure strategies take account of time management and scheduling issues, and resource constraints.</li> <li>Create promotional materials that enhance the product and commercial presentation</li> </ul>	<ul> <li>Describe the importance of Promotional activities.</li> <li>Describe different types of promotion techniques.</li> </ul>	<ul><li>Multimedia</li><li>Presentations</li><li>Stationery</li></ul>

# **Illustration and Examples:**

China, Pakistan, Russia, North Korea and Italy are the main producers of pine nuts. In Asia, pine nuts are harvested from two species of Korean pine (P. koraiensis) which has relatively higher commercial value and chilgoza pine (P. gerardiana) which has higher nutritional value. Due to its higher nutritional value and delicate taste, chilgoza pine nuts have a high demand in local, national and international markets.

The Chilgoza Pine (Pinus Gerardiana) found in the western Himalayan forests of Pakistan, Afghanistan and India, growing at elevations between 1800 to 3350 meters. Pine Nuts or Chilghoza is found in the Khyber Pakhtunkhwa and Baluchistan Provinces, the Northern Areas (Gilgit Agency) and Kashmir. Chilgoza Pine have hardy tree and can endure excessive drought, high winds, and severe cold in the winter. Nearly 20 percent of the Pakistani Forests comprise of Chilgoza Trees. They are good source of essential minerals, vitamins and heart-healthy monounsaturated fatty acids. Pine Nuts are crunchy yet buttery pieces of sweet delight that you can simply snack on or add to salads and savories

The market chain for chilgoza pine nuts has multiple steps. Generally, after nut extraction, local villagers sell their product in village or district markets. Also, there are dealers/traders that come into villages and buy the nuts directly from villagers. If the forest is contracted, then private sector actors take care of processing, cleaning and delivering to provincial markets. Both in district and provincial markets, the nuts are sold by traders within the country or exported to other countries.

# Importance of a Market analysis.

"Market analysis is one of the crucial components to help business with all the required information and making wise business decisions,"

#### • Great help in understanding your customers:

Market analysis is a technique through which the comprehensive profile of an ideal customer for your business can be collected. It can help in ascertaining the size of the market for your business. Also, it will also help in gaining insights on their location, age, income, and gender that can lead the way for making specific marketing campaigns.

#### • Analyze your competitors:

To evaluate your competitors, market analysis is the most significant weapon. It can also help in examining the new competitors, if any, who are trying to gain power in the market. It also helps in measuring the reaction of competitors when you introduce any new product or service. Weaknesses of competitors' strategy are one of the most significant things that this analysis helps to identify.

#### Test before launch:

Once your product gets to the final stage, refrain from jumping directly into its marketing. Rather test the product or service before introduction and then market analysis will help you plan the most suitable strategy to market the product

#### What is a Business Plan?

A business plan is a written document that describes in detail how a business—usually a new one—is going to achieve its goals. A business plan lays out a written plan from a marketing, financial and operational viewpoint.

- A business plan is a written document describing how businesses—both new and established—plan to achieve their goals.
- Businesses may come up with a lengthier traditional business plan or a shorter lean startup business plan.
- Good business plans should include an executive summary, products and services, financial planning, marketing strategy and analysis, financial planning, and a budget.

Whether you're starting a small business or exploring ways to expand an existing one, a business plan is an important tool to help guide your decisions. Think of it as a roadmap to success, providing greater clarity on all aspects of your business, from marketing and finance to operations and product/service details

# **Financial Planning**

Financial Planning is the process of estimating the capital required and determining its competition. It is the process of framing financial policies in relation to procurement, investment and administration of funds of an enterprise.

## **Objectives of Financial Planning**

Financial Planning has got many objectives to look forward to:

- a. **Determining capital requirements-** This will depend upon factors like cost of current and fixed assets, promotional expenses and long-range planning. Capital requirements have to be looked with both aspects: short- term and long- term requirements.
- b. **Determining capital structure-** The capital structure is the composition of capital, i.e., the relative kind and proportion of capital required in the business. This includes decisions of debt- equity ratio- both short-term and long- term.
- c. Framing financial policies with regards to cash control, lending, borrowings, etc.
- d. A finance manager ensures that the scarce financial resources are maximally utilized in the best possible manner at least cost in order to get maximum returns on investment.

## Importance of Financial Planning

Financial Planning is process of framing objectives, policies, procedures, programs and budgets regarding the financial activities of a concern. This ensures effective and adequate financial and investment policies. The importance can be outlined as-

- 1. Adequate funds have to be ensured.
- 2. Financial Planning helps in ensuring a reasonable balance between outflow and inflow of funds so that stability is maintained.
- 3. Financial Planning ensures that the suppliers of funds are easily investing in companies which exercise financial planning.
- 4. Financial Planning helps in making growth and expansion programs which helps in long-run survival of the company.
- 5. Financial Planning reduces uncertainties with regards to changing market trends which can be faced easily through enough funds.

# **Business Communication:**

"Organizational communication is the way in which members of an organization interact with each other and the people they serve."

Communication is the cornerstone of any organization's success; business comprises of continuous interactions with multiple parties i.e. managers, employees and clients. Types of organizational communication can include superior to subordinate, co-worker to co-worker, and frontline to customer/client/guest, to name a few. These interactions can happen face-to-face, over the phone, or electronically

Effective communication ensures the flowing of information between all relevant parties, reducing the potential for misunderstanding, dissatisfaction and lack of trust

#### 7 C's of Effective Communication

The 7 C's of effective communication, also known as the seven principles of communication are a useful way to ensure good and business communication. The 7 C's of Effective Communication provide a useful check list as a result of which both written and verbal communication pass off in a clear, plain, target group-oriented and well-structured manner.

#### 1. Completeness

The message must be complete and geared to the receiver's perception of the world. The message must be based on facts and a complex message needs additional information and / or explanation. A good subdivision of subjects will clarify the message as a result of which there will be a complete overview of what is said.

#### 2. Concreteness

Concrete business communication is also about a clear message. This is often supported by factual material such as research data and figures. The words used as well as the sentence structure can be interpreted uni-vocally. Nothing is left to the imagination.

#### 3. Courtesy

In addition to considering the feelings and points of view of the target group, it is also important to approach the audience in a friendly and courteous manner. Use of terms that show respect for the receiver contribute towards effective communication. The same goes for the manner

in which you address someone. Not everyone will be charmed if you use a familiar form of address and use of a formal address could come across as too distant. By using the word 'they' a larger audience is immediately addressed.

## 4. Correctness

A correct use of language has the preference. In written business communication, grammatical errors must be avoided and stylistic lapses or a wrong use of verbs are not sufficient either in verbal communication. A correct use of language increases trustworthiness and the receiver will feel that they are taken seriously.

### 5. Clarity

Clear or plain language is characterized by explicitness, short sentences and concrete words. Fuzzy language is absolutely forbidden, as are formal language and cliché expressions. By avoiding parentheses and keeping to the point, the receiver will get a clear picture of the content of the message. Briefly-worded information emphasizes the essence of the message.

#### 6. Consideration

Communicating with the target group (Consideration). In order to communicate well, it is important to relate to the target group and be involved. By taking the audience into account, the message can be geared towards them. Factors that play a role in this are for example: professional knowledge, level of education, age and interests.

## 7. Conciseness

A message is clear when the storyline is consistent and when this does not contain any inconsistencies. When facts are mentioned, it is important that there is consistent, supporting information. Systematically implementing a certain statement or notation also contributes to clear business communication. When statements are varied, they will confuse the receiver.

### **Marketing Plan**

A business must have a marketing plan in order to produce, communicate, and sell products and services. Using research on segments of the target audience, a marketing plan is written. Once the plan has been developed, a budget is set for the promotional campaign.

The goal of promotion strategies in marketing is to make the public aware of your product, to influence them to purchase it, and to establish a long-term relationship that will make them repeat customers. Some methods of communication include advertising, digital marketing, sales promotions, and public relations.

## **Marketing Communications**

Advertising is just one method of marketing communications, which is the umbrella for many methods.

#### **TYPES OF ADVERTISING -**

MASS MEDIA	SALES PROMOTION	PERSONAL	DIRECT MARKETING	DIGITAL
Outdoor Ads	• Coupons	SELLING	Mail Order Catalogues	MARKETING - The Internet is here to
Business	<ul> <li>Discounts</li> </ul>	Salesmen	Bulk Mailers	stay!
Directories	<ul> <li>Referral Programs</li> </ul>	Showrooms	E-mail	Company Websites
<ul> <li>Magazines and/or Newspapers</li> </ul>	<ul> <li>Loyalty Incentives</li> </ul>	<ul><li>Exhibitions</li><li>Trade shows</li></ul>	<ul><li>Telemarketing</li><li>Point of Sale Displays and Signs</li></ul>	Social Media - Facebook or Twitter
Television and/or     Movies				Blogging
• Radio			Packaging	Mobile Phone     Promotions
Infomercials				• YouTube

# **Frequently Asked Questions**

1.	What is Competency Based Training (CBT) and how is it different from currently offered trainings in institutes?	Competency-based training (CBT) is an approach to vocational education and training that places emphasis on what a person can do in the workplace as a result of completing a program of training. Compared to conventional programs, the competency based training is not primarily content based; it rather focuses on the competence requirement of the envisaged job role. The whole qualification refers to certain industry standard criterion and is modularized in nature rather than being course oriented.
2.	What is the passing criterion for CBT certificate?	You shall be required to be declared "Competent" in the summative assessment to attain the certificate.
3.	What are the entry requirements for this course?	The entry requirement for this course is 8th Grade or equivalent.
4.	How can I progress in my educational career after attaining this certificate?	You shall be eligible to take admission in the National Vocational Certificate Level-3 in Leather Products Development Technician (Pattern Maker). You shall be able to progress further to National Vocational Certificate Level-4 in Heavy Construction Machinery Operator Course; and take admission in a level-5, DAE or equivalent course (if applicable). In certain case, you may be required to attain an equivalence certificate from The Inter Board Committee of Chairmen (IBCC).
5.	If I have the experience and skills mentioned in the competency standards, do I still need to attend the course to attain this certificate?	You can opt to take part in the Recognition of Prior Learning (RPL) program by contacting the relevant training institute and getting assessed by providing the required evidences.
6.	What is the entry requirement for Recognition of Prior Learning program (RPL)?	There is no general entry requirement. The institute shall assess you, identify your competence gaps and offer you courses to cover the gaps; after which you can take up the final assessment.
7.	Is there any age restriction for entry in this course or Recognition of Prior Learning program (RPL)?	There are no age restrictions to enter this course or take up the Recognition of Prior Learning program
8.	What is the duration of this course?	The duration of the course work is 1,510 hrs. (11 months)

9. What are the class timings?	The classes are normally offered 25 days a month from 08:00am to 01:30pm. These may vary according to the practices of certain institutes.
10. What is equivalence of this certificate with other qualifications?	As per the national vocational qualifications framework, the level-4 certificate is equivalent to Matriculation. The equivalence certificate can be obtained from The Inter Board Committee of Chairmen (IBCC).
11.What is the importance of this certificate in National and International job market?	This certificate is based on the nationally standardized and notified competency standards by National Vocational and Technical Training Commission (NAVTTC). These standards are also recognized worldwide as all the standards are coded using international methodology and are accessible to the employers worldwide through NAVTTC website.
12. Which jobs can I get after attaining this certificate? Are there job for this certificate in public sector as well?	You shall be able to take up jobs in the local or overseas construction companies in heavy machinery operator job profile.
13. What are possible career progressions in industry after attaining this certificate?	You shall be able to progress up to the level of supervisor after attaining sufficient experience, knowledge and skills during the job. Attaining additional relevant qualifications may aid your career advancement to even higher levels.
14. Is this certificate recognized by any competent authority in Pakistan?	This certificate is based on the nationally standardized and notified competency standards by National Vocational and Technical Training Commission (NAVTTC). The official certificates shall be awarded by the relevant certificate awarding body.
15. Is on-the-job training mandatory for this certificate? If yes, what is the duration of on-the-job training?	On-the-job training is not a requirement for final / summative assessment of this certificate. However, taking up on-the-job training after or during the course work may add your chances to get a job afterwards.
16. How much salary can I get on job after attaining this certificate?	The minimum wages announced by the Government of Pakistan in 2019 are PKR 17,500. This may vary in subsequent years and different regions of the country. Progressive employers may pay more than the mentioned amount. The heavy Machinery Operator normally earns 20,000 to 25,000 in the start.
17. Are there any alternative certificates which I can take up?	There are some short courses offered by some training institutes on this subject. Some institutes may still be offering conventional certificate courses in the field.
18. What is the teaching language of this course?	The leaching language of this course is Urdu and English.

	There are some short courses offered by some training institutes on this subject. Some institutes may still be offering conventional certificate courses in the field.
20. What is the examination / assessment system in this program?	Competency based assessments are organized by training institutes during the course which serve the purpose of assessing the progress and preparedness of each student. Final / summative assessments are organized by the relevant qualification awarding bodies at the end of the certificate program. You shall be required to be declared "Competent" in the summative assessment to attain the certificate.
21. Does this certificate enable me to work as freelancer?	You can start your small business by purchasing your own heavy construction machine and can start earning 50,000 per month. You may need additional skills on entrepreneurship to support your initiative.

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