

FARMER AND COMMUNITY EMPOWERMENT (FACE) THROUGH SOLAR DRYERS FOOD PROCESSING

TRAINING & INFORMATION MANUAL



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DRIED FOOD PROCESSING

1.1. What is dried food?

Dried food is food that has been preserved by removing the water or moisture content present in it. The removal of water from food inhibits the growth of microorganisms, allowing for a longer shelf life.

Because drying removes moisture, the food becomes smaller and lighter in weight.

Fruits and Vegetables can also be dried. Dried fruits are unique, tasty and nutritious.

Vegetables can also be preserved by drying. Because they contain less acid than fruits, vegetables are dried until they are brittle, at which stage, only 10% moisture remains and no microorganism can grow.

1.2. Market/demand for dried fruits and vegetables

Dried fruits can be eaten as is or can be preserved to be used in making desserts or other dishes.

Many chefs use dried fruits to prepare desserts in most fancy restaurants today.

Dried fruits also have the potential to be used in ice cream.

Dried vegetables can either be grinded into powder form or reconstituted when they need to be used. These vegetables can be used in every day (Pakistani) food, along with having other uses.

Dried vegetables are also often served as side orders in many restaurants today.

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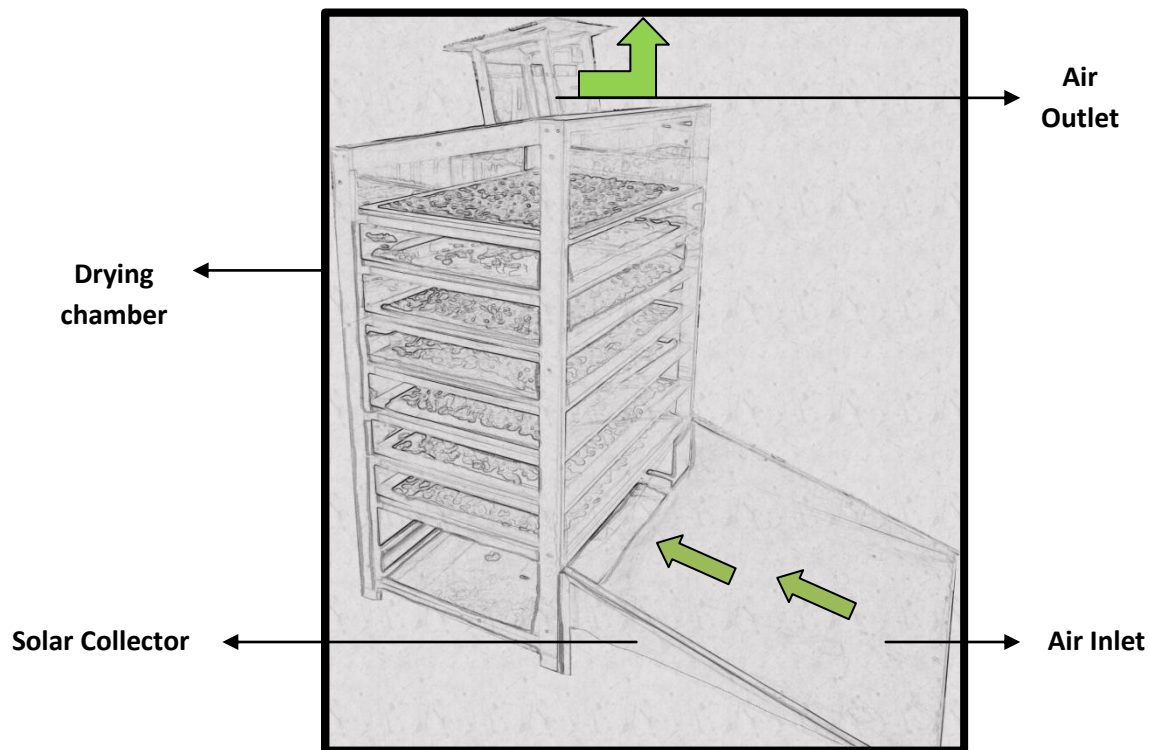
SOLAR DRYING FOOD PROCESSING – AN INTRODUCTION

2.1. What is Solar Drying?

Solar Drying is a simple and ancient skill that continues to be practiced successfully on a commercial scale in several countries (where conditions are suitable). It is the most accessible and hence the most widespread food processing technology, which has been adapted over the years to ensure greater quality and better results. The traditional method of solar drying fruits and vegetables is to expose them to direct sunlight. However, this method entails several risks including contamination, theft or damage by birds and vermin, no protection from rain or dew that adds moisture to the food (encouraging mould and decay), and loss of essential nutrients stored in the food caused by (excessive) exposure to harsh sunlight.

2.2. What is a Solar Dryer?

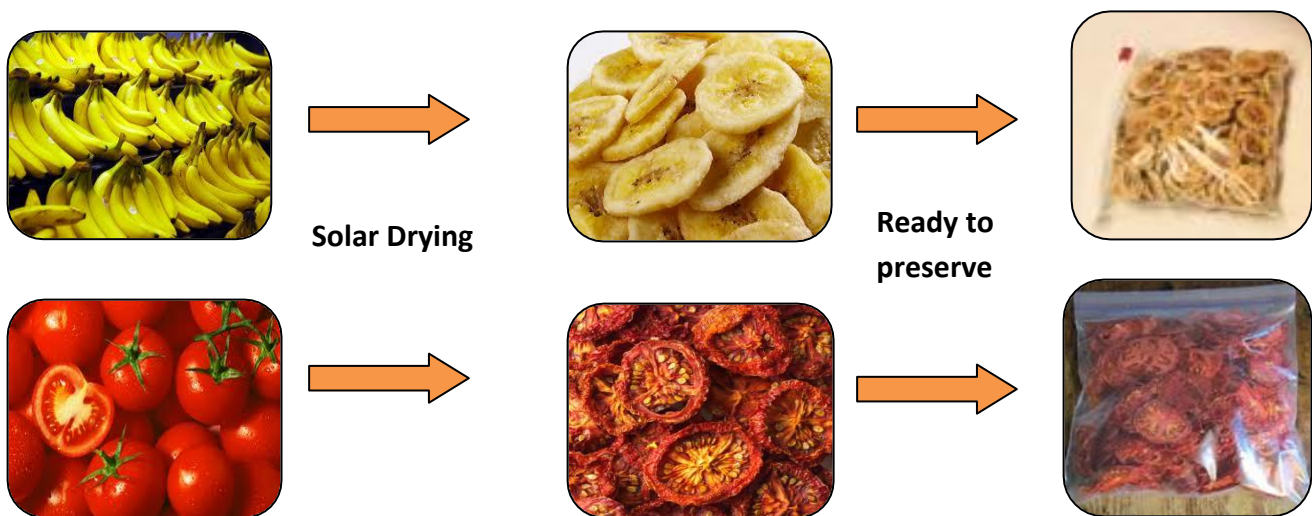
Instead of directly placing fruits and vegetables under the sun, to avoid a range of hazards the concept of collecting solar heat and using it for food drying has received increasing attention in the recent years. For this purpose, solar dryer units have been developed. Solar dryers vary in design and concept. Indirect heating dryers (as used for this particular project), dry the food with heated air collected by a “solar collector” – a plain metal surface used to absorb heat from the sun and warm the surrounding air. The food is placed inside an insulated heating/drying chamber with proper air circulation.



SOLAR DRYER

2.3. What are the reasons for solar drying fruits and vegetables?

Fruits and vegetables with their rich contents of minerals, vitamins, and dietary fiber & anti oxidants are considered as nature's gifts for the health & well being of humans. They are highly perishable in nature due to high moisture content (70-95%); they have a soft texture and are susceptible to bacterial rotting by microbial respiration as well as physiological breakdown. Sometimes moisture degradation in the quality of fruits & vegetables also starts immediately after the harvest leading to drying & shriveling. They also get infested easily with micro organisms like fungi, bacteria & insects affecting food safety. In rural areas, where fruits & vegetables are grown in plenty, a lack of facilities and knowledge of preservation of food leads to a significant amount of wastage of agricultural produce. Hence these fruits & vegetables are to be preserved & protected from deterioration in both quality & quantity.



2.4. What are the benefits of Solar Drying fruits and vegetables (using a solar dryer)?

While the solar drying of fruits and vegetables using a solar dryer can be comparatively costly as opposed to traditional methods of drying, it has immense benefits.

BENEFITS OF SOLAR DRYING

- Dried foods are high in fiber and carbohydrates and low in fat, making them healthy food choices
- Vitamin A is retained during drying
- Storage space required for dried foods is minimal making them easy to store
- Transportation costs are reduced as dried products weigh only 1/6 of the fresh food product
- Easy to carry out, as solar food drying is a relatively simple skill
- Longer shelf- life of produce
- Reduction in wastage of fruits and vegetables

A comparison table between traditional methods of drying and solar air drying (using custom-designed solar drying units) is shown below:

OPEN SUN DRYING	SOLAR AIR DRYING
Traditional method	More recent innovation
Delayed drying	Fast drying
Problems of contamination by birds, insects, etc.	No contamination
Less hygienic and less clean	Highly hygienic and very clean
Inferior quality products	Best quality products
Drying possible only on sunny days	Drying possible on all days including cloudy and rainy days with electrical backup
Poor sensory qualities to products- Appearance / Color & Textures	Highly acceptable sensory qualities to products – attractive appearance & color & Texture
Uneven drying	Even drying
Less suited for large/ commercial scale production	Highly viable for quality commercial production & economically viable
Less storage time due to uneven and incomplete drying	Longer storage of drying time (because of more complete drying)

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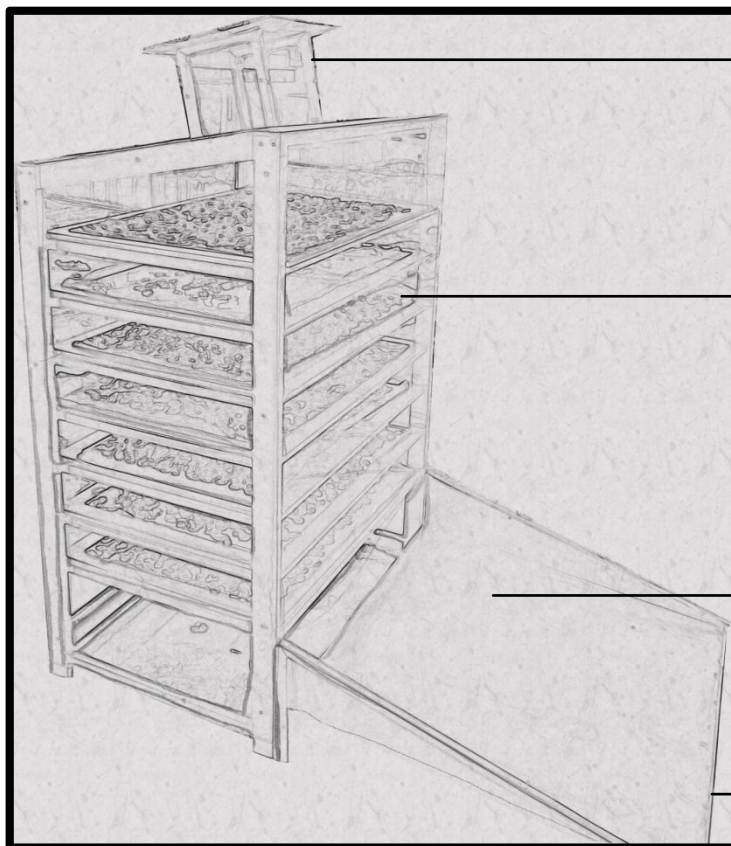
MAINTENANCE OF SOLAR DRYER

3.1. Where to Place the Solar Dryer?

To achieve the highest quality results and evenly dried fruits and vegetables, the solar dryer needs to be appropriately placed.

DOs	DON'Ts
Place on a flat and clean surface	Do not place on an uneven surface
Position the solar dryer collector facing South	Do not place near a wall, tree or covered dark area where sunlight is blocked
Place in a location with maximum sunlight throughout the day	Do not place near muddy or dusty area
Place in a location with good air circulation	Do not place near unhygienic area (near garbage, drainage etc.)
Place in a clean and garbage free location, away from animals and insects	Do not place near animals

3.2. How to clean the Solar Dryer?



AIR OUTLET
Brush the air outlet and remove any dust to ensure efficient flow of air.

DRYING CHAMBER SURFACE
Clean the surface thoroughly to remove any dust and dirt using duster or dry cloth.

SOLAR COLLECTOR SURFACE
Wipe the surface using a damp soft cloth (cotton)

AIR INLET
Remove dirt & ensure the entrance of the solar chamber is not clogged

3.3. How to clean the Solar Dryer Trays?

Maintaining the cleanliness of the solar dryer and specifically the solar dryer trays is extremely important to protect food from being contaminated.

- 1 • Scrape off any old remains (of food) from the tray, using a brush
- 2 • Soak the green mesh/net in the water mixed with dish washing liquid/powder
- 3 • Dry the tray and green mesh/net before each use
- 4 • Before loading the trays, wipe the inside of the drying chamber with a clean cloth
- 5 • Close the door immediately after each tray has been loaded

4

FOOD SAFETY, SANITATION AND PERSONAL HYGIENE

4.1. Food Contamination

4.1.1. What is Food Contamination?

Food contamination refers to foods that are spoiled or tainted because they either contain microorganisms, such as bacteria or parasites, or toxic substances that make them unfit for consumption. Food contamination is a serious issue, as food is one of the few commodities that people actually ingest into their bodies. The most important thing to remember is that, food CAN be contaminated if it is not handled correctly.

Hence, when you produce food for sale you have a special responsibility not to hurt or injure your customers. The main ways in which a producer can harm consumers are by selling food that:

- Contains poisonous materials
- Contains bacteria or moulds or the poisons they produce
- Contains glass or other contaminants that could cause harm if eaten
- Has been contaminated by coming into direct contact with flies, insects and other animals

4.1.2. How is Food contaminated?

Fruits and Vegetables can be contaminated in the following ways:

- If they are washed using water contaminated with animal manure or human sewerage
- Contamination is also possible from infected food handlers. For instance, dirty hands and nails, dirty clothes etc.
- Poor hygiene and lack of cleanliness of the food processing center also causes contamination
- Cross contamination: is the transfer of disease-causing microorganisms, such as bacteria and viruses, from one food to another. Contaminated food may come in direct contact with other foods, or one food may drip contaminated juices on another food
- Using dirty cutting boards and other unclean utensils can cause contamination
- Exposing food to animals, insects and an unhygienic environment causes contamination
- Pests and pest droppings in the kitchen or house cause contamination

4.2. Sanitation

Sanitation literally means measures necessary for improving and protecting health and well being of the people. Sanitation is any system that promotes adequate sewerage disposal (human and animal wastes), proper use of toilet and avoiding open space defecation. Sanitation also includes the provision of clean drinking water.

Inadequate sanitation is a major cause of disease world-wide and improving sanitation is known to have a significant beneficial impact on health both in households and across communities.

Proper sanitation is extremely important for food processing centers and food handlers. Important things to remember regarding sanitation are:

- **Open defecation** should not be practiced. Latrines should be used.
- **Animals** should be kept in a place where their waste should not be near the household or near drinking water source.
- **Garbage** should be disposed of properly. Trash from the kitchen, leftover and stale foods, and other garbage should not be kept inside the household for long, and immediately disposed away from the household to avoid the spread of diseases
 - Garbage should not be disposed near drinking water source, so as to not contaminate the water.
- **Clean water** should be used for drinking. Dirty water can cause diseases.

4.3. Personal Hygiene

Good personal hygiene is the first step to good health. It not only protects you from poor health, but also shields those around you from suffering illnesses that arise from poor personal habits. Taking care of personal hygiene is important and beneficial for everyone, but especially important for food handlers.

HOW TO MAINTAIN YOUR PERSONAL HYGIENE

- Wash hands with soap regularly to prevent the spread of diseases (especially after using the toilet)
- Avoid using towels or other cloth to dry hands, as these may contain germs. Instead, practice air drying of hands
- Nails should be cut and cleaned regularly. Dirty nails store dirt that can cause serious illness
- Shower or bathe every day even if you don't feel dirty, to remove all dirt and impurities
- After using the toilet, clean yourself properly with water, followed by washing hands with soap
- Do not clean your nose or ears with bare hands. Ears and Nose should be cleaned in the toilet OR they should be cleaned with a tissue/clean cloth/handkerchief - afterwards hands should be washed
- Teeth should be brushed or 'meswak' used to clean and maintain healthy gums and teeth
- The inside of the mouth should be regularly rinsed with water to kill bacteria present in the mouth

WHEN TO WASH HANDS

- Before starting work
- After handling food
- Between handling raw and ready to eat food (like fruits & vegetables)
- After going to the toilet or helping children use the toilet
- After handling raw foods
- After handling waste
- after eating, drinking or smoking, coughing, sneezing or touching your face
- After stroking your hair or tying your hair
- After taking a break (from work)
- After handling chemicals
- After handling money
- After touching or handling animals

HOW TO WASH HANDS

1. Wet hands
2. Apply soap and lather
3. Rub palm to palm
4. Rub backs of both hands
5. Rub between fingers
6. Rub backs of fingers (interlocked)
7. Rub all parts of both hands
8. Clean under nails
9. Rinse hands under clean water
10. Air dry hands

4.4. Food Safety

Food safety is a scientific discipline describing handling, preparation, and storage of food in ways that prevent food-borne illness. This includes a number of routines that should be followed to avoid food from being contaminated. Food Safety is extremely important as contaminated food can lead to potentially severe health hazards.

Food must be protected from all means of contamination, to safeguard the health of human beings eating the food. Certain precautions and safety measures can be adopted when handling food to minimize the risks of contamination (find in detail on next page).

FOOD SAFETY
STORAGE OF FOOD
<ul style="list-style-type: none">• In case of shopping for all food items together, make sure to separate fruits and vegetables from raw meat by placing them in separate shopping bags (fruits and vegetables can be contaminated when juices from raw meat drip onto them, as these juices contain bacteria).
<ul style="list-style-type: none">• If the fruits and vegetables are refrigerated, they must be kept separately from raw meat and poultry.
<ul style="list-style-type: none">• Do not leave cut produce at room temperature for many hours.
<ul style="list-style-type: none">• Store chemicals and equipment well away from food items, food packaging and food handling areas
<ul style="list-style-type: none">• Food storage, handling and cooking should be carried out away from any animals, birds, insects or vermin
<ul style="list-style-type: none">• Food storage locations should be away and safe from trash cans or garbage disposal areas
<ul style="list-style-type: none">• Food should be stored and handled AWAY from the toilet
WASHING FRUITS & VEGETABLES
<ul style="list-style-type: none">• Fruits and vegetables should be washed with clean water
<ul style="list-style-type: none">• Washed fruits and vegetables should be placed in a clean bowl or on a clean surface
<ul style="list-style-type: none">• Because bacteria can grow well on the cut surface of fruit or vegetables, be careful not to contaminate these foods while slicing them up on the cutting board
KITCHEN UTENSILS & COUNTER
<ul style="list-style-type: none">• All knives, bowls, cutting boards etc. should be completely clean before use
<ul style="list-style-type: none">• Knives used to cut raw meat or other food should not be used to cut fruits and vegetables
<ul style="list-style-type: none">• Separate knives should be used for different fruits OR the knife should be wiped with a clean cloth between use from one fruit/vegetable to another
<ul style="list-style-type: none">• Wash kitchen utensils with hot soapy water before AND after use.
<ul style="list-style-type: none">• The kitchen counter should be wiped during work as well as before and after work in the kitchen
<ul style="list-style-type: none">• Avoid unnecessary contact with food, e.g. use utensils rather than bare hands

PERSONAL HYGIENE OF FOOD HANDLERS

- Wash hands with soap regularly. Hands should be washed before and after handling food items
- Clean the inside of nails before handling food
- Wear clean protective clothing, such as an apron, when handling food
- Wear gloves when handling food. Change gloves regularly as the need arises
- Tie your hair and cover it with a scarf or hair net before handling food
- If you have any cuts or wounds, cover them with an appropriate dressing or a cloth.
- If you cut yourself while cutting the fruit, immediately clean your wound and ensure that blood has stopped before proceeding to handle food
- Avoid wearing jewelry as metals can contain poisonous substances
- Never smoke, chew gum, and eat pan or spit, in a food handling or food storage area.
- Never change a baby's nappy or clean the baby near the food handling/storage area.
- Do not cough or sneeze over food.
- Do not clean your nose or ears while handling food
- Do not handle food if you are feeling unwell or suffering from a contagious illness

5

SOLAR DRYING FOOD PROCESSING – THE PROCESS

5.1. Equipment required

Solar drying and food processing of fruits and vegetables requires a clean and well maintained food processing center. The equipment required for the solar drying of fruits and vegetables has been listed below:

- Solar dryer
- Green mesh/net
- Fruits and vegetables
- Salt and clean water
- Vinegar
- Knives
- Peelers
- Cutting boards
- Strainers
- Bowls
- Baskets
- Trays
- Aprons
- Gloves
- Hairnets/scarves

5.2. Initial Preparation

Before starting the actual solar drying process, initial preparatory steps need to be made:

- Procure the relevant fruits and vegetables that need to be dried
- Brush off any food remnants or dirt from the solar dryer trays
- Clean the solar dryer if dirty
- Check the temperature outside
- Place the “solar collector” appropriately so as to face the sun and absorb maximum heat

5.3. The step-by-step solar drying process

1. Properly wash the fruits/vegetables with clean water, rubbing any dirt off them
2. Wear an apron and tie and cover your hair
3. Wash hands with soap and air dry them properly
4. Wear gloves
5. Peel the food items using a peeler/knife (those that need to be peeled)
6. Slice the fruit/vegetable in different sizes (different for each item)
7. Dip the fruit (e.g. apples) in vinegar (this step is to be followed for certain items ONLY). For onions, dip in salt and water.
8. For dipped food items, use a large strainer to take them out of the salt water/vinegar
9. Place sliced items on a tray
10. Using gloved hands place sliced items on the solar dryer tray with ample spacing
11. Close the door of the solar dryer and ensure all unnecessary openings are sealed
12. Leave fruits and vegetables to dry until completely dehydrated
13. Regularly check the food to ensure it is receiving adequate sunlight

5.4. Storage and Packaging

Once the fruits and vegetables have been dried, they are to be removed from the solar dryer and properly packaged and stored to protect them from the damaging effects of light, heat and air, thus preventing spoilage and ensuring a long shelf life.

The importance of packaging is as follows:

- Proper packing protects the color, appearance & taste of product
- Packing prevents the loss of nutrients
- Attractive packing as per the size or shape of the product helps promote quick sales by its aesthetic look
- Correct packing enables easy transport
- Packing should be done in a scientific manner using right type of packaging material.
- Label on package must indicate brand, ingredients, preservatives used, quantity/ weight /size of the product, date of manufacture, nutritional facts, price, etc.
- Packing in wax paper, aluminum foil, acceptable polypropylene pouches / sachets / boxes

6

TRAINING GUIDELINES

6.1. Guidelines for the trainer/facilitator

The following guidelines should be followed by all trainers conducting training sessions:

1. Prior to initiating the training, the manual must be read thoroughly to minimize disruptions and ensure smooth flow during the sessions
2. All necessary materials and teaching aids for each session must be organized prior to the start of the session in order to avoid embarrassing situations in midsession.
3. Before starting the actual training, participants should be made to feel safe and comfortable.
4. Make sure to create a friendly and pleasant environment for participants
5. The participants must be interacted with as a friend, not as a trainer. They must not feel distanced or intimidated by the trainer.
6. Remember, your role will be one of assistance, not one of direction.
7. Your role must always be positive, exemplary and imitable
8. The sessions must be conducted in an atmosphere of sincerity and harmony. Your sincerity will make the participants feel at ease.
9. Attempts should always be taken to encourage, inspire and motivate the participants. Your attempts will play a major role in achieving the goals of this training.
10. Take special care not to make the sessions boring or monotonous, conducted in a lecture-style. Instead, make the session interactive and thus a more pleasurable learning experience.
11. In each session, all the flipchart images and handout contents must be explained and presented before the participants in an easy-to-understand form.
12. Questions from the participants must be warmly welcomed. The participants must be subsequently satisfied with relevant answers to the questions.
13. Easy and fluent language must be used when conducting the sessions. If needed, regional dialects may also be used. However, anything said must be relevant and pertaining to the best interests of the participants.
14. If needed, the techniques or processes of conducting the trainings can be modified depending on the time, place and personnel involved, while retaining the primary objectives of the training program.
15. Above all, trainers must remember that it is their duty to convey project messages to the beneficiaries in an easy-to-understand manner, helping them understand every detail, while also building a sense of trust and commitment with the participants, to ensure their involvement in the project.

6.2. Objectives of the training

At the end of the (two-week) basic training session, participants should be able to:

- Identify their aims and dreams in life
- Understand and follow basic workplace discipline
- Demonstrate a professional attitude and behavior in the workplace
- Understand the entire solar drying food processing method
- List the benefits and uses of dried food
- Understand the importance of personal hygiene and food safety
- Be better equipped to use (and clean) solar dryers
- Understand the importance that engaging in such an activity can hold for them as women
- Recognize the overall objectives and purpose of the project
- Identify organizations involved in the project

6.3. Training techniques, materials and aids



Materials & Aids

- Flipcharts
- Poster boards
- Solar dryers and food items (for practical)



Techniques

- Lectures
- Participatory discussion
- Activities
- Practical demonstrations

7

BASIC TRAINING AND APPRENTICESHIP

7.1. Community Mobilization/ Beneficiary Selection

The basic training phase consists of a total of 5 sessions covered over a period of two weeks conducted with a group of 10-15 women (depending on drop outs and unavailability of women the number may vary). Before basic training can start, participants/beneficiaries need to be approached and selected.

- Beneficiaries must be from the target area
- Beneficiaries must fit the pre-defined criteria
- The community must be aware of the project, donors, organization and the nature of the activity in the area
- Beneficiaries/communities need to be approached in a cautious manner keeping cultural sensitivities in mind
- Trainers must be appropriately dressed (according to the culture) and speak the same language when approaching beneficiaries

7.2. Training schedule

BASIC TRAINING		
Day 1	Session 1	2 hours
Day 2	Session 2	2 hours
Day 5	Session 3	1 hour
Day 7	Session 4	2 hours
Day 10	Session 5	1 hour

BASIC TRAINING- DAY 1: Session 1 (2 hours)

S.N.	TOPIC	DURATION	POINTS FOR DISCUSSION	ACTIVITIES/QUESTIONS	OUTCOMES
1.	Orientation and Introduction to the project	15 minutes	<ul style="list-style-type: none"> - Introduction of trainers - Introduction to the project - Objectives of the training - Brief overview of the basic training phase - Expectations from participants 	<ul style="list-style-type: none"> - Ask participant to introduce themselves - Ice-breakers: How's the weather? How are you feeling? Excited about the training? etc. 	Participants should: <ul style="list-style-type: none"> - Be able to understand the purpose of their visit - Understand the project and its activities and objectives - Feel safe and at ease
2.	Personal Goals/Dreams of Life	30 minutes	<ul style="list-style-type: none"> - Discussion on individuals' goals/dreams in life - Discussion on the concept of self-discovery - Importance of evaluating one's strengths and weaknesses to become a more productive person - Relating life goals to understanding the importance of self-reliance (link back to project) 	<ul style="list-style-type: none"> - Ask participants to talk about themselves. - Probe to encourage them to share personal aims and aspirations - Ask thought provoking questions: Would you want to make your dreams come true? Do you think you are capable enough? What if you were given the chance to make your dreams come true, through this project? 	Participants should: <ul style="list-style-type: none"> - Be able to open up about their personal aims - Be able to feel a sense of competence - Understand that dreams can be transformed into reality
3.	Basic work ethics/ moral behavior	30 minutes	<ul style="list-style-type: none"> - Characteristics of a good human being (honest, hardworking, helpful, disciplined, etc.) - Important to be a good human being first then become a good team member - Importance of working together (teamwork) to increase efficiency - How to behave at the workplace 	<ul style="list-style-type: none"> - Story of sticks to explain concept of teamwork (one stick alone can easily be broken, 10 sticks in a bundle are stronger and harder to break) - References from religion to demonstrate the importance of good behavior - Team-building activities 	Participants should: <ul style="list-style-type: none"> - Be able to better identify with each other - Become familiar with professional behavior and attitude - Understand why work ethics are important

					<ul style="list-style-type: none"> - Understand why teamwork is important
4.	Introduction to Solar Drying Food Processing	20 minutes	<ul style="list-style-type: none"> - Discussion on solar drying food processing - Why is it important to preserve fruits and vegetables - Benefits of solar drying - Emphasize on the importance of using a solar dryer as compared to traditional methods of drying - Discussion on the solar dryer (how it works, its maintenance etc.) 	<ul style="list-style-type: none"> - Ask them whether they face problems storing fruits and vegetables for long periods of time - Demonstrate the method of solar drying (use dried fruits and vegetables as examples to show to participants) 	<p>Participants should:</p> <ul style="list-style-type: none"> - Become familiar with solar drying food processing techniques - Be able to identify a solar dryer - Be able to identify the benefits of dried fruits and vegetables
5.	Benefits of engaging in food processing activity (especially for women)	10 minutes	<ul style="list-style-type: none"> - Explain the concept of engaging in income generating activities - Explain the importance of getting exposure to new technology and learning new skills - New skills → More informed women → Earn income → Path to becoming self-reliant → Provide better life for their children and families → Happy mothers, happy families, happy and progressive communities 	<ul style="list-style-type: none"> - Ask them what they would do if they had their own money 	<p>Participants should:</p> <ul style="list-style-type: none"> - Be able to understand the personal benefits from participating in the project - Be able to understand their role in their families and in society.
6.	Personal Hygiene and Food safety	15 minutes	<ul style="list-style-type: none"> - Discuss the importance of hand washing at critical times - Cleanliness of work environment (kitchen) and personal hygiene when handling food items - Food handling 'Dos' and 'Donts' 	<ul style="list-style-type: none"> - Demonstrate HOW to wash hands and air dry them - Demonstrate how to wear gloves, aprons etc. 	<p>Participants should:</p> <ul style="list-style-type: none"> - Learn the importance of hygiene - Learn how to take care of their personal and surrounding hygiene

BASIC TRAINING- DAY 2: SESSION 2 (2 hours)

S.N.	TOPIC	DURATION	POINTS FOR DISCUSSION	ACTIVITIES/QUESTIONS	OUTCOMES
1.	Solar drying- the detailed process	1 hour	<ul style="list-style-type: none"> - How to cut and peel the food items - How to soak them in vinegar (if needed) - How to place in solar dryer - Special points to keep in mind when handling solar dryer (cleaning dryer, closing door etc.) 	<ul style="list-style-type: none"> - Practical work and demonstration (demonstrate the process to the participants and then allow them to practically carry it out themselves) - Place fruits and vegetables for drying 	Participants should: <ul style="list-style-type: none"> - Learn how to prepare food items for solar drying - How to handle and place the solar dryer to ensure maximum heat absorbed
2.	Hygiene	15 minutes	<ul style="list-style-type: none"> - Revision of importance of personal hygiene - Ways to keep yourself clean 	<ul style="list-style-type: none"> - Ask them if they have started washing hands - Ask whether they went home and encouraged their families to start hand washing regularly 	Participants should: <ul style="list-style-type: none"> - Be able to recall hygiene related messages taught in session 1. - Start practicing hand washing, wearing aprons etc. and taking care of cleanliness in the work environment
3.	Sanitation , Food Safety and overall cleanliness	15 minutes	<ul style="list-style-type: none"> - Discussion on the importance of clean environment - Cleanliness of the kitchen and other food storage places - Proper disposal of garbage - Discuss proper storage of food 	<ul style="list-style-type: none"> - Demonstrate how to clean knives and other kitchen utensils 	Participants should: <ul style="list-style-type: none"> - Understand the importance of protecting food from vermin and insects - Understand how to properly store food

BASIC TRAINING- DAY 5: SESSION 3 (1 hour)

S.N.	TOPIC	DURATION	POINTS FOR DISCUSSION	ACTIVITIES/QUESTIONS	OUTCOMES
1.	Check on dried food items placed in solar dryer	30 minutes	<ul style="list-style-type: none"> - Check on food items placed in solar dryer during session 2. - Identify possible problems, weaknesses in the way food items were placed - Discuss inefficiencies and fallbacks. - Weigh the dried food items - Package and store dried food items 	<ul style="list-style-type: none"> - Check on food items placed in solar dryer during session 2. 	<p>Participants should:</p> <ul style="list-style-type: none"> - Be able to identify dried fruits and vegetables - Be able to understand the process of solar drying fruits and vegetables
2.	Hygiene	30 minutes	<ul style="list-style-type: none"> - Revise lessons on personal hygiene 	<ul style="list-style-type: none"> - Monitor and observe personal hygiene and hand washing habits of beneficiaries 	<p>Participants should:</p> <ul style="list-style-type: none"> - Slowly show change in behavior i.e. adapting hygienic behavior, wearing gloves etc.

BASIC TRAINING- DAY 7: SESSION 4 (2 hours)

S.N.	TOPIC	DURATION	POINTS FOR DISCUSSION	ACTIVITIES/QUESTIONS	OUTCOMES
1.	Place second batch of fruits and vegetables for solar drying	1 hour	- Repeat as in session 2	- Repeat as in session 2	Participants should: <ul style="list-style-type: none"> - Be confident and knowledgeable enough to handle the solar drying process on their own - Be able to cut, peel, soak and dry the food items themselves under the supervision of trainers
2.	Goals/dreams of life	15 minutes	- Repeat concepts of personal dreams and goals to motivate participants to improve their work ethic and work harder	- Have group discussion	- Participants should be able to understand the importance of the project in helping them change their lives
3.	Work Ethics	15 minutes	- Repeat discussion on work ethics to remind individuals of the importance of professional behavior, time management, self- discipline etc.	- Have group discussion. - Ask for their feedback on the project, their feelings etc.	- Participants should demonstrate good work ethics
3.	Sanitation, hygiene and food safety	30 minutes	- Revise hygiene related concepts	- Observe how they maintain cleanliness in the work place	- Participants should practice hygienic activities

BASIC TRAINING- DAY 10: SESSION 5 (1 hour)

S.N.	TOPIC	DURATION	POINTS FOR DISCUSSION	ACTIVITIES/QUESTIONS	OUTCOMES
1.	Check on dried food items placed in solar dryer	30 minutes	- Repeat as in Session 3	- Repeat as in session 3	Participants should: <ul style="list-style-type: none">- Have mastered the solar drying process- Should be able to identify whether fruits and vegetables have been properly dried- Should know how to operate the solar dryer