

## The Ecofarms and Agroservices Phytosanitary and Biosecurity Standard Operating Procedure

Providing Consistency, Predictability, and Help to Ensure Safety and the Highest Possible Quality Outcome in Food Production.



The Ecofarms and Agroservices Resource Center





This standard operating procedure (SOP) is a document providing instructions to guide all staffs, employees, visitors, and any persons operating withing the farm vicinities, on all Phytosanitary and biosecurity protocols to adhere to. This is to ensure the safety of lives and preservation of the quality of products, services and properties.

The Ecofarms and Agroservices Resource Center.

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## Farm Review

The Fresh fruit and Vegetable Sector of the The Ecofarms and Agroservices Company, comprises a number of departments dedicated to providing consumers with consistently safe, high-quality and nutritious Nigerian grown fresh Fruits, vegetables and other staples.

This Manual provides our farm managers, staffs and our growers with crop-specific phytosanitary activities to ensure the safety of farms, facilities, staffs and consumers. The manual focuses on the grower's role in providing fresh fruits, vegetables that meet the goals of the Nigerian Food Safety Act and other globally acceptable standards of food safety protocols. There are many pathways for farm, food and consumer contamination that could result to economic losses in investments, and food poisoning of consumers, such as through unsanitary handling or contaminated equipment, farm sanitation or packaging material and distribution protocols.

By making all workers and visitors to the farm aware of these measures, farm managers minimis the risks associated with disease exposure in the farm. The information in this manual is in no way comprehensive, but is developed to act as a guide for phytosanitary and biosecurity best practice. Specific measures may vary between farms and production systems. However, with greater awareness and vigilance by all farm actors and visitors, the threat of pest incursions can be greatly reduced.

## What is biosecurity?

B iosecurity are sets of measures that are put in place at the national, regional and farm level. These are aimed at helping to protect against the introduction and spread of pests, diseases, and to effectively deal with them should any eventually make it through. Phytosanitary measures seek to certify that food items are produced with highest possible quality and are free from disease and infections. *Early detection, immediate reporting and effective response; increases the chance of effective eradication of any new pest.* 

Current regulatory oversight and complementary cultural, packing and logistic practices provide an additional layer of protection for the consumer. The Ecofarms and Agroservices Company is committed to providing the highest quality food and products to its clients. This Manual is consistent with The Ecofarms and Agroservices Company's compulsory Good Agricultural Practices, and Good Handling Practices audit training material for all food handling, processing staffs and out growers.

# Section 1

# FARM INFORMATION

The following information should be provided and kept on file.

Farm Name
Farm Owner
Phone Number
Farm Location
Farm Phone Number
Email Address
GPS/Latitude-Longitude of Location
Total Acres/Hectares Farmed

Note: An aerial image/map or hand-drawn map must be available that shows the crops grown in each field or production area.

## **Food Safety Coordinator**

A food safety coordinator should be appointed for each farm operation. This person is responsible for implementing

and overseeing the company's food safety program. The food safety coordinator is also responsible for ensuring the program is being followed by all employees and visitors to the farm.

Food Safety Coordinator \_\_\_\_\_

Phone number\_

## **Traceability and Mock Recall**

## **Policies and Procedures**

## **Purpose:**

To ensure harvested produce can be traced back to the growing area, and individual famer in the event of a food safety recall.

## **Policies:**

- 1. Each grower or clusters of growers are identified or coded to enable traceability in the event of a recall.
- 2. Field Receipts containing grower name and number, date harvested variety of fruit, or vegetable. Quantity harvested, a unique ID number is issued by the packinghouse to the grower when the handler receives or picks up the fruit from the field.
- 3. Field Receipts are kept by the grower and the packinghouse.
- 4. In the event of a recall, the size of the area a grower can trace back to may determine the extent of produce affected. Field Receipts that include field/ detailed

address that are precise enough for growers to trace a delivery back to the farm are strongly encouraged, as this will likely limit the overall impact of a recall.

5. A mock recall must be conducted prior to the GAP audit.

#### **Procedures:**

#### **Mock Recall**

- 1. Identify how much fruit and vegetables were picked from the particular farm where possible "issues" may have occurred.
- 2. Locate Field Receipt associated with the potentially "affected" fruit and vegetables in question.
- 3. Develop a plan of action to dispose of such supplies. Example: Notify the packinghouse of the particular fruit that may have been affected; do not harvest from this particular area until problem is corrected; etc.
- 4. Complete Mock Recall Form. Include all written communications such as: Emails and other documents.

#### **Mock Recall Form**

Account Name	

Account Number \_\_\_\_\_

Date

Time\_\_\_\_\_

Field Receipt Number \_\_\_\_\_

Conducted by\_\_\_\_\_

SN	Growers' information's	Quantities of supplies	Observation	Remark
1				
2				

#### **Prior Land Use**

SN	Crop Grown	Previous Land Use	Size
1			
2			

#### **Ownership Statement:**

Regarding property locate	ed at	
State of		Parcel #:
Owned by	and	farmed
by	··	

To the best of my knowledge, there has been no previous land use that would render this property unsuitable for agriculture. This property has never been used as a landfill, feedlot or for industrial purposes that may have created biological or toxic waste, and it has either been fallow or used for production of food crops for the past\_\_\_\_\_years.

Name	
Position	
Company	
Signature Date	

Soils and Land Use

#### **Policies and Procedures**

#### **Purpose:**

To ensure the growing area is suitable for growing and harvesting commodities.

## **Policies:**

- 1. Previous land use was compatible with the growing and harvesting of commodities with minimal risk of microbial, chemical or other contamination.
- 2. Crop production areas that have been subjected to flooding and where the produce comes in contact with potentially contaminated flood waters should be tested for microbial hazards.

## Section 2

# POLICIES: WORKER HEALTH AND HYGIENE

#### **Policies and Procedures**

#### **Purpose:**

To address correct workers hygiene practices and reduce the potential for food contamination by an employee or visitor's actions, hygiene, health or habits.

- 1. Portable water is available to all employees to drink and to wash their hands.
- 2. Visitors and employees who may come in direct contact with product are required to follow all sanitation and hygiene practices as outlines by the food safety coordinator.
- 3. First aid kits must be available in the event of an injury or emergency.
- 4. All employees must be trained on proper sanitation and hygiene practices annually, and are required to follow proper sanitation and hygiene practices. (Periodic refresher training should be conducted throughout the year.) New employees will receive all

necessary training prior to work placement, and must sign and commit to following all company laid down sanitation and hygiene practices.

- 5. Employees must sign documentation that they have been trained in proper sanitation and hygiene practices.
- 6. Safety and hygiene signs are posted in English, and where necessary in native language in the vicinity of the toilet facility, instructing employees to wash their hands before beginning work or returning to work.

#### **Procedures:**

## Hygiene

- 1. Water-testing records must be available for drinking water provided to employees, showing the water is potable.
- 2. Employees must wash hands before work, after using the restroom and after breaks.
- 3. If gloves are used for food handling, such as during harvest (this does not include activities such as pruning, irrigating, etc.), they must be intact, clean and in sanitary condition.
- 4. Eating food, chewing gum, drinking beverages (except bottled water) or using tobacco are restricted to areas outside the production area. Eating and drinking may take place outside of the production area, on brake hutches in the field, or in areas already

harvested in current harvest cycle.

#### Hand Washing

## Note: Hand washing with soap and water is required. Sanitizer use alone is NOT an acceptable practice.

- 1. Water-testing records must be available, showing the water being used for hand washing is potable.
- 2. All employees must wash their hands with soap and water at the beginning of the workday, after using the toilet, after eating and after breaks.
  - a) Wet both hands with potable water; preferably, rushing water from the tap. Apply soap and rub to lather as far as the wrist.
  - b) Rinse under clean water.
  - c) Dry hands with a single-use towel.
  - d) Dispose of towel in trash can.

## **Toilet and Hand-Washing Facilities**

#### **Policies and Procedures**

#### **Purpose:**

To ensure that toilet and field sanitation facilities are maintained in good repair and condition, and placed so that fields and employees are not contaminated. Placement of portable toilets should only be done in a manner that minimizes the chance that usage, cleaning or relocation could result in contamination of irrigation water sources, equipment-cleaning areas, areas of foot traffic, the floor of the processing area and any other areas that may jeopardize the safety of the harvested produce. Use special caution when servicing portable toilets to prevent spillage into the fields.

## **Policies:**

## **Toilet and Hand-Washing Facilities**

- 1. Employees must have access to a toilet and hand washing facility that shall be properly stocked and have regularly scheduled cleaning. Toilet and hand washing facilities shall be located at a distance and in an area that minimizes risk of product contamination.
- 2. At no time are employees allowed to urinate or defecate anywhere other than the provided toilet.
- 3. Operations must be in compliance with all applicable state and/or federal regulations dictating the number, condition and placement of portable field sanitation units. If the number of employees does not require a portable field sanitation unit, access to a clean toilet facility must be readily available for all employees.

## **Procedures:**

## **Toilet and Hand-Washing Facilities Maintenance**

- 1. Toilet facilities must be in good repair, clean and properly stocked.
- 2. Cleaning and servicing must be done on a regularly

scheduled basis, and documentation of servicing must be available.

3. Field sanitation facilities must be stocked with single-use towels, soap, a place to dispose of trash and potable water for hand washing.

#### **Portable Toilet Facilities Cleaning**

#### Note: Toilets will have a service log.

- 1. Toilet facilities should be placed at a distance and in an area that minimizes risk of product contamination.
- 2. Ensure floors, tiles, toilet bowls, urinary and washing hand basins are always clean.
- 3. Replace and replenish toilet paper as needed.
- 4. Sign and date "service log sticker" in each unit. Toilets should be serviced often as needed.

#### **Toilet and Hand-Washing Station Maintenance Log**

#### **Purpose:**

To ensure toilet and hand-washing facilities are properly maintained.

#### **Frequency:**

On an as-needed basis whenever workers are present.

## **Directions:**

- 1. Place facilities away from crops.
- 2. Pump the toilet and hand-washing holding tanks and

ensure they are all properly functioning.

- 3. Pick up all trash and remove to trash can. Clean toilet, sink and floors.
- 4. Restock toilet paper, soap and single-use towels.

SN	Date	Time	<b>Description of services</b>	Remark
1				
2				

### Bleeding/Bodily Fluids and In-Field Illness Policies and Procedures Purpose:

To address the potential contamination issues caused by employees who are bleeding or appear to have in-field illnesses or injuries.

## **Policies:**

## **Bleeding and Bodily Fluids**

- 1. All incidences of bleeding and vomiting are to be reported to supervisors.
- 2. Workers are instructed to seek prompt treatment with clean first aid supplies for cuts, abrasions or other injuries.
- 3. Any produce and packaging materials contaminated with blood and/or bodily fluids must be segregated and disposed of immediately.
- 4. Tools and/or equipment contaminated with blood

must be properly sanitized immediately.

- 5. Any employee having sores, cuts, boils, lesions, etc., on his/her hands shall have those areas covered with first aid materials and/or disposable gloves.
- 6. If first aid materials/disposable gloves do not fully cover the wound, the employee is not permitted to engage in working in direct contact with the fruit, vegetables or other produce.

#### Illness

Employees showing symptoms of diarrhea, vomiting or other infectious diseases are excluded from work assignments that involve direct contact with fresh produce.

## Section 3

# AGRICULTURAL INPUTS

## **Pre-harvest Materials**

## **Policies and Procedures**

#### **Purpose:**

To ensure personnel applying pre-harvest pesticides, growth regulators and fertilizers have working knowledge of all applicable federal, state, local laws and acceptable international standards governing such operations.

## **Policy:**

Copies of Qualified Applicator's license and/or Pest Control Adviser's license should be available for review. Where such documents are not available staffs should be properly trained in-house, with an attached supervisor.

## **Procedure:**

All employees responsible for material applications shall be properly trained and/or certified.

Water Usage

**Policies and Procedures** 

## Water Usage

Source of Irrigation Water (Check all that apply.)

- o Municipal
- o Well,
- o Pond,
- o Reservoir
- o Canals/Rivers/Ditches,
- o storm water/Runoff Water

How are crops irrigated? (Drip, sprinkler, overhead, other)

#### **Purpose:**

To ensure water used for irrigation, chemical applications and/or fertigation does not represent a likely source of biological contamination to food intended for human or animal consumption.

## **Policies:**

1. Water used for drinking and hand washing must be from a potable water source.

2. The quality of water used for irrigation, chemical applications and/or fertigation must meet the standard for *E*. *coli* established by the World Health Organization.

3. Water sources must be tested at the required frequency for total coliform/generic *E. coli*.

## **Procedures:**

## Municipal/District

1. Acquire test results from the local water authority annually.

2. Municipal water supplies are regulated by law and are generally required to be potable.

## Wells

1. Test, at a minimum, annually for total coliform/generic *E. coli*. Document testing on the Water Testing Log.

2. For wells contaminated by microorganisms, a possible corrective measure would be shocking the well with chlorine.

# **Open-Water Sources (Ponds/Reservoirs/Canals/Rivers/Ditches)**

Test, at a minimum, three times per year at the delivery point for total coliform/generic *E. coli*.

SN	Usage	Allowable Limits
1	Drinking	potable water only
2	Hand Washing	potable water only
3	Irrigation/Fertigation/	Cannot exceed 1,000* MPN (or
	Foliar Applications	CFU)/100 mL

Document testing on the Water-Testing Log.

\*Source: World Health Organization – Irrigation Water Standard

SN	Source	Required Test and Test Frequency
1	Municipal/District	Obtain water-testing results from municipal/district water source yearly.
2	Wells	Total coliform/generic <i>E. coli</i> at least once a year.
3	Ponds	Total coliform/generic E. coli at least 3 times a year.
4	Reservoirs, Canals, and Rivers	Total coliform/generic E. coli at least 3 times a year.

## Water-testing Log

#### **Procedures:**

1. Conduct a total coliform/generic *E. coli* water test on each water source according to the required standard.

#### **Frequency:**

- a. Wells at least once a year.
- b. Open-water sources— at least three times a year.
- 2. Document findings and attach results

SN	Water Source	Testing Lab	<b>Results Attached</b>	Remark
1	Туре			
2	Name			
3	Location			

Composted Manure/Class "A" Bio-solids (Treated) Usage

#### **Policies and Procedures**

#### **Purpose:**

To ensure composted manure and/or Class "A" Bio-solids used as soil amendments do not represent a likely source of biological contamination to produce intended for human consumption.

## **Policies:**

- 1. Only properly decomposed manure and/or Class "A" Bio-solids are used as soil amendments.
- 2. Composted manure and/or Class "A" bio-solids are properly stored and are protected to minimize recontamination using:
  - o Barriers
  - o Physical Containment
  - Coverage to Prevent Rain Leaching
  - o Others\_\_\_
- 3. Composted manure stored adjacent to crop production areas is contained to prevent contamination of crops.
- 4. Analysis reports are available for composted manure/ Class "A" bio-solids along with an explanation of the method of treatments used to kill pathogens.

## **Procedures:**

## **Application:**

- 1. Growers purchasing composted manure should obtain specification sheet from the supplier of each shipment.
- 2. Document rates, dates and locations of composted manure/Class "A" bio-solid applications.

#### **Storage:**

- 1. Composted manure and/or bio-solids that are stored on the farm near the growing area must be stored in a way that ensures they do not leach or run off into adjacent production areas or water sources.
- 2. Consider physical containment to secure manure storage or treatment areas where contamination from runoff, leaching or wind spread is a concern.
- 3. Physical containment may include concrete blocks or soil berms, pits or lagoons. Such storage must be away from irrigation water sources.
- 4. Consider covering manure piles or storing manure under a roof to avoid leaching.
- 5. Growers may consider collecting water that leaches through the manure that is being stored or treated. Collecting leachate allows growers to control its disposal.

## Composted Manure/Class "A" Bio-solids (Treated) Application Log

SN	Date	Field	Crop	MANURE Source/ Type/Quantity/ Applicator	D a t e Harvested
1					
2					
3					
4					

## Section 4 FIELD SANITATION

## Sewage Treatment

## **Policies and Procedures**

#### **Purpose:**

To ensure the farm's sewage treatment system/septic system functions properly and there is no evidence of leaking or runoff.

Policy:

Farm sewage treatment systems must be functional and operating properly with no evidence of runoff or leaking. Septic tanks should be sealed.

## **Procedure:**

If signs of leaking or runoff are detected, correct the problem immediately.

Animal, Wildlife, and Livestock

**Policies and Procedures** 

**Purpose:** 

To ensure high concentrations of wildlife or domestic animals do not cause a food safety issue due to significant amounts of uncontrollable animal feces and other contaminants.

## **Policies:**

- 1. Farming operations are never going to be able to exclude wild and/or domestic animals from entering crop production areas. However, conscious effort should be made to limit their access to the production areas.
- 2. Wild and/or domestic animals are restricted from entering crop production areas by a variety of means including, but not limited to, the following.

(Check all that apply.)

- Fencing
- Audible Cannons
- Distress Calls
- Physical Repellents
- Scare Balloons
- Odoriferous Repellents
- Perimeter Monitoring

Other

3. Manure lagoons and manure storage areas are properly managed to prevent leaking, overflow and/

or runoff from contaminating crop production areas.

- 4. Manure stored near or adjacent to crop production areas is contained to prevent contamination of crops.
- 5. Measures are taken to restrict livestock access to water sources used in crop production.

#### **Procedures:**

#### **Perimeter Monitoring**

- 1. Drive/Walk around the growing area and water sources, looking for the presence or signs of significant, high concentrations of wild or domestic animals/animal intrusion.
- 2. Where appropriate, corrective measures should be taken.
- 3. Such corrective measures may include removing animal fecal material, disposing of crop that comes in direct contact with fecal material, repairing fences, removing dead carcasses, etc.
- 4. Observations and corrective measures are logged in the Perimeter and Water Source Monitoring Log.

#### **Perimeter and Water Source Monitoring**

#### Purpose

To be aware of the animal populations in the production area, and to ensure there are no significant signs of animal intrusion in the production area or water sources that could be a food safety risk.

## Frequency

Animal-intrusion monitoring should be conducted on a regular basis just prior to and during harvest.

#### Procedures

- 1. Walk or drive around the farm and area surrounding water sources, looking for anything abnormal such as broken fences, significant amounts of animal fecal matter, animal carcasses, etc., that may be a food safety risk.
- 2. Fix anything broken or out of place, dispose of animal fecal matter that may be a food safety risk, dispose of animal carcasses, etc.
- 3. Document findings and corrective measures.

SN	Date	Field/ Location	Animal Activity/ Problem or Concern	Deterrent Action/	Remark
1					
2					

## Section 5

# FOOD SAFETY TRAINING

## Food Safety Training for all Employees

## **Microorganisms and Food Handling**

- 1. The microorganisms that cause illness are much too small to see.
- 2. These tiny bacteria and parasites can be transferred to foods from dirty hands or blood, especially from people who did not wash their hands after using the toilet.
- 3. We all eat fruits and vegetables, and we can all be made sick if somebody else who is sick or does not have clean hands has touched our food.
- 4. Don't eat food or chew tobacco or gum while working with fruit. Food from our mouths can transfer bacteria or parasites to food and make others sick.

#### **Illness Reporting**

1. Report any active cases of illness to your supervisor before beginning work. This includes diarrhea, vomiting, fever or nausea. Seek medical attention and do not handle fruit.

- 2. Report lesions on your body such as infected wounds, draining wounds, boils or wounds seeping pus that might come in contact with produce. Obtain latexfree gloves/first aid materials to cover the wound or do NOT handle produce!
- 3. Be familiar with symptoms of infectious diseases so that if symptoms are evident, the supervisor can take appropriate steps.
- 4. Symptoms include diarrhea, runny nose, yellow skin or eyes, cough or fever.

## **Toilet Use**

- 1. All employees must use the toilet facilities provided, which must be connected to a sewage disposal system or self-contained.
- 2. Failure to use provided toilet facilities is grounds for dismissal.

## Hand Washing

#### *Note: Hand washing with soap and water is required. Sanitizer use alone is NOT an acceptable practice.*

- 1. Water-testing records must be available, showing the water being used for hand washing is potable.
- 2. All employees must wash their hands with soap and water at the beginning of the workday, after using the toilet, after eating and after breaks.

- a) Wash hands with portable water; apply soap and work to lather.
- b) Rub hands together.
- c) Rinse under clean water.
- d) Dry hands with a single-use towel.
- e) Dispose of towel in trash can.

#### **Bleeding Incidence**

- 1. Any cuts or scrapes that cause the loss of blood must be reported to the supervisor immediately.
- 2. All fresh produce that may have come in contact with blood during an incident must be destroyed.
- 3. All equipment that has come in contact with blood during this incident must be cleaned and sanitized.

#### **Provide Protection from a Lesion**

- 1. A lesion that contains pus, such as a boil or infected wound that is open or draining and that is located on parts of the body that might have contact with produce during harvesting, sorting or packaging, will be covered by first aid material.
- 2. If a worker has a lesion that cannot be effectively covered in such a way to prevent contact with fresh produce or related equipment, the employee will not be allowed to work in any aspect with fresh produce or related equipment.

## **Hygienic Practices**

Ensure good hygienic practices are followed by all visitors who come in contact with fresh produce in the field.

#### **Alternative Good Hygienic Practices**

- 1. Single-service disposable gloves can be an important part of an effective hygienic practice in combination with hand washing in some circumstances. However, if gloves are not used properly, they can become another vehicle for spreading pathogens.
- 2. The use of gloves in no way lessens the need for or importance of hand washing and proper hygienic practices.

#### Worker Hygiene/Health and Food Safety Training Log

Training Topic:\_\_\_\_\_\_ Instructor: Date/Time:

Training Details:

Training Materials Used:

SN	Name	Signature
1		
2		

## **Food-borne Illness Training for Supervisors**

Infected employees, through food or food utensils, may transmit a wide range of communicable diseases and infections to consumers. An important part of an ongoing program to ensure the safety of fresh produce is to institute a system of identifying employees who present a risk of transmitting food-borne pathogens to fresh produce or to other employees.

Supervisors should be aware of the symptoms of foodborne illnesses so that they can recognize them in workers. If any workers appear to exhibit symptoms of any of these illnesses, they should be excluded from work assignments that involve direct contact with fresh produce.

Below is a partial list of symptoms caused by infectious and communicable diseases that are transmitted through food:

- 1) Fever
- 2) Jaundice
- 3) Diarrhea
- 4) Vomiting
- 5) Sore throat

Section 6

## LOOKING FOR AND REPORTING PESTS AND DISEASES IN THE FARM

The introduction of new pests into a farm will nearly always result in increased costs of production and reduced profitability. Hence early and correct identification of disease vector, parasite or actual disease condition through repeated and continuous scouting is paramount.

This can be achieved by the implementation of a number of on-farm management practices and treatments. If a new pest is detected early enough, it may be eradicated or contained for a fraction of the cost of treatment.

A repeated and continuous pest surveillance activity which involves looking for, correctly identifying, recording and initiating appropriate pest management protocols. The farm must have a pest surveillance program and you may have an active role in this program. There are a number of things you can do to add to surveillance activities carried out at the farm level. If you suspect you have found a new plant pest or any unusual plant symptoms, inform the farm manager or your supervisor immediately. They may instruct you to take the following actions:

- **Contain the problem** by preventing people, equipment and plant material from leaving the affected area without prior disinfestation.
- **Stop movement** of people, equipment and plant material near the affected area as this can rapidly spread pests.
- Wash hands, clothes and boots that have been in contact with affected plant material or soil before leaving the affected area.
- **Do not touch, move or transport** affected plant material from that location.
- The appropriate treatment is decided and initiated properly to address the challenge. All necessary treatment records are then kept for reference.

## Planting material and farm inputs

Planting materials and farm inputs present an enormous opportunity for pest and disease introduction into the farm. Such risks can be reduced by using certified planting material, all farm inputs should be checked closely to ensure no pests are introduced. A quarantine screenhouse is a standard to allow for studying new plant materials. If you suspect any pests or unhealthy planting material entering or leaving the farm, let the farm manager or your supervisor know immediately.

## Harvested produce

Movement of farm produce within and between farms

presents the opportunity for the spread of pests. Thoroughly examine produce for the presence of any pests or unusual symptoms before transporting. In addition, all logistics security measures must be implemented from one location to the other. Any observed pests or unusual symptoms, or compromise in safety, should be reported to the farm manager or your supervisor immediately for appropriate action.

## **Crop waste**

Handling crop waste is key to farm safety. Any crop waste that is not properly disposed of can serve as pest and disease breeding grounds. This includes pruned crop residues, waste from sorting and packing, and general harvest leftovers. Carefully follow the laid down protocols to properly dispose of waste. Some of such protocols could include:

- All crop residues and pruning's should be removed from the farm, can serve as animal fodder or be ploughed into the soil directly as compost. Alternatively, they can be decomposed at the compost pit.
- All other waste that can be harmful to the farm should be buried or disposed far away from the farm.
- Any crop waste to be used as animal fodder must be properly treated to prevent cross transfer of pest or diseases.

## Human, vehicle and equipment movement

Human, vehicle and equipment movement in and out of the

farm and between different farms can spread pests. They can serve as conveyors, carrying disease, vectors and pest. Vehicle tires, footwears, clothes, and gardening tools are the most notorious. You can help reduce these risks by carrying out the following management steps:

- When driving into the farm, use the parking area.
- Read and understand all biosecurity signage and strictly follow all instructions.
- Wash all farming tools and equipment's immediately after use, preferably using high pressure water, detergent and bleach. While doing this ensure washed dirt's are clearly drained away from the farm area.
- properly clean and disinfect tools (such as boots, cutting and pruning equipment) after each work session.
- Always ensure you use scrubs and footbaths as you move from one section of the farm to the other, especially entering greenhouse and exiting to clean and disinfect footwear.
- All visitors, staffs, and materials entering the farm from different regions or from overseas must go through proper safety protocols to address any and all biosecurity risks that might exist.





Providing Consistency, Predictability, and Help to Ensure Safety and the Highest Possible Quality Outcome in Food Production.



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