

Facilitating and Learning Materials

NATIONAL CERTIFICATE LEVEL 2

TRADE AREA:

CASHEW VALUE CHAIN

UNIT 9:

PROCUREMENT OF CASHEW APPLES



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0. Introduction and preliminary notes



With owning a cashew tree plantation, the post-harvest activities are important as these are the main areas where problems arise. The profitability of the agribusiness is dependent on the quality and condition of the harvest and the subsequent products created from the harvested cashew apples.

Once harvesting has occurred, the cashew apples have to undergo a process of being received, graded and documented in order to sort them and determine their usability and what they can be used for.

This unit is focused on receiving, inspecting, weighing and documenting cashew apples

LO 1: Demonstrate skills for receiving cashew apples



PC (a) Explain cashew apple reception

The cashew apples arrive from the field as bunches or loose fruit. The fresh fruit is normally emptied into wooden boxes suitable for weighing on a scale so that quantities of fruit arriving at the processing site may be checked. Large installations use weighbridges to weigh materials in trucks.

The quality standard achieved is initially dependent on the quality of bunches arriving. At the pack-house they cannot improve upon this quality but can prevent or minimize further deterioration.

PC (b) State the importance of receiving cashew apples for processing

The purpose of the reception grading is to determine the quality received. This helps to determine the purchase price. If the cashew apple reception is from company plantation the grading provides feed back to the plantation on the quality. Cashew apple reception plays a very important role, as they check the quality and the quantity.



Fruit reception at the pack-house is performed mainly for the following purposes:

- Checking of sanitary and freshness status;
- Control of varieties and fruit wholeness;
- Evaluation maturity degree;
- Collection of data about quantities received in connection to the source of supply: outside growers/farmers, own farm.

PC (c) State the factors to consider in receiving cashew apples for processing

- Cashew apples deteriorate rapidly
- Cashew apples bruise easily
- Harmful toxins from the fruit need to be carefully managed



PC (d) Demonstrate the use of tools and equipment for receiving cashew apples for processing

For receiving cashew apples, the following equipment is needed:

- PPE (personal protective equipment) and clothing
- Crates/baskets/boxes for carrying



Situation:

You are tasked by your employer to demonstrate the use of tools and equipment for receiving cashew apples for processing.

Instructions:

1. Demonstrate the use of the tools and equipment

Performance criteria:

1. The use of the tools and equipment is demonstrated correctly
2. PPE is worn

Use the checklist to follow the stated steps for demonstrating the use of tools and equipment for receiving cashew apples for processing. Rate your own performance critically and honestly after you have completed each activity.



Excellent



Okay



Try Again

Daily PM Activities	Rate
1. Protective clothing is worn on site	
2. Correct tools are used and demonstrated	

PC (e) Explain procedures for receiving cashew apples for processing

Under ideal conditions, the cashew trees being harvested should be located a short distance from the packinghouse. If fruit transport requires traveling long distances, producers should take into consideration the points below to minimize the effects on quality of the cashew apples that transport to the packinghouse might cause to the cashew fruit.

- Protect fruit from direct sunlight
- Select a transport method that allows ventilation
- When possible, ship cashew apples during cooler hours of the day
- Schedule deliveries to packinghouse



PC (f) Receive cashew apples for processing



Situation: You have just harvested your cashew apples, and need to seal them for processing.

Instructions:

1. Receive cashew apples for processing

Performance criteria:

1. Protective clothing is worn on site
2. Correct tools are used
3. Cashew apples are received

Use the checklist to follow the stated steps for receiving cashew apples for processing. Rate your own performance critically and honestly after you have completed each activity.



Excellent



Okay



Try Again

Daily PM Activities	Rate
1. Protective clothing is worn on site	
2. Correct tools are used	

Self-assessment

PC (a)

Define cashew apple reception.

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PC (b)

Why is cashew apple reception important?

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PC (c)

What are the factors to consider in receiving cashew apples for processing?

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PC (d)

What tools and equipment are used for receiving cashew apples for processing?

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PC (e)

What is the procedure for receiving cashew apples for processing?

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LO 2: Demonstrate skills for inspecting cashew apples for processing



PC (a) Explain cashew apple inspection for processing

Once the cashew apples have been received, they need to be inspected and graded so that they can undergo the processing procedure according to their quality and respective uses.

PC (b) State the importance of cashew apple inspection for processing

It is important for cashew apples to be inspecting, especially because they degrade rapidly. Unusable cashew apples need to be discarded

PC (c) State the attributes of a good cashew apples

- Cashew apples have been processed within six (6) hours post-harvest
- Cashew apples are not bruised
- Cashew apples are ripe
- Cashew apples are of respectable size and weight



PC (d) Demonstrate the use of tools and equipment in cashew apple inspection

The following tools and equipment are used in cashew apple inspection

- Fruit trays
- Refract meter
- Weighing scale
- Record books



Situation:

You are tasked with demonstrating the use of tools and equipment in inspection.

Instructions:

1. Demonstrate use of tools and equipment in inspection

Performance criteria:

1. Use of tools and equipment is correctly demonstrated

Use the checklist to follow the stated steps for demonstrating the use of tools and equipment in inspection. Rate your own performance critically and honestly after you have completed each activity.



Excellent



Okay



Try Again

Daily PM Activities	Rate
1. Use of tools and equipment is demonstrated	

PC (e) Outline the procedure for cashew apple inspection

1. Cashew apples are placed onto fruit trays
2. Visible bruising and markings are looked for
3. The time post-harvest is noted
4. The refract meter is used
5. Cashew apples are weighed and measured
6. Observations are documented in the record books



PC (f) Inspect cashew apples for processing



Situation: You have received the cashew apples at the reception and they need to be inspected for processing.

Instructions:

1. Inspect five (5) cashew apples for processing
2. Record observations in record book
3. You have **15 minutes**

Performance criteria:

1. Five (5) cashew apples are inspected for processing
2. Observations are correctly recorded
3. Time limit is adhered to

Use the checklist to follow the stated steps for inspecting cashew apples for processing. Rate your own performance critically and honestly after you have completed each activity.



Excellent



Okay



Try Again

Daily PM Activities	Rate
1. Correctly inspect five (5) cashew apples for processing	
1. Observations are correctly recorded	
2. Time limit is adhered to	

Self-assessment

PC (a)

Define cashew apple inspection.

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PC (b)

What is the importance of cashew apple inspection for processing?

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PC (c)

What are the attributes of good cashew apples?

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PC (d)

What tools and equipment are used in cashew apple inspection?

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PC (e)

What is the procedure for cashew apple inspection?

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LO 3: Demonstrate skills in weighing cashew apples for processing

PC (a) Explain weighing of cashew apples

Cashew apples will need to be weighed to determine their quality for processing

PC (b) State the importance of weighing cashew apples

The weight of the cashew apple is important because it determines:

- Price
- Quality
- Grade
- Use
- Output volume of cashew apple products

PC (c) Demonstrate the use of tools and equipment for weighing cashew apples

- Weighing scale
- Fruit tray
- Pen
- Marker
- Stainless steel pans
- Record book



Situation:

You have been tasked by your employer to demonstrate the use of tools and equipment for weighing cashew apples.

Instructions:

1. Demonstrate use of the tools and equipment

Performance criteria:

1. Use of tools and equipment is demonstrated



Use the checklist to follow the stated steps for demonstrating tools and equipment for weighing cashew apples. Rate your own performance critically and honestly after you have completed each activity.



Excellent



Okay



Try Again

Daily PM Activities	Rate
1. Correct use of tools and equipment are demonstrated	

PC (d) Describe the procedure for weighing cashew apples

1. Place cashew apples in either fruit tray or stainless-steel pan
2. Place tray or pan on weighing scale
3. Record the weight displayed on the scale using a pen/marker in the record book

PC (e) Weigh cashew apples



Situation: You now need to weigh your cashew apples once they have been inspected.

Instructions:

1. Weigh five (5) cashew apples
2. Record results in record book
3. **You have 10 minutes**

Performance criteria:

1. Five (5) cashew apples are weighed
2. Results are recorded
3. Time limit is adhered to



Use the checklist to follow the stated steps for weighing the inspected cashew apples. Rate your own performance critically and honestly after you have completed each activity.



Excellent



Okay



Try Again

Daily PM Activities	Rate
1. Five (5) cashew apples are weighed	
2. Results are recorded	
3. Time limit is adhered to	

Self-assessment

PC (a)

Explain weighing of cashews.

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PC (b)

Why weighing cashew apples important?

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PC (c)

What tools and equipment are used for weighing cashew apples?

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PC (d)

What is the procedure for weighing cashew apples?

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LO 4: Demonstrate skills for documenting cashews apples at the reception

PC (a) Explain documentation of cashew apples at the reception

All cashew apples that are received at reception will need to be documented in the record books. This is for monitoring and control purposes of the agri-business.



PC (b) State the importance for documenting cashew apples at the reception

- Measuring the productivity of the cashew plantation
- Handling issues can be detected
- As time is vital to the processing of the cashew apple, special care is needed with recording the times of harvest

PC (c) Demonstrate the use of tools and materials used for cashew apple documentation

The following is used for the documentation of cashew apples:

- Weighing scale
- Fruit tray
- Record books



Situation:

You have been tasked by your employer, along with your co-workers, to demonstrate the use of tools and equipment used for cashew apple documentation.

Instructions:

1. Demonstrate the use of tools and equipment

Performance criteria:

1. Correct use of tools and equipment is demonstrated

Use the checklist to follow the stated steps for demonstrating the use of tools and equipment used for cashew apple documentation. Rate your own performance critically and honestly after you have completed each activity.



Excellent



Okay



Try Again

Daily PM Activities	Rate
1. Demonstrate correct use of tools and equipment	



PC (d) Outline the procedure for documenting cashew apples at the reception

1. Cashew apples are received and time is marked
2. Cashew apples are inspected
3. Cashew apples are weighed
4. Records are made on the physical characteristics of the cashew apples

PC (e) Perform documentation of cashew apples at the reception



Situation: You have harvested cashew apples and need to document them.

Instructions:

1. Record documentation of ten (10) cashew apples
2. **You have 30 minutes**

Performance criteria:

1. Results are recorded
2. Time limit is adhered to

Use the checklist to follow the stated steps for performing documentation of cashew apples at the reception. Rate your own performance critically and honestly after you have completed each activity.



Excellent



Okay



Try Again

Daily PM Activities	Rate
1. Results are recorded	
2. Time limit is adhered to	

Self-assessment

PC (a)

What is documentation of cashew apples at the reception?

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PC (b)

Why is this documentation important?

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PC (c)

What tools and materials are used for documentation?

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PC (d)

What is the procedure for documenting cashew apples?

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Reflection on your learning in this unit



You will write **short reflections** of your learning and actions relating to the knowledge you have learnt and the practical skills you have developed.

Tips for writing your Reflection/Reflection

Journal: You should write in your Reflection Journal within 24 hours of completing your practical session to record your experiences while they are fresh in your memory. Use the '**What, So What, Now What Model**' to guide your writing. Answer

the following questions:

What happened **to**...? (Describe what happened when did what you did)

So, What did I learn from that? (Give at least 2 examples)

Now, What can I do better in future? (How can I improve next time?)

What did you learn to do?

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What difficulties did you face in this unit?

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What can I do it better in future?

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How long did it take you each time you did it?

Attempt 1

Attempt 2.....

Attempt 3.....

References:

1. <http://agris.fao.org/agris-search/search.do?recordID=US201600104118>
2. <https://en.wikipedia.org/wiki/Cashew>