



PACKAGING, STORAGE, TRANSPORT, AND MARKETING OF AVOCADOS USING CRATES



INTRODUCTION

Crates play a vital role in the avocado industry's operations, facilitating packaging, storage, transport, and marketing. These containers protect avocados from damage during handling and transit, ensuring freshness and quality. Additionally, crates serve as effective marketing tools, showcasing the fruit's appeal while offering practical solutions for distribution logistics.

PACKAGING

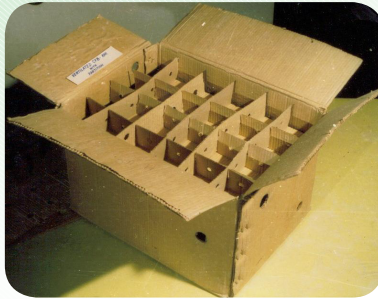
Packaging entails enclosing food produce or products to protect them from mechanical injuries, tampering, and contamination from physical, chemical, and biological sources. It simplifies the handling, transport, and distribution of products to the final consumers. Avocado packaging is typically done using crates, which provide protection, ease of handling, and containment for the avocado produce.

Functions of Packaging

- Protection/preservation
- Containment and waste reduction
- Enhanced marketing, hence better prices
- Ease of transportation (safe transport)
- Traceability
- Maintain freshness of produce
- Ease of handling
- Ease of weighing

Types of Packaging Containers

- Plastic crates
- Wooden crates
- Plastic containers
- Punnets
- Cardboard boxes



Cardboard box for packaging avocado (Source James Ndambuki)

Types of crates

i. **Wooden Crates**



Wooden crates

Disadvantages of wooden crates

- They are heavy
- Timber is affected by prevailing weather conditions
- Not easy to clean
- Less sustainable
- High mechanical damage of the produce

ii) Plastic Crates

Types of Plastic Crates

Plastic crates comprises normal, nestable and collapsible types. These crates are used to package avocado fruits during storage and transportation to minimize mechanical damage.

Note: Nestable and collapsible crates are space-saving version that should be promoted for transporters



Nestable crates (source: James Ndambuki)
Collapsible



Collapsible crate (Source: James Ndambuki, KALRO)



Normal Crates (Source: James Ndambuki, KALRO)

Benefits of Using Plastic Crates

- They are reusable.
- Less physiological loss of weight
- They are strong and rigid
- They reduce postharvest losses (damage during transportation and storage)
- They alleviate human drudgery
- Enhancement of market value

Conditions for Packaging Crates

- Ensure proper hygiene practices by thoroughly cleaning packaging crates with soap or detergent after each use.
- Exercise caution when handling crates during loading, stacking, and unloading. Avoid dropping them and refrain from using them as makeshift seats during sorting processes.
- Store crates in a clean environment to prevent insect and rodent infestation, and keep them separate from chemicals and farm machinery to avoid potential contamination.

- Avoid leaving crates exposed to sunlight as this can lead to premature tear and wear.
- If crates are utilized for transporting fresh produce, refrain from using them as storage containers for agrochemicals such as fertilizers and pesticides.

TRANSPORT

Selecting the appropriate crate is crucial for ensuring the successful shipment of products, as it directly impacts packaging quality and product safety during transportation. Opting for the correct type of crate among various options can result in cost savings while maintaining the integrity of the goods being transported.



Loading of Avocado fruits in crates for transportation to a processing area (Source: James Ndambuki, KALRO)



STORAGE

Crates are very important during storage as they maintain the quality of the produce. Crates play a vital role in the preservation of produce during storage, serving as essential protection of quality. Their significance lies in their ability to uphold the integrity and freshness of goods, ensuring they reach consumers in optimal condition. By providing a stable and secure environment, crates help maintain the nutritional value, flavor, and appearance of the stored produce over extended periods. Whether in warehouses, distribution centers, or during transit, the use of crates is indispensable for the preservation and quality assurance of goods, underscoring their indispensable role in the supply chain. Their presence ensures that consumers can enjoy fresh, high-quality produce, reinforcing the crucial role of crates in the realm of storage and distribution.

MARKETING


Crates are very important in the marketing of avocado produce as they help in the display of the product and weighing. Crates like nestable and collapsible are important in marketing as the produce does not have mechanical injuries.











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