

## ABSTRACT

**This study investigates the pivotal role of technological advancements and infrastructure development in bolstering the efficiency and competitiveness of perishable cargo handling and exports** within Tanzania's horticulture value chain. **The primary objective of this research is to delve** into the contributions of technology and infrastructure to the enhancement of perishable cargo handling for horticultural exports in Tanzania. The study assessed the effectiveness of perishable cargo handling technologies employed at Kilimanjaro International Airport and Dar es Salaam Port in facilitating the export of horticultural products. It identified and analyzed challenges encountered in the current implementation of perishable cargo handling technologies within the cold supply chain at the airport and port.

Findings of the study revealed that, there has been a consistent increase in export volume over the past five years, indicating growing demand for Tanzanian horticultural produce in international markets. The sector has experienced steady growth, with an annual average increase of approximately 5%, resulting in an annual export volume rise from 280,000 metric tons in 2017 to

350,000 metric tons in 2021.

The study found that, Government policies have played a significant role in supporting business registration and expansion within the horticulture sector. In assessing technological advancements in horticulture, the study revealed that modern equipment and technological innovations have significantly improved the efficiency and quality of perishable cargo handling throughout the horticulture value chain, from cultivation and processing to packing, shipping, and storage. Embracing technology has led to enhanced productivity and reduced post-