

## **Use of plastic crates in super market supply chains: a case study**

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A scientific study was conducted to evaluate the use of plastic crates within the super market supply chains during the perishable transportation. Four supply chains of Cargils, Keels and Tropical healthy fruits were used for this study. Data was collected from farmers, regional collecting centers, transporters, main wholesale centers and retail outlets.

100% of farmers supplying fruits and vegetables to super markets use plastic crates and 30% of them use poly-sack bags occasionally. Due use of plastic crates, farmers' income have increased by 15-150% and postharvest losses reduced from 10-20% to 2-5%. At collecting centers, farmers are 20-40% higher prices than to outside market for their produce. All the vehicles own by companies are refrigerated trucks which are used to transport perishables. Wholesale centers receive 110-140 vegetable and 30-40 fruits types daily. Use of plastic crates has reduced postharvest losses in wholesale centers from 6-6.5 mt to 0.9-1.6mt and also income has increased by 20%. The main packaging method to transport fruits and vegetables is plastic crates. Use plastic crates has reduced postharvest loss from 20-30% to 3.5-6% during the supply chain while preserving the quality