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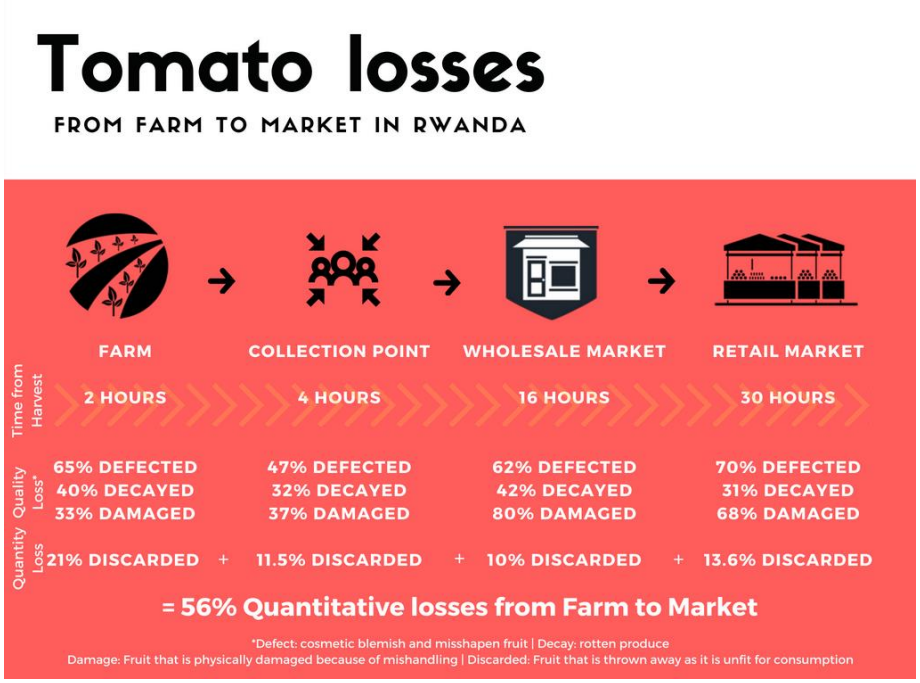
# POSTHARVEST LOSS ASSESSMENT OF TOMATOES IN RWANDA – BRIEF

Tomatoes are a widely produced and consumed horticultural crop in Rwanda with consumption on the rise. Tomatoes have been identified as a priority crop for the Reducing Postharvest Losses in Rwanda project, as previous studies have noted high losses (WFLO 2010). To understand the postharvest losses in the tomato value chain, the project conducted three types of analysis – Value Chain Analysis, Commodity Systems Assessment Methodology (CSAM) and Environmental Lifecycle Analysis.

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## Causes of Postharvest Losses in Photos

## Summary of postharvest losses and quality problems in tomatoes

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|  Inputs | • Availability of quality affordable seed on the market has been a limitation to the farmers. The farmers are using regenerated seeds, which at times are up to 3rd generation seed. This greatly lowers seed productivity as the seeds realize less resistance to pests and diseases. |
|  Farmer and Trader Postharvest Information Gap | • Tomatoes are harvested red ripe and soft, with little shelf life remaining.<br>• Tomato packing and repacking occurs several times, which greatly reduces the quality at farm level.<br>• Proper storage after harvest at the farm is one of the major limitations<br>• Lead time between harvest at farm level to customer is approximately 1 day, leaving approximately 2 to 3 days of shelf life. If any delays occur, this leads to additional postharvest losses. |
|  Transportation | • Tomatoes are packed and transported in large baskets leading to various losses along the chain.<br>• Trucks are overloaded for the transport of produce for long distances. |
|  Cold Storage | • There are no cold chains or cool storage facilities for tomatoes. |
|  Farmer Organization | • Farmer cooperatives are not properly organized, which has led to lack of bargaining power for selling their produce to traders. |

## Recommendations for Reducing Postharvest Losses

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| **1** | **Training of trainers (capacity building) in improved practices.** Value chain players involved in tomato production should be trained in harvest indices, postharvest handling, use of improved containers, sorting/grading, and use of shade. In general, training on production, harvest and postharvest best practices is required. |
| **2** | **Demonstrations that are recommended for the Postharvest Training and Services Centers on cost effective practices for reducing postharvest losses in tomatoes include:**<br>● Use of shade (various types of simple, low cost structures and portable shade such as market umbrellas)<br>● Use of improved containers for transport and marketing (smaller sizes, stackable baskets, plastic crates)<br>● Innovative transportation solutions, especially for traders handling small volumes<br>● Zero Energy Cool Chamber (brick and sand, 100 kg capacity) for temporary cool storage<br>● Small-scale tomato processing methods (solar drying, sauce making, juices) |
| **3** | **Postharvest agri-business opportunities for tomatoes should be promoted. These include:**<br>● Trader/grower partnerships, where improved tomato production, harvest practices and postharvest handling on the farm leads to increased profits for both the growers and the traders.<br>● Catalyzing entrepreneurs to provide postharvest storage and management services including packaging, handling, cooling technology and better transportation.<br>● Local manufacture of tomato paste, sauces and juices (with flavors, package sizes and prices targeted to local consumer preferences).<br>● Smallholders need training on farming as a business |

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