

POSTHARVEST LOSS ASSESSMENT OF GREEN CHILIES IN RWANDA – BRIEF

Green bananas are a main staple crop in Rwanda, with widespread cultivation, consumption and cultural acceptance. To understand the postharvest losses in the green banana value chain, the project conducted three types of analysis – Value Chain Analysis, Commodity Systems Assessment Methodology (CSAM) and Environmental Lifecycle Analysis.

Causes of Postharvest Losses in Photos





Green Chilies losses

FROM FARM TO MARKET IN RWANDA



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Summary of postharvest losses and quality problems

 Farmer Knowledge	<ul style="list-style-type: none"> Harvesting only once per week causes growers to supply a load of mixed maturities and overall lower grade Rough handling causes damage and increases the rate of deterioration
 Cold Storage	<ul style="list-style-type: none"> There are no cold chains or cool storage facilities used for green chilies. The one charcoal cool room observed during the CSAM study was not in use. Leaving green chilies at ambient temperature for 24 hours after the harvest resulted in 13% weight loss. Proper cool storage after harvest at the farm is one of the major limitations if proper measures are put in place between supply and demand would minimize weight losses early in the value chain
 Farmer Organization	<ul style="list-style-type: none"> Growers lack of bargaining power for selling their produce to the exporter, There is a lack of transparency regarding grades and sorting/grading standards.
 Processing	<ul style="list-style-type: none"> Lack of processing options, little opportunity to add value.

Recommendations for Reducing Postharvest Losses

1	<p>Training of trainers (capacity building) in improved practices Leaders of cooperatives involved in production should be trained in use of high quality seed, harvest indices, planning for multiple harvests/week, gentle harvesting, use of picking bags, improved postharvest handling, sorting/grading standards, use of shade.</p>
2	<p>Demonstrations that are recommended for the Postharvest Training and Services Centers on cost effective practices for reducing postharvest losses in green chilies (and other similar chili peppers) include:</p> <ul style="list-style-type: none"> Maturity indices, quality and shelf life Use of aprons/wearable harvesting bags (picking bags) Use of shade (various types of simple, low cost structures and portable shade such as market umbrellas) Management of the Charcoal cool room and Zero Energy Cool Chambers (brick and sand, 100 kg capacity) for temporary cool storage Small-scale green chili processing methods (solar drying, sauce making, chili oils)
3	<p>Postharvest agri-business opportunities for green chilies should be promoted. These include:</p> <ul style="list-style-type: none"> Exporter/grower partnerships, where improved green chili production, harvest practices and postharvest handling on the farm leads to increased profits for both the growers and the buyers. Local manufacture of dried diced green chilies, green chili paste, sauces, salsas, dried powders and oils (with flavors, package sizes and prices targeted to local consumer preferences), especially for adding value to Grade 2 or rejected produce.

