The Mango Value Chain Ecosystem

Technoserve, 2023

the ACTORS

FARMER

AGENT/BROKER

TIER 1 TRADER

TIER 2 TRADER

TIER 3 TRADER

PROCESSOR

FORMAL RETAILER

TRANSPORTER

KEY

- PROCESS FLOW
- MONEY FLOW
- WASTE & LOSS FLOW
- HIGHEST LOSS

ECOSYSTEM FOCUS

Start of Season	Peak Season	Regional Markets
OCT - DEC	JAN - FEB	MAR - APR

Peak Season
[JAN-MAR]

Sourcing (1 week) — *Harvesting, Sorting & Transporting (1-3 days)* — *Distribution (1-6 days)*

FARMGATE

AGENTS AND FARMERS COMMUNICATE WITH EACH OTHER WHEN MANGOES ARE READY FOR HARVEST

AGENT HARVESTS & AGGREGATES FOR TIER 1 TRADER

EXPORTERS HARVEST FROM LARGE SCALE FARMS WHEN THE SEASON STARTS. THEY BUY BASED ON GRADES

AGGREGATION MARKET

SUPPLIES 5 - 10MT TO THE INFORMAL MARKET WHEN MANGOES ARE MATURE

TIER 1 TRADERS RECEIVE ORDERS FROM EXPORTERS AND SUPPLY START OF SEASON

EXPORT

SOURCE MARKETS

TIER 2 TRADER BUYS LARGE QUANTITIES, +3K PER WEEK

DEPENDS ON LPOs AND CONTRACTS TO SUPPLY HERE

INFORMAL RETAIL MARKET

TIER 3 TRADER BUYS SMALL QUANTITIES, -1K PER WEEK

FORMAL RETAIL MARKET

PROVIDES VARIETY FOR THE CONSUMERS FROM VALUE ADDED MANGO PRODUCTS TO MANGO FRUIT

PROCESSOR

MAKES VALUE ADDED PRODUCTS TO SELL TO CONSUMERS AS AN ALTERNATIVE TO MANGO FRUIT

CONSUMER

THERE'S AN EXCESS SUPPLY OF MANGOES AT THE INFORMAL WHOLESALE MARKETS IN THE PEAK SEASON. CHEAPER MANGO OPTIONS ARE MORE AVAILABLE IN THE MARKET

WHY? MARKET DYNAMICS INFLUENCED BY THE FACT THAT ALL ACTORS ARE SELLING MANGOES LEADING TO GLUT!

TIER 3 TRADERS EXPERIENCE WASTE AND LOSS HOWEVER IT'S MINIMAL COMPARED TO OTHER TRADERS UPSTREAM

TIER 3 TRADERS ARE IN CLOSE PROXIMITY AND HAVE A WIDER OPTION OF COMSUMERS FOR SELLING MANGOES I.E. LOCAL EATERIES, CONSTRUCTION SITES..

WASTE
Small size mangoes are left on the farm by the agent. They don't meet downstream market grades.

WASTE
Oversupply during the wet season so many mangoes are not bought.

WASTE
Bruised mangoes and mangoes infested by pests and diseases are left thrown during sorting.

WASTE
Waste happens at informal markets when there's an oversupply and all traders forfeit their roles by selling to consumers directly in an effort to clear stock quickly

WASTE
An oversupply of mango variety and grades leads to consumers being spoilt for choice opting to buy more cosmetically appealing and sweeter varieties. The rest don't move as quickly and eventually go to waste.

WASTE
In the peak season, tier 2 traders opt to buy from farmers at lower prices and sell within the same markets or in markets outside the wholesale market.

WASTE
Farmers with their own transportation and storage capacity also sell directly to consumers at discounted rates. They strategically station themselves close to or outside informal markets.

WASTE
Cottage processors are mainly started and operated by mango stakeholder associations or farmers and traders who come together to redirect mangoes. However, they strugle to successfully run these operations because of their inability to plan their resources effectively

WASTE
They don't have any storage options to slow down the ripening process incurring financial losses over time

MINIMAL WASTE
Tier 3 traders take only what they are capable of selling. The don't accumilate as much waste as other traders upstream

MINIMAL WASTE
Tier 3 traders try to save mangoes from going to waste. Those with large stalls have the capacity to sell juice & fruit salad. Close proximity to the consumers helps move volumes

UPSTREAM LOSSES
After harvesting, losses average between 1 - 30%. From a harvest of 5000 mangoes, 50 - 1800 pieces may be lost to agents and tier 1 traders.

DOWNSTREAM LOSSES
At markets, losses amount to 8 - 40% of trader purchases.