GUIDE · FARMERS

Reducing Tomato Spoilage During Transport

> Fresh produce profitability depends heavily on handling quality after harvest, not just yield quantity.

Reducing Tomato Spoilage During Transport

Tomatoes remain one of the most traded agricultural products across local markets, restaurants, retailers, and wholesale supply chains. Despite high demand, many farmers continue losing a large percentage of harvested produce before it even reaches buyers. In most cases, the problem is not poor farming practices. The problem begins after harvesting.

Transportation damage continues to affect produce quality across many agricultural regions. Tomatoes that leave farms in good condition often arrive at markets bruised, cracked, softened, overheated, or partially spoiled. These losses reduce farmer profits, lower buyer confidence, and create instability across the supply chain.

The reality is that post-harvest handling determines whether produce reaches the market at premium value or reduced value.

One of the biggest causes of spoilage is poor handling immediately after harvesting. Tomatoes are highly sensitive to pressure and heat. Once damaged, deterioration begins quickly and spreads rapidly across nearby produce. A single damaged tomato inside a tightly packed container can affect surrounding produce within a short period of time.

Many farmers harvest tomatoes during hot daytime hours when field temperatures are already high. Warm produce deteriorates faster during transportation because heat accelerates ripening and moisture loss. Harvesting during early morning or late afternoon significantly improves produce stability before transportation begins.

Transportation methods also play a major role in produce preservation. In many local supply chains, tomatoes are transported using overloaded sacks. While sacks remain common because they are inexpensive and accessible, they create heavy compression damage during transit. Tomatoes at the bottom of stacked sacks experience constant pressure for long periods, especially on rough roads.

This is why many buyers often receive produce that appears acceptable externally but has already begun softening internally.

Ventilated crates provide a much safer alternative because they reduce compression pressure while improving airflow throughout transportation. Proper airflow helps control heat buildup and reduces moisture accumulation inside containers. Better packaging alone can dramatically improve shelf life and reduce losses during market delivery.

Another major challenge comes from delayed transportation after harvesting. Tomatoes should move through the supply chain as quickly as possible after collection. Long waiting periods under direct sunlight or inside poorly ventilated environments increase spoilage risk significantly. Farmers should always keep harvested produce under shade while awaiting transportation.

Sorting produce before loading also improves transportation outcomes. Damaged tomatoes should be removed immediately before packing. Mixing spoiled produce with healthy produce accelerates spoilage during transportation and storage. Buyers also prefer suppliers who maintain consistent grading standards because predictable quality improves resale confidence.

Proper transportation management is equally important. Produce should be loaded carefully to reduce unnecessary movement during transit. Overstacking containers increases crushing pressure on lower layers, especially during long-distance transportation on rough roads. Vehicles transporting produce should maintain proper ventilation and reduce prolonged exposure to heat whenever possible.

Temperature management remains one of the most important factors in reducing post-

harvest losses. Heat accelerates ripening, softening, bacterial growth, and moisture loss. Tomatoes exposed to direct sunlight for extended periods can lose freshness rapidly even when they initially appear visually stable.

Cold storage systems help extend shelf life significantly when managed properly. Even basic cooling and shaded storage conditions can improve produce preservation before delivery to markets or buyers.

Farmers who improve post-harvest handling practices often notice immediate improvements in profitability. Reduced spoilage means more sellable produce, stronger buyer trust, fewer rejected deliveries, and better market consistency. In many cases, improving handling practices produces better financial outcomes than simply increasing production volume.

The agricultural supply chain depends heavily on consistency, reliability, and produce quality. Buyers are more likely to continue purchasing from farmers who deliver produce in stable condition repeatedly over time. Good transportation practices therefore become both an operational advantage and a business advantage.

Reducing tomato spoilage is not simply about preventing waste. It is about protecting farmer income, improving food supply reliability, strengthening market trust, and building a more efficient agricultural commerce ecosystem for everyone involved.
