Disease Resilient and Market-Preferred Tomato Varieties

Better yield, less disease, more income

This technology provides improved tomato varieties for development projects aiming to strengthen vegetable production, farmer income, and food security. It includes high-yielding, good-quality varieties with resistance or tolerance to major constraints such as bacterial wilt and tomato yellow leaf curl virus, depending on the variety. Well suited to cool-season production, several also have a shelf life of more than 15 days, helping reduce postharvest losses and improve market access.

World Vegetable Center
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This technology is pre-validated.

9·7 Scaling readiness: idea maturity 9/9; level of use 7/9

Inclusion assessment

Climate impact 7

Problem

- Tomato diseases can wipe out smallholder harvests.
- Yields stay unstable, reducing project results.
- Tomatoes spoil quickly, reducing farmer income.

Solution

- Disease-resilient varieties protect smallholder tomato harvest and income.
- Longer shelf life reduces postharvest losses and improves market access.
- High yield potential supports stronger and more reliable project results.

Key points to design your program

- **Reduce crop failure and protect income** by targeting smallholder tomato zones facing bacterial wilt and tomato yellow leaf curl virus, and promoting the most suitable resistant or tolerant varieties.
- **Combine seed access with practical support**: ensure seed availability through partners, then add farmer training on nursery practices, transplanting, staking, watering, and field hygiene.
- **Strengthen learning and adoption** using demonstrations and farmer field days that show yield and survival under disease pressure, compared to common local varieties.
- **Address postharvest losses** through basic sorting, packaging, and market linkage support, and use cooling solutions such as the Zero Energy Cooling Chamber where available to keep tomatoes in good condition.
- **Monitor results and scale responsibly** by tracking adoption, yield performance, disease incidence, and market outcomes each season to refine strategy and report impact.

3703 USD	10868 USD	7165 USD	193 %
Cost per season per hectare	Revenue per season per hectare	Net income per season per hectare	ROI per season

IP

Open source / open access

Commodities

Tomato

Sustainable Development Goals

1 NO POVERTY · 2 ZERO HUNGER · 3 GOOD HEALTH AND WELL-BEING · 5 GENDER EQUALITY · 12 RESPONSIBLE CONSUMPTION AND PRODUCTION · 13 CLIMATE ACTION

+ 1 more

Categories

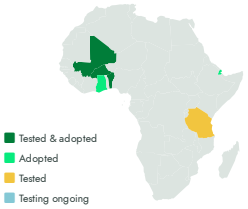
Production, Improved varieties, Disease resistance, Yield improvement

Best used with

Zero Energy Cooling Chamber for Vegetables

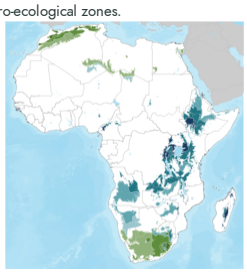
See all 1 technologies online

Tested/adopted in



Where it can be used

This technology can be used in the colored agro-ecological zones.



Target groups

Breeders, Farmers, Seed companies