

Long Peppers Varieties Resistant to Diseases

Strong Against Disease, Hot on the Market.

This group of long pepper varieties, developed by the World Vegetable Center, addresses national concerns around low productivity, disease-related losses, and seed import dependence. With yields of 6.8–18.01 t/ha over 10 harvests, strong resistance to major pepper diseases, and maturity in 70–85 days, these varieties enable stable domestic production and support food security. As an open-pollinated line, it strengthens local seed systems and aligns with climate resilience goals in dryland zones.



Commodities

Vegetable crop

Sustainable Development Goals



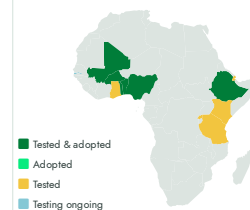
Categories

Production, Improved varieties,
Disease resistance, Yield improvement

Best used with

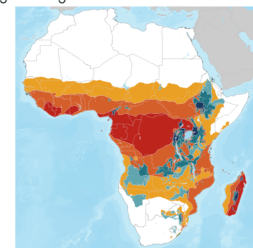
Zero Energy Cooling Chamber for Vegetables
See all 1 technologies online

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,
Sellers

This technology is **pre-validated**.

7-8



Scaling readiness: idea maturity 7/9; level of use 8/9

Inclusion assessment

4

Climate impact

7

Problem

- Low-yield local varieties and climate stress limit national pepper production.
- Frequent disease outbreaks reduce yields and burden extension services.
- Heavy pesticide use poses health and environmental risks.
- Imported seeds drive up costs and weaken seed sovereignty.

Solution

- **Boosts yields** to close production gaps (6.8–18.01 t/ha).
- **Resists major diseases**, easing pressure on extension services.
- **Open-pollinated**, enabling local seed production.
- **Adapted to savannas**, supporting climate resilience efforts.

Key points to design your project

This high-yielding, disease-resistant cayenne variety from WorldVeg thrives in hot, disease-prone zones with yields up to 18.01 t/ha—ideal for boosting farmer income and food security.

To scale it:

- **Source seed from WorldVeg** and register locally.
- **Target dry, high-risk zones** where current varieties fail.
- **Engage seed multipliers** to produce and maintain purity.
- **Distribute via agro-dealers** in small and bulk packs.
- **Set up demos and farmer training** through extension.
- **Promote with local media** to drive adoption.
- **Link farmers to processors** to unlock market value.
- **Monitor adoption and impact** for scale-up decisions.

Cost: \$\$\$ **2336 USD**

All production cost for 1 hectare

ROI: \$\$\$ **up to 434 %**

over 10 harvests

6.8–18.01
t/ha over 10
harvest

70–85 days
Days to Maturity after
Transplanting

**Officially
released in
Benin in
2025**

12 939 USD
Total revenue



Open source / open
access

