



# Vegetable compact technologies Toolkit

4 TECHNOLOGIES | CREATED ON AUG 22, 2025 BY TAAT PROFILING TEAM | LAST UPDATED AUG 22, 2025



## TECHNOLOGIES IN THIS TOOLKIT

- **AVTO2116:** Resilient and Market-Preferred Tomato Variety
- **Hot and Aromatic Round Pepper**
- **for Culinary and Processing Use**
- **Long Peppers Varieties Resistant to Diseases**



<https://taat.africa/nzp>

# Hot and Aromatic Round Pepper for Culinary and Processing Use

Intense Heat, Rich Aroma, Market Ready!

These spicy and flavorful peppers grow well in hot regions and meet local taste preferences. They can support nutrition programs, income generation, and rural development goals. A practical option for seed distribution and public farming initiatives.



## Commodities

Chili peppers

## Sustainable Development Goals



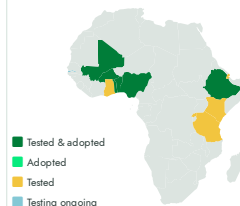
## Categories

Production, Improved varieties,  
Disease resistance, Yield improvement

## Best used with

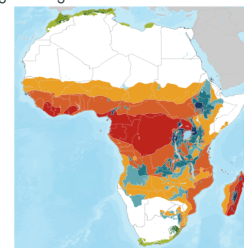
Zero Energy Cooling Chamber for Vegetables  
See all 1 technologies online

## Tested/adopted in



## Where it can be used

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



## Target groups

Breeders, Farmers, Processors,  
Seed companies

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

- **Reduced Production:** Yield losses limit supply of high-heat, aromatic peppers and reduce farmer incomes.
- **Health Risks:** Heavy pesticide use threatens public health and environment.
- **Weak Seed Systems:** Poor pipelines block delivery of improved, uniform pepper varieties.
- **Low Productivity:** Low farm output limits rural development impact.

## Solution

- **Disease Resistance:** Increases pepper production nationally.
- **Less Pesticide Use:** Protects health and the environment.
- **Early Maturity:** Supports farmer income growth.
- **Heat and Aroma:** Meets market and consumer demand.
- **Climate Adaptability:** Fits national food security and climate plans.

## Key points to design your project

These disease-resistant round pepper varieties from WorldVeg are adapted to hot, disease-prone environments and offer reliable yields with consistent fruit quality—ideal for improving farmer income, nutrition, and climate resilience.

To integrate them into a project:

- Source seed from WorldVeg and begin local registration.
- Target areas with high disease pressure and poor-performing local varieties.
- Engage trusted cooperatives or seed multipliers to ensure quality seed production.
- Distribute through agro-dealers in appropriate package sizes for smallholders and larger farms.
- Set up demonstration plots and train farmers through local extension networks.
- Promote adoption using local languages and trusted communication channels.
- Connect producers with traders and processors to strengthen market access.
- Monitor uptake, yield performance, and market outcomes to guide scaling.

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**



Open source / open access



Hot and Aromatic Round Pepper for Culinary and Processing Use

<https://taat.africa/woa>

Last updated on 7 July 2025, printed on 7 July 2025

Enquiries [e-catalogs@taat.africa](mailto:e-catalogs@taat.africa)

# Long Peppers Varieties Resistant to Diseases

Strong Against Disease, Hot on the Market.

These long pepper varieties, developed by the World Vegetable Center, tackle low productivity, disease losses, and seed import reliance. With yields of 6.8–18.01 t/ha, disease resistance, and 70–85 days to maturity, they ensure stable domestic production, support food security, and strengthen local seed systems in dryland areas.



Commodities

Chili peppers

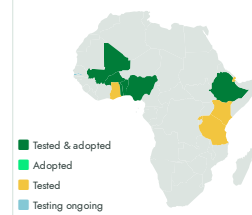
Sustainable Development Goals



Categories

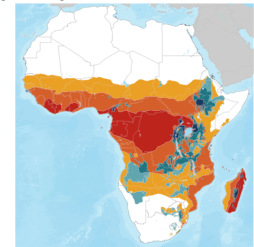
Production, Improved varieties,  
Disease resistance, Yield improvement

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  
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**70–85 days**  
Days to Maturity after  
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**Officially  
released in  
Benin in  
2025**

**12 939 USD**  
Total revenue



Open source / open  
access



Long Peppers Varieties Resistant to Diseases

<https://taat.africa/gks>

Last updated on 14 July 2025, printed on 14 July 2025

Enquiries [e-catalogs@taat.africa](mailto:e-catalogs@taat.africa)



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🔗 <https://taat.africa/nzp>

## ABOUT US

### TAAT

TAAT, Technologies for African Agricultural Transformation, is an African Development Bank initiative to boost agricultural productivity by rapidly rolling out proven technologies to more than 40 million smallholder farmers.

TAAT aims to double crop, livestock, and fish productivity by 2025 by engaging both public and private sectors to expand access to productivity-increasing technologies across the continent. TAAT advises African government who receive funding from international financial institutions such as the African Development Bank to help them integrate the best agricultural technologies in their development projects. TAAT also offers technical assistance for the integration of these technologies, when needed.

### TAAT Technologies

TAAT definition of agricultural technologies is very broad: they include improved varieties, inputs, equipment, agricultural infrastructure, practices and agricultural policies. In short, any solution to an agricultural constraint. TAAT technologies have been developed by a wide variety of organizations: the CGIAR, other international research institutions, national research organizations, or the private sector.

### TAAT Clearinghouse

Within TAAT, the Clearinghouse has the remit to select, profile and validate agricultural technologies, and showcase them in online

catalogs to support the advisory role that the Clearinghouse offers to governments and the private sector. The Clearinghouse strives to be an 'honest broker' of technologies through its selection, profiling, validation and advice.

### TAAT e-catalogs

The e-catalogs are designed to be used by decision-makers within governments, private sector companies or development organizations. They facilitate the search for appropriate solutions that are adapted to local conditions and requirements, and provide all necessary information, presented in jargon-free and easy to analyze technology profiles. Once a decision-maker has selected a technology of interest, the e-catalogs facilitate their direct contact with those who can help them implement the technology, whether they are a research group or a private company.

### TAAT Technology Toolkits

Technology toolkits are hand-picked selections of technologies from the TAAT e-catalogs. We offer some curated toolkits for specific cases, and registered users can create their own toolkits, showcasing their selection of technologies. Toolkits can be used online and shared as links, as mini e-catalogs, they can also be downloaded, saved, shared or printed as collections of technology pitches in PDF format (pitches are one-page summaries of technology profiles, available for all technologies on the e-catalogs).

## CONTACT

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TAAT is funded by the African Development Bank, the TAAT Clearinghouse is co-funded by the Bill and Melinda Gates Foundation and the African Development Bank.