

# Contour Bunding Technique (CBT) Contour Bunds for Water Harvesting

CBT: Nurturing Crops, Conserving Soil, and Cultivating Resilience

The "Contour Bunding Technique (CBT)" is a farming strategy used in Africa's dry areas. It uses small walls built along field curves to collect water, reduce runoff, and prevent soil erosion. This enhances the soil's water retention, making it a practical solution for water scarcity in dryland farming.



Semi-circular bunds reinforced with stones



**International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)**  
Dougbedji Fatondji

Technology originally documented by

ProPAS

Commodities

Sorghum/Millet

Sustainable Development Goals



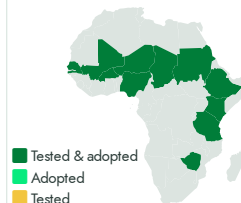
Categories

Production, Practices, Water management

Best used with

- [Millet and Sorghum Varieties for Better Nutrition and Stress Resistance >](#)
- [Fertilizer Micro-Dosing to Enhance Yield and Use Efficiency >](#)
- [Dual-purpose Varieties for Crop and Livestock Integration >](#)

Tested/adopted in



Where it can be used

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



This technology is **TAAT1 validated**.

8·7



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

Gender assessment 4

Climate impact 7

## Problem

- Water Scarcity:** Dryland farming often faces water shortages, making crop growth challenging.
- Soil Erosion:** In dry areas, soil erosion and gully formation degrade soil health and productivity.

## Solution

- Water Management:** CBT uses walls to capture and store rainwater, increasing crop yields.
- Soil Conservation:** CBT slows water movement, reduces soil erosion, and improves soil fertility.

## Key points to design your project

The Contour Bunding Technique (CBT) promotes inclusivity and mitigates climate change impacts, contributing to several Sustainable Development Goals (SDGs). It's a valuable tool for sustainable agriculture and climate resilience projects.

To integrate CBT into a project:

- Raise Awareness:** Educate the community about CBT's benefits.
- Train Stakeholders:** Train agents and farmers on cost-effective bund construction techniques.
- Consult Farmers:** Discuss with farmers to understand water movement and determine optimal bund placement.
- Provide Resources:** Ensure access to necessary resources for building and reinforcing bunds.
- Monitor and Evaluate:** Track the effects of CBT on crop yields and soil health for continuous improvement.
- Engage Community:** Involve the community to ensure project sustainability and foster ownership.

Cost: \$\$\$ **9 USD**

Drawing contour line per ha

**40 %**

Runoff reduction

**20 %**

Sediment loss decrease



Open source / open access



## Contour Bunding Technique (CBT)

<https://e-catalogs.taatafrica.org/gov/technologies/contour-bunding-technique-cbt-contour-bunds-for-water-harvesting>

Last updated on 22 May 2024, printed on 22 May 2024

Enquiries [techs@taatafrica.org](mailto:techs@taatafrica.org)