

Furrow Irrigated Raised Bed Wheat Production

Smart Irrigation, Bountiful Harvests

This technique involves creating raised beds with furrows for planting crops, which ensures even irrigation and optimal soil moisture while reducing soil erosion and preventing waterlogging. It is effective with specific irrigated wheat varieties. In Ethiopia, suitable varieties include Amibera, Ga'ambo, Kakaba, Fentale-2, Shorima, Dandaa, and Ogolcho. In Nigeria, the varieties are Attila,...



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This technology is **TAAT1 validated**.
 7·7
 Scaling readiness: idea maturity 7/9; level of use 7/9

Gender assessment 4

Climate impact 7

Problem

- **Flooding wastes water:** Raises production costs.
- **Scattered fertilizer:** Costs more, harms environment.
- **Uncontrolled moisture:** Lowers yields, hurts productivity.
- **Limited freshwater:** Weakens drought resistance, hurts yields.

Solution

- **Saves water:** Targets furrows for optimal soil moisture.
- **Protects crops:** Raised beds prevent waterlogging and improve drainage.
- **Reduces waste:** Precise fertilizer application minimizes cost and environmental harm.
- **Boosts harvests:** Rainwater harvesting and controlled irrigation maximize water use for resilient crops.

Technology from
ProPAS

Commodities
Wheat

Sustainable Development Goals

Categories
Production, Practices, Water management

Best used with

- [Wheat Cultivation in Dryland through Winter Irrigation >](#)
- [Minimal Tillage and Surface Mulching of Soils >](#)

Cost: **300 USD** (labor and input per ha)
360 USD (sheet plastic per ha) **100–250 USD** (water from planting to harvest) IP (Open source / open access)

Tested/adopted in

- Tested & adopted
- Adopted
- Tested
- Testing ongoing

Where it can be used

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

