Wheat Cultivation in Dryland through Winter Irrigation

Growing Resilient Wheat, Even in the Hottest Seasons.

Expanded Production of Irrigated Wheat technology, emphases the cultivation of spring wheat varieties and the use of suitable irrigation systems, specific wheat varieties, fertilizers, and pesticides to promote a sustainable and resilient approach to wheat cultivation.

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This technology is TAAT1 validated.

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

Gender assessment 4

Climate impact 6 1

Problem

- Decreased wheat yields due to exposure to high diurnal temperatures
- The global climate change, leading to heightened risks of yield losses and crop failure.
- Traditional cultivation of wheat during the hot rainy seasons exposes the crop to adverse effects of heat stress.

Solution

- Promote winter production of wheat in African dryland,
- Develop and implement irrigation systems, including investments in water lifting and drip feed infrastructure,
- Encourage the use of heat-tolerant wheat varieties including fertilizers, and pesticides.

Key points to design your project

This technology improves wheat production. To implement it:

- Provide access to affordable irrigation systems
- Estimate input quantities, consider delivery costs, provide training, and develop communication materials.
- Collaborate with agricultural institutes and seed companies is recommended for successful technology integration

Cost: $$$ **373 USD**

Total cost of a winter production using surface irrigation

4 - 6 ton/ha
Grain yields increased

100,000 - 300,000 Ha
Possible area for cultivation expansion

IP
Open source / open access

Technology from

ProPAS

Commodities

Wheat

Sustainable Development Goals

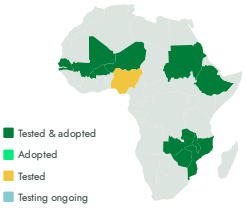
Categories

Production, Practices, Water management

Best used with

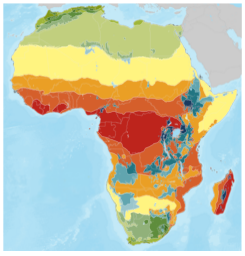
- Furrow Irrigated Raised Bed Wheat Production ›

Tested/adopted in



Where it can be used

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



Target groups

Farmers