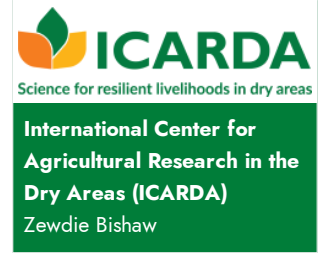
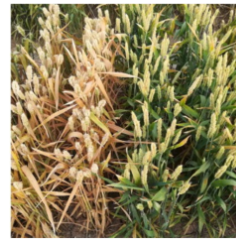


Heat and Drought Tolerant Wheat Varieties

Wheat cultivation in high temperature regions

These wheat varieties mature in 90 days, withstand temperatures 4°C above normal, maintain 75% yield under extreme conditions, resist diseases like yellow stem rust, and have high water use efficiency. They also good for bread flour with a protein content of 14-15%. Ideal for challenging environments like Sub-Saharan Africa.



This technology is **TAAT1 validated**.

 7•8

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

Gender assessment 4

Climate impact 7

Problem

- Heat Stress:** Yield loss due to temperatures 4°C higher than normal.
- Drought Conditions:** Poor performance with less than 200mm of moisture.
- Low Productivity:** Traditional varieties yield much less than 6 tons/ha.
- Limited Cultivation Zones:** Unsuitable for high temperatures and low rainfall areas

Solution

- Heat Tolerance:** Withstand temperatures 4°C higher than normal.
- Drought Resistance:** Perform well with less than 200mm of moisture.
- Higher Yields:** Achieve up to 6 tons/ha.
- Expanded Cultivation Areas:** Suitable for high-temperature and low-rainfall regions.

Key points to design your project

To integrate this technology

- Calculate seed quantity based on planting rate and cost,
- Consider sourcing logistics,
- Provide training and communication support, and
- Collaborate with agricultural institutes and seed multiplication companies for implementation.

Additionally, it's recommended to combine this technology with other wheat production methods for optimal results.

Cost: \$\$\$

4 - 6 tons/ha increase in yield

100 kg/ha Planting rate

IP Unknown

Technology from

[ProPAS](#)

Commodities

Wheat

Sustainable Development Goals

Categories

Production, Improved varieties, Drought tolerance, Heat tolerance

Best used with

- [Wheat Cultivation in Dryland through Winter Irrigation >](#)
- [Furrow Irrigated Raised Bed Wheat Production >](#)
- [Yellow Rust and Stem Rust Resistant wheat >](#)

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.

