

Golden maize varieties (High provitamin A)

Nutrition-boosting, income-enhancing maize.

These maize varieties have distinctive orange kernels, a result of high beta-carotene content. They are developed through advanced breeding techniques, combining naturally provitamin A enriched lines from Central and South America with elite land races and hybrid lines with improved agronomic traits.



African Agricultural Technologies Foundation (AATF)

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✓ This technology is **TAAT1 validated**.

7-7



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

Cost: \$\$\$ **0.8—1.2 USD** per kg

10—20 % Revenue increased



Open source / open access

Technology from

ProPAS

Commodities

Maize

Sustainable Development Goals



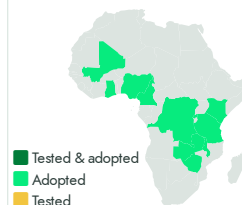
Categories

Production, Improved varieties, Yield improvement, Quality improvement

Best used with

- [Drought Tolerant Maize Varieties and Water Efficient Maize Varieties >](#)
- [Pre-plant blended fertilizers and nitrogen topdressing for maize >](#)
- [Maize-legume rotation and intercropping >](#)

Tested/adopted in



Where it can be used

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



Problem

- Significant population, including children and adults, faces preventable blindness and weakened immune systems due to insufficient vitamin A levels.
- Increased susceptibility to diseases such as measles, diarrhea, and respiratory infections.
- Common maize varieties lack vital vitamins and minerals, contributing to widespread malnutrition.
- 50% of children aged 0.5 to 5 years are at risk of vitamin A deficiency, leading to severe health complications and diminished quality of life

Solution

- Provitamin A enriched maize varieties provide a stable source of essential nutrients, combating deficiencies.
- Preservation of beta-carotene ensures a consistent supply of vitamin A.
- Genomic modification maintains nutrient content without compromising yield.
- Cost-effective approach for regions heavily reliant on maize.
- Tailored to meet nutritional needs, providing a significant portion of daily vitamin A requirement.
- Accessible and adaptable for diverse farming systems.

Key points to design your business plan

This technology is beneficial for three main groups: manufacturers, resellers, and end users (farmers).

Golden Maize technology provides a cost-effective solution, addressing vitamin A deficiency and empowering diverse farming communities globally. Selling the product enhances user engagement, contributing to overall health and wellbeing. Utilizing Provitamin A enriched maize ensures a sustainable solution, combating vitamin A deficiency and empowering farming communities for enhanced health and wellbeing.

Gender assessment

Climate impact



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<https://e-catalogs.taatafrica.org/com/technologies/golden-maize-varieties-high-provitamin-a>

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