

Foliar micronutrient addition for healthier rice

Enhancing Yield and Nutrition with Micronutrient Sprays



AfricaRice

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The technology "Foliar Micronutrient Addition for Healthier Rice" is developed to address micronutrient deficiencies in rice crops. The application of micronutrients onto the rice canopy aims to enhance the harvest yield and nutritional quality of the grain without requiring extensive investment or infrastructure.

This technology is **TAAT1 validated**.

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

Gender assessment **3**

Climate impact **6**

Problem

- Crucial deficient of soil in rice-growing areas in crucial micronutrients like magnesium, calcium, copper, zinc, manganese, and boron.
- Low rice yield and micronutrient content

Solution

- The technology supplements essential elements directly to plant leaves,
- Enhances both grain yield and nutritional value. It can be used in various soil conditions.
- The nutrients are quickly absorbed through the leaves, providing immediate benefits to the plant.

Key points to design your project

This technology on rice addresses low micronutrient content in Sub-Saharan Africa. It promotes sustainable agriculture, aligning with goals for food security and poverty reduction. To integrate this technology,

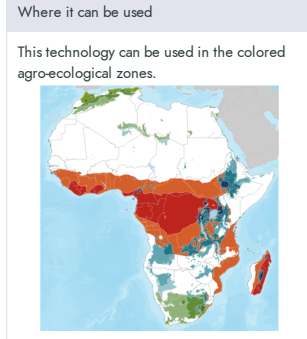
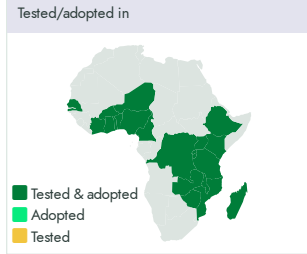
- Inform farmers, assess micronutrient deficiencies, formulate application plans, and provide resources.
- Estimate fertilizer and sprayer quantities, considering delivery costs.
- Training, communication support, and collaboration with agricultural institutes are crucial for successful implementation.

Technology originally documented by
ProPAS

Commodities
Rice

Sustainable Development Goals

Categories
Production, Practices, Yield improvement



Target groups
Farmers

Cost: **\$\$** **41.1 USD**
Fertilizers

ROI: **\$\$\$** **7—30 %**
Yield increased

40 USD

Protective kits per person

30—45 USD

Knapsack sprayers with a tank of 20 liter



Open source / open access



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<https://e-catalogs.taatafrica.org/gov/technologies/foliar-micronutrient-addition-for-healthier-rice>

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