

Foliar micronutrient addition for healthier rice

Enhancing Yield and Nutrition with Micronutrient Sprays



AfricaRice

Africa Rice Center
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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

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

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
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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 business plan

This technology addresses the challenge of low micronutrient content in rice, improving both grain yield and nutritional value.

- The cost structure includes various elements such as the price per kilogram of microelements in fertilizers, protective kits, knapsack sprayers, and renting tractor-mountable sprayers.
- Training is crucial for successful implementation, and collaboration with agro dealers is essential.
- The potential profit can be estimated based on positive outcomes observed in Brazil and Malaysia.

Technology from

ProPAS

Commodities

Rice

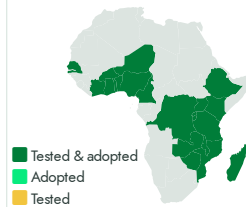
Sustainable Development Goals



Categories

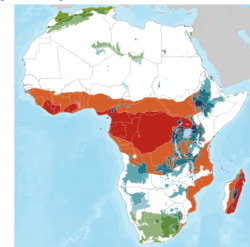
Production, Practices, Yield improvement

Tested/adopted in



Where it can be used

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



Target groups

Farmers

Gender assessment 3

Climate impact 6



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

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