

ABC Grower: Biomineralization of weeds for soil improvement

Solar-Powered, Cost-Effective, and Ecologically Smart BioFertilizer for Thriving Crops and Sustainable Agriculture

ABC Grower is a biotechnology that extracts nutrients from weeds using positive microorganisms (EM). These nutrients are formulated to enhance crop growth, tailored for tropical soils. Powered by solar energy, it reduces fertilizer production time from 60 to 14 days, lowers costs by 10 to 20 times, and adds economic value to weeds for farmers.



SOCIETE DE DEVELOPPEMENT DE L'AGRICULTURE DURABLE (SDAD SARL)
Bienvenu Chabi ADJE

This technology is **pre-validated**.

9•8

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

Gender assessment **4**

Climate impact **7**

Problem

- Climate change accelerates land degradation, threatening agricultural productivity and food security.
- Farmers using chemical inputs face poverty and environmental risks from heavy metal accumulation.
- Low adoption of compost in organic farming is due to lengthy production time, high water and labor requirements, and logistical challenges, including high costs and quantity demands.

Solution

- Cost Reduction: Significantly lower fertilization costs alleviate financial burdens for farmers.
- Improved Efficiency: Precise biofertilizer formulation enhances agronomic efficiency, surpassing conventional methods.
- Solar Energy: Solar energy reduces organic fertilizer production time from 60 to 14 days, simplifying production.
- Economic Valorization: Weeds in fields gain economic value, benefiting farmers economically.

Key points to design your project

To integrate this technology into your project:

1. Raise awareness among farmers about its benefits.
2. Ensure equitable access and financial support for local suppliers and smallholder farmers.
3. Calculate required quantities based on an initial cost of USD 8 per unit.
4. Consider delivery costs, import clearance, and duties if applicable.
5. Provide training and support for project installation.
6. Develop communication materials.
7. Collaborate with agricultural development institutes for implementation.

Cost: \$\$\$ **8 USD**

Initial cost

ROI: \$\$\$ **20 %**

Benefit

1,500 USD

Production Kit purchase

40 %

Benefit for the kit purchase

15 Years

Lifespan



Patent granted

Commodities

All Crops

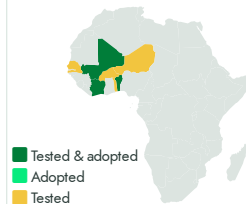
Sustainable Development Goals



Categories

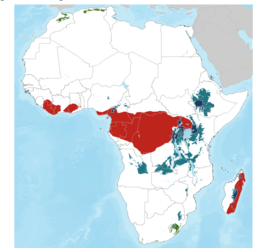
Production, Inputs, Fertilizer

Tested/adopted in



Where it can be used

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



Target groups

Farmers, Sellers



ABC Grower

<https://e-catalogs.taatafrica.org/gov/technologies/abc-grower-biomineralization-of-weeds-for-soil-improvement>

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