

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.



Société de développement de l'agriculture durable (SDAD SARL)
Bienvenu Chabi ADJE

Commodities

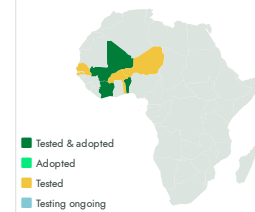
Sustainable Development Goals



Categories

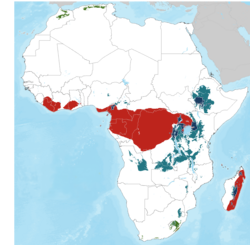
Production, Inputs, Fertilizer

Tested/adopted in



Where it can be used

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



Target groups

Farmers, Sellers

✓ This technology is **validated**.

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

Inclusion 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 program

ABC Grower can be integrated into sustainable agriculture, soil fertility management, climate-smart agriculture, and women's economic empowerment programs to improve soil fertility, reduce fertilizer costs, and increase crop productivity. Its adoption contributes to **SDGs 2, 5, and 13**. To integrate this technology into your project, plan and budget for the following activities and prerequisites:

- **Facilitate access** to ABC Grower production kits, effective microorganisms (EM), and biofertilizer production equipment.
- **Establish partnerships** with SDAD SARL and agricultural development institutes.
- **Conduct** demonstrations and training on biofertilizer production and application, and **monitor** technology adoption, soil fertility improvement, and crop productivity.

1,500 USD

Production Kit purchase

40 %

Benefit for the kit purchase

15 Years

Lifespan



Patent granted



ABC Grower

<https://taat.africa/bez>

Last updated on Jul 3, 2026 printed on Jul 9, 2026

Enquiries e-catalogs@taat.africa