

Biochar: Biomass Charcoal for Soil improvement

Biochar, a powerfully circular way to fight climate change

Biochar technology is a form of charcoal. It is made through a process called pyrolysis which involves burning of biomass in an oven with little or no oxygen. What you get out of it is solid material which then is added into soil.



Moshood Sulaiman

Commodities

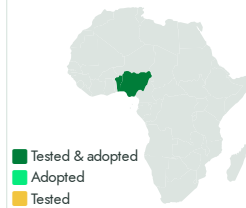
Sustainable Development Goals



Categories

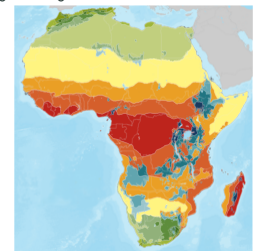
Production, Pre-production, Inputs, Fertilizer, Combustible

Tested/adopted in



Where it can be used

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



Target groups

Farmers

This technology is **pre-validated**.

8·7 Scaling readiness: idea maturity: 8/9; level of use: 7/9

305 USD

For 500 Kg capacity

5—10 Tones

Recommended Biochar quantity for 1 hectare



Open source / open access

Problem

- Poor soil fertility and health
- High greenhouse gas emissions from agricultural practices
- Soil erosion and nutrient leaching
- Limited contributions to climate change mitigation efforts

Solution

- Biochar reduces the need for farmers to burn residues, while also creating a valuable soil amendment that can improve soil,
- Reduce water usage, lower methane emissions, and
- Save on input costs for expensive and polluting chemical fertilizers.

Key points to design your business plan

Biochar technology is an innovative approach to sustainable farming, enhancing soil health, improving crop yields. To integrate it into your business:

- The equipment to produce Biochar costs around 305 USD and is available in Nigeria.
- Farmers can purchase Biochar directly, with prices. Approximately 5-10 tons per hectare are required for optimal soil enhancement.
- Key partners for implementing Biochar technology include equipment sellers, agricultural service providers.

Gender assessment **3**

Climate impact **7**



Biochar

<https://e-catalogs.taatafrica.org/com/technologies/biochar-biomass-charcoal-for-soil-improvement>

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