

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.



Sasakawa Africa Association
Moshood Sulaiman

✓ This technology is **validated**.

8·7



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

Inclusion assessment

3

Climate impact

7

Problem

- **Poor soil health and low fertiliser use** keep African farmers trapped in low-yield cycles.
- **Burning residues worsens climate vulnerability**, releasing carbon and degrading soils further.
- **Agricultural waste is underutilized**, missing potential for circular and regenerative practices.
- **Current land and input practices limit impact** on food systems resilience and climate adaptation efforts.

Solution

- Enhances soil fertility, water retention, and smallholder productivity.
- Cuts reliance on expensive inputs while increasing yields.
- Mitigates emissions and enables carbon credit generation.
- Creates co-benefits across agriculture, climate resilience, and livelihoods.

Key points to design your program

Accelerate food security, climate action, and rural income with biochar:

- Fund training hubs to equip farmers with biochar skills and carbon credit access.
- Promote biochar within regenerative agriculture projects to restore soils and boost yields.
- Enable access to equipment and local suppliers to scale implementation (e.g., Nigeria-based).
- Support partnerships that link farmers, cooperatives, and carbon buyers for long-term impact.

305 USD

For 500 Kg capacity

5—10 Tones

Recommended Biochar quantity for 1 hectare



Open source / open access

Commodities

All Crops

Sustainable Development Goals



Categories

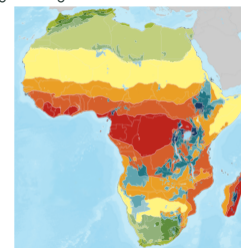
Production, Pre-production, Inputs, Fertilizer

Tested/adopted in



Where it can be used

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



Target groups

Farmers



Biochar

<https://taat.africa/bhu>

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Enquiries e-catalogs@taat.africa