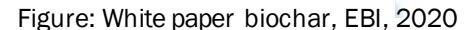


Artisan C-Sink as incentive mechanism for decentral biochar production and application



Kick-off | Annett Pollex | 27.05.2024

- Photosynthesis acts as carbon dioxide removal (CDR).
- Building up soil organic matter by soil amelioration with biochar could substantially contribute to CDR.
- Certification of C-sinks can provide financial incentives for decentral biochar production



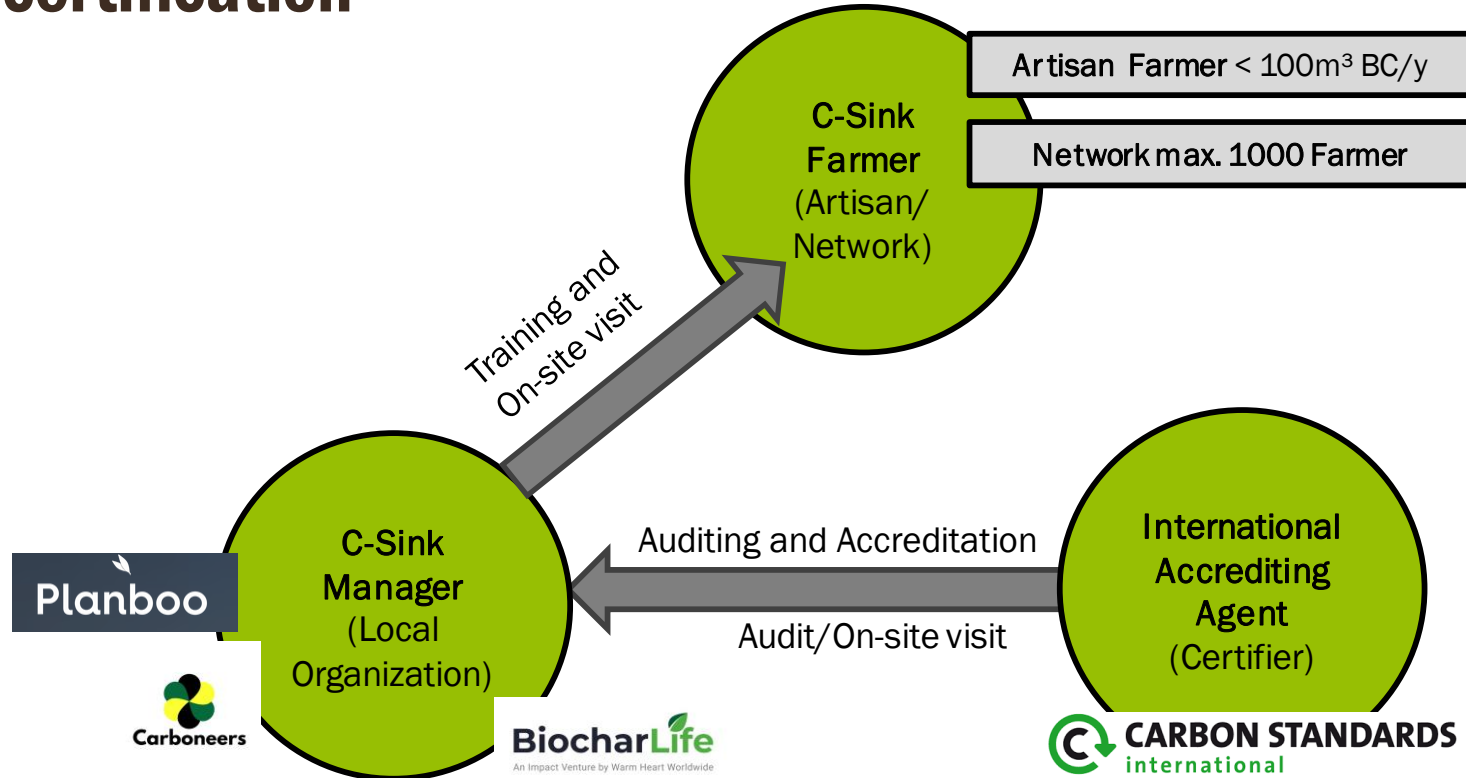
The Global Artisan C-Sink Certification system

- Provides guidelines for the certification of biochar-based C-Sinks, produced by artisanal methods.
- Geographical scope: Low to lower middle income and higher middle-income countries as per the World Bank classification.
- Advocated for decentral, small-scale biochar production.



ithaka institute for carbon strategies

Concept and structure of Artisan C-Sink certification



Key aspects of the Artisan C-Sink certification



Raw materials for biochar production



Raw materials prerequisites:

- Underutilized or unexploited agricultural residues with no competing use
- Low moisture content (below 30%) and stored dry and aerated
- Examples: corn stover or cobs, straw, coffee husks, nut shells, tree prunings
- Excluded: Forest biomass

Technologies for biochar production



Principles and important aspects:

- Flame curtain principle (most common) or top lid up-draft (TLUD) technologies
- Kon-Tiki as a cheap and and low-tech approach
- High quality biochar possible
- Common yield: 25% of input biomass by weight



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“It is not the Kon-Tiki technology as such that can be certified but only the combination of the technology and the executing artisan – the artisan biochar producer”

Training of the Artisan

Mandatory content:

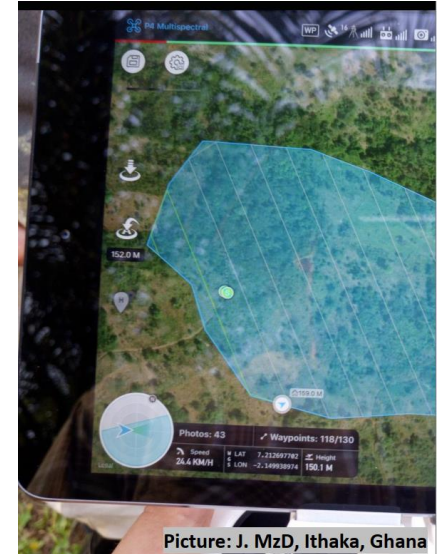
- Principles of feedstock selection
- Biomass drying
- Kon-Tiki operation
- Volume measurement
- Post-pyrolytic treatment
- Agronomic use of biochar
- Use of the Artisan App to enable digital monitoring, reporting and verification

→ Training must be completed by a successful examen.

Monitoring

Data collected by C-Sink manager:

- Create account for each C-sink farmer / artisan
- Upload training certificate
- Register available biomass (GPS of farm + crop rotation)
- Employed pyrolysis technology
- Documentation of biochar production
 - Feedstock description
 - Geo- and time referenced pictures of process and product.
 - Final volume produced
- Documentation of application / mixing of biochar (amount / date / location)
- Sale



Certification, trading and benefit sharing

Trading of the certificates e.g. by carbonfuture



<https://platform.carbonfuture.earth/balancer/portfolios>



Exomad

📍 South America
⚖️ 25,000 tCO₂e (p. a.)



Varaha

📍 Southern Asia
⚖️ 3,000 tCO₂e (p. a.)

More information?

Global Artisan C-Sink Guidelines
are available here:

EBC C-Sink Guidelines & Documents

<https://www.european-biochar.org/en/ct/139-C-sink-guidelines-documents>

Contact

Carbon Standards International: info@carbon-standards.com

Ithaka Institute: mzd@ithaka-institut.org



PDF

Outlook to further steps

We plan a workshop combined with a study tour to visit an Artisan C-Sink manager and farmers producing biochar within an Artisan network for October

Start of training on Farmers level: ideally in November

Questions: Are BoA representatives interested in participating the study tour? If yes, who would like to participate? When and where could the workshop take place? Who could act as C-sink manager?



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