



TEMPLATE

# STAKEHOLDER CONSULTATION REPORT

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PUBLICATION DATE **05.05.2022**

VERSION **v. 2.0**

RELATED SUPPORT

**TEMPLATE GUIDE Stakeholder Consultation Report v.2.0**

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This is a report template to be used for filling the information pertaining to Local Stakeholder Consultation and Stakeholder Feedback Round conducted in line with the [Stakeholder Consultation and Engagement Requirements](#).

This document contains the following Sections

[Key Project Information](#)

[Grouped Consultation Information](#)

[SECTION A - Information made available to Stakeholders](#)

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## KEY PROJECT INFORMATION

<b>GS ID of Project</b>	
<b>Title of Project</b>	Sifuri Halisi: Industrial Biochar production in Tanzania
<b>Version number of this Report</b>	1.1
<b>Completion date of version</b>	13.12.2023
<b>Time of First Submission Date</b>	
<b>Start Date of the Project</b>	27/03/2023
<b>Date of Meeting (s)</b>	17/05/2023
<b>Project Cycle:</b>	<input type="checkbox"/> Regular <input checked="" type="checkbox"/> Retroactive

## GROUPED CONSULTATION INFORMATION

<b>GS ID of Real Case VPA</b>	
<b>Title of Real Case VPA</b>	
<b>Geographical Boundary of Grouped Consultation</b>	
<b>Technology covered by the Grouped Consultation</b>	
<b>Validity Period</b>	
<b>Anticipated number of VPAs</b>	

## SECTION A. INFORMATION MADE AVAILABLE TO STAKEHOLDERS

### A.1. Preliminary agenda for the meeting

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08:30 - 09:30	Registration and coffee
09:30 - 10:00	Welcome and Introduction of all participants and guests
10:00 - 10:30	Presentation by DEC & atmosfair
10:30 - 11:00	Coffee and bites break
11:00 - 11:20	Presentation by TARI on soil and fertility issues
11:20 - 11:40	Presentation by SUA on biochar and their research
11:40 - 12:20	Grievance mechanism and SDG impacts
12:30 - 13:30	Lunch break
13:40 - 14:00	Group break out discussions
14:00 - 15:00	Question and answers for the presenter
15:00 - 15:10	Chief guest comments and remarks
15:10 - 15:15	Close of LSC

### A.2. A non-technical summary of the project

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“Sifuri Halisi” means absolute zero in Kiswahili. It represents both our pledge and our mission. Together, Dark Earth Carbon (DEC) and atmosfair, pledge to contribute to a net zero emission future by removing CO2 from the atmosphere and stably store it in order to mitigate the effects of climate change.

In order to achieve our mission, DEC and atmosfair seek to partner with smallholders, government plantations, and Tree Grower Associations (TGAs) and use their wood residues. The wood residues from the forestry sector and timber industry in Tanzania are currently being burnt or degraded, which results in greenhouse gas emissions and health problems. One of the fundamental reasons is the lack of markets and sophisticated facilities in place for these end-of-life products. With this project’s activities, we fill in this void by providing a possibility of using these wood residues and converting them into biochar. This project will furthermore demonstrate the untapped potential of wood residues to the local forestry sector and local

stakeholders, and therefore incentivise them to adopt not only a better waste management strategy but also more sustainable forestry practices.

Another important objective of the project is to improve the soil quality in Tanzania by introducing biochar as fertiliser to the local public. Biochar can improve soil quality and boost crop yields because of its impact on the soil water retention capacity, the soil pH and its ability to store nutrients. At the meeting more information about biochar will be presented and DEC will help introduce biochar to farmers, NGOs, government officials, and other interested parties throughout the coming year. DEC will be running field trials to demonstrate the positive effect of biochar, and biochar mixes, on crop yields and will be inviting local stakeholders to field days. DEC is already forging relationships with government institutions such as TARI to develop a local fertiliser mix suited for the needs of Tanzanian farmers.

The project activities will be supported by carbon funding for the reduction of greenhouse gases. For this purpose, the project will be registered under the Gold Standard. The Gold Standard is one of the highest available standards for climate change mitigation projects, following strict social and environmental criteria. The Local Stakeholder Consultation is an essential part of the project registration process.

### Project Implementation

The project is implemented by the local company Dark Earth Carbon (DEC), located in Mafinga, Tanzania. DEC is a start-up company which was founded with the mission to remove CO<sub>2</sub> from the atmosphere and put it to good use, improving the soil and lives of smallholder farmers. They have a good experience of working closely with Tanzanian smallholder farmers and have been advocating for the improvement of the management of local small-scale, low intensity community forests in Tanzania. DEC will install a biochar reactor with a feedstock capacity of 1T per hour in Mafinga, Tanzania, in the heart of the country's timber industry. DEC will source feedstock for their reactor from smallholders, government plantations, and Tree Grower Associations (TGAs). This will help to incentivise good management practices, such as timely thinning of plantations, particularly on smallholder farms. Additionally, it will reduce the fire risk in plantations, which is a major challenge in the Southern Highlands negatively affecting the development of the forestry sector

**A.3. Contact details to get further technical detail and project information**

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atmosfair gGmbH Patrizia Pschera  Email: pschera@atmosfair.de Tel: +49 (0) 30 120 84 80 - 68	Dark Earth Carbon Amar Shanghavi  Email: amar@darkearthcarbon.com Tel: +255 656 403 873
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**A.4. Summary of economic, social and environmental impacts of the Project**

>>

Besides reducing GHG emission in line with the UN’s Sustainable Development Goal (SDG) number 13, the project will also contribute to the following SDGs:

SDG 3 Good Health and well-being: reduce the practice of biomass burning as waste treatment, thus substantially reducing the number of deaths and illnesses from hazardous chemicals and air contamination.

SDG 4 Quality Education: substantially increase the number of trained smallholders and Tanzania tree growers in agro economic practices, thus pushing for better sustainable management in the forest and timber production sector.

SDG 8 Decent work and economic growth: Achieving full and productive employment and decent work for all women and men, by creating more job possibilities for the local communities.

SDG 12 Responsible Consumption and production: Substantially reduce wood waste by providing a market and incentive for recycling wood and turning it into biochar.

**A.5. Other relevant information to help stakeholders understand the project**

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The actual agenda carried out during the meeting was:

08:30 - 09:30	Registration
09:30 – 09:40	Welcome and Introduction of all participants and guests
09:40 - 10:10	Presentation by DEC & atmosfair
10:10- 10:20	First Round Q&A

10:20 - 10:45	Presentation by TARI on soil and fertility issues
10:45- 11:20	Coffee and bites break
11:20 - 11:40	Presentation by SUA on biochar and their research
11:40 - 12:20	Grievance mechanism and SDG impacts
12:30 - 13:00	Group break out discussions
13:00 - 13:45	Presentation of Group works and Q&A
13:45 - 14:30	Lunch

Currently, the biomass waste in Southern Highlands is being burnt

Burning of forestry waste has many negative impacts

- High emissions of greenhouse gases
- Forest fire risk
- Health hazard
- No local value creation

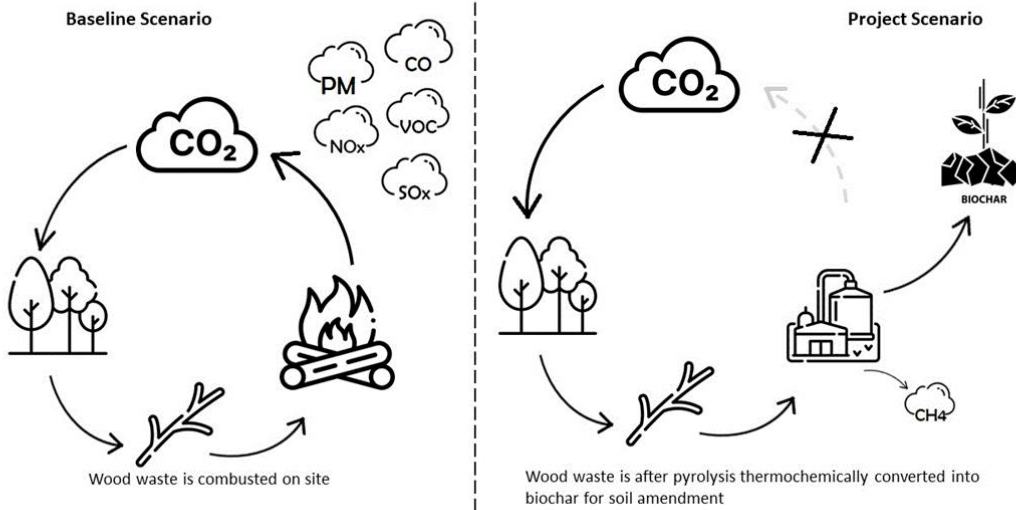


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The project at a glance



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### Dark Earth Carbon Tanzania LTD

- Is a Tanzanian Manufacturing business
- DEC will have its first location – Sifuri Halisi in Kinyanambo, Mafinga
- Directors



• Arno Rohwedder



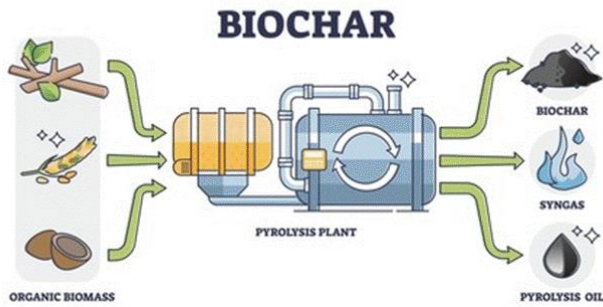
Dr Amar Shanghavi



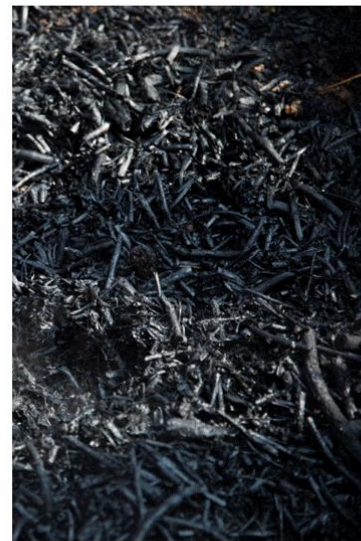
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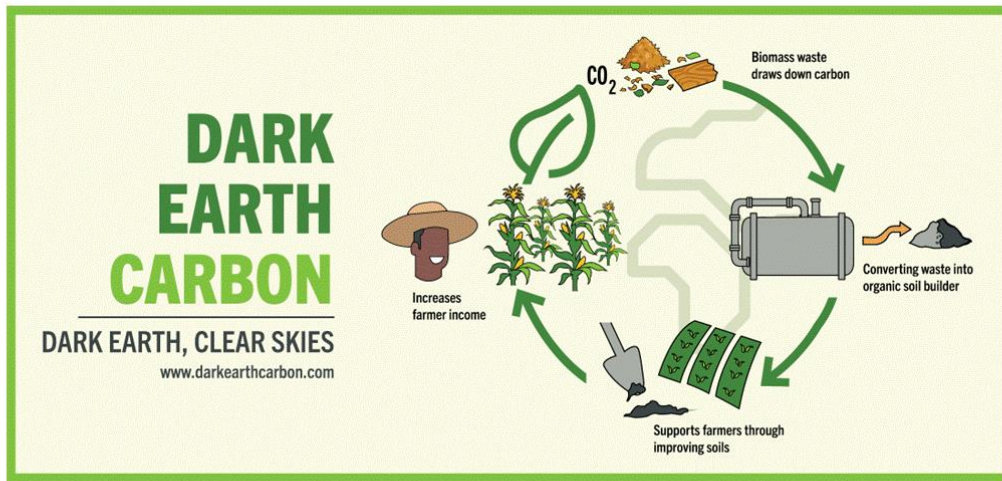
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The project will locally produce biochar to supply inputs to farmers.



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The first pilot unit will be installed by end of September 2023

- First phase included installation of 1 ton per hour processing capacity.
- High tech pyrolysis machinery from China
- Will create 20 direct jobs in year one and 300 jobs by year 3
- co-funded by atmosfair, and shareholders of DEC

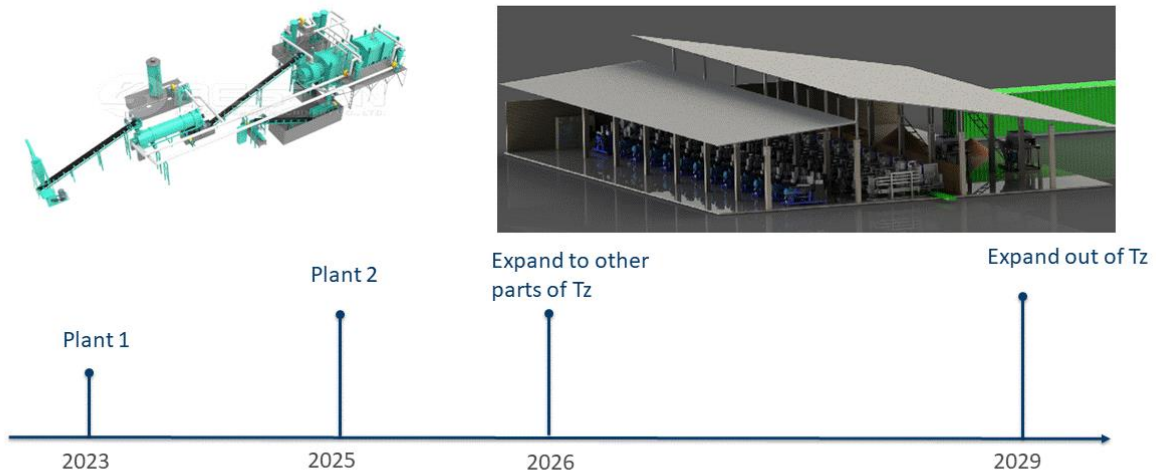


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The project shall be scaled up over the next years to process 25 tons per hour of biomass waste



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### How does biomass burn: Stages of biomass combustion



- 1 : Gas Generation (controlled by **HEAT**)
- 2 : Gas Combustion (controlled by **AIR**)

In the Pyrolysis Plant only step 1 is performed under controlled condition and in an oxygen free environment. That's clean biochar production.

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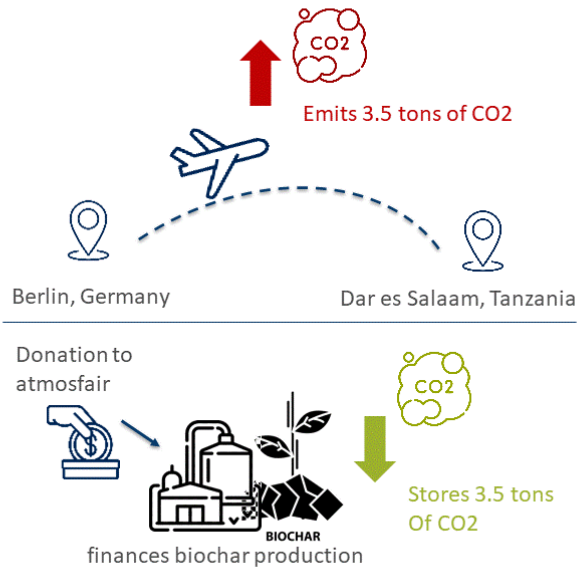


### atmosfair is a German non-profit organization

- Founded 2004 under the patronage of former UNEP executive director Klaus Töpfer
- Funded by voluntary climate donations through carbon offsetting of e.g. air travel
- Projects in 25 countries across the world
- Projects include renewable energy, energy efficiency, waste management and climate change education
- Projects are certified under carbon credit standards Clean Development Mechanism (UN) and/or Gold Standard



- atmosfair will co-fund and co-develop the project and manage certification under Gold Standard



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### Exemplary projects



Compost Plant, Dar es Salaam, Tanzania



Household Biogas, Kenya



Smallholder biochar, India



Electric cooking, Sanya Juu, Tanzania

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## Biochar as a Soil Amendment

### Soil improvement

Enhances soil structure and increases water-holding capacity

Increases Ph value

Increases microbial activity

### Nutrient retention

High capacity to retain nutrients

Reducing the need for frequent fertilization

→ Increased crop yields

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## Biochar trial in a Teagarden in Assam, India



Compost



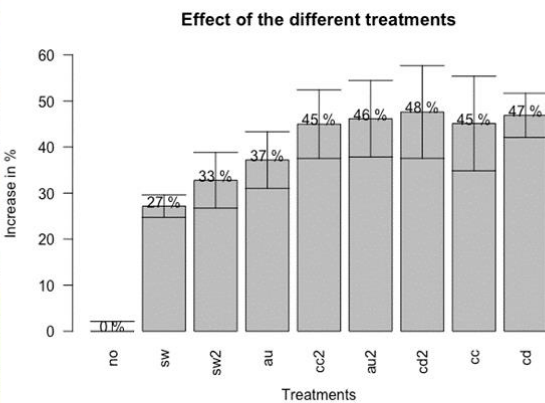
Application



Collection of the cow urine directly at the source and place to soak the charcoal/ biochar. In this way, the urine cannot ferment



Plucking



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## Local Biochar beats imported fertiliser



Planted 4<sup>th</sup> January 2022 by Nthawi Farms  
Seed: Recycled Local maize seed  
Treatment: Biochar charged with manure and urine

Planted 1<sup>st</sup> January 2022, by neighbour  
Seed: Purchased Hybrid maize  
Treatment: NPK fertilizer only, as urea was out of stock



Photo taken by C Roth on 5<sup>th</sup> February 2022 on the boundary of Nthawi farms, Lilongwe district, coordinates 14.00820° S, 33.62495° E  
15 days after heavy rains from tropical storm Ana caused more soil erosion on the conventional farm (right) than on Nthawi with biochar

Slide taken from Christa Roth

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### The Gold Standard is one of the most renowned quality standards for carbon credits



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### The project partners will quantify the project impacts by monitoring contributions to UN Sustainable Development Goals 13, 3, 4, 8 and 12



Remove CO<sub>2</sub> from the atmosphere and store it permanently, thus creating a permanent CO<sub>2</sub> sink and mitigate climate change.

- Amount & quality of biochar
- Subtract Emissions



Reduce the practice of biomass burning as waste treatment thus substantially reducing the number of deaths and illnesses from hazardous chemicals and air contamination.

- Amount of waste purchased for production of biochar



Substantially increase the number of trained smallholders and Tanzania tree growers in agro-economic practices

- # trainings performed
- # participants



Achieving full and productive employment and decent work for all women and men, by creating more job possibilities for the local communities

- # employments



Substantially reduce wood waste by providing a market and incentive for recycling wood and turning it into biochar

- Amount of waste purchased for production of biochar

Do you think something else should be monitored?



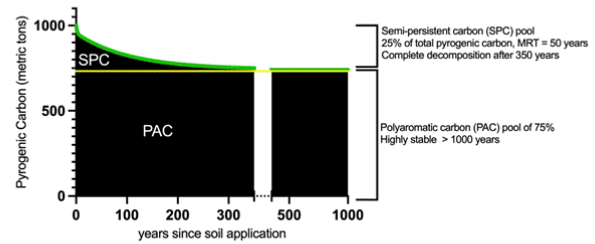
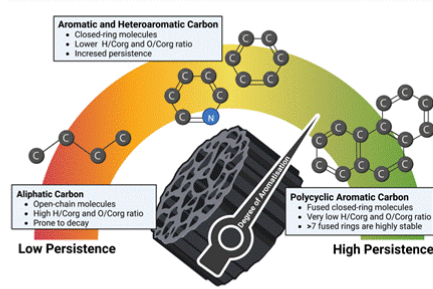
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### Quality safeguards

- Annual testing of the quality of the produced biochar in special labs
- Main test results:
  - PAH content and heavy metal contamination to ensure safe use in agriculture.
  - H:Corg and C-content to ensure the permanence of the sink. 75% of the C-amount will persist as a sink.



Source: <https://www.biochar-journal.org/en/ct/109>

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### Stakeholders are invited to provide input and file grievances via different channels

	Method chosen	Best practice	
	Continuous Input/ Grievance Expression Process Book	a book for grievance expression will be placed in the DEC office	made available at the DEC office, checked regularly by DEC and atmosfair
	Gold Standard contact	<a href="mailto:help@goldstandard.org">help@goldstandard.org</a>	
	Telephone access	Dark Earth Carbon Tanzania LTD: Dr. Amar Shanghavi 0744535933	comments received via phone calls will be registered in grievance expression book
	Internet/email access	DEC: <a href="mailto:comments@darkearthcarbon.com">comments@darkearthcarbon.com</a> atmosfair: Ms. Patrizia Pschera <a href="mailto:pschera@atmosfair.de">pschera@atmosfair.de</a>	comments received by email will be registered in grievance expression book
	Independent mediator		

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### What do you think could be the risks or negative impacts of the project?



You could think for example of these categories:



Human Rights



Gender Equality and Women's Rights



Community Health, Safety and Working Conditions



Cultural Heritage



Corruption



Economic Impacts



Climate and Energy



Water



Environment, ecology and land use

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### What do you think could be the positive impacts of the project?



You could think for example of these categories:



Human Rights



Gender Equality and Women's Rights



Community Health, Safety and Working Conditions



Cultural Heritage



Corruption



Economic Impacts



Climate and Energy



Water



Environment, ecology and land use

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## Tanzania biochar Situation..

- 'Super Vegetable Garden' biochar project in Mtwara implemented majorly by Women Perseverance Group.
- Results of this project; yields were drastically improved in three out of four test crops.



## Tanzania biochar Situation...

- Norges Vel, TaTEDO and RUDI;
- Conducted in Dar es Salaam, Mbarali, Kilombero and Idodi.
- The project aimed to improve smallholder livelihoods through the application of rice husks biochar in rice fields.
- The project had demonstrated positive results, increasing average rice plant height.



## Tanzania biochar Situation..

- ❑ New Forests Company; Iringa Mbozi district, Songwe region
- ❑ Aim; to minimize waste and improve its business case, residues from the core business were converted to tradable commodities, mostly fuels such as charcoal, biochar and firewood.
- ❑ The biochar produced was charged with nutrients from local dairy and chicken farms or imported organic fertilizers. 30 hectares trial application was conducted in 2019, amending biochar to soils in a coffee plantation.
- ❑ Test results report positive yields.



## Tanzania biochar Situation...

- ❑ Exploring lessons from five years of biochar-producing cookstoves in the Kagera region, Tanzania.
- ❑ Aimed at identifying key factors affecting the level of stove adoption and use, as well as biochar utilization.
- ❑ Results; Based on a follow-up survey of 50 households in northwestern Tanzania that received microgasifier stoves in 2015, only 12 still made use of their stove 5 years later (Eltigani et al.,2022)



## SUA Attempts-Completed/Proposals

- Trans-SEC and Sokoine University; Kilosa
- Aimed to improve food security for the rural poor in Tanzania and produce energy from biowaste, i.e. maize cobs. The University of Hohenheim provided blueprints of a top-lit updraft barrel reactor, which was adapted to local needs by engineers at Sokoine University of Agriculture (SUA). Initial tests of the effects of biochar on crop yields (corn) were conducted at SUA, with positive results (Graef et al. 2018).



## SUA Attempts-Completed/Proposals..

- Combining biochar with low rate of chemical fertilizer boosts maize biomass yield, regardless of tillage system, under humid conditions (Kiobia et al 2019)
- Influence of inorganic fertilizer, manure, and biochar on properties of highly weathered soils of Morogoro.(Msc.Proposal)



## Recommendations

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- Proper feedstock identification
- Competition on biomass
- Leakages
- Possibility of integrating- low cost biofuels (briquettes, bio-oil etc)
- Proper design of the reactor
- Training and awareness raising amongst potential beneficiaries



MINISTRY OF AGRICULTURE  
TANZANIA AGRICULTURAL RESEARCH INSTITUTE  
TARI MLINGANO



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## Soil fertility in Tanzania

Dr. Mwangi & Dr. Msita



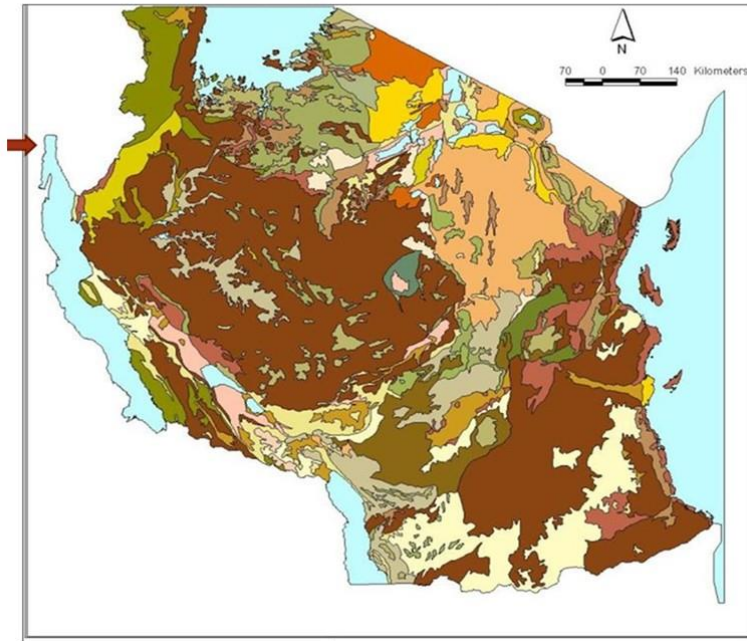
Local stakeholders consultation meeting held at the Forestry and Wood industries training Centre on 17<sup>th</sup> May 2023

## Introduction

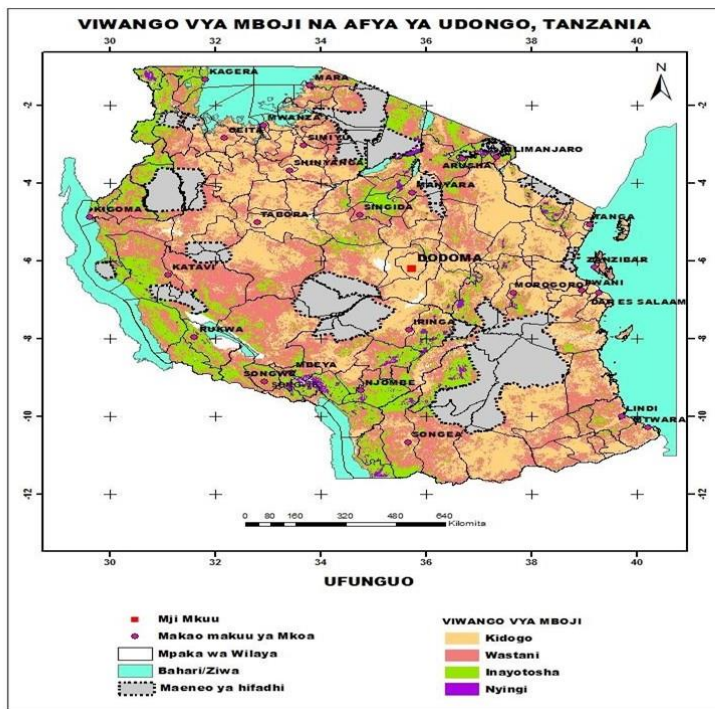
- TARI Mlingano is one among 17 Centers of Tanzania Agricultural Research Institute (TARI)
- The Centre has a **national mandate to coordinate and conduct researches on Sisal and Soils in Tanzania.**



## Soils of Tanzania



As you can see many of soil types are acidic and low fertility in nature



< 1.3% OC -low (41% of the arable land)

1.4-2.4% OC -moderate (38 % of arable land)



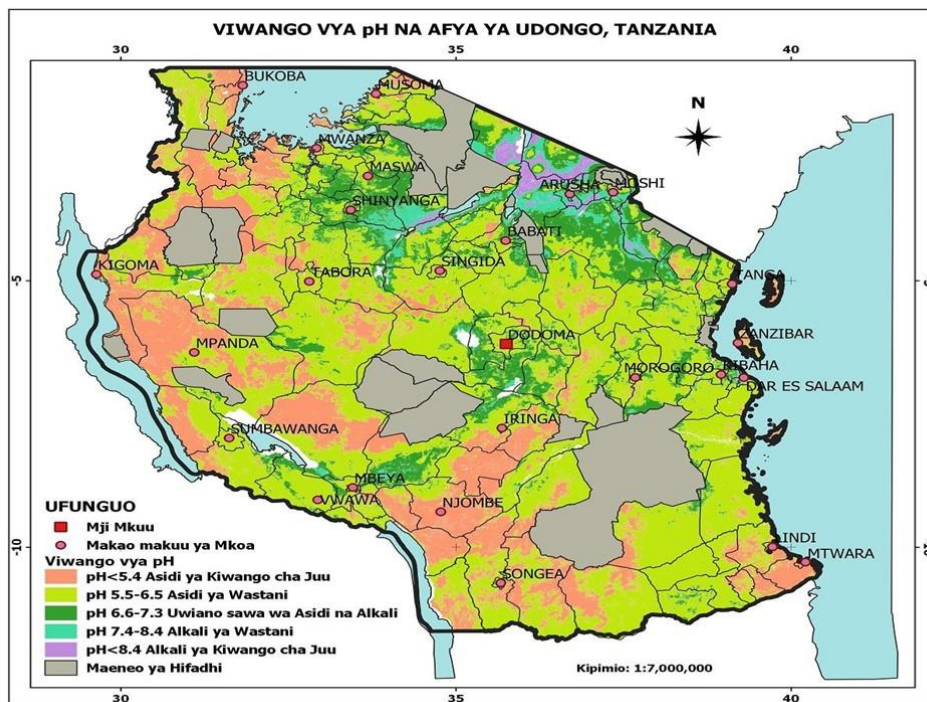
## OC in TZ soils

This shows how bad our soils have been degraded by several factors.

- ✓ Effects of climate change
- ✓ Soil erosion
- ✓ Overgrazing
- ✓ Bad agricultural practices such as setting fire during land clearing etc.

Soil organic carbon is very important in agriculture

- ✓ Important indicator of soil fertility and soil health in general
- ✓ Improves soil physico-chemical and biological properties
- ✓ Retain soil moisture
- ✓ Retain plant nutrients
- ✓ Mitigate climate change



pH < 5.4 – Strongly acidic (21% of the arable land)

pH (5.5-6.5) - moderately acidic (46% of arable land)

## **Soil acidity and management**

Soil acidification is a natural process that occurs very slowly during soil weathering.

But agricultural practices can speed it up. Such practices include

- ✓ Use of acidifying fertilizers in acidic soils
- ✓ Land clearing by setting fire

The increased H<sup>+</sup> ions result in soil acidity, which adversely impacts soil microbial activities and plants.

Toxic levels of aluminium (Al) and manganese (Mn) resulting from soil acidity impede plant growth.

## **Soil acidity and management**

Additionally, some essential plant nutrients, such as phosphorus (P) and molybdenum (Mo), appear to be insoluble and less available under low soil pH. Where also calcium (Ca) and magnesium (Mg) become deficiency to plant growth

The use of natural acid-neutralizing materials (e.g., lime and dolomite) is necessary for agriculture to reduce acidity and improve crop productivity.

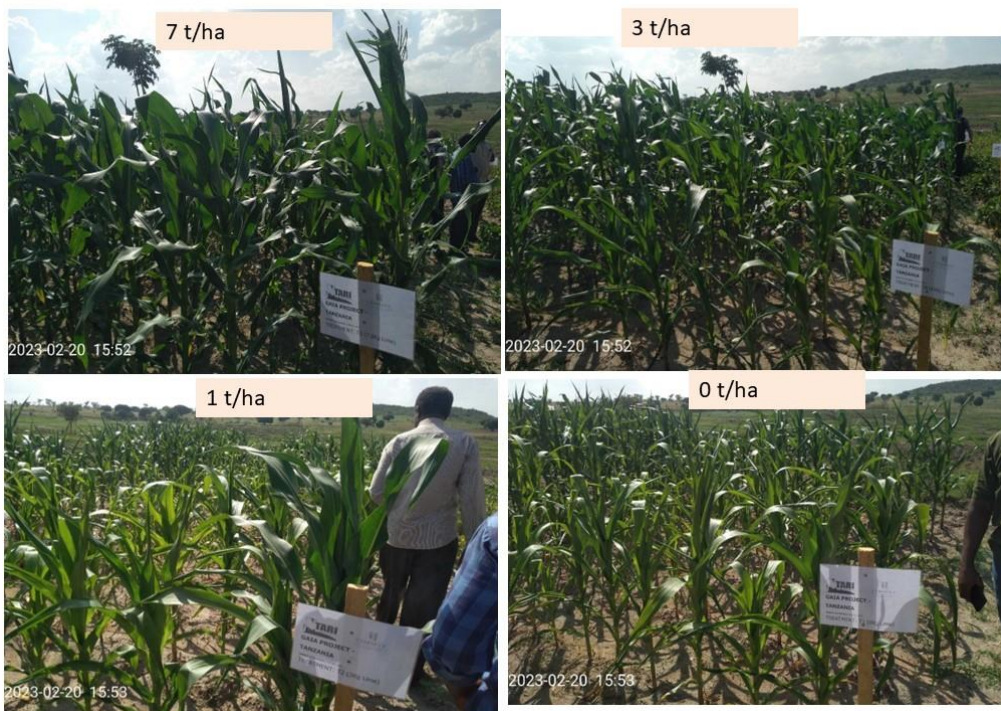
Liming materials improve soil physico-chemical and biological properties, thereby enhancing soil fertility and plant growth.

### Soil acidity and management

Liming also improves soil structure, enhance mobility and availability of essential plant nutrients such as phosphorus, calcium and magnesium

GAIA (Guiding acid soil management investments in Africa) Project. Is an ongoing project, it is implemented in Mbozi and Geita districts

Preliminary results show very promising crop responses to applied lime



Status Geita:  
Response  
of maize to  
applied lime  
between  
Treatments





**Status Mbozi:**  
Response of maize to applied lime between treatments





Limestone before crushed



Agri-lime  
factory





Agri-Lime

## Challenges

While the use of lime for the amelioration of soil acidity is important. However

- ❖ It has been observed that both the limited availability and high cost of liming materials in some regions limit its application,
- ❖ Farmers are sensitive to bulkiness and tediousness in its application
- ❖ Farmers are sensitive to transport costs

It is suggested that:

- ✓ Further researches be conducted for alternatives to lime such as biochar and farmyard manure where studies show promising results.
- ✓ Blending fertilizers with liming effect for use in areas with acidic soils

GAIA project will extend its efforts into investigating the alternatives to lime where biochar and farm yard manure will be taken onboard.



Ministry of Agriculture  
Tanzania Agricultural Research Institute (TARI) Mlingano Centre



# THANKS

## SECTION B. INVITATIONS MADE TO STAKEHOLDERS

### B.1. Invitation tracking table

Category Code	Stakeholder Type/Organisation (if relevant)	Name of invitee	Male/Female	Method of invitation	Date of invitation (>30 days before Meeting)
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A	Tanzania Tree Growers Association Union	[Removed for public version]	M	Email	27/03/2023
	Tree Grower Associations	[Removed for public version]	M	via Mr. Timbula	27/03/2023
	TGA Nundwe	[Removed for public version]	F	via Mr. Timbula	27/03/2023
	One Acre Fund	[Removed for public version]	F	Email	03/05/2023
	Mkaa Endelevu	[Removed for public version]	M	Email	20/04/2023
	Kisiwa Farming Limited	[Removed for public version]	M	Email	29/03/2023
	Kisiwa Farming Limited	[Removed for public version]	M	Email	29/03/2023
	Kisiwa Farming Limited	[Removed for public version]	M	Email	29/03/2023
	Kisiwa Farming Limited	[Removed for public version]	M	Email	29/03/2023
	Kisiwa Farming Limited	[Removed for public version]	M	Email	29/03/2023
	The Recycler	[Removed for public version]	M	Email	29/03/2023
	TGA Vikula	[Removed for public version]	M	via Mr. Timbula	27/03/2023
	TGA Vikula	[Removed for public version]	M	via Mr. Timbula	27/03/2023
B	Timber yard manager - site neighbour	[Removed for public version]	M	Phone call	15/05/2023

C	Mufindi District	[Removed for public version]	F	Physical invitation	05/05/2023
	Tanzanian Forestry Services	[Removed for public version]	M	Email	27/03/2023
	District Forestry Officer	[Removed for public version]	M	Email	27/03/2023
	District Forestry Officer	[Removed for public version]	F	Email	27/03/2023
D	Regional Comissioner	[Removed for public version]	M	Email	27/03/2023
	Ministry of Natural Ressources and Tourism	[Removed for public version]	M	Email	27/03/2023
	DNA, Division of Environment, Vice-President's Office	[Removed for public version]	M	Email	29/03/2023
E	Patricipatory Forestry Programme	[Removed for public version]	M	Email	27/03/2023
	German Chamber of Commerce	[Removed for public version]	M	Email	29/03/2023
	Tanazania Renewable Energy Association (TAREA)	[Removed for public version]	M	Email	29/03/2023
	Farm Africa	[Removed for public version]	F	Email	27/03/2023

	Rikolto	[Removed for public version]	F	Email	29/03/2023
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	TGA Vikula	[Removed for public version]	F	Email	27/03/2023
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	Patricipatory Forestry Programme	[Removed for public version]	M	Email	27/03/2023
	Patricipatory Forestry Programme	[Removed for public version]	F	Email	27/03/2023
F	Gold Standard representative	[Removed for public version]	N/A	Email	27/03/2023
G	Lean Management Systems Promotion Society	[Removed for public version]	N/A	Email	27/03/2023
	HIVOS	[Removed for public version]	M	Email	27/03/2023
	myclimate	[Removed for public version]	M	Email	27/03/2023
	Concern Health Ghana	[Removed for public version]	M	Email	27/03/2023
	Galactica Foundation	[Removed for public version]	M	Email	27/03/2023

	United Purpose	[Removed for public version]	N/A	Email	27/03/2023
	Global Offset Research	[Removed for public version]	N/A	Email	27/03/2023
	CEDESOL	[Removed for public version]	M	Email	27/03/2023
Academic s & Research*	Forestry and Wood Industry Training Centre	[Removed for public version]	F	Email	27/03/2023
	Forestry Training Institute	[Removed for public version]	M	Email	27/03/2023
	Forest Industry Training Institute	[Removed for public version]	M	Email	27/03/2023
	Sokoine University of Agriculture (SUA)	[Removed for public version]	F	Email	27/03/2023
	Tanzania Forestry Research Institute	[Removed for public version]	M	Email	27/03/2023
Lobbying groups *	Tanzania National Business Council	[Removed for public version]	M	Email	27/03/2023
	African Forestry	[Removed for public version]	M	Email	27/03/2023

\*This project revolves around a new micro-scale methodology, necessitates substantial academic and political backing from the local community. Therefore, we propose the inclusion of two additional categories of stakeholders in the stakeholder consultation process: "academic and research groups" and "lobbying groups." This inclusion will enable us to engage with esteemed academic institutions, researchers,

and influential advocacy organizations, ensuring a comprehensive and well-rounded consultation that encompasses the diverse perspectives and expertise necessary for the success and legitimacy of our endeavors.

### **B.1.1. Appropriateness of methods**

>>

Email invitations were sent out before the Stakeholder Consultation Meeting to those people using email means of communication. Local communities, especially tree growers were invited via the general manager for the Tanzania Tree Growers Association Union. The follow up will be conducted via phone/WhatsApp to ensure continuous feedback.

### **B.1.2. Gender Sensitivity**

>>

To ensure inclusivity and promote gender equality, gender sensitivity is incorporated throughout the consultation process.



When designing the stakeholder invitation process, a gender-sensitive approach was adopted to ensure that the voices and perspectives of both men and women were heard. A deliberate effort was made to include representation of male and female stakeholders in the initial invitation list. And the invitation was crafted avoiding any gender biases or assumptions.


-Recognizing the importance of women's involvement in decision-making processes, specific efforts were made to identify and engage female stakeholders. Collaborations were established with local women's organizations, non-governmental organizations (NGOs), and community leaders who could help identify and connect with women stakeholders.


### **B.1.3. Evidence proving invites took place as stated**

>>

Example of invitation sent

Von Mir <pschera@atmosfair.de>  Antworten Allen antworten Weiterleiten Archivieren Junk Löschen Mehr 

An help@goldstandard.org  29.03.2023, 08:30

Kopie (CC) Amar Shanghavi <amar@darkearthcarbon.com> 

Betreff **Invitation to Local Stakeholder Consultation // Sustainable Biochar Production in Mafinga, Tanzania**

---

Dear team,

atmosfair and Dark Earth Carbon are planning a project for large scale sustainable biochar production from local wood residues in Mafinga, Tanzania. Doing so, this project aims to provide nature-based solutions for climate mitigation that address farmers' needs and meet sustainable development goals. Dark Earth Carbon (DEC) was founded with the mission to remove CO2 from the atmosphere and put it to good use, improving the soil and lives of smallholder farmers.

We are looking for your input on the project design and are delighted to invite you to the Local Stakeholder Consultation, which will be held on 17<sup>th</sup> May 2023 **at 8:30am at Forestry and Wood Industries Training Centre in Mafinga**. At this meeting, we will inform you about the ongoing and planned activities under the project and discuss potential environmental, social and economic impacts with you. Please find the official invitation (in English and Kiswahili), background information and contact details attached.

Your presence (or that of your representative) would be highly appreciated, as your active participation and feedback will contribute to the success of the project. Please inform us whether you will be attending or not by emailing to help us organise the logistics.

Lunch will be served during the meeting.


If you are unable to attend the meeting, we would appreciate your comments by email.

Best

Patrizia

**Patrizia Pschera (she/her)**  
Project Developer



[Das Klima wartet nicht – unterstütze uns jetzt!](#)

think-go climate conscious  
**atmosfair** 

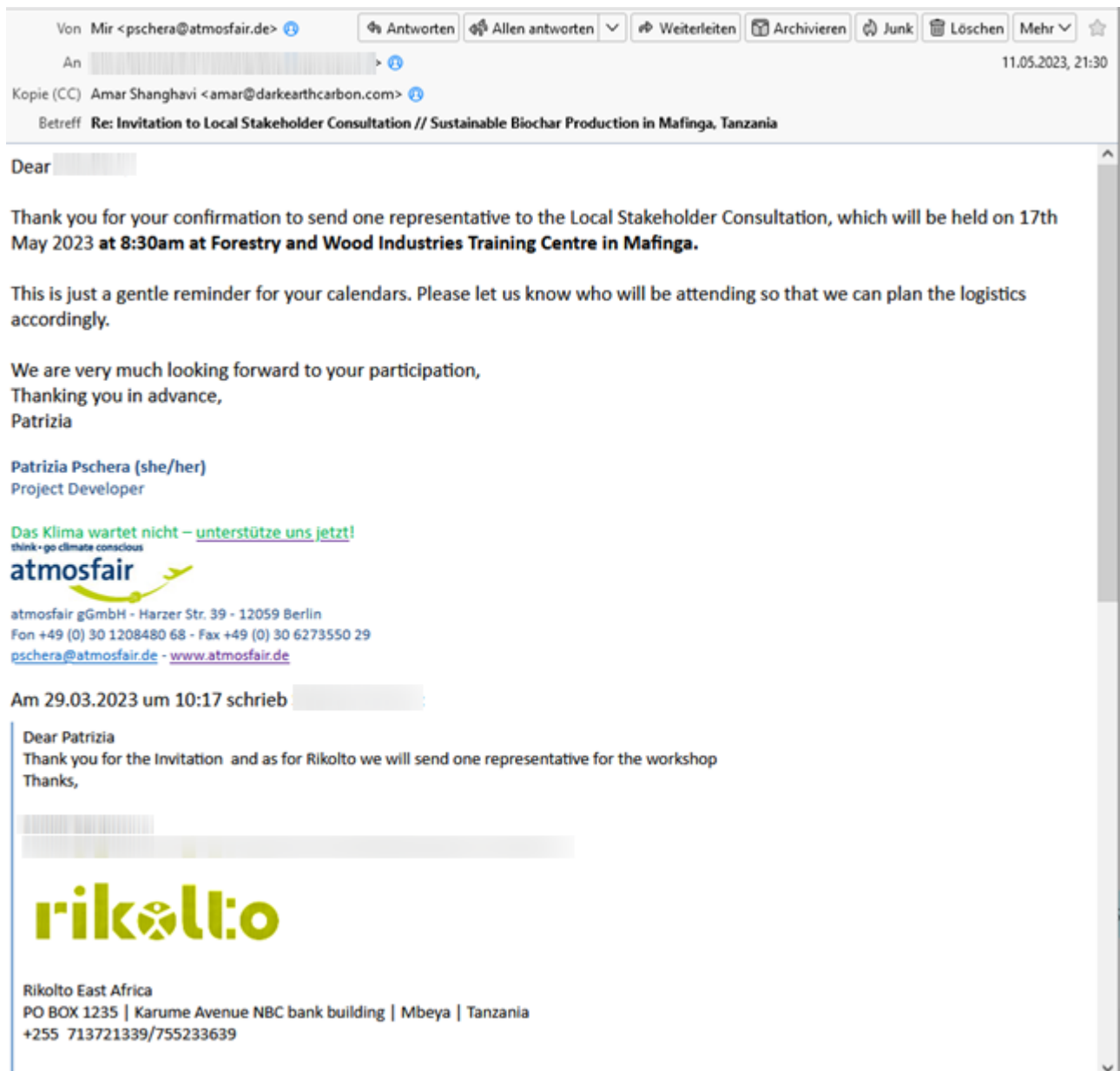
atmosfair gGmbH - Harzer Str. 39 - 12059 Berlin  
Fon +49 (0) 30 1208480 68 - Fax +49 (0) 30 6273550 29  
[pschera@atmosfair.de](mailto:pschera@atmosfair.de) - [www.atmosfair.de](http://www.atmosfair.de)

---

2 Anhänge 380 KB Alle speichern

 InvitationLetter\_En.pdf 192 KB  InvitationLetter\_Kw.pdf 188 KB

Example of reminder to those, who confirmed their participation, sent few days before the meeting.



#### B.1.4. Sample content of invites (for each Method above)

>>

Invitation letter in English and Swahili has been sent out to stakeholders from all aforementioned categories. Samples are shown below:





**Invitation to the Local Stakeholder Consultation**

**Sifuri Halisi Sustainable Biochar Project in Tanzania**

The "Sifuri Halisi" project is an initiative of the German non-profit organisation atmosfair gGmbH and the Tanzanian company Dark Earth Carbon. This project aims for large-scale biochar production to provide nature based solutions for climate mitigation that address farmers’ needs and meet sustainable development goals.

The project initiators are delighted to invite you to the Local Stakeholder Consultation to inform you about the ongoing project activities and the next steps. The purpose of the meeting is to discuss potential environmental, social, and economic impacts of the project with local stakeholders and to establish an ongoing mechanism for feedback.

The meeting will be held

**on 17<sup>th</sup> May 2023 from 8.30am to 3pm**

**at the Forestry and Wood Industries Training Centre in Mafinga.**

The preliminary agenda of the meeting can be found below.

08:30 - 09:30	Registration and coffee
09:30 - 10:00	Welcome and Introduction of all participants and guests
10:00 - 10:30	Presentation by DEC & atmosfair
10:30 - 11:00	Coffee and bites break
11:00 - 11:20	Presentation by TARI on soil and fertility issues
11:20 - 11:40	Presentation by SUA on biochar and their research
11:40 - 12:20	Grievance mechanism and SDG impacts
12:30 - 13:30	Lunch break
13:40 - 14:00	Group break out discussions
14:00 - 15:00	Question and answers for the presenter
15:00 - 15:10	Chief guest comments and remarks
15:10 - 15:15	Close of LSC



Your presence (or that of your representative) would be highly appreciated, as your active participation will contribute to the success of this meeting and the project at large. Please inform us whether you will be attending or not by **15th April 2023** to help us organise the logistics. We will provide breakfast, lunch, and travel reimbursement upon presentation of a valid bus ticket. Other costs are to be borne by participants.

If you are unable to attend, we would appreciate your comments by email.

Our contact details are provided below.

atmosfair gGmbH Patrizia Pschera  Email: <a href="mailto:pschera@atmosfair.de">pschera@atmosfair.de</a> Tel: +49 (0) 30 120 84 80 - 68	Dark Earth Carbon Amar Shanghavi  Email: <a href="mailto:amar@darkearthcarbon.com">amar@darkearthcarbon.com</a> Tel: +255 656 403 873
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### Key information on the project

#### Sifuri Halisi: Industrial Biochar production in Tanzania

“Sifuri Halisi” means absolute zero in Kiswahili. It represents both our pledge and our mission. Together, Dark Earth Carbon (DEC) and atmosfair, pledge to contribute to a net zero emission future by removing CO<sub>2</sub> from the atmosphere and stably store it in order to mitigate the effects of climate change.

In order to achieve our mission, DEC and atmosfair seek to partner with smallholders, government plantations, and Tree Grower Associations (TGAs) and use their wood residues. The wood residues from the forestry sector and timber industry in Tanzania are currently being burnt or degraded, which results in greenhouse gas emissions and health problems. One of the fundamental reasons is the lack of markets and sophisticated facilities in place for these end-of-life products. With this project’s activities, we fill in this void by providing a possibility of using these wood residues and converting them into biochar. This project will furthermore demonstrate the untapped potential of wood residues to the local forestry sector and local stakeholders, and therefore incentivise them to adopt not only a better waste management strategy but also more sustainable forestry practices.

Another important objective of the project is to improve the soil quality in Tanzania by introducing biochar as fertiliser to the local public. Biochar can improve soil quality and boost crop yields because of its impact on the soil water retention capacity, the soil pH and its ability to store nutrients. At the meeting more information about biochar will be presented and DEC will help introduce biochar to farmers, NGOs, government officials, and other interested parties throughout the coming year. DEC will be running field trials to demonstrate the positive effect of biochar, and biochar mixes, on crop yields and will be inviting local stakeholders to field days. DEC is already forging relationships with government institutions such as TARI to develop a local fertiliser mix suited for the needs of Tanzanian farmers.



The project activities will be supported by carbon funding for the reduction of greenhouse gases. For this purpose, the project will be registered under the Gold Standard. The Gold Standard is one of the highest available standards for climate change mitigation projects, following strict social and environmental criteria. The Local Stakeholder Consultation is an essential part of the project registration process.

**Project Implementation**

The project is implemented by the local company Dark Earth Carbon (DEC), located in Mafinga, Tanzania. DEC is a start-up company which was founded with the mission to remove CO<sub>2</sub> from the atmosphere and put it to good use, improving the soil and lives of smallholder farmers. They have a good experience of working closely with Tanzanian smallholder farmers and have been advocating for the improvement of the management of local small-scale, low intensity community forests in Tanzania.

DEC will install a biochar reactor with a feedstock capacity of 1T per hour in Mafinga, Tanzania, in the heart of the country's timber industry. DEC will source feedstock for their reactor from smallholders, government plantations, and Tree Grower Associations (TGAs). This will help to incentivise good management practices, such as timely thinning of plantations, particularly on smallholder farms. Additionally, it will reduce the fire risk in plantations, which is a major challenge in the Southern Highlands negatively affecting the development of the forestry sector

**Tentative Implementation Plan**

2023	Achieve at least 50% planned production, achieve biochar production target of 1,000t, reduce wood waste of 4000t
2024	Planned biochar production target of 2,000t, reduce wood waste of 8,000t
2025	Introducing second reactor, Scale-up of biochar production to 4,000t, reduce wood waste of 16,000t
2026	Introducing third reactor, Scale-up of biochar production to 6,000t, reduce wood waste of 23,000t

**Social, economic and environmental impacts**

Besides reducing GHG emission in line with the UN's Sustainable Development Goal (SDG) number 13, the project will also contribute to the following SDGs:



SDG 3 Good Health and well being: reduce the practice of biomass burning as waste treatment, thus substantially reducing the number of deaths and illnesses from hazardous chemicals and air contamination.



SDG 4 Quality Education: substantially increase the number of trained smallholders and Tanzania tree growers in agro economic practices, thus pushing for better sustainable management in the forest and timber production sector.



SDG 8 Decent work and economic growth: Achieving full and productive employment and decent work for all women and men, by creating more job possibilities for the local communities.



SDG 12 Responsible Consumption and production: Substantially reduce wood waste by providing a market and incentive for recycling wood and turning it into biochar.





**Mwaliko wa mashauriano ya wadau wa ndani**

**Mradi Endelevu wa Sifuri Halisi Biochar nchini Tanzania**

Mradi wa "Sifuri Halisi" ni mpango wa NGO la Ujerumani atmosfair gmbH na kampuni ya Tanzania ya Dark Earth Carbon. Mradi huu unalenga uzalishaji mkubwa wa biochar ili kutoa masuluhisho ya asili ya kukabiliana na hali ya hewa ambayo yanashughulikia mahitaji ya wakulima na kufikia malengo ya maendeleo endelevu.

Waanzilishi wa mradi wanafuraha kukualika kwenye Ushauri wa Wadau wa Ndani ili kukuarifu kuhusu shughuli zinazoendelea za mradi na hatua zinazofuata. Madhumuni ya mkutano huo ni kujadili athari zinazoweza kujitokeza katika mazingira, kijamii, na kiuchumi za mradi na wadau wa eneo hilo na kuweka utaratibu unaoendelea wa kutoa maoni.

Mkutano huo utafanyika

**17 mwezi wa Mai 2023 saa mbili na nusu asubuhi paka saa tisa mchana**

**Katika Kituo cha Mafunzo ya Viwanda vya Misitu na Miti kilichopo Mafinga.**

Ajenda ya awali ya mkutano inaweza kupatikana hapa chini.

08:30 - 09:30	Usajili na kahawa
09:30 - 10:00	Kukaribisha na Utambulisho wa washiriki wote na wageni
10:00 - 10:30	Uwasilishaji kutoka kwa DEC & atmosfair
10:30 - 11:00	Mapumziko ya staftahi
11:00 - 11:20	Uwasilishaji kutoka TARI kuhusu masuala ya udongo na rutuba
11:20 - 11:40	Uwasilishaji kutoka SUA kuhusu biochar na utafiti wao
11:40 - 12:20	Utaratibu wa malalamiko na athari za SDG
12:30 - 13:30	Mapumziko ya chakula cha mchana
13:40 - 14:00	Majadiliano kwenye vikundi
14:00 - 15:00	Kipindi cha maswali na majibu kwa



	mwasilishaji
15:00 - 15:10	Maoni na ushauri kutoka kwa mgeni rasmi
15:10 - 15:15	Kufunga kwa LCS

Uwepo wako (au ule wa mwakilishi wako) utathaminiwa sana, kwani ushiriki wako wa dhati utachangia mafanikio ya mkutano huu na mradi kwa ujumla.

Tafadhali tufahamisha ikiwa utahudhuria au hautahudhuria ifikapo tarehe 15 Aprili 2023 ili utusaidie kupanga utaratibu. Tutatoa malipo ya kifungua kinywa, chakula cha mchana na usafiri itakapo wasilishwa tiketi halali ya basi. Gharama zingine zitalipwa na washiriki.

Ikiwa huwezi kuhudhuria, tutashukuru kwa maoni yako kwa barua pepe.

Mawasiliano yetu yametolewa hapa chini

atmosfair gGmbH Patrizia Pschera  Barua pepe: <a href="mailto:pschera@atmosfair.de">pschera@atmosfair.de</a> Simu: +49 (0) 30 120 84 80 - 68	Dark Earth Carbon Amar Shanghavi  Barua pepe: <a href="mailto:amar@darkearthcarbon.com">amar@darkearthcarbon.com</a> Simu: +255 656 403 873
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### Taarifa muhimu juu ya mradi

#### Sifuri Halisi: Uzalishaji wa Biochar Viwandani nchini Tanzania

"Sifuri Halisi" maana yake ni sifuri kabisa katika Kiswahili. Inawakilisha ahadi yetu na misheni yetu. Kwa pamoja, Dark Earth Carbon (DEC) na atmosfair, zinaahidi kuchangia katika siku zijazo za kutoa hewa sifuri kwa kuondoa CO2 kutoka angani na kuihifadhi kwa uthabiti ili kupunguza athari za mabadiliko ya hali ya hewa.

Ili kufikia dhamira yetu, DEC na shirika la anga zinatafuta kushirikiana na wakulima wadogo, mashamba makubwa ya serikali, na Vyama vya Wakulima wa Miti (TGAs) na kutumia mabaki yao ya kuni. Mabaki ya mbao kutoka sekta ya misitu na sekta ya mbao nchini Tanzania kwa sasa yanateketezwa au kuharibiwa, jambo ambalo linasababisha utoaji wa gesi chafuzi na matatizo ya kiafya. Moja ya sababu za kimsingi ni ukosefu wa masoko na vifaa vya kisasa kwa bidhaa hizi za mwisho za masalia. Kwa shughuli za mradi huu, tunajazia uhabau huu kwa kutoa uwezekano wa kutumia mabaki haya ya kuni na kuyageuza kuwa biochar.



Mradi huu pia utaonyesha uwezo ambao haujatumiwa wa masalia ya mbao kwa sekta ya misitu ya ndani na washikadau wa ndani, na kwa hiyo kuwatia motisha kuchukua sio tu mkakati bora wa usimamizi wa taka bali pia mbinu endelevu zaidi za misitu.

Lengo lingine muhimu la mradi ni kuboresha ubora wa udongo nchini Tanzania kwa kuanzisha biochar kama mbolea kwa wananchi wa eneo hilo. Biochar inaweza kuboresha ubora wa udongo na kuongeza mavuno ya mazao kwa sababu ya athari zake kwenye uwezo wa kuhifadhi maji ya udongo, pH ya udongo na uwezo wake wa kuhifadhi virutubisho. Katika mkutano huo taarifa zaidi kuhusu biochar itawasilishwa na DEC itasaidia kutambulisha biochar kwa wakulima, mashirika yasiyo ya kiserikali, maafisa wa serikali, na wahusika wengine katika mwaka mzima ujao. DEC itakuwa ikifanya majaribio ya uwanjani ili kuonyesha athari chanya ya biochar, na mchanganyiko wa biochar, kwenye mazao na itakuwa inawaalika washikadau wa ndani kwa siku za shamba. DEC tayari inajenga uhusiano na taasisi za serikali kama vile TARI ili kutengeneza mchanganyiko wa mbolea ya asili kwa mahitaji ya wakulima wa Tanzania.

Shughuli za mradi zitasaidiwa na ufadhili wa kaboni kwa ajili ya kupunguza gesi chafuzi. Kwa madhumuni haya, mradi utasajiliwa chini ya kiwango cha Dhahabu. Kiwango cha Dhahabu ni mojawapo ya viwango vya juu zaidi vinavyopatikana kwa miradi ya kukabiliana na mabadiliko ya hali ya hewa, kufuatia vigezo vikali vya kijamii na mazingira. ushauri wa wadau wa ndani ni sehemu muhimu ya mchakato wa usajili wa mradi.

**Utekelezaji wa Mradi**

Mradi huo unatekelezwa na kampuni ya ndani ya Dark Earth Carbon (DEC), iliyoko Mafinga, Tanzania. DEC ni kampuni iliyoanzishwa kwa dhamira ya kuondoa CO2 kutoka anga na kuitumia vizuri, kuboresha udongo na maisha ya wakulima wadogo. Wana uzoefu mzuri wa kufanya kazi kwa karibu na wakulima wadogo wa Tanzania na wamekuwa wakitetea uboreshaji wa usimamizi wa misitu ya ndani ya jamii ya wakulima wadogo nchini Tanzania.

DEC itaweka kinu cha biochar chenye uwezo wa malisho wa 1T kwa saa huko Mafinga, Tanzania, katikati mwa sekta ya mbao nchini. DEC itatoa malisho kwa kinu kutoka kwa wakulima wadogo, mashamba ya serikali, na Vyama vya Wakulima wa Miti (TGAs). Hii itasaidia kuhamasisha usimamiaji mzuri, kama vile kupunguza mashamba kwa wakati, hasa kwenye mashamba ya wakulima wadogo. Zaidi ya hayo, itapunguza hatari ya moto katika mashamba makubwa, ambayo ni changamoto kubwa katika Nyanda za Juu Kusini na kuathiri vibaya maendeleo ya sekta ya misitu.

**Mpango wa Utekelezaji wa Muda**

2023	Mpaka kufikia 2023 kufikia angalau 50% ya uzalishaji uliopangwa, kufikia lengo la uzalishaji wa biochar wa 1,000t, punguza upotevu wa kuni wa 4000t
2024	Lengo la uzalishaji wa biochar iliyopangwa ya 2,000t, kupunguza upotevu wa kuni wa 8,000t
2025	Kuanzisha kinu cha pili, Kuongeza uzalishaji wa biochar hadi 4,000t, kupunguza upotevu wa kuni wa 16,000t.



2026	Kuanzisha kinu cha tatu, Kuongeza uzalishaji wa biochar hadi 6,000t, punguza upotevu wa kuni wa 23,000t.
------	--

**Athari za kijamii, kiuchumi na kimazingira**

Kando na kupunguza utoaji wa GHG kulingana na Malengo ya Maendeleo Endelevu ya Umoja wa Mataifa (SDG) nambari 13, mradi pia utachangia SDGs zifuatazo



**MME 3 Afya Bora na Ustawi:** Kupunguza mazoea ya uchomaji wa majani kama matibabu ya taka, na hivyo kupunguza kwa kiasi kikubwa idadi ya vifo na magonjwa kutokana na kemikali hatari na uchafuzi wa hewa.



**MME 4 Elimu ya Ubora:** kuongeza kwa kiasi kikubwa idadi ya wakulima wadogo waliopata mafunzo na wakulima wa miti Tanzania katika mbinu za kiuchumi za kilimo, hivyo kusukuma usimamizi bora endelevu katika sekta ya misitu na uzalishaji wa mbao.



**MME 8 Kazi yenye staha na ukuaji wa uchumi:** Kufikia ajira kamili na yenye tija na kazi yenye staha kwa wanawake na wanaume wote, kwa kuunda uwezekano zaidi wa kazi kwa jumuiya.



**MME 12 Uwajibikaji katika Matumizi na Uzalishaji :** Punguza kwa kiasi kikubwa taka za kuni kwa kutoa soko na motisha ya kuchakata kuni na kuzigeuza kuwa biochar.

**B.1.5. Description of other Means and methods to provide feedback for those who are not able to join the consultation meeting**

>>

atmosfair gGmbH facilitated feedback by providing the Key Project Information and the email/WhatsApp contact of the project parties as per section A.3 for those who could not attend the physical meeting.

## SECTION C. REPORT OF THE CONSULTATION PROCESS

### C.1. Date of Meeting

>>  
17/05/2023

#### C.1.1. Justification of why consultation took place after the project start date (retroactive projects only)

>>

The date of local stakeholder consultation is 17/05/2023. As per paragraph 4.1.39 of the PRINCIPLES & REQUIREMENTS document Version 1.2 (<https://globalgoals.goldstandard.org/101-par-principles-requirements/>) the project start date is the date of contract, which is 27/03/2023. In this contract atmosfair shows financial commitment to the project conditional to the securement of additional sources of funding are secured. So that the consultation took place after the start date.

This early commitment from atmosfair enabled DEC to obtain further funding for the project, as atmosfair's pledge acted as a form of security. However, it was not clear whether DEC would be able to raise the additional funds needed. When this was achieved, the LSC was scheduled. To avoid further delays in project implementation, the machine order was already placed. The delivery time would be several months anyway.

While using the contract signing date as the project start date provides a clear and formalized starting point, we still engage stakeholders and conduct necessary consultations to align expectations, gather input, and ensure their active involvement throughout the project.

#### C.1.2. List of participants

Original Version can be found in ANNEX I.

Date and Time		17/05/2023		Location		FWITC Mafinga	
Category Code	Name of the participant, job / position in the community	Male / Female	Contact details	Organisation (if relevant)	Signature		
A	[Removed for public version]	M	[Removed for public version]	TTGAU (Tanzania Tree Growers Association Union)	Signed		
	[Removed for public version]	M	[Removed for public version]	TTGAU	Signed		
	[Removed for public version]	M	[Removed for public version]	MKILIMA TGA (Tree Growers Association)	Signed		
	[Removed for public version]	F	[Removed for public version]	MKULIMA TGA	Signed		



	[Removed for public version]	M	[Removed for public version]	TML	Signed
	[Removed for public version]	M	[Removed for public version]	MKULIMA (LSP)	Signed
	[Removed for public version]	M	[Removed for public version]	MKULIMA	Signed
	[Removed for public version]	M	[Removed for public version]	MKULIMA	Signed
	[Removed for public version]	M	[Removed for public version]	MKULIMA	Signed
	[Removed for public version]	M	[Removed for public version]	DEC	Signed
	[Removed for public version]	F	[Removed for public version]	MHAZINI	Signed
	[Removed for public version]	M	[Removed for public version]	SeedCAND	Signed
	[Removed for public version]	M	[Removed for public version]	Farmer	Signed
	[Removed for public version]	M	[Removed for public version]	TPL	Signed
	[Removed for public version]	M	[Removed for public version]	KATIBU UWAMVI	Signed
C	[Removed for public version]	F	[Removed for public version]	TFS (Tanzania Forestry Services)	Signed
	[Removed for public version]	F	[Removed for public version]	NUFINDI D2	Signed
	[Removed for public version]	M	[Removed for public version]	TFS	Signed
	[Removed for public version]	M	[Removed for public version]	MAFINGA TC	Signed
	[Removed for public version]	M	[Removed for public version]	Forest Extention Officer	Signed
E	[Removed for public version]	M	[Removed for public version]	OAF (One Acre Fund)	Signed
	[Removed for public version]	M	[Removed for public version]	OAF	Signed
	[Removed for public version]	F	[Removed for public version]	OAF	Signed
	[Removed for public version]	M	[Removed for public version]	OAF	Signed

	[Removed for public version]	F	[Removed for public version]	Forestry and Wood Industry Training Centre	Signed
	[Removed for public version]	M	[Removed for public version]	RIKOLTO	Signed
	[Removed for public version]	M	[Removed for public version]	M&E PFP 2	Signed
	[Removed for public version]	M	[Removed for public version]	PFP2(Participatory Forestry Programme)	Signed
	[Removed for public version]	F	[Removed for public version]	PFP2	Signed
	[Removed for public version]	M	[Removed for public version]	PFP2	Signed
	[Removed for public version]	M	[Removed for public version]	PFP (wood technologist)	Signed
G	[Removed for public version]	F	[Removed for public version]	atmosfair	Signed
Academics & research	[Removed for public version]	F	[Removed for public version]	SUA Sokoine University Agriculture)	Signed
	[Removed for public version]	F	[Removed for public version]	TARI	Signed
	[Removed for public version]	M	[Removed for public version]	TARI	Signed
Lobbying groups	[Removed for public version]	M	[Removed for public version]	African Forestry (AF)	Signed
	[Removed for public version]	M	[Removed for public version]	African Forestry (AF)	Signed

### C.1.3. Pictures from the physical meeting(s) (best practice)

>>



1 Presentation of the results of the group work.



2 Question raised during the meeting.



3 Presentation given by TARI.





4 Amar Shanghavi giving feedback on the raised concerns.



5 Group work on impact of the project.





6 Patrizia Pschera presenting the monitored SDG impacts.

## **C.2. Minutes of physical meeting(s)**

>>

The stakeholder consultation was held at the Forestry and Wood Industries Training Centre in Mafinga, Iringa.

The meeting began promptly at 8:30 with registration of the first participants, new guests arrived continuously.

At 9:30, the organizers welcomed everyone, thanked them for their attendance and introduced the agenda for the meeting. A round of introduction was held where everyone gave their name and organization. This allowed everyone to become acquainted with each other, setting a positive tone for the meeting.

Following the introductions, it was time for the first presentation, jointly conducted by the representatives from DEC and atmosfair. They introduced their organizations as well as details on the project and the way of financing it. Amar Shanghavi from DEC spoke in Swahili while Patrizia Pschera from atmosfair spoke in English and was translated into Swahili. The audience listened attentively, taking notes and occasionally individual members of the audience jumped in and repeated what had

been said, in a way that was more adapted to the local circumstances, so that it was ensured that everyone in the room could really follow the presentation.

After the presentation, a brief 10-minute session was allocated for the first round of questions and answers. Participants eagerly posed their queries, seeking further clarification or expressing their thoughts on the topics discussed. The presenters provided thoughtful responses, engaging in a productive dialogue with the audience.

The agenda then moved on to the next presentation, which focused on soil Ph and fertility issues. The presentations was indirectly linked to the project as biochar is also known to address soil acidity. By inviting the Tanzania Agriculture Research Institute (TARI) to highlight the soil acidity problems, their work in the area and the challenges of addressing it under the current scenario in the country, provided a good platform to discuss the benefits of biochar to the various participants and farmers in attendance. Dr. Sibaway Mwangi from TARI took the stage, presenting their research findings on liming and its benefits, however he also emphasized the difficulties in implementing the government program due to various obstacles ranging from quality of lime, logistical issues and price. . In the final minutes of the presentation he championed the necessity of using biochar to enable scaling and multiplying the effects of the promoted techniques.

A 35-minute coffee and bites break followed, giving everyone an opportunity to network, exchange ideas, and discuss the presentations they had witnessed so far.

At 11:20, the meeting resumed with a presentation by Ms. Lynder Gesase from SUA (Sokoine University of Agriculture). She showcased a summary of research on biochar that had been conducted in Tanzania, highlighting its potential benefits and applications in sustainable agriculture. Her presentation ended with some potential problems and resulting recommendations to the design of the project to the project developers.

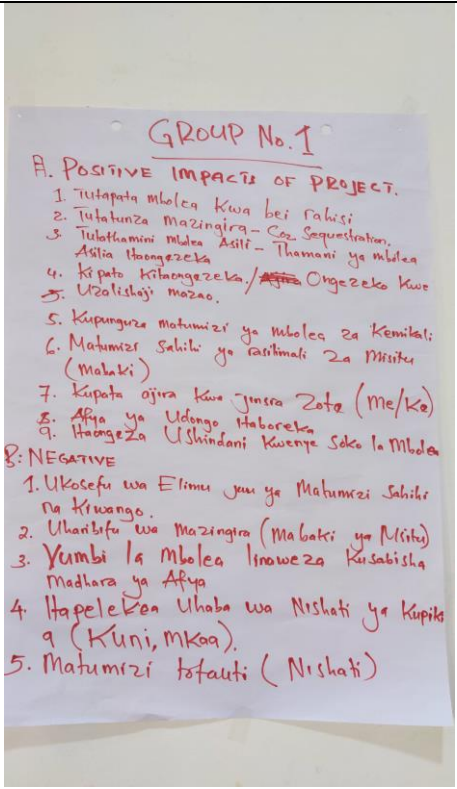
The word was taken by Patrizia Pschera from atmosfair again to present the impact on Sustainable Development Goals (SDGs) and a discussion of the grievance mechanisms. Participants contributed what should be additionally monitored and expressed their pleasure with the current meeting and described their interest in continued engagement.

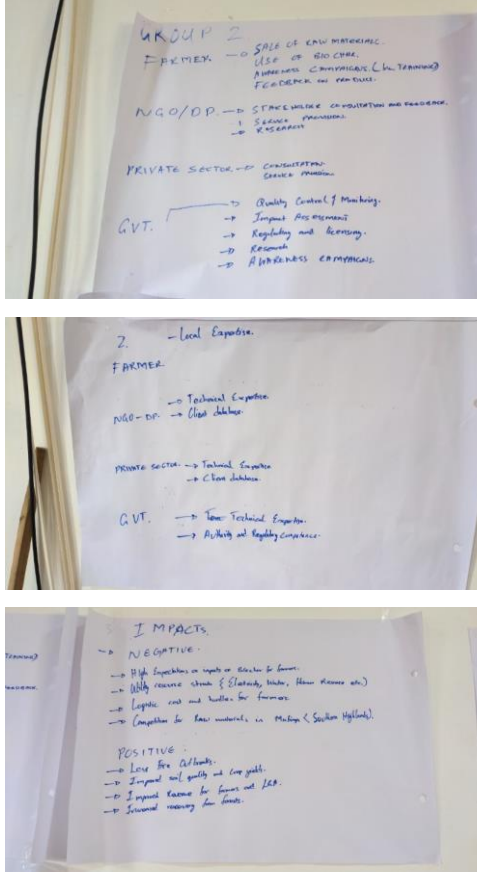
Following the presentation, a group breakout session was scheduled for 30 minutes. Before the group session started some urgent questions were clarified. It was briefly questioned whether there was a need for a group session, with others in the audience. The overwhelming consensus was that group sessions will allow others to contribute who may have not had a chance to voice their opinion. Participants were divided into smaller groups and equipped with large paper and marker pens, allowing for more focused discussions and brainstorming on the topics covered earlier. This exercise encouraged collaboration, enabling attendees to share insights and understand the perspectives of different stakeholders, exchange ideas, and propose practical solutions to the challenges discussed.

At 13:00, each group reconvened, presenting their collaborative work and findings to the larger audience (3 group presentation were done by women, 2 by men).

The following questions are raised before the group discussion:

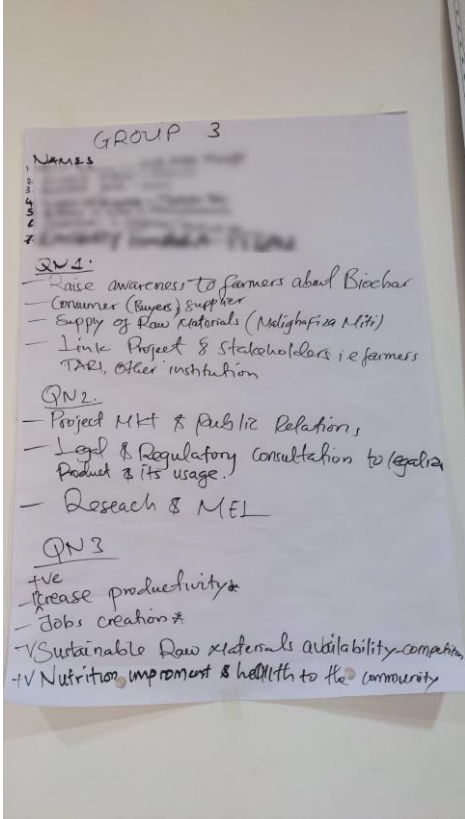
1. How can you interact with the project?
2. What competences do you bring to contribute to the project?
3. Is there anything in the community that can be negatively or positively affected by the project that we have not thought of?

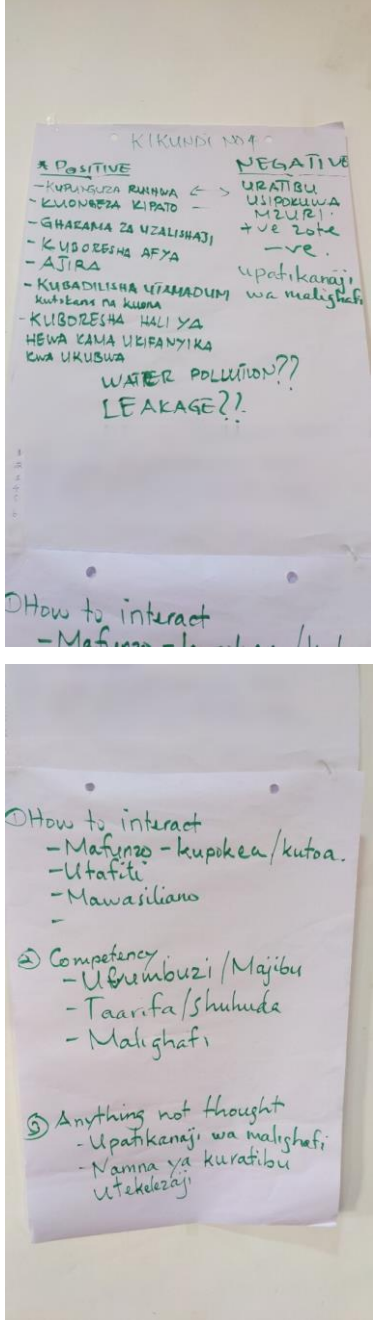
<p>Group 1 (3 female, 3 male)</p>	 <p><b>GROUP No.1</b></p> <p><b>A. POSITIVE IMPACTS OF PROJECT.</b></p> <ol style="list-style-type: none"> <li>1. Tutapata mbolea kwa bei rahisi</li> <li>2. Tutatunza mazingira - CO<sub>2</sub> Sequestration</li> <li>3. Tutathamini mbolea Asili - Thamoni ya mbolea Asilia hongozeka</li> <li>4. Kipato kitongezeka / <del>Kit</del> Ongerezeka kwa</li> <li>5. Uzalishaji mazao.</li> <li>5. Kupunguza matumizi ya mbolea za kemikali</li> <li>6. Matumizi sahihi ya wastawi za misitu (Mabaki)</li> <li>7. Kupata ajira kwa jumla zote (Me/Ko)</li> <li>8. Afya ya Udongo habareka</li> <li>9. Hongozeka Ushindani kwenye Soko la Mbolea</li> </ol> <p><b>B. NEGATIVE</b></p> <ol style="list-style-type: none"> <li>1. Ukosefu wa Elimu juu ya Matumizi Sahihiri na Kruwaga.</li> <li>2. Uharifu wa mazingira (Mabaki ya Misitu)</li> <li>3. Yumbi la mbolea linoweza kusabisha madhara ya Afya</li> <li>4. Hapelekea Uhaba wa Nishati ya Kipita 9 (Kuni, Mkoa).</li> <li>5. Matumizi tofauti (Nishati)</li> </ol>	<p>(Translated)</p> <p>Group No.1</p> <p>A. Positive impacts of (the) project:</p> <ol style="list-style-type: none"> <li>1. Environmental consideration</li> <li>2. Affordable price</li> <li>3. Quality of organic fertilizers</li> <li>4. Increase of income</li> <li>5. Increase of production</li> <li>Reduces the use of chemical fertilizer</li> <li>6. Actual use of wastes from forest</li> <li>7. Employment</li> <li>8. Improves soil fertilizer</li> </ol> <p>B. Negative impacts:</p> <ol style="list-style-type: none"> <li>1. Lack of education (for farmers to use biochar)</li> </ol>
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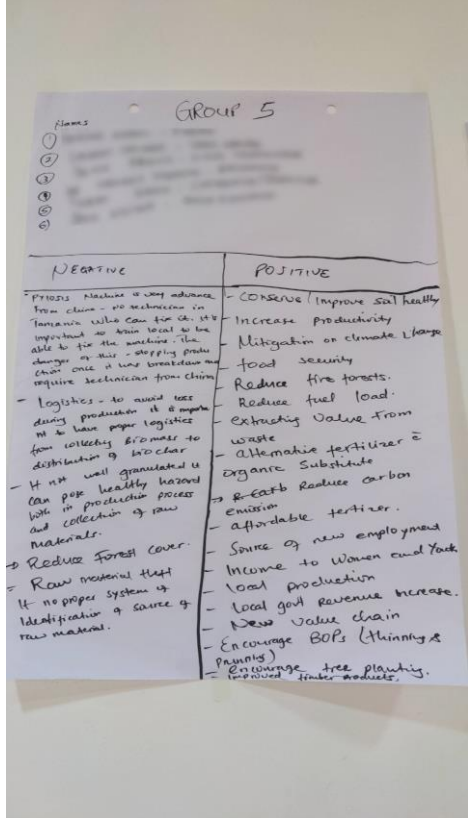
		<ul style="list-style-type: none"> <li>2. Environmental destruction</li> <li>3. Lack of other source of energy, like firewood and charcoal</li> <li>4. Different uses of biochar</li> </ul>
<p>Group 2 (6 male)</p>		<p>Group 2</p> <p>A. Valuable expertise for the project</p> <p>Farmer:</p> <ul style="list-style-type: none"> <li>- Sale of raw materials</li> <li>- Use of Biochar</li> <li>- Awareness companies (incl. trainers)</li> <li>- Feedback on the product.</li> </ul> <p>NGO:</p> <ul style="list-style-type: none"> <li>- Stakeholder consultation and feedback</li> <li>- Service provision</li> <li>- Research</li> </ul> <p>Private sector:</p> <ul style="list-style-type: none"> <li>- Consultation</li> <li>- Service permission</li> </ul> <p>Government:</p> <ul style="list-style-type: none"> <li>- Quality control and monitoring</li> <li>- Impact assessment</li> <li>- Regulating and licensing</li> <li>- Research</li> <li>- Awareness campaigns</li> </ul> <p>B. Expertise contribution</p> <p>Farmer</p> <p>NGO:</p> <ul style="list-style-type: none"> <li>- Technical expertise</li> <li>- Client database</li> </ul> <p>Government:</p> <ul style="list-style-type: none"> <li>- Technical expertise</li> </ul>

		<ul style="list-style-type: none"> <li>- Authority and regulatory competence</li> </ul> <p>C. Impacts:</p> <p>Negative:</p> <ul style="list-style-type: none"> <li>- High expectations on impacts of biochar for farmers</li> <li>- Utilities resource strain (Electricity, water, human resource etc.)</li> <li>- Logistic cost and burden for farmers</li> <li>- Competition for raw materials in Mafinga (Southern Highlands)</li> </ul> <p>Positive:</p> <ul style="list-style-type: none"> <li>- Less fire outbreaks</li> <li>- Improved soil quality and crop yield</li> <li>- Increased revenue for farmers and locals</li> <li>- Increased recovery rate from forestry.</li> </ul>
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<p>Group 3 (2 female, 5 male)</p>	 <p>The image shows a handwritten note on a piece of paper titled "GROUP 3". The note is organized into sections: "NAMES" (with a list of names that is mostly illegible), "QN1:", "QN2:", and "QN3:". Under "QN1:", there are four bullet points: "Raise awareness to farmers about Biochar", "Consumer (Buyers) supplier", "Supply of raw materials (Neligafisa Nitri)", and "Link Project &amp; Stakeholders i.e farmers TARI, other institution". Under "QN2:", there are three bullet points: "Project Mkt &amp; public Relations", "Legal &amp; Regulatory consultation to legalize Product &amp; its usage", and "Research &amp; MEL". Under "QN3:", there are four bullet points: "+ve", "Increase productivity", "Jobs creation", "Sustainable Raw materials availability competition", and "Nutrition improvement &amp; health to the community".</p>	<p>Group 3 (Names)</p> <p>QN1:</p> <ul style="list-style-type: none"> <li>- Raise awareness to farmers about biochar</li> <li>- Consumer (buyers), Supplier</li> <li>- Supply of raw materials</li> <li>- Link project stakeholders (together), i.e., farmers, TARI and other institutions.</li> </ul> <p>QN2:</p> <ul style="list-style-type: none"> <li>- Project market and public relations</li> <li>- Legal and regulatory consultation to legalize product and its usage</li> <li>- Research</li> </ul> <p>QN3:</p> <ul style="list-style-type: none"> <li>- Increase productivity</li> <li>- Jobs creation</li> <li>- Sustainable raw materials availability competition</li> <li>- Nutrition improvement and health improvement to the community</li> </ul>
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<p>Group 4 (1 female, 5 male)</p>		<p>Group</p> <p>Positive:</p> <ul style="list-style-type: none"> <li>- Reduce corruption</li> <li>- Increase income</li> <li>- Decrease cost in production (for farmers)</li> <li>- Improve health to farmers</li> <li>- Employment</li> <li>- Improve climate</li> <li>- Culture exchange</li> </ul> <p>(Concern raised regarding water pollution and leakages)</p> <p>How to interact (How will different stakeholder interact with each other?)</p> <ul style="list-style-type: none"> <li>- Through trainer</li> <li>- Several research</li> <li>- Communication and feedback</li> </ul>
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<p>Group 5 (2 female, 4 male)</p>	 <p>The image shows a handwritten document titled 'Group 5' with a list of names at the top. Below the names, the document is divided into two columns: 'NEGATIVE' and 'POSITIVE'. The 'NEGATIVE' column lists concerns such as the pyrolysis machine being very advanced and difficult to fix, the need for technicians from China, and issues with logistics and forest cover. The 'POSITIVE' column lists benefits like increased productivity, food security, and the potential for new employment and income for women and youth.</p>	<p>Group 5 (Names) Negative:</p> <ul style="list-style-type: none"> <li>-Pyrolysis machine is very advance from China, no technician in Tanzania who can fix it. It is very important to train local to be able to fix the machine. The danger of it all, is that production will stop once it breakdowns and it will require technicians from China (to fix it);</li> <li>- (Improve logistics) to avoid (inefficient transportation cost) during (overall) production (and distribution): It is important to have proper logistics from collecting biomass to distribution of biochar;</li> <li>- If (biomass) is not well granulated, it can pose health hazard both in production process and collection of raw materials.</li> <li>- Reduce forest cover;</li> <li>- Raw material theft: If no proper system of identification of source</li> </ul>
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The presentations were followed by a short address from Amar Shanghavi from DEC covering all concerns raised by all different groups. Questions that remained open after this were addressed in the following Q&A session. The meeting was closed and evaluation forms were filled.

With minds brimming with new knowledge and ideas, it was time for a well-deserved lunch break at 13:45. Participants gathered around buffet tables, enjoying a delicious, vegan meal while continuing their conversations, networking, and forging connections

with like-minded individuals. Patrizia Pschera and Amar Shanghavi were available for personal discussions and feedback.

**C.2.1. Minutes of other consultations**

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N/A (There’s no other consultation).

**C.3. Assessment of comments from all consultations above**

Gender of Stakeholder	Stakeholder comment	Was comment taken into account (Yes/No)?	Explanation/ Justification (Why? How?)
m	The technology is a good opportunity. Is DEC for profit not for profit?	Yes. Question was answered during the meeting.	It was noted that previous projects, though showed great promise on farmer yields during biochar trials, they did not have sufficient funding to continue operations. With this in mind, DEC is setup as a social enterprise for profit. DEC has the goal to reduce emissions, provide decent working conditions, improve lifestyles and bring education to farmers. The money provided by atmosfair is not for free. The loan has to be paid back and the continuous payments for sequestered carbon are necessary to fill the financial gap and be able to provide a product at prices that smallholders can afford. The government was urged to provide a decent framework that make such kinds of projects profitable,

that means reducing fees and tax rates.

m	Is there any research done in the southern regions regarding this project?	Yes.	Soil test have been taken. Cooperation with research institutes, experts and trial farms are planned to find the optimal solution for the area. As noted in the presentation by Ms Lynder Gesase, there have been various field trials using biochar in Tanzania all showing positive benefits.
m	Is there an outreach program for farmers to learn the project/biochar production so that they can produce biochar themselves?	No.	This is outside the scope of the project.
m	Salinity of the soil is a big problem in Songwe (region in Tanzania). Is salinity also reduced by biochar?	No.	Since biochar acts as a filter, its application significantly reduces the impact of salinity. However, this matter will not be attended to within our project activities, since Songwe region is outside our project boundary.
f	When and how often do I need to apply biochar to my fields?	Yes.	DEC will partner with research institutes, run demo plots and give trainings to the farmers and explain how and when to apply. We will provide relevant and detailed data as soon as we start providing the product.
m	Please think about application on other crops (e.g. Avocado) as well.		
m	On which crops can biochar be used?		
m	You provided evidence that it is working on maize. We		



	need more information about the fertilizer (P, N, K, ...). Sufficient information needs to be given by the producer to the farmer.		
m	Fertilizer company is responsible to provide information to the farmer!		
f	How do you activate the biochar?	Yes.	Cooperation with research institutes, experts and trial farms are planned to find the optimal solution for the area.
m	How will you organize the logistics? How will you transport the waste from farms to productions site?	Yes.	Plant will be stationary, chipping will be done on-site, transport will be done by trucks.
m	Recommendation: Project should partner with NGOs that are already working with farmers and have the contacts.	Yes.	DEC is in process of discussing with various NGO partners such as the WFP, One Acre Fund, Farm Africa to name a few for distribution of the biochar and demonstration plots.
m	What is the lifetime of the project?	Yes.	It will be a continuous project. Project lifetime for financing via Gold Standard is limited to several crediting periods à 5 years. At each renewal of crediting period ongoing financial need has to be proven. DEC is a for profit company that plans to run this project continuously with expansion plans across the region over the next decades.
m	Are you starting your own tree plantations?	No.	We will use the biomass residues from existing plantations for the project and use this valuation to

			provide incentives for better forest management.
m	Emphasizes the vulnerability of difficile machinery. It needs: <ul style="list-style-type: none"> <li>- Spare parts</li> <li>- Maintenance plan</li> <li>- Education</li> </ul>	Yes.	DEC will train technicians in Tanzania and management has experience in importing machinery from China. Furthermore, there are warranties with the service providers in place. Spare parts will be hold. DEC did thorough research on best machinery to use and equivalent machinery is in use in Cameroon and Brazil, therefore operating under similar conditions has been proven.
M	Revenues from carbon credits will only be available ex-post. Who will cover the costs until that’s done?	Yes.	Biochar will be sold to the farmers at a reduced price. This is possible because atmosfair provides advance payments to DEC before the issuance of the carbon credits. This approach ensures that no additional financial burdens will be imposed upon the farmers.
m	How will farmers individually profit from the carbon credits?	Yes.	Price of biochar will be subsidized.
f+m	Will there be insufficient amount of waste material as feedstock, due to the competition of recourse and overlaps with other sectors? (The comment is raised by several groups)	Yes.	The current waste levels in the area are alarmingly high. This notion received validation during the meeting, where the plantation manager of TFS emphasized the abundance of waste and the pressing issue it poses, including the occurrence of wildfires and other associated risks.

f+m	Will the biochar cause potential water pollution? (The comment is raised by group 4)	Yes	No, biochar will not cause water pollution. On the contrary, biochar can improve water quality through its impact on soil health. When applied to agricultural fields or used as a soil amendment, biochar enhances soil fertility, water retention, and nutrient cycling. These benefits can reduce the need for chemical fertilizers and pesticides, decreasing the potential for water pollution from agricultural runoff.
f+m	What steps does the company take to ensure compliance with health and safety regulations, as well as the legal and regulatory consultations, in their manufacturing processes? (The comment is raised by several groups)	Yes.	We prioritize strict adherence to health and safety regulations in our manufacturing processes. E.g. our workers are provided with safety safety boots and work clothes. Additionally, we are currently addressing the issue of legal and regulatory consultations. We seek government support to subsidize the costs of biochar production rather than imposing higher royalties. This approach aims to create a favorable environment for biochar adoption, considering that coal currently faces a minimal tax rate of 1%.
f+m	Pyrolysis machine is very advance from China, no technician in Tanzania who can fix it. How will you maintain the machinery, who can fix it if it breaks down? (The comment is raised by Group 5)	Yes.	DEC has experience with importing machinery from China, thereby ensuring a seamless progression during the preliminary implementation phase. Subsequently, DEC will train technicians in Tanzania to operate and maintain the equipment.
f+m	Will you explore different use of biochar in this project? (The comment is raised by Group 1)	No.	While biochar offers numerous benefits beyond soil amendment, it is important to note that our current pilot project and its initial implementation phase will primarily focus on this particular aspect. During this stage, we will not be exploring alternative applications.

f+m	Will this project reduce forest cover considering the use of woody biomass as feedstock? (The comment is raised by Group 5)	Yes.	In this project, we have carefully selected feedstock materials primarily sourced from offcuts generated through responsible forest management practices and secondary wood waste materials. By utilizing these specific feedstocks, we ensure that the project has no impact on the overall forest cover.
f+m	Will the logistic costs become a burden for the farmers? (The comment is raised by several Groups)	Yes	The logistics will add no extra costs, as they are part of the business case and project design.
f+m	How will you prevent raw material theft? (The comment is raised by Group 5)	Yes	We will set up a decentralized system that allows direct purchase from respective tree growers.

Input on additional Monitoring:

Gender of Stakeholder	Stakeholder comment	Was comment taken into account (Yes/No)?	Explanation/ Justification (Why? How?)
F	- Forest cover (if incentives more people to plant trees)	No.	This is outside project boundaries and cannot be monitored as we cannot ensure that we include all influencing factors on forest cover in this evaluation.
F	- PH value of biochar	Yes.	pH value will be part of the annual analysis of the biochar.
F	- Area of application	Yes.	Area of Application will be monitored for the fraction of biochar that forms the composite system that secures its existence for at least 100 years from the date of formation of the composite system only when applied to the agricultural land.

If the composite system is formed in a fertilizer company or the like the final area of application is outside project boundaries and will not be monitored. Nevertheless, voluntary reporting by the respective farmers is highly appreciated.

F	-	Crop yield after application	No.	This is outside project boundaries and will not be monitored. Nevertheless, voluntary reporting by the respective farmers is highly appreciated for internal quality assessment.
M	-	Permanence of carbon storage in the soil	Yes.	That's a crucial part of the methodology.
M	-	gender ratio <ul style="list-style-type: none"> <li>o participation in trainings</li> <li>o employments</li> </ul>	Yes.	Gender of participants in the trainings as well as Gender of employed will be monitored internally only and made accessible upon request.
F	-	youth employment (disaggregate the information on persons employed)	Yes.	This is outside the project scope however to address the point, the share of employed aged between 18 and 24 will be monitored internally only and made accessible upon request.
F	-	adoption rates of information provided in training	No.	This is outside the project boundaries. However, we will seek support on design of trainings from One Acre Fund as they have many years of experience with successful trainings.



### C.3.1. Evaluation forms (best practice)

Original version of the evaluation forms can be found in ANNEX II.

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	Good meeting. It will be good to see that the knowledge about biochar is spread so that the cost of production is reduced and the income for the farmers is increased.
What do you like about the project?	Contribution to environmental conservation.
What do you not like about the project?	Too early to say anything.
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	The project should start at once. No politics should be involved.
What do you like about the project?	Selling of products from our forests.
What do you not like about the project?	Education should reach the villages.
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Female</b>
What is your impression of the meeting?	Meeting went well with different sectors being involved, and all got a chance to contribute their opinions.
What do you like about the project?	The project is done in location with plenty of raw materials, and it will benefit many in areas of education, income, investment, employment, and forest management and agricultural development.
What do you not like about the project?	<b>NIL</b>
Signature	

Name	[Removed for public version]
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Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	Nice. We discussed many things concerning project development.
What do you like about the project?	The use of forest remnants to produce alternative fertilizer instead of chemical fertilizer.
What do you not like about the project?	Nothing. Increase efforts in the project.
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	Meeting went well and I think it will benefit Tanzanians and their nation.
What do you like about the project?	It will help in environmental and climate protection
What do you not like about the project?	My concern is on how it will benefit a normal peasant.
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	Meeting was nice because it prepares us for the new technology in production.
What do you like about the project?	Influencing us to shift from chemical fertilizers to organic fertilizers.
What do you not like about the project?	NIL
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Female</b>
What is your impression of the meeting?	Nice and attractive meeting Finding more donors/sponsors for the project to succeed.

	More research to be done for the project to be productive as specified.
What do you like about the project?	Everything was perfect especially organization and time management.
What do you not like about the project?	NO
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Female</b>
What is your impression of the meeting?	Education should be transferred even to farmers in villages.
What do you like about the project?	The project is good. The project is new to me, but I have understood its education.
What do you not like about the project?	NIL
Signature	

Name	-
Gender – Male/Female:	<b>Female</b>
What is your impression of the meeting?	Informative meeting, well-coordinated, good choice of participants (diversity). >participatory
What do you like about the project?	Creation of new forestry value chain and potential improvement of timber product.
What do you not like about the project?	None
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	Meeting has significant objectives to cope with climatic changes and to benefit farmers in general.
What do you like about the project?	Project presentation is better because it well explains its works and benefits.
What do you not like about the project?	NIL
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	We ask trainings to the TGA farmers’ groups. We ask that the trainings be provided in Swahili language.
What do you like about the project?	The project will have benefits to farmers in their needs to improve the land.
What do you not like about the project?	Everything that I saw will not bring productivity in the forestry sector
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Female</b>
What is your impression of the meeting?	Thanks to stakeholders and facilitators for the education in the use of forest remnants in improving the environment.
What do you like about the project?	Trainings on the use of biochar.
What do you not like about the project?	NIL
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Female</b>
What is your impression of the meeting?	Meeting went well and ended on time.
What do you like about the project?	Project has started well by involving the stakeholders. It shows that it will be a sustainable project.
What do you not like about the project?	NIL
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	The project is good, it will help adding soil fertility and increase productivity. Also, it will

	remove wastes in town considering forest wastes production – more than 47 tones produced daily and only 28 tones are removed. Low waste removal capability.
What do you like about the project?	I like the use of organic materials, other than inorganic ones which cause health problems and, in the soil, because they are natural. Reduction in fire outbreak and its effects which occur due to remnants of trees. The remnants will be removed or decreased.
What do you not like about the project?	People will harvest immature trees for making biochar. They have to use trees’ remnants.
Signature	

Name	-
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	To ask if there is possibility for the biochar machine to be installed in Rukwa region. We need it.
What do you like about the project?	To be loaned the initial capital.
What do you not like about the project?	I don’t like to be left behind.
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	The meeting is good, and we hope to act on what have been discussed by different stakeholders.
What do you like about the project?	If implemented as discussed, the project will be impactful. The fertilizer to be delivered on time to farmers. Low costs for the farmers
What do you not like about the project?	Late delivery of fertilizer to farmers after the agricultural season as it is now, and especially in Rukwa region.



Signature	
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Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	Project is good. The project should expand and develop. It should not end here because the meeting has expanded my understanding about natural fertilizer.
What do you like about the project?	The project should arrive in Songwe for us to benefit.
What do you not like about the project?	NIL
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	The meeting was very fruitful. It helped me to increase my knowledge on SDGs and carbon related issues.
What do you like about the project?	It is directly beneficial to smallholder farmers, hence touching the right group.
What do you not like about the project?	NONE
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	Great project for farmers and carbon enthusiasts.
What do you like about the project?	Emphasis on agriculture and soil fertility improvement.
What do you not like about the project?	Not clear on revenue sharing with local communities.
Signature	

Name	[Removed for public version]
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Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	This is good project with vision and future sustainability is visible. Tape the potential of the existing donor-funded projects to run this project.
What do you like about the project?	The modality to be business-oriented project but reducing CO <sub>2</sub> emissions to our environment. the project will create employment and reduce forest wastes in Tanzania.
What do you not like about the project?	NIL
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	The meeting was so interactive, each individual has been given equal opportunity to share and speak out. The project seems to be useful in Southern Highlands.
What do you like about the project?	The sustainability plan, and the raw material used in production.
What do you not like about the project?	If the project will not stack, I wish to see it comes to operation to fill the gap of fertilizers.
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Female</b>
What is your impression of the meeting?	The meeting was inclusive and interactive as well.
What do you like about the project?	The fact that it will reduce CO <sub>2</sub> emissions to me this is the good way to go in terms of climate change mitigation options.
What do you not like about the project?	I am positive on this move/project.
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	Good process, good content, good outcome
What do you like about the project?	Everything
What do you not like about the project?	N/H
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	Very inclusive. Information well transferred. A successful meeting.
What do you like about the project?	It is new concept in Tanzania. It has potential to benefit all involved.
What do you not like about the project?	The risk of not being able to market biochar to land users.
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	Including and good explained.
What do you like about the project?	The possibility of scaling on a win/win for both farmers/environment and forestry.
What do you not like about the project?	Not enough research data on output or outcome.
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	I love it. Keep involving different stakeholders throughout.
What do you like about the project?	The idea of using carbon credit to subsidize biochar sold to farmers.
What do you not like about the project?	NIL
Signature	

Name	[Removed for public version]
Gender – Male/Female:	<b>Male</b>
What is your impression of the meeting?	This is fantastic and excellent meeting, very important and meaningful to farmers, climate mitigators and Tanzania in general.
What do you like about the project?	Integrated practices between agriculture production and climate change mitigation.
What do you not like about the project?	NIL
Signature	

### C.1. Summary of alterations based on comments

>> Based on the minutes, the project will be modified as follows:

1. Gender of participants in the trainings as well as Gender of employed will be monitored internally. This is due to the scope of the project. If interested, stakeholders can access the monitoring results by directly reaching out to DEC.
2. Employment among youth was addressed explicitly during LSC, thus also the share of employed aged between 18 and 23 years will be monitored internally. This is due to the scope of the project. If interested, stakeholders can access the monitoring results by directly reaching out to DEC.
3. Based on previous extensive research exploring the influence of biochar on soil fertility and considering the valuable feedback received from participants, it is evident that conducting a project-based trial to assess the efficacy of biochar as a soil amendment is of utmost significance. The trial will be set up as a part of the project.

## SECTION D. CONTINUOUS INPUT / GRIEVANCE MECHANISM

Please use the table below to report on the methods agreed with stakeholders

**Method Chosen (include a Justification of Choice known details e.g. location (best practice) of the book, phone, number, identity of mediator)**

Continuous Input / Grievance Expression Process Book (mandatory)	A book for grievance expression will be placed in the DEC office checked regularly by DEC and atmosfair	Made available at the DEC office, checked regularly by DEC and atmosfair
GS Contact (mandatory)	help@goldstandard.org	
Telephone access (optional)	Dark Earth Carbon Tanzania LTI Dr. Amar Shanghavi 0744535933	Comments received via phone calls will be registered in grievance expression book
Internet/email access (optional)	DEC: comments@darkearthcarbon.co atmosfair Ms. Lisa Bretschneider bretschneider@atmosfair.de	Comments received by email will be registered in grievance expression book



## SECTION E. STAKEHOLDER FEEDBACK ROUND

Please check this box if the project is retroactive and has done only 1 consultation with a physical meeting integrated into the SFR.

### E.1. Length of the Feedback Round

Stakeholder Feedback Round	Planned	Actual
Start Date	<input checked="" type="checkbox"/>	<input type="checkbox"/>
End Date	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### E.2. Summarise how all stakeholders were/will be invited to provide feedback

>>

The stakeholder consultation report together with the key project information will be uploaded to the atmosfair website, where it will be publicly accessible. Attendees of the physical meeting as well as stakeholders who could not attend the meeting will be informed via email and Whatsapp.

### E.3. Summarise Feedback received, including if any changes in project design were made

>>

N/A

## Revision History

Version	Date	Remarks
1.2	5 May 2022	Addition of grouped consultation info, preliminary agenda and section to justify retroactive consultation took place. Minor edits to text.
1.1	14 October 2020	Inclusion of Key Project Information Restructure, new headings and reorder to better match the steps a developer will follow in consultations. Removal of some non-mandatory template tables (Blind Sustainable Development Assessment). Clarification of best practice steps that are non mandatory processes, clarification of mandatory discussion points. Clarification regarding publishing names and that original evaluation forms (optional) and attendance lists (mandatory) should be separate documents. Improved clarity on Stakeholder Feedback round section and procedures for retroactive projects Provision of an <a href="#">accompanying Guide</a> to help the user understand detailed rules and requirements
1.0	14 August 2017	Initial adoption