Plant-for-the-Planet Ghana Activities Report 2023

PLANT FOR THE PLANET

UN environment programme

UNITED NATIONS DECADE ON ECOSYSTEM RESTORATION 2021-2030

Plant-for-the-Planet supports the United Nations Environment Programme

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Introduction

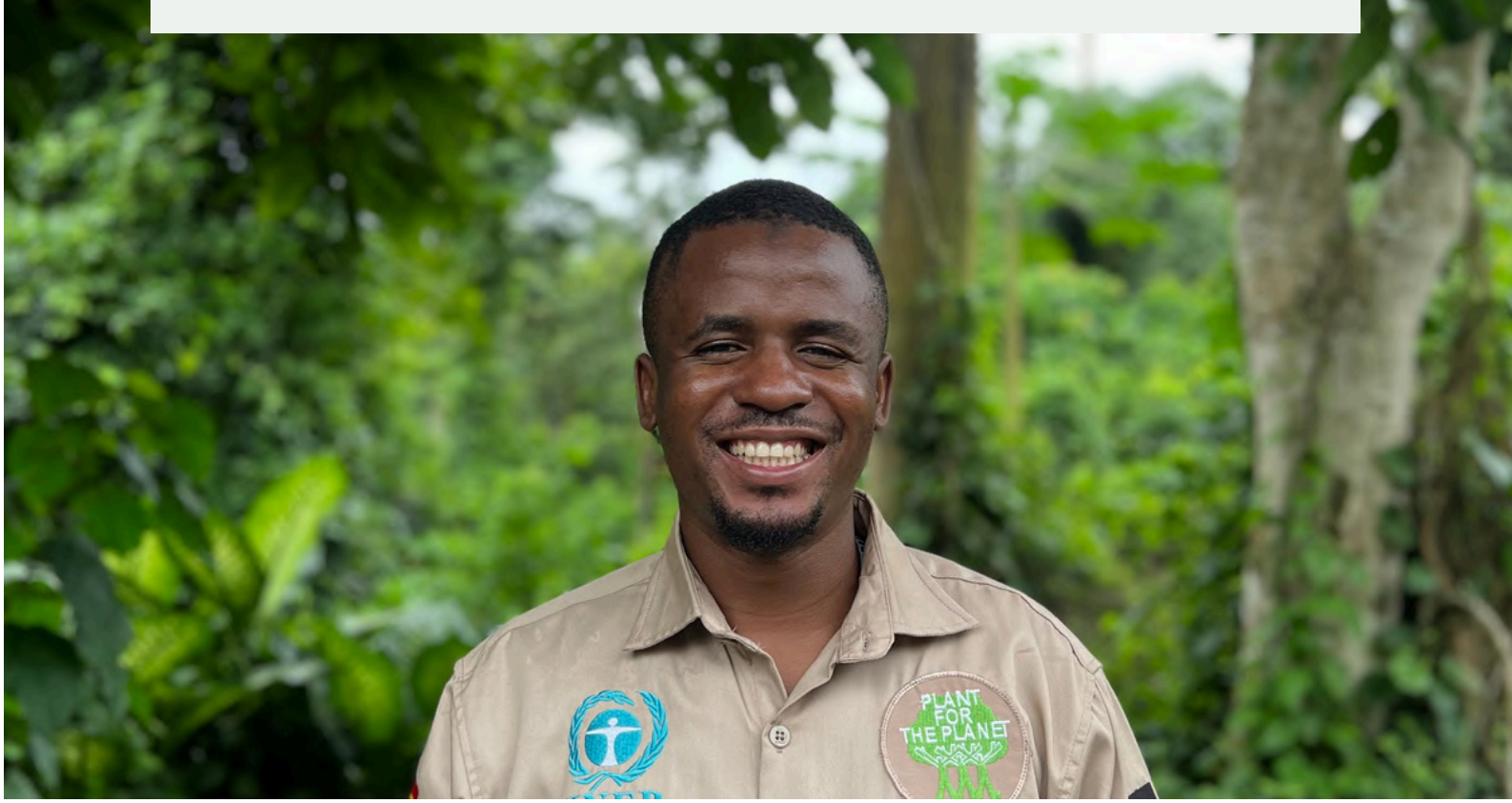
A bright future requires us to combat the climate crisis as a top priority. But, it also depends on bringing about the conditions necessary to allow billions of people to live safe and dignified lives: those, who live or will live at the forefront of the climate crisis.

At Plant-for-the-Planet, we restore forest to empower people in the fight for a better climate and to end poverty. Our new project in Ghana (Africa) strives to show this massive potential for the region with each tree planted.

This Activities Report (2023) serves as a comprehensive summary of the activities and achievements of Plant-for-the-Planet Ghana in 2023.

Transparency is our top standard at Plant-for-the-Planet. So, look forward to a glimpse into the country of Ghana with its beauty and its challenges. Learn about the ecosystem that could be restored. Get to know the faces behind the project, their hopes and struggles. See what exactly it is we are doing on a daily basis, how exactly we do it and why.

Know also that our project is at the beginning of its journey. So much can be accomplished in the next 3 or 10 or 100 years. We invite you to join us on this path as **supporters**. Be sure to contact us to learn more.



Message from the Founder

Dear donors, dear supporters,

Our mission is to restore ecosystems and combat the climate crisis in the heart of Ghana, a region I call home. Growing up here and seeing the severe impacts of environmental degradation, I was inspired to create change. After many years as a Plant-for-the-Planet Climate Justice Ambassador, in 2021, I founded Plant-for-Ghana, a project that goes beyond just planting trees. It's about restoring lost and crucial ecosystems, creating green jobs, and nurturing sustainability for local communities.

Each tree we plant in Ghana's savannah region is a beacon of hope, a guardian against climate crisis, and a source of resilience. **Together, we are rewriting the climate crisis narrative**, empowering women and youth, and fostering environmental awareness. We're creating a greener, healthier planet for us all. **Join us.**

MOHAMMED RABIU DANNAKABU

Founder and Executive Director
of Plant-for-the-Planet Ghana

Ghana

Ghana is a country in a climate-vulnerable region with a great potential for a positive impact on the world.

Historical background

Ghana's history is marked by resilience and transformation. From ancient empires like the Ashanti, Fante, and Dagbon to its colonial era as the Gold Coast under British rule, Ghana gained independence in 1957. Since then, Ghana has been a beacon of stability and democracy in the region. Post-independence, Ghana faced various challenges, including economic difficulties and environmental degradation. However, the nation has also shown active engagement in climate change mitigation and environmental preservation.

Climate vulnerability

Ghana, situated in West Africa, is a nation facing significant climate vulnerability, which necessitates a strategic response to mitigate and adapt to the consequences of the climate crisis. Ghana's geographic positioning renders it exceptionally susceptible to the impacts of the climate crisis: particularly irregular rainfall patterns, extended droughts, and escalating temperatures pose grave threats to agriculture, food security, and the livelihoods of millions, particularly in the northern regions. That's a big part of the reason why Plant-for-Ghana project came to life!

Environmental problems and our solutions
Why has the ecosystem been degraded?

Cut down trees around the planting site, 2023

Ecosystem degradation in the Northern region is catalysed by economic underdevelopment and lack of opportunities. Forest ecosystem restoration can effectively address that and achieve socio-economic development that benefits everyone.

DEFORESTATION

The country is facing a significant loss of biodiversity due to commercial deforestation.

***Ecosystem-focused forest restoration** is the best way to restore Ghana's lost forests.*

WILDFIRES

A much drier climate due to climate crisis and fragmentation makes forests especially vulnerable to destructive fires.

***Strategic fire management** is crucial during worsening climate conditions. Healthy ecosystems directly reduce fire risks.*

Wildfires at the project site, May 2022

Charcoal Burning in the communities in Bampewa, 2023

CHARCOAL BURNING

Charcoal production is prevalent in many communities in Ghana. It represents a source of income in areas with limited or unavailable employment opportunities. Alternatives to this ecosystem-damaging last resort are needed.

*Plant-for-Ghana represents an **alternative source of income** to charcoal with additional environmental and economic benefits.*

About **Plant-for-the-Planet**

Plant-for-the-Planet is a global movement empowering people and organizations to restore forest ecosystems and fight for climate justice. To do so, we educate young people, restore ecosystems, conduct restoration research, and provide free software tools and restoration advice for organizations worldwide. **Plant-for-Ghana** is a hybrid restoration agroforestry project initiated by Plant-for-the-Planet Ghana – a national affiliate of the worldwide organisation Plant-for-the-Planet.

Sustainable and highly bio-diverse forest restoration is how we can bring back the lost and degraded forests ecosystems in Ghana's Northern Savannah Ecological Zone to contribute to climate crisis solutions both locally and globally.

The overall goal of the project: **10 MILLION TREES**

Our Mission

Our mission is to restore 10 million trees in Ghana's Northern Savannah Ecological Zone, catalysing the ecosystem's crucial functions including climate mitigation and adaptation. Beyond the environmental impact, we aim to alleviate poverty in the region by cultivating community-based job opportunities stemming from the forest restoration work. In particular, we aim to improve the socio-economic living standards in the region by empowering women groups and the youth.

Our Vision

Our vision is to bring back thriving forest ecosystems as close as possible to their state before degradation and enable people to sustainably benefit from it. As such, we aspire to be a role-model project for holistic community-led forest restoration worldwide.

Community Objectives

Green Job Creation

creating **fair, stable and long-term employment** with above-average benefits for the local communities

Women Empowerment

supporting **gender equality** and providing women with opportunities, employment, and education

Biodiverse Restoration

restoring degraded ecosystems and bringing back resilient, rich, and healthy forests that benefit nature and people

Global Objectives

Climate Crisis Mitigation

Restoring forest ecosystems is a positive and crucial part of nature-based climate solutions in absorbing carbon emissions.

Sustainable Development Goals

The project contributes to all 17 UN SDGs, representing a global effort for a better future for all.
In particular, we focus on these SDGs:

How are we going to **achieve** this? **Together.**

Our Strategic Principles

Strong community support and adherence to high-quality practices make our project's scalability possible and desired. Thanks to the sympathies of local communities, our impact remains **effective** and **replicable** across the region**.**
For example, cooperation has already started between the Czech Embassy in Accra and Plant-for-Ghana to expand our work to the communities Chibrinyua and Kyinga Krom.

The core community (Banpewa) and its **active engagement** ensure our initiatives align with local needs and aspirations. The community becomes an integral part of our success by fostering a sense of ownership.

International Cooperation

Scalability
and region-wide outreach

Funding
from various sources

Community Involvement

High-quality **Restoration** and **Agroforestry**

The climate crisis is a global problem that requires cooperation across national borders. We cooperate with our partners within the Plant-for-the-Planet International Network and other governmental and non-governmental actors worldwide to maximize our impact.

Plant-for-Ghana receives **funds and donations** from various sources: the Plant-for-the-Planet Platform, private and company donors, and other governmental grants through development aid.

Forest ecosystem restoration, intertwined with **agroforestry,** is crucial to our strategy. Beyond biodiversity and carbon sequestration, this approach is tailored to meet the economic needs of local communities. Agroforestry serves as an avenue for sustainable farming practices, where trees yield renewable products with economic benefits. This dual-purpose strategy **revitalizes ecosystems, addresses poverty**, and fosters local development. By strategically integrating forest restoration with agroforestry, we aim to create a sustainable, economically viable model that **uplifts both people and the environment.**

The history and milestones of Plant-for-Ghana

It all started with one dedicated individual, and then many more followed!

Mohammed Rabiu Dannakabu

2013

Mohammed initially became the **President of the Plant-for-the-Planet Global Board** as a Youth Climate Justice Ambassador after he had discovered the organization online. His motivation to make a meaningful impact in his home country, Ghana, grew.

This marked the beginning of his efforts to organize **Academies across Ghana** to provide essential knowledge to children about the climate crisis, enabling them to actively contribute to securing a sustainable future. Ghanian Ambassadors joined a global network and were able to find their place within the global family of Plant-for-the-Planet.

84
ORGANIZED ACADEMIES

6643
CLIMATE JUSTICE AMBASSADORS

> We realized that issues in Ghana are becoming more serious. Together with the team, we decided to take another step towards solutions in restoring degraded lands.

2020

Mohammed founded the non-profit organization **Plant-for-the-Planet Ghana.** This underlined his previous commitments towards Ghana and enabled him to start a brand new planting project **Plant-for-Ghana**.

2021

The first tree planted by Plant-for-Ghana marks the beginning of the journey!

The chief and members of the local community of **Banpewa** attended the opening festive ceremony. Involving the community also enhances the the project's long-term viability, as residents become stewards of the restored environment, fostering a collective commitment to its **preservation and sustainability.**

2022

Drone view of the nursery, 2022

The nursery relocated and its capacity doubled!

What's more, the return of **two wildlife species** was witnessed around the nursery and the planting site.

Deepening of the Czech-Ghanaian Cooperation

Plant-for-Ghana and the Czech Embassy in Accra

On top of the existing friendship between **Plant-for-the-Planet Czech Republic Nadace** and Plant-for-the-Planet Ghana, Mohammed deepened the relationship and received support from the Embassy of the Czech Republic in Accra to drive global restoration and climate justice.

Mohammed at the Embassy of Czech Republic in Accra with the head of the mission, H.E. Mr Ján Füry, 2022

2023

So far, between 2021 and 2023,

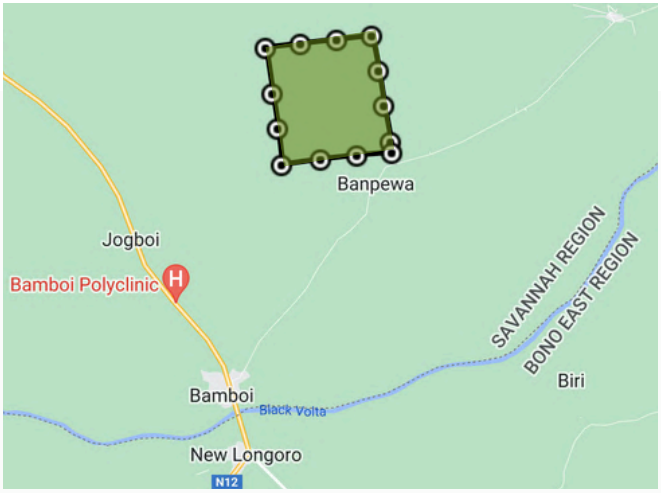
67,612

new trees were planted!

What will the future bring?

Project Location

The site is located in central Ghana's Bole District of the Savanna Region. The site is near the settlement of Bamboi, which neighbors the Banpewa community. The closest water source is the Black Volta River, which creates a natural border between the regions.



What is the ecosystem type?

The project is located in the **transition zone of forests to savannah woodlands**. This transition zone is crucial for combating desertification, because it is the frontline that can allow deserts spread if not maintained. Hence, the forests restored here present a very vulnerable but even more valuable ecosystem.

Why here? Many reasons...

Environmental

High Ecosystem Restoration potential within the degraded area, where trees grow fast and absorb large amounts of CO_2.

The region faces **many negative climate crisis impacts**: droughts, floods, wildfires... that can be fought with forests.

Social

Community-based restoration contributes to solving social issues like **gender inequality, unemployment, or hunger,** with which the communities in the underdeveloped region struggle.

Economic

Regional problems with the **unemployment rate and lack of employment opportunities** for youth and women can be adressed.

High potential for green jobs creation, women empowerment and lowering poverty.

Banpewa community leased the land to Plant-for-the-Planet Ghana and stayed directly involved in the project as an advisor and also forms its majority work-force. Community support and cooperation are crucial for the successful project management.

Planting Site — 1,000 ha

total area for the current project site

Drone picture of the Plant-for-Ghana planting site, August 2023

Tree Capacity: 1 MILLION TREES

Planting location: bit.ly/plantingsite

Demarcation of the Area

Demarcation is done with boundary pillars, marked with numbers from **1-13**, distributed around the whole planting site. The map with the boundary pillars and their coordinates can be found at bit.ly/planofland

The active planting area is marked with 16 plots covering 16 ha.

Picture #1 showcases the demarcation of the area with planted trees and lists the mix of planted species, 2023

Picture #1

Land Ownership

Private, legally owned by Plant-for-the-Planet Ghana as of 2020 with Plant-for-the-Planet Foundation access rights for the next **70 years.** All legal documents are signed and notarized.

The land, 1000 ha, was leased from the Banpewa community, signed by Nnaa Dr. Agbaa Jaaga III. of Chief's Palace Banpewa on behalf of the Banpewa community.

The lease contract is to be found at bit.ly/landcontractghana

Mohammed Rabiu Dannakabu, team from Plant-for-the-Planet Czechia and a scientific advisor, Dr Peter Borchardt on the planting site of Plant-for-Ghana, 2023

Tree Nursery

Project's powerhouse

The tree nursery is essential for nursing **high-quality tree seedlings** and providing **long-term employment** for the community. The nursery is not far from the planting site: in Bamboi, near the water source. There, it has access to the necessary infrastructure for easy movement of the seedlings to the planting site.

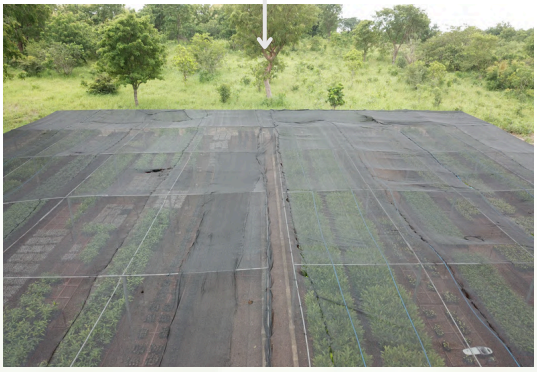
What are the benefits?

- **Our own production of seedlings** *and a diverse mix of species*
- **Flexibility in species planning** *thanks to the cooperation with FORIG*
- **Easy data collection and monitoring** *for analysis*
- **Close proximity to the planting site** *as well as water and infrastructure*
- Long-term **permanent employment** for **trained employees**

Nursery capacity:

120,000

200 elevated platforms can grow the seedlings – 600 polybags/platform!



On our way to all-year-long nursery

At the moment, the nursery is seasonal and depends on the planting season. The number of seedlings depends on the amount of donations received by Plant-for-Ghana.

February — June

Current active months of the nursery (5)

The nursery presents great potential for **scaling up** the seedling production in the future. Making the nursery active **for the whole year** is one of the main goals when scaling up the project! This will ensure even better seedling growth, better planning, and better use of resources. Then, with increasing donations, we can **scale up the nursery capacity** as much as necessary.

Tree Species

What species do we plant?

Hybrid project with two different approaches

Planting high-diversity tree species mixes in deforested areas ensures that forest restorations are resilient to the ongoing threats of climate change and is also proven to lead to forests of numerous functions and benefits.

Native Species

Agroforestry Species

Anacardium occidentale (cashew)

Mangifera indica (mango)

Mixing native and agroforestry species ensures that local communities can benefit from the fruit and non-timber products produced by a subset of planted tree species (eg., cashew or mango). This ensures **sustainability and contributes to the economic empowerment** of involved communities.

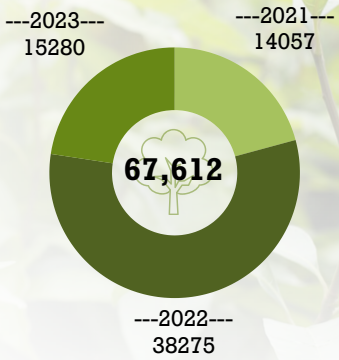
• • •

The mix of agroforestry and native species is selected with the advice of the Forestry Research Institute of Ghana

List of Tree Species (So Far)

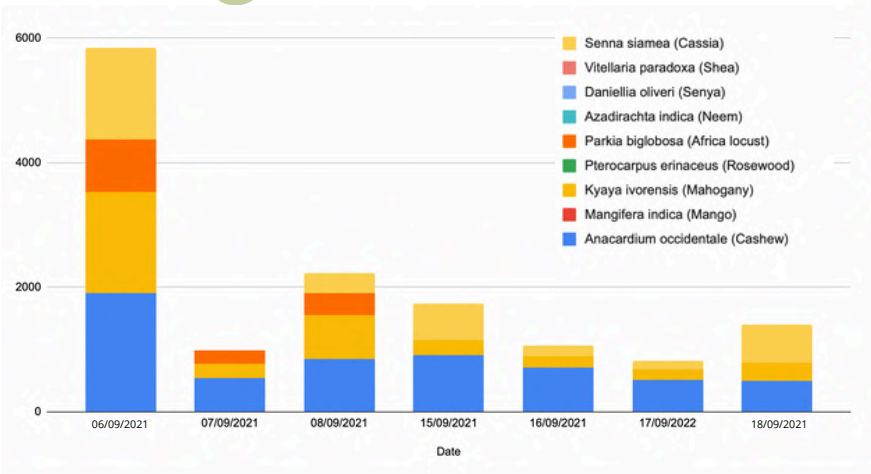
#	Scientific name	Local name	Benefit
1	Khaya senigalensis	Mahogany	environmental and economic
2	Azadirachta indica	Neem	environmental
3	Pterocarpus erinaceous	Rosewood	high environmental
4	Parkia biglobosa	Dawadawa	environmental and economic
5	Daniella spp	Senya	environmental
6	Vitellaria paradoxa	Shea	environmental and economic
7	Mangifera indica	Mango	economic - agroforestry
8	Anacardium occidentale	Cashew	economic - agroforestry

Trees Planted by Species



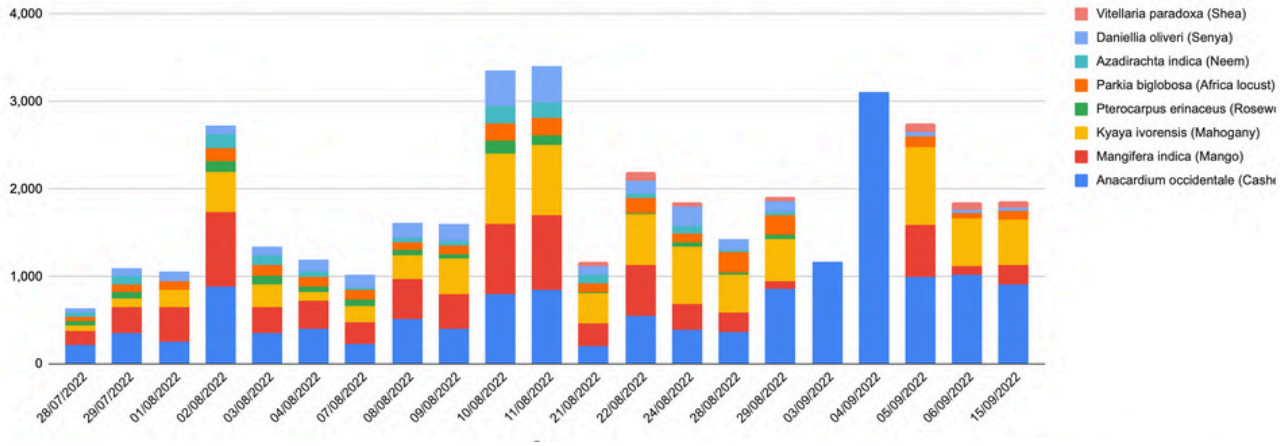
2021

14,057 trees planted



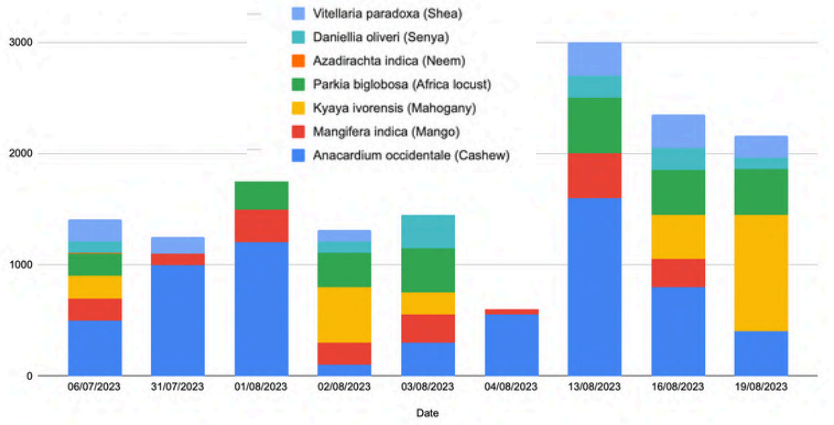
2022

38,275 trees planted



2023

15,280 trees planted



Planting days happen during the planting season and last a few months a year, but growing the seedlings in the nursery and caring for the trees after planting **carries on all year!**

Plant-for-the-Planet Ghana: the charity

Board Members and Management

Mohammed Rabiu Dannakabu

Founder and Executive Director
Plant-for-the-Planet Ghana
(volunteer)

Dr. Haruna Danamiji

Chairman

Ibrahim Wasiu Hamid

Board Member

Ernest Obeng Adu

Expert Advisor

Paulina Tangoba Abayage

Vice-Chairman

Murtala Mohammed

Treasurer

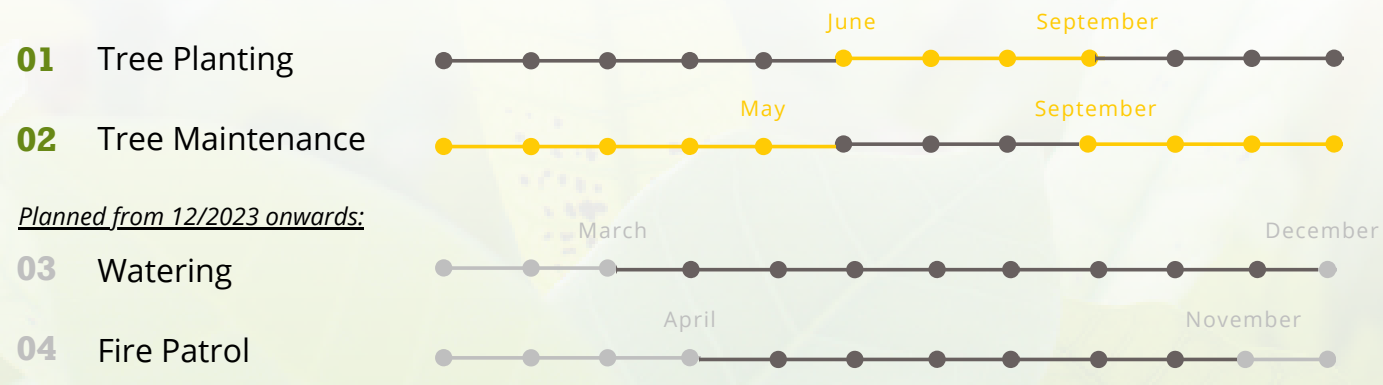
Sauda Alhassan

Secretary

The Restoration Team

A proficient restoration team is integral to the success of any environmental project. With the intricacies of ecological restoration requiring specialized knowledge and skills, **a trained team** ensures the implementation of scientifically sound and effective restoration practices. What's more, restoration work changes throughout the year.

Current Distribution of Work (month-based analysis):



Employee Spotlight

In 2023, there have been **3 permanent workers, including** a nursery manager. In the nursery, they're responsible for seed germination and planting, soil preparation, watering and irrigation, weeding and pest control, monitoring plant health, and much more!

Trained employees in the nursery mean stable, high-quality, and effective seedling production, from seed management to transport to the planting site.

Permanent Nursery Workers

Nursery/Planting Manager

Nursery Worker	Personal Story	Benefits and Impact	Identified Challenges
Edith Addo	**Edith** comes from the Eastern Region and relocated because of a lack of work. She enjoys caring for the seedlings daily as it serves her as her peaceful spot in a busy life.	She inspires the other women to be active and independent in employment. Edith herself earns a living and sees the environment as a crucial part of a healthy livelihood. Education and learning from "nature" drives her.	There is a lack of drinking water, and she would appreciate more hospitable care during working days. Similarly, direct sources make the watering of the seedlings easier.
Charles Bakunmini Nminlanaa	**Charles,** a nursery worker, completed his Senior High School education and first cooperated with Plant-for-Ghana as a restoration worker on "by-day-work." After showing dedication and hard work, he joined the team permanently.	Gaining education in restoration and environmental practices that can be used on private farms later (knowledge transfer). Having employment and extra income.	Extensive workload because of the scale of the nursery and many parallel activities that are happening.
Ali Addrisu	**Ali**, a Nursery and Planting Manager, originally comes from Kumasi and previously worked as a seed officer and has a Bachelor's Degree in the field. He's in charge of coordinating day-to-day activities in the nursery and manages workers during planting days.	Permanent employment, dynamic work, and the opportunity to learn and work in a team to positively influence the community and the environment.	Seed management and collection are a challenge. He would appreciate better water management for watering the seedlings to make the process more effective.

The table summarizes the stories, personal benefits, and identified challenges by the nursery workers in the conducted detailed verbal interviews during the visit of Plant-for-the-Planet Czech Republic at the nursery in August 2023.

I like the work because I'm a woman, and I can prove to them that a woman can do the "men's" work. Whatever a man can do, if a woman feels like doing it, she can do it.
– Edith

Restoration Workers (Tree-planting Team)

15-20

Restoration Workers / Planting Day

Restoration workers actively contribute to the cleaning of the area, planting, and tree maintenance during the planting days. Planting days are always announced to mobilize the workers and deliver the information to the directly involved groups – chief, youth leaders, and women leaders are informed first-hand.

All Planting Activity is monitored and transparently reported with TreeMapper app. Data is showcased in polygons here.

Trees are life. I don't think we can survive without them. We want to do it bigger and we need to plant for the planet and plant for Ghana.
– Charles

Planting days start early in the morning and happen during the rainy season. Seedlings are distributed to the planting site, the planting area is marked, and work is divided among workers for **effective and high-quality tree planting.**

Our Restoration Team in Ghana during a visit by Plant-for-the-Planet Czech Republic on planting day: 06/08/2023

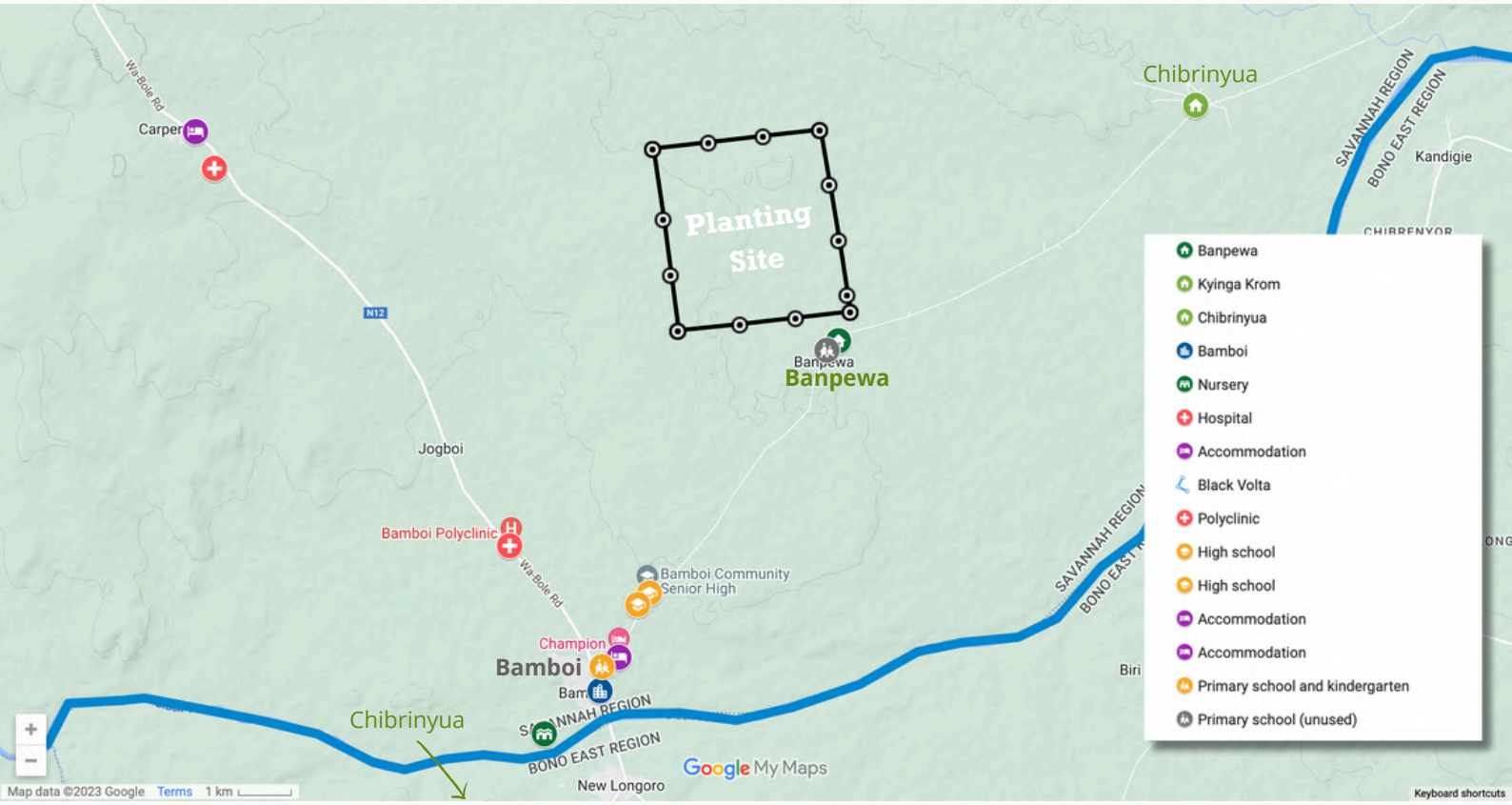
Local **Communities' Involvement**

The main community Plant-for-Ghana cooperates with is **Banpewa Community** (*see the map below*). To ensure effective cooperation, understanding, and implementation of the project, regular communication happens with the 3 main groups identified as crucial for the project's success and maximizing the positive environmental and socio-economic impact (*see Diagram on the right*). People of the community are directly involved through employment and other partnerships.

Diagram describes 3 main groups within the Banpewa community involved with Plant-for-Ghana

We hope to keep the forest alive so that in the next 10 years, animals such as monkeys can come back. The project can be a role model for the region; other communities will follow and understand the long-term impact!

– Banpewa community elder



The map above summarizes the most important subjects around the planting site: nursery, communities, infrastructure, and other essential institutions like schools, ***see the legend***

Women of Banpewa

Actively involving women in our initiatives serves a **dual purpose:**

significant contribution to the **ecological success** of forest restoration

addressing **gender inequalities** by providing employment opportunities

Through our project, women contribute to green jobs, fostering economic independence and self-sufficiency within local communities.

Women are integral to the fabric of our forest restoration efforts within Plant-for-Ghana.

What are the challenges faced from women's perspective?

Transportation

The only means of transportation is walking, which is time-consuming - to work, the market, or school.

Walk for water

It's women who travel long distances to fetch water for household needs and spend hours daily on water collection.

Information Transfer

Women need to get the right information about the availability of work opportunities to empower them to participate. Women's spokes-person ensures that.

Challenges were identified through the conducted interviews and during a meeting with the Women of the Banpewa community.

Currently, we focus on creating a **Plant-for-Ghana Women Group** to address the mentioned challenges and focus on long-term empowerment.

Youth Group of Banpewa

Young people can be drivers of environmental and social change in the region. Listening to their voices gives us the perspective to understand the struggles, challenges, and the **positive impact possible.**

The youth proved themselves to be motivated, showed appreciation for the project, and defined their struggles, which is crucial for project development and **well-targeted change.**

Low-quality water source that is polluted and is shared with animals, 2023, Banpewa Community.

Youth Leader (orange T-shirt, second from the right) is the main point of contact and information transfer.

How does the project benefit them?

Green Jobs and Employment – they can support themselves and their families

Understanding of the **protection of the area** - forests are essential for the community and the environment.

The biggest motivation would be an **all-year-long employment** that provides security and stability.

They are **open to discussing protocols** and other further environmental protection measures and their implementation.

Elders and **the Chief** of Banpewa

Since the beginning of the project, the Elders proved to support its implementation greatly. Their motivation is rooted in being a role model for Ghana's ecosystem restoration and community development (health facilities, employment, poverty reduction)

They are important Ambassadors of Plant-for Ghana project.

Plant-for-the-Planet Czechia met with the Elders in Bamboi, August 2023.

On our way to involve **more communities!**

Consideration of other communities in the proximity of the project can boost scalability and positive impact.

Community problems don't end with one community; therefore, **our work and impact also don't!**

Identified problems that all communities face in the region:

Energy poverty – no electricity / limited access to electricity

Water availability – no source of water / polluted sources / not enough sources

Lack of **healthcare** and lack of **childcare and schooling**

Lack of **permanent work opportunities** and income in the region

Meeting with the Chibrinyua community during the Plant-for-the-Planet Czechia visit, August 2023.

Chibrinyua Community

Kyinga Krom Community

Meeting with the Kryinga Krom community during the Plant-for-the-Planet Czechia visit, August 2023.

How do we adress them?

So far, we provided the Banpewa community with a set of **12 solar lamps.** These present a renewable source of electricity and light.

Healthy ecosystems and climate adaptation practices help with water management.

Dr. Haruna Danamiji Osman, our chairman, is finding ways of delivering accessible healthcare for the involved communities.

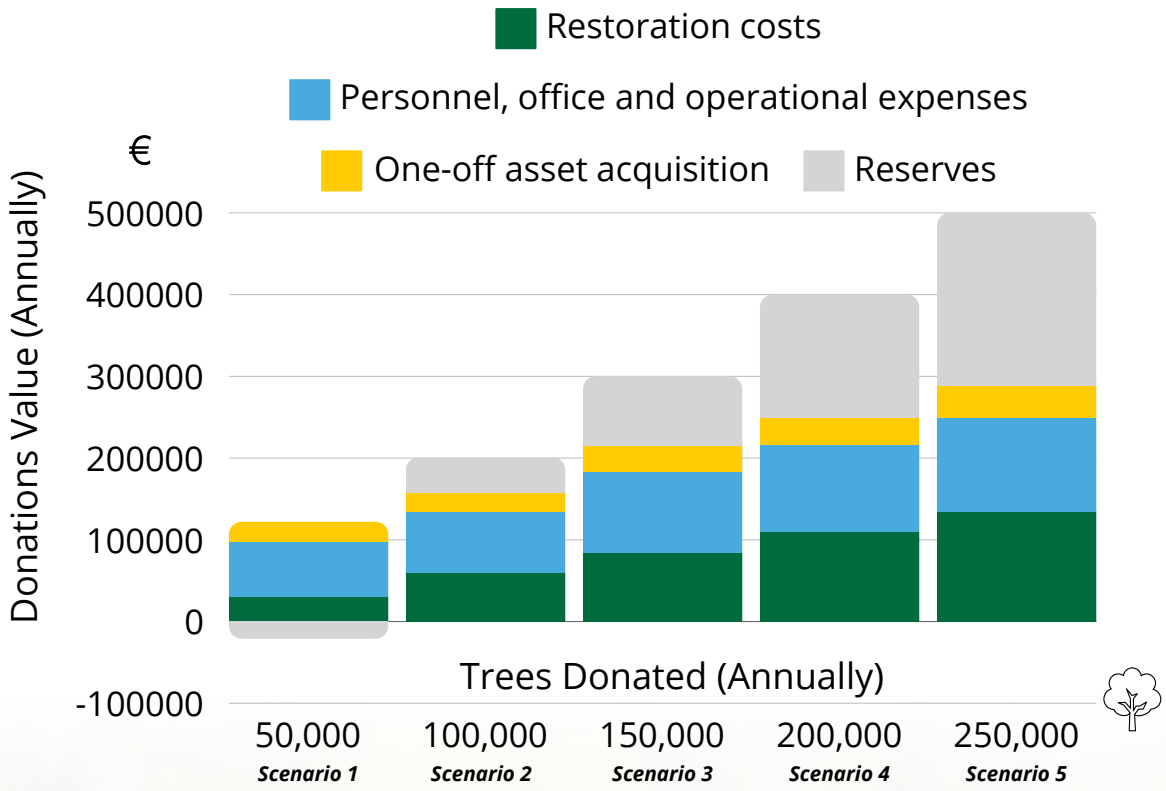
Scaling up the project will create more employment opportunities and possibilities for **long-term employment in the region.**

Main **Achievements of 2023**

In 2023, **together with our partners** (organisations, companies and individual donors), we have an incredible positive impact on the environment, local communities and also contributed to sustainable development in Ghana, with the spillover to the world. Let us show you some of our biggest achievements of 2023!

01 Financing Scenario 1 of our Sustainable Growth Plan

Budget Scenarios at 2 € per tree



Scenario 1 presents the bare minimum of Tree Donations that the project needs *every year* so that our work can have the desired impact and quality.

It allows the verge of security to do exactly as stated: to plant 50,000 trees.

Required Annual Donation = ***100,000 €***

Scenario 5 is an adequate response to the urgency of challenges our planet is facing. It means that *every year* we can restore ecosystems at an effective pace.

The reserves created allow our impact to sky-rocket by co-funding more trees and community developments.

Required Annual Donation = ***500,000 €***

02 Planting Site Improvements

Increasing Species Diversity

A successful restoration project cannot be a monoculture, nor anything near it. To restore quality forest as close to the image of their original composition, we strive to plant diverse native species that benefit each other and create a truly biodiverse ecosystem. So far, we've been able to plant 8 species in total, but we don't want to stop there.

With larger numbers, we can get more uniquely-taylored deals on **seeds** thanks to a **seed partnership with Forestry Research Institute of Ghana (FORIG)**. Instead of relying on what can be collected by hand, FORIG can provide us quality seeds of diverse species, being The National Tree Seed Centre.

The deal includes **expert advice** on which species to plant, where and in what quantities. That way, we restore the ecosystem as best as we can!

Agroforestry benefits

Species planted so far (8):

Cashew ***Mango***

Dawadawa

• • •

Mahagony
Neem
Rosewood
Senya
Shea

endangered!

Photo: Our visit to FORIG's seed bank

New species added (+10):

Onyina

Akyee

Baobab

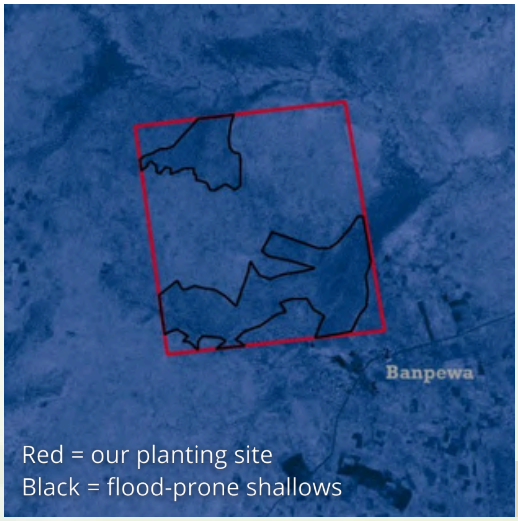
• • •

Papao
Acacia
Cassie
Osakanee
Faidherbia albida
Terminalia ivorensis
Triplochiton scleroxylon

great for swampy areas

annual

Fighting floods with water-friendly trees



Red = our planting site
Black = flood-prone shallows

A minor flood has hit the project in 2023, thankfully without any damage to the young trees. But the climate crisis will always pose the risk of flooding.

That is why we **identified the flood-prone areas** within our planting site. Going forward, the species mix in those areas will be altered to **prioritise species suited for water**.

This means that those trees will **better absorb water**, lowering flooding risk for all of the project while their growth benefits from the increased water supply.

annual

Fire mitigation: Fire squad & fire belts

Every restoration project has to tackle two main natural threats: water and fire.

We have learned this the hard way: In early 2023, we had a fire on the project. Its origin was not natural but human-made, which gives us optimism about the ecosystem's resilience to natural wildfires, but still, it pointed to an important challenge. Approximately 32,000 newly-planted saplings were damaged, of which roughly 12,000 **recovered**.
We have **replanted** all of the rest later at our expense.

More about the 2023 fire from Mohammed: **youtu.be/h_Hv6lmskME**

***Top**: damaged area after the 2023 fire*
***Right**: a sapling recovering from fire*

Addressing the challenge

1) Fire squad

With the newly-proposed Planting Site Team of 15 all-year-round workers (see more on **Page 09**), we can now train and convert part of the team to fire patrol during dry seasons. Keeping an eye on fires day and night, equipped with fire-fighting emergency equipment, is the best way to prevent potential small fires from growing big.

2) Fire belts

The Fire squad will create fire belts – protective stripes of non-flammable land around the project boundaries and around key planting locations. Done either by controlled burning or by clearing with the aid of a tractor, it is a good way to ensure that a fire from the outside cannot spread to our precious saplings.

Illustrative photo: Fire belt creation

annual

Funding a temporary Fire squad for the upcoming dry season (December to April)

not included in the Tree Scenarios (unless funded from reserves)

With all of the Tree Donation Scenarios only covering us going forward from the next planting season onwards, the **shortly-upcoming dry season** is currently not covered in terms of manned fire protection.

But this gives us the opportunity to already form our first Fire squad from the community members – it will only have to be funded either from the Tree Donation Scenario reserves, or by a separate donation.

03 Organizational Improvements

Illustratory photo: our Yucatán office

Setting Up an On-site Office

The planting site needs to **set up and equip with utilities** a space for all the **on-site employees** (planting and nursery teams and officers) where they could keep equipment, do management work and hold meetings and **trainings**. Furthermore, the space shall be the representative **entry-point** for all visitors to the project, including potential partners and the wider team-members.

Ernest, Restoration Expert (left)

Hiring an On-site Team of Full-time Officers

As we scale up and improve the quality of our work, our team needs to grow with the task. That is why, going forward, we propose a team of officers based around Bamboi or Banpewa to manage the work on our planting site.

This includes 3 main roles:

Ali, Project Officer candidate

Restoration Expert

- creates and adapts the restoration strategy, eg. species mix, planting and care methods, site maintenance
- oversees quality of work and designs improvements
- educated expert in ecology with restoration experience

Project Officer

- manages all daily operations on-site and implements the guidance of the restoration expert & director
- distributes work in both nursery and planting site
- educated and experienced in management or similar

Charles, Liaison Officer candidate

Liaison Officer

- right-hand of the project officer
- maintains all communication networks and relationships, eg. involved community groups, focal points, contracters
- is local to the area and has enthusiasm

annual

All-Year Planting Site and Nursery Teams

While in the beginning of the project, both planting site work and nursery work were **seasonal**, with scaling we need core teams of workers established that are committed to the project full-time and most importantly, all-year-round.

This is also crucial for the engaged community members who have voiced their need for a stable, **long-term employment** that is not seasonal. Together with **fair wages that will rise with performance**, this is a pre-requisite for economic empowerment and breaking the poverty cycle.

Planting Site Team

The Banpewa community will provide the core team of 15 employees to do all necessary work on the planting site. Depending on the season and planting needs, they will be trained for the following works and converted as necessary:

- tree-planting
- care for growing trees and watering
- site maintenance and clearing

- fire patrol and fire belt maintenance
- security

Tree Scenarios 1-2 = **15 workers**
Tree Scenarios 3-5 = **25 workers**

Note: Additional ad-hoc workers can be called from the community on a non-permanent daily basis as needed.

Nursery Team

From the Banpewa community and Bamboi, we form the team for the Nursery (located in Bamboi). Aiming for an all-women team, they will form the hub for women empowerment and provide an expertise-based care for our seeds and seedlings.

Edith Addo, with her passion for the project, is a true role-model and deserves to be promoted and to Nursery Team Leader with adequate wages and benefits, which will apply to all of the Nursery Team.

Tree Scenarios 1-2 = **4 workers**
Tree Scenarios 3-5 = **8 workers**

Note: Additional ad-hoc workers can be called from the community on a non-permanent daily basis as needed.

Scenario 1-2: € 25,000; Scenario 3-5: € 42,000

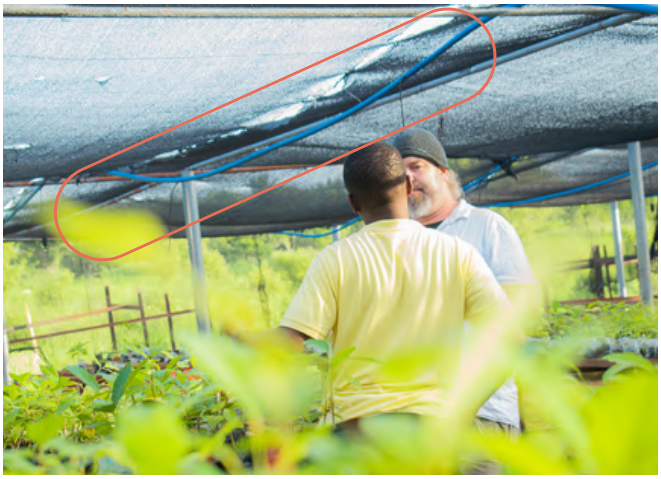
04 Other Impovements
Project and Community

Nursery upkeeping:
floor strengthening

Spreading floor chippings in water-logged areas will make the Nursery **more accesible and safe** in case of changing weather conditions.

Nursery upkeeping:
shade nets

Replacing torn shade nets in the nursery will improve the survival of seedlings before the next season and improve the overall shade management.



Picture above showcases some of the parts of torn nets, 2023

More **cost-conscious approach** to plant cultivation

Currently there are single-use plastic poly-pots being used. Replacing them increases their durability, which leads to cost-effectiveness and aligns with sustainable practices of minimizing waste.

Reusable Poly-pots for the Nursery

Using better, reusable poly-pots **improves the sustainability** of the nursery and the quality of nursery outputs.

Filling of the poly pots, 2023 before the planting season

Putting seeds into the poly bags in the nursery, 2023

Better **Nursery Water Management**

Currently, watering the seedlings is time and labor-intensive without a regulated and automated distribution of water.

Water Tank Tower in the Nursery

Water tank tower **optimizes irrigation practices** and alleviates the **burden of manual labor.**

Illustrative Photo of one types of the water tank tower suitable for the Nursery, 2023

One of the workers manually watering the seedling, 2022

Energy Poverty in the Region

The pictures below showcase how dark it gets. Pictures were taken with flash around 7 pm in August 2023 during one conducted community meeting

Lack of electricity is a significant and multifaceted challenge, with repercussions extending across daily life. Limited access to electricity limits educational opportunities, causes business constraints, and supports reliance on biomass.

Bringing Light to Banpewa

The Banpewa community is in darkness. For better living conditions, each household should be provided with **a solar lamp. At community vantage points, solar street lamps should be installed.**

Women's community meeting in Banpewa, August 2023

During the Project Visit in August 2023, we provided the Banpewa community with **12 portable solar lamps** distributed equally within the households. This was just a small step on our the way to solving energy poverty.

Water Scarcity in the Region

Our community struggles with inadequate access to clean and reliable water sources. Women walk and cover extensive distances to secure water for their families. This raises hygiene and sanitation challenges, leading to water-borne diseases and compromising the overall well-being of communities. The situation underscores the urgent need for sustainable water management practices and infrastructure development to alleviate the burdens faced by women and communities.

Ensuring equitable access to this fundamental resource is important for a healthier and more prosperous future.

One of Banpewa's water sources is polluted and shared with cattle; even to reach this one, they must walk kilometers. The closest natural water source is the Black Volta which is kilometers from the community.

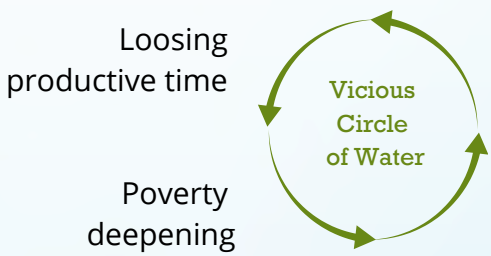
There is one hardly functioning water well that serves everyone; the water has low quality, is polluted, and cannot support all the households in Banpewa during the dry season. For some households, this water source is again very far.

Bringing Water to Banpewa

The Banpewa community currently has to spend long time to walk for dirty water. **A borehole with a solar pump** was recommended to free their time and **provide a clean, sustainable water source.**

Example of a Solar Pump Borehole

Breaking the Circle



The diagram describes the Vicious circle of insufficient water management and its socio-economic impacts

Expanding
Empowerment Strategies

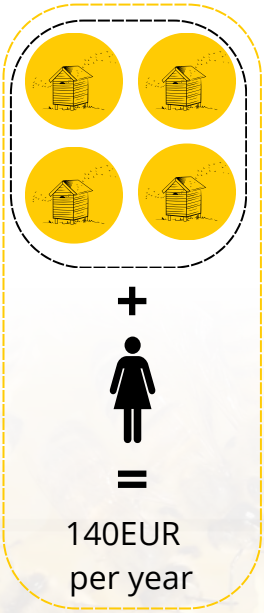
Incorporating bee-keeping into our project holds immense potential, particularly for empowering women and fostering sustainable economic development. Beekeeping provides an avenue for women to actively participate in a business venture that not only contributes to environmental restoration but also generates a reliable income stream.

Bee-keeping set-up and trainings for women

Bee-keeping can ecologically enhance the planting site and give empowerment and income to women as part of a proposed cooperative; the budget below is for a trial start with **20 women involved, 4 bee-hives each**.

ONE BEE HIVE

Honey Production:
450 GHC
(35EUR) per year



\+

=

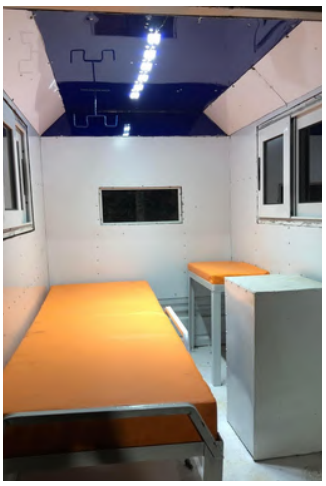
140EUR
per year

Beekeepers using protective gear harvest honey in Mafinga, Tanzania in 2022. Photo: © FAO/Luis Tato

The production and **sale of honey** and other bee-related products not only bolster individual financial autonomy but also contribute to the economic resilience of the entire community.

Lack of Transportation in Emergencies

In emergencies, swift access to medical care can be the difference between life and death. Unfortunately, the lack of proper transportation and infrastructure leaves many residents vulnerable, particularly in remote areas where our community lives as well.



The picture on the right shows the inside of the below showcased vehicle

Transportation for medical urgencies

A **motorbike ambulance** for the Banpewa community will address the lack of transportation for medical emergencies and ensure safe transport to medical facilities.

Picture showcases our Motorking Ambulance as the mean of transportation in emergencies

Partnership Overview

01

Plant-for-the-Planet Czech Republic & Plant-for-the-Planet Ghana

National entities foster a “patron” entity relationship with a fundraising focus focused on long-term financial support. They cooperate on co-developing the project. We're inspired and learning from the example of Plant-for-the-Planet Foundation in Germany & Yucatán Restoration in Mexico.

Šimon Michalčík, Founder and Executive Director of Plant-for-the-Planet Czech Republic, Tamara Cibuľková, Project Manager, and Mohammed Rabiu Dannakabu have already had a years-long close cooperation.

02

Plant-for-the-Planet Ghana & Plant-for-the-Planet Foundation

Plant-for-Ghana receives scientific advice and support from Germany's “mother” entity. This close cooperation underlines the international climate action.

03

Cooperation with the Czech Embassy in Accra

The Czech Embassy in Accra started the cooperation as a partner of the project in 2022 when communities Chibrinyua and Kyinga Krom received **10,000 trees** (cashew and mango) financed from the Czech Republic Development Cooperation as a Small small-scale project. The realization of the project happened in 2023.

This was just the beginning! Now, Plant-for-Ghana is communicating with the Embassy regularly and discussing ways of future cooperation focused on economic development, women's empowerment, and sustainable goals through forest ecosystem restoration.

Picture #1 shows the Embassy of the Czech Republic in Accra, Plant-for-the-Planet Czech Republic and Mohammed Rabiu Dannakabu, meeting with Economic and Trade Counselor, Beata Matusiková. Picture #2 shows Mohammed's participation at the Embassy's event with Deputy Ambassador Matěj Denk and Picture #3 showcases the visit of Beata to Chibrinyua Community

Future Outlook

In 2024 and the upcoming years, we want to continue our great work with our partners. We're happy to see the project and the positive impacts grow. Within our broader strategy, we will focus on those **four aspects in the future:**

Raising more **funds** to grow the project sustainably (focusing on further funding scenarios)

Being a **role mode**l in setting restoration top restoration standards in Ghana

Planting over **50,000 trees** in 2024 (*already funded*)

Deepening our local and international **environmental cooperation**

Main **Challenges faced**

01

Bushfires

Bushfires are a common problem during the dry season. We overcame them easily without any major losses. Having a fire plan ready for the next season is a top priority for us to further lower the potential negative impact of wildfires.

02

Floods

We have faced a **regular type of flood** at the planting site that did not cause any significant damage. With the worsening climate crisis, it proves that we need resillient ecosystems more than ever.

03

Regular Challenges

Our **day-to-day activities** are complex and require a flexible approach. With that we area ble to effectively address all the challenges, starting from employment, planning or situations in our tree nursery.

Donation Account

Plant-for-the-Planet Ghana: Stanbic Bank
Post Office Box 216 - Bolgatanga
Currency *(EUR)*:
Acc. number: 9040009037025 -
SWIFT/BIC: SBICGHAC
Currency *(USD)*:
Acc. number: 9040009037009
SWIFT/BIC: SBICGHAC

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