



2023 ANNUAL REPORT

FEBRUARY 2024

Atebubu and Wiase FLR in Numbers 2023

Natural Forest Restoration - APSD:

2,766,623
Number of trees planted

2,146
ha restored¹
(in total)

Agroforestry Programme - Community:

10
New communities engaged
(23 communities overall)

728
Farms newly engaged
(1,204 overall)

684
Newly engaged farmers
(1,117 overall)

862
ha of agroforestry
(1,692 ha overall)

204,374
Tree seedlings distributed to newly engaged farmers

Multi-stakeholder platform (MSP):²

4
Number of MSP meetings held

~60
People attending each meeting

28 in 2023
Increase in the average number of women participating in MSP meetings

88 people each day
Attending the three-day community engagement workshop to help co-design the carbon certification project

Community capacity building:

37
Sensitization sessions at community level

1,189
Farmers participated in these sessions –
828 men and 357 women

21
Lead farmers representing their communities attended a one-week advanced training in agroforestry

303
People attended 10 agroforestry training events

1,255
People joined 20 wildfire prevention and management training events

¹ Areas restored are areas that have been planted with seedlings and/or with seeds. They are at the start of the restoration journey.

² Multistakeholder platform (MSP) and community engagement



iNovaland Statement

The last 12 months have been challenging for all the project partners due to the heavy rain and flooding. Our continued progress in spite of this demonstrates the strength of the relationship between partners, particularly between the tree nurseries and farmers in coordinating collection and planting of the agroforestry trees. That strong relationship was also very evident at the carbon community engagement workshop in November, and the positivity and openness with which issues were discussed.

Andrew Heald,
iNovaland COO

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Community feedback



Monica Nyamekye
Cashew farmer from
Akyeremade

“The persistent fire education and announcements in our community by NGPTA is beginning to get through to people because myself and other farmers discuss it when we are going to our farms. I have the belief that other people will also begin to put out the message to reduce bushfires, which are one of the greatest challenges we face here.”



Gambo Bashiru
Farmer from Kwame
Danso and nursery
operator

“Partnering with the Atebubu and Wiase Forest Landscape Restoration Project as a nursery operator has been a transformative journey. Beyond being a source of employment for me and many women in the community, we are working together to create a lasting impact – improving biodiversity, fostering soil health, and empowering local communities through high-quality seedlings.”



Honourable Bio Peter
Farmer from Mframa

“Reflecting on the past year, it's evident that the Atebubu and Wiase forest landscape project is making a tangible difference in our community. Previously, the dry season would bring about extensive burning, causing damage to crops, biodiversity and livelihoods. However, with the implementation of the Atebubu and Wiase FLR project, we have experienced a noticeable reduction in fire incidents. Continuous community commitment to tree planting, coupled with comprehensive training on fire prevention, has been instrumental in shaping a more resilient and sustainable landscape.”



Theresah Kwabokye
Mango farmer from
Akyeremade

“I have observed the involvement and participation of my community opinion leaders like the chief and the assembly member and the lead farmer in your project's implementation and governance. This gives me trust and belief in the project as well as a sense of ownership and thus motivation to get involved. My mangoes are doing well and I am so happy.”

Project overview

Atebubu and Wiase Forest Landscape Restoration (FLR) project:

“A ‘Living Lab’ for Community and Ecological Resilience” is a ten-year community-led project located in the Bono East region of Central Ghana.

Living Labs are an initiative established by the **Circular Bioeconomy Alliance (CBA)**, created by His Majesty King Charles III under the Sustainable Markets Initiative. CBA aims to catalyse investments for creating resilient landscapes and sustainable markets powered by nature. The Atebubu and Wiase project was the world’s first CBA Living Lab, and is funded by **AstraZeneca**.

The project seeks to address issues of land degradation, declining soil fertility, low agriculture productivity, deforestation, nature loss, unemployment and climate change.

On **28 June 2023** an expansion of the project was announced. To build community and ecological resilience through forest landscape restoration, the initial targets set in 2021 were revised:

- **Natural forest restoration:**
4,500 hectares of restoration in degraded areas
- **Agroforestry programme:**
3,780 hectares of agroforestry and regenerative agriculture to reduce pressure on natural forests, improve land productivity and boost incomes for smallholder farmers

A total of 6 million trees planted by 2025:

- **Natural Forest: 5 million trees**
- **Agroforestry and Woodlots: 1 million trees**

This is made possible by working with project partners and the Multi-Stakeholder Platform (MSP).



Building a Sustainable Future Together

Progress and achievements in 2023

In 2023, a total of 2,970,997 million trees were planted, on about 2,253 hectares of degraded forest land and farmland located in the Atebubu-Amatin and Sene West districts.

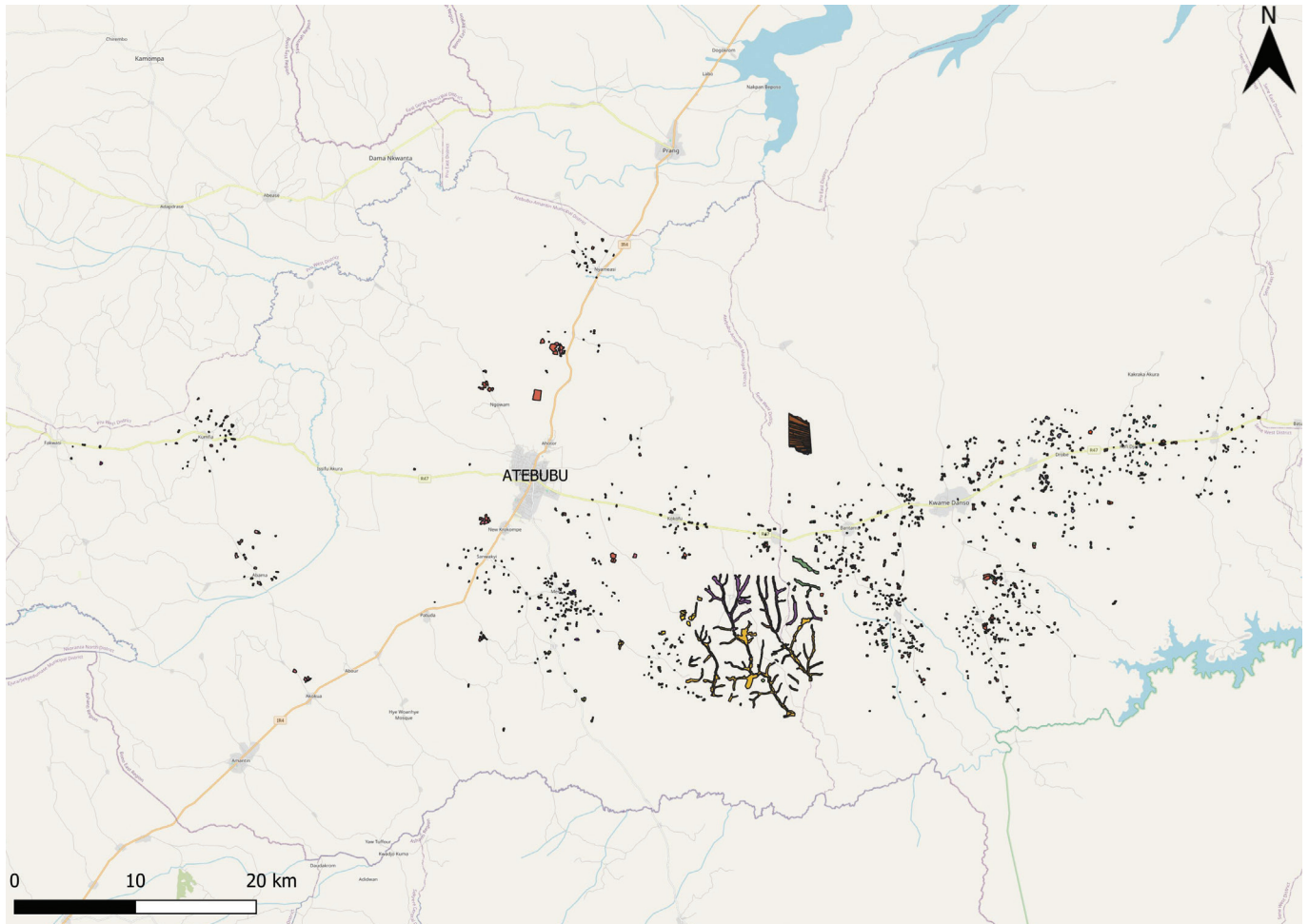


Figure 1. Areas planted in 2021, 2022 and 2023.

In the agroforestry programme, 204,374 trees were distributed and planted during 2023 (154,374 fruit trees and 50,000 timber trees). Initial survival rates were 88% for mango, 81% for cashew and 65% for timber trees (mix of native and exotic species).

Natural forest restoration within the African Plantations for Sustainable Development (APSD) concession reached 2,766,623 planted trees in 2023. Initial assessments at the end of November showed an average survival rate of 98%. Overall, 3,809,149 trees have been planted across 2,146 hectares of degraded natural forest.

During the year, four MSP meetings took place led by Nature and Development Foundation (NDF), and NGPTA's community liaison officers led 37 engagements at the community level. Overall, 236 people attended the MSP meetings and a variety of issues have been discussed (Table 3). Gender is one of the main topics being addressed and many efforts have been made to increase the participation of women in the project. Only 12% of attendees at MSP meetings are women, and this number needs to be increased. When meetings are held in communities, the participation of women increases to around 25%.

As part of the community engagement, several training events on agroforestry (before the planting season started) and fire management (post-planting and before the dry season kicked in) took place at the community level. In 2023, as part of the lead farmers programme, an advanced training in agroforestry took place at Crops Research Institute in Ghana where 21 farmers spent a week immersed in good practice to help them assist other farmers in the communities.

The fire management trainings are part of a wider strategy to reduce the impact of fire in the landscape and protect all planted trees. This has been developed from within the MSP and with the support of the project Advisory Board (Table 1).



Figure 2. Lead farmers training at Crops Research Institute in Kumasi.

Table 1. Members of the Advisory Board³ at the end of 2023

Name	Entity
Yitagesu Tekle	Circular Bioeconomy Alliance / European Forest Institute (CBA/EFI)
Mustapha Seidu (Chair)	Nature and Development Foundation
Nana Owusu Sarpong	Atebubu Traditional Authority
Bantama Honourable Anthony Owusu	Multistakeholder Platform Chair
Nana Amo Kwasi IV	Wiase Traditional Authority
Yakubu Mohammed	Forestry Commission of Ghana
Prof. Daniel Ofori	Forest Research Institute of Ghana
Nana Barimah Ntte	Dwan Traditional Authority
Samuel Azuug	Crops Research Institute

³ The main purpose of the Advisory Board is to provide additional support and input to the project. This support and input could be scientific, cultural, or technical. The Advisory Board has no decision-making power but can give clear recommendations to the Project Board.

Table 2. Project Board Members⁴

Name	Entity
Yitagesu Tekle	Circular Bioeconomy Alliance / European Forest Institute (CBA/EFI)
Mustapha Seidu	Nature and Development Foundation
Andrew Heald	iNovaland
Finn Jacobsen	APSD
John Atkinson	AstraZeneca

⁴ The main purpose of the Project Board is to a) make high level strategic decisions about the direction of the Project and b) monitor and evaluate progress of the project.

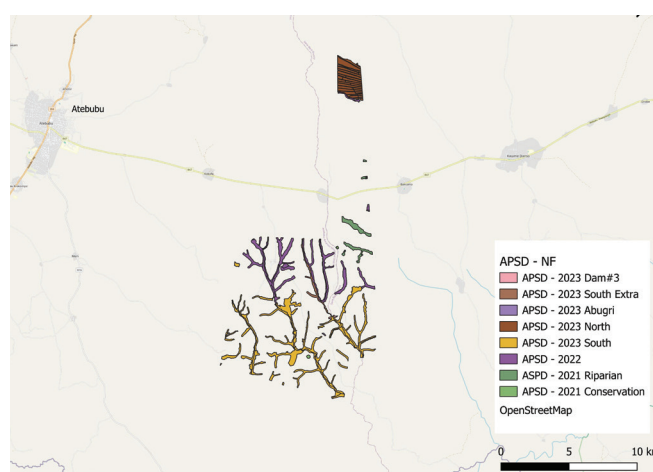


Figure 3. Total area planted in 2023 of natural forest restoration: 1,551ha within APSD's concession.

Table 3. Issues raised by participants at MSP Meetings⁵

Issue
Communication
Better gender representation
Farmer representatives
Land tenure
Low participation of migrant farmers
Balance between arable crops and tree crops
Bushfire management and control

⁵ Full MSP reports are available at the project's website.

eDNA sampling

BOX 1. eDNA sampling and biodiversity monitoring

eDNA stands for environmental DNA. It refers to genetic material that is extracted directly from environmental samples such as soil, water or air, rather than from an organism itself. This genetic material can include DNA from a variety of organisms, such as plants, animals, bacteria and fungi, that shed cells or other biological material into the environment. The Atebubu and Wiase FLR project is analysing eDNA in water samples to see how natural forest restoration is benefiting biodiversity in freshwater streams in the region. This is part of a wider monitoring framework being developed together with experts from the Kwame Nkrumah University of Science and Technology in Kumasi. Results show presence of mammals, vertebrates and insects. The image on page 9 shows a significant presence of fishes and amphibious in all streams, and to a lesser extent: birds, mammals and reptiles. Next sampling period, we'll be looking to how this evolve in terms of presence.



Figure 4. Moro Seidu from NGPTA field team collecting aquatic eDNA samples at the end of the rainy season in September 2023.

Indicators - tree targets

The project's target for 2023 (following the project expansion announcement in May 2023) was to have 1,762,482 trees planted and 1,359,915 surviving trees. By the end of the planting season 2,766,623 trees had been planted in natural forest restoration within the APSD concession, and 204,374 fruit and timber trees had been distributed and planted by local farmers under the agroforestry programme.

Initial survival rates in the agroforestry programme are 88% for mangos, 81% for cashews and 65% for timber trees. In natural forest restoration, initial monitoring shows a 98% survival rate.

Natural forest and fruit tree survival rates are within expected boundaries at this stage of the year, still early in the dry season. Timber trees are significantly lower than expected. Some of the issues identified in 2022 have been addressed, but weather has had a negative with some trees dying because of excess of water or being submerged, and others not being planted because farmlands were waterlogged.

Survival rates will be reassessed after the dry season (end of March 2024).



Figure 5. Mango seedling (and marker stick) planted in 2023 surviving in a flooded farm.

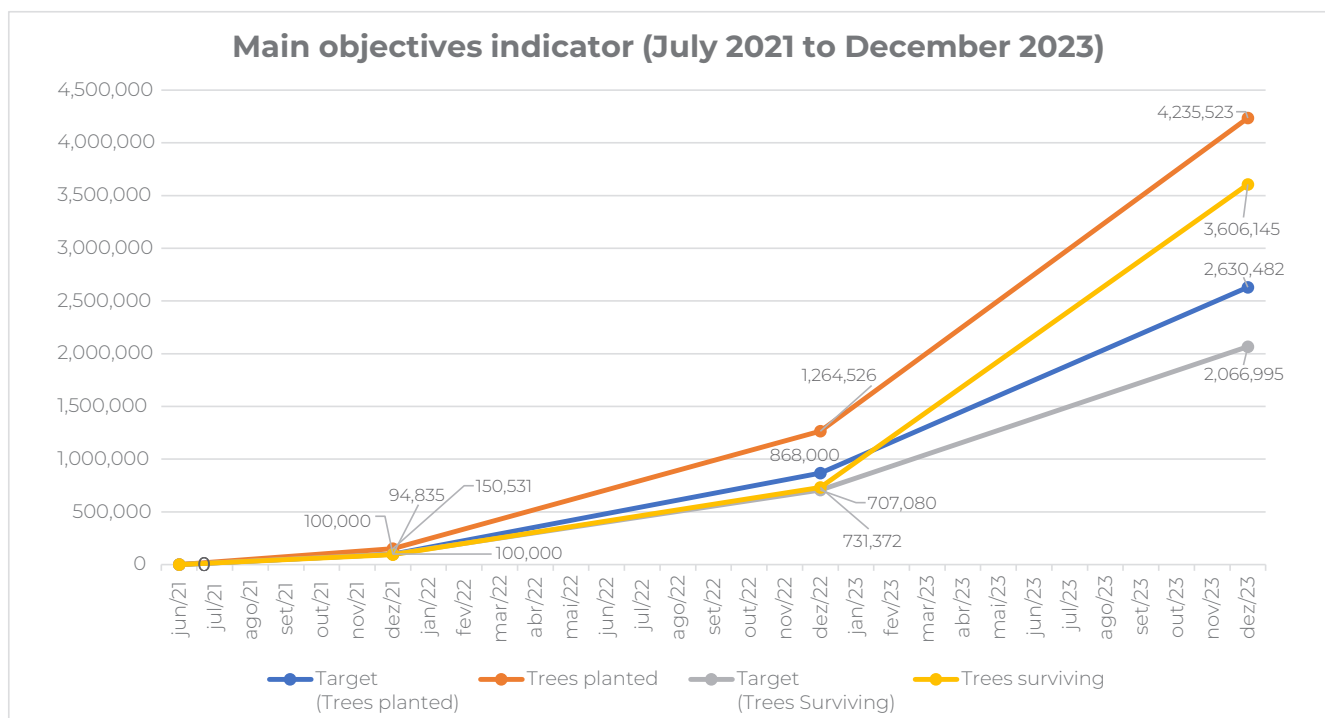


Figure 6. Comparison between targets and actual results of trees planted and trees surviving until December 2023.

Challenges and lessons

There is no project without challenges.

What is important is continuous reflective learning to do things better

Challenges:

1. Planting at the right time to improve results is crucial for the project's impact. We've learned at this stage that trees planted later in the planting season are not properly established when the dry season comes, and suffer huge stress that can damage them irreversibly. Farmers did not always manage to plant early because of other crops or due to the wet weather. The project will build on recommendations from the MSP to showcase the benefits of planting early and preparing the farm early for the fire season, cleaning other crop residues and using them in soil preparation and mulching trees, and setting fire breaks to keep fires off their farms. To achieve this, we will establish model farms showcasing best practices and the resulting improvements in tree establishment and yields.

2. Bushfire remains one of the communities' main concerns. Fires are becoming more frequent, reducing organic matter in the soil and destroying biodiversity and crops year after year. Following recommendations from the MSP and the Advisory Board, the project will invest even further in raising awareness on fire management, reducing the use of fire in land preparation by presenting sustainable alternatives, training farmers and other community members on fire management, and supporting the creation of fire brigades.

WILDFIRE HOTSPOT (2018 - 2023)

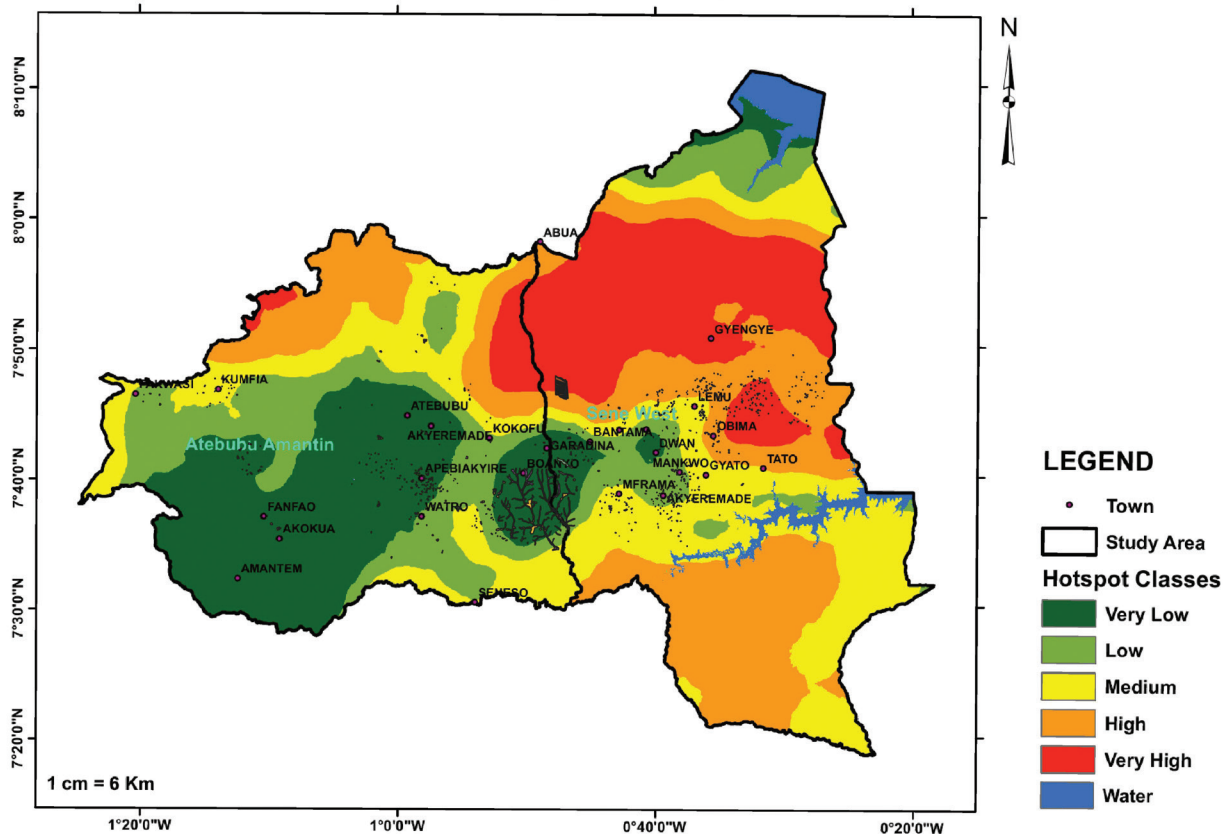


Figure 7. Wildfire hotspots in 2018-2023 in the project area.

Lessons:

1. Creating capacity at the community level has empowered the communities to perform better and to have a stronger voice in leading the project. The lead farmers network created in 2023 has helped to reduce the gap between communities and the field team working there. Lead farmers have been trained in advanced agroforestry practices so they can provide technical assistance to farmers. They have also been trained in mapping and, in the future, will be trained in monitoring. To promote knowledge exchange, they've created a WhatsApp group, where they share pictures, best practices and other information. The project will keep on investing in these farmers, providing more training and support. The strong connection they have created with the field team also helps them pass on challenges and concerns from the communities to the MSP. This shows that, given the tools necessary and the right support, the communities will be able to steer the project in the future, with great benefit for their livelihoods in harmony with nature.

2. Trust and transparency have been crucial in defining the project's future. The MSP plays a significant role here because it has created a place for everyone to have a voice. The recent community engagement workshop shed a light on this as farmers, chiefs and other community leaders came in with a spirit of discussion and active listening fundamental for a joint journey. Farmers had a floor to talk directly with chiefs on pressing issues of land rights and land tenure, and at the same time, chiefs were happy to answer. Trust, transparency and open dialogue remain crucial in supporting farmer-focused, equitable governance and benefit sharing; empowering women and young people; and partnering with communities, and local and national entities.



Communications

The project partners have developed a communications strategy, revised every year, for local and international purposes. This aims to:

- **Develop impactful communication materials to achieve the project objectives.**
- **Share and showcase success stories, good practices and lessons**
- **Increase the intended audiences' awareness of the project and project partners**
- **Encourage and facilitate the active participation of diverse stakeholders and policymakers and pose calls to action.**
- **Secure the commitment of stakeholders to the project objectives.**

Expansion announcement

On June 28, AstraZeneca publicly announced the project expansion under its AZ Forests global initiative.

Green Ghana Day

Green Ghana Day is an annual event promoted by the government of Ghana to raise awareness on the need for more tree planting and management. This year it was held on June 9. NGPTA's team organised a local planting event and agroforestry training to mark the day and highlight the project's contributions to its goals.



Figure 8. Green Ghana Day event.

Website

During 2023, the project's website was updated regularly. By making project documents and achievements available in a simple and clear format, this promotes transparency to the community and other stakeholders

The Atebubu and Wiase FLR page can be accessed at

<https://atebubu.inovaland.earth>

Social media

Many notes about the project were posted on **iNovaland's LinkedIn** account and **NGPTA's X** account.

NGPTA organised a **Twitter Space** on gender inclusion to bring other views and experiences to one of the key challenges of the project.

Radio Shows

NGPTA's team organised several radio shows to mark the beginning of the planting season; during the community engagement workshop on forests, carbon and co-benefits to explain the carbon certification process and what was being discussed to a wider regional audience; and to raise awareness about fire management. To keep up awareness of fire issues, an announcement was created to be run daily on both local radio stations during the entire dry season.

More radio shows are scheduled for 2024.

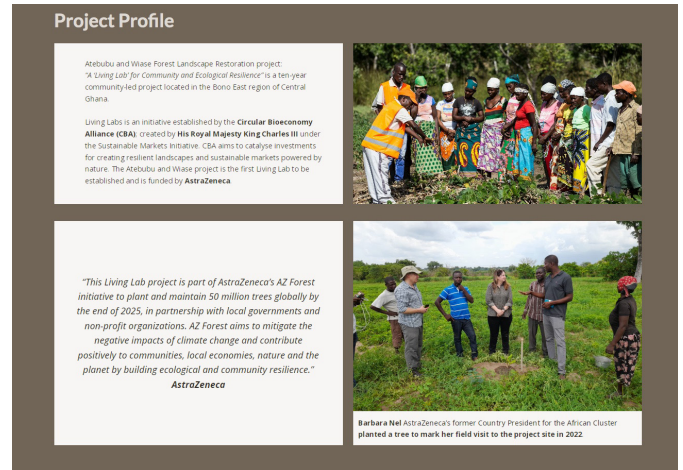


Figure 9. Website



Figure 10. Twitter Space poster



Figure 11. NGPTA team and local farmers at STAR FM talking about the workshop and carbon certification.

Reflection

This project was designed as a Living Lab, which means it uses iterative feedback from partners and communities throughout its life cycle to create sustainable impact.

As part of this, we have been researching, learning and testing solutions on how to integrate carbon finance to create long-term sustainability for the project. From the beginning of 2023, we began discussions with local communities about the potential of using carbon finance to provide long term support to the project. This was followed by a three-day community engagement workshop in Atebubu in November on “Forests, Carbon and Co-Benefits”. The workshop aimed to further explain to the community and partners how carbon finance might work, and to co-design the project and pave the way to reach benefit-sharing agreements. Over the three day, 88 people from the 23 project communities and local and regional entities shared and discussed thoughts, challenges and concerns.

The impressive results achieved during the event (available on the project website) could only be achieved because of the project’s investment in continuous community engagement and sensitization through the MSP. This has been crucial to building confidence and trust and creating a safe space for all to express their concerns, from farmers to community chiefs. It was clear to all present that the workshop was a crucial stepping stone for the project, serving as the culmination of 2.5 years' work and opening the door to the next 5-10 years.



Figure 12. Community Engagement Workshop: Forests, Carbon and Co-Benefits group photo – November 2023

Appendices - Targets and Main Activities for 2024

In 2023, targets have been revised based on the 1st year of implementation. The table below reflects the current project targets for the coming years.

Table 4. Tree and area targets for 2024 to 2025

	Total			Natural Forest			Agroforestry Programme		
	Area (ha)	Trees Planted	Trees Surviving	Area (ha)	Trees Planted	Trees Surviving	Area (ha)	Trees Planted	Trees Surviving
2024	2,289	1,690,982	1,306,290	1,302	1,419,167	1,064,375	987	271,815	241,915
2025	2,289	1,740,982	1,343,790	1,302	1,469,167	1,101,875	987	271,815	241,915
Total (2021-25)	8,280	6,062,445	4,717,076	4,500	5,025,000	3,793,750	3,280	1,037,445	923,326

This year is another opportunity for us and our partners to showcase the potential of FLR in building community and ecological resilience. We will continue supporting the 400+ farmers implementing agroforestry to better manage the trees already planted and expand to new farmers within the 13 main communities. Our targets include:

- Restore circa **1,302 hectares of degraded natural forest** within APSD's concession using native tree species.
- Improve food and timber production in circa **987 hectares of agricultural lands** through smallholder-led agroforestry.
- Continue providing technical, practical and **peer-to-peer capacity building for farmers** in climate change adaptation, agroforestry, land use and fire management.
- **Monitoring, evaluation and learning** to ensure better survival rates for planted trees and long-term community impact, and biodiversity protection and enhancement.

Key people implementing the project.

Entity	Name	Role in the project
NGPTA	Abraham Yelley	Project Coordinator
iNovaland	Andrew Heald	iNovaland COO
NGPTA	Emmanuel Kwarteng	Community Liaison Officer
NGPTA	Moro Seidu	Community Liaison Officer
NGPTA	Rose Kobusinge	Communications Officer
NGPTA	Rui Barreira	NGPTA Director Project Lead
NDF	Mustapha Seidu	MSP facilitator Advisory Board Chair
Community Leader	Bantama's Honourable Anthony Owusu	MSP Chair
APSD	Finn Jacobsen	Natural Forest Restoration
APSD	Celestina Nsor	Natural Forest Restoration

Key Dates	Activity
February to May	Farmers mapping, registering and agroforestry training
May to September	Natural forest planting
June to August	Agroforestry tree distribution and planting Community Liaison Officer
March, June, September and November	Multi-stakeholder Platform meetings (4)
October 2024 to March 2025	Wildfire management



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Concerns about the project can be raised via this independent helpline: [\(Click Here\)](#)



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