





Darwin Initiative Capability & Capacity: Annual Report

To be completed with reference to the "Project Reporting Information Note": (https://www.darwininitiative.org.uk/resources/information-notes/).

It is expected that this report will be a maximum of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2025

Submit to: BCF-Reports@niras.com including your project ref in the subject line

Darwin Initiative Project Information

Project reference	DARCC044
Project title	Improving capacity for plant biodiversity planning in Guinea
Country/ies	Guinea
Lead Organisation	Royal Botanic Gardens Kew
Project partner(s)	Herbier National de Guinée, MBG, Guinée Ecologie, CFZ, CRRA-Sérédou
Darwin Initiative grant value	
Start/end dates of project	1 Apr 2024-31 Mar 2026
Reporting period (e.g. Apr 2024 – Mar 2025) and number (e.g. Annual Report 1, 2, 3)	May 2024-Mar 2025 Annual Report 1
Project Leader name	Charlotte Couch
Project website/blog/social media	https://www.herbierguinee.org/darwin-cc.html
Report author(s) and date	Charlotte Couch, Martin Cheek

1. Project summary

Guinea has 275 globally red-listed threatened plant species (several in the pipeline), including 80 unique to Guinea, though not all published on the IUCN Red list yet. A lack of knowledge of these species at national level restricts effective conservation. National capability to collect field data, identify and analyse plant species data is minimal. Seed collection of threatened and socioeconomic species for propagation in village nurseries has started, but scaling up is limited by seed availability. Reinforcement of capacity and capability is needed to enable wider access to data, seed and plants for habitat restoration.

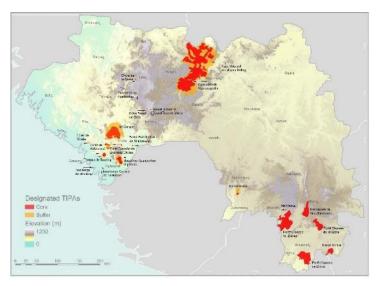


Figure 1: Map of Guinea and TIPAs

Guinea has the highest levels of plant species diversity in West Africa. In 2019, 22 Important Plant Areas (IPAs) were identified in Guinea through a Darwin funded partnership between RBG Kew, National Herbarium of Guinea. NGOs and government. Guinea has suffered massive losses of natural habitat, 96% of its original intact forest was lost by 1992 (Sayer et al.) and further losses of 25 % of the main surviving forest area between 2003-2018 (Fitzgerald et al, 2021). species 273 plant had considered as globally threatened (Couch et al, 2019), many are

nationally endemic. All are threatened by habitat clearance for agriculture, logging, urban expansion, and mining (Couch et al, 2022).

Approximately 63% of Guinea's population is rural, increasing by 2.1% annually (World Bank, 2021) and people depend on the forest and its products for medicine, food, construction materials etc. 66.2% of the population is multidimensionally poor while an additional 16.4 percent is classified as vulnerable to multidimensional poverty (UNDP, 2023). An increasing population puts pressure on natural resources. Many Non-Timber Forest Products (NTFPs) also support local urban markets and the demand is ever growing (Haba et al, 2021). The 6th National Report for the CBD (2018) highlights, among other factors, a low involvement of the local communities in their protection and insufficient knowledge of the biodiversity due to inadequate scientific research programmes as obstacles and requirements to delivering the Aichi targets. This is echoed by our recent work with communities who made it clear that they want to be involved in the protection of the environment and forest resources, but don't have the knowledge to do so.

The government of Guinea is committed through their National Plan for Economic and Social Development to the sustainable management of ecosystems. Reforestation is a key activity of the government every year, historically only a selected group of species was used, mostly invasive exotics like *Gmelina arborea*. This is a major issue for reforestation in protected areas. Recent collaborative projects creating village nurseries to raise tree seedlings of threatened and useful species have been moderately successful in their debut. Ten community nurseries in buffer zones of IPAs are reforesting and creating community forests for long-term community benefits. One of the limiting factors to scaling up activities is a lack of knowledge about where populations of threatened and useful plants are located. The national conservation action plan for threatened trees (2023) uses global level assessments as there is not enough data to assess at country level. It identifies the lack of ability of local researchers, forestry agents, conservation practitioners to identify these species as often they are rare and little documented; also raised by participants during courses run in previous projects. Botany is no longer taught in universities, creating a skills gap in plant identification and taxonomy.

Access to seed for propagation and replanting programmes is a limiting factor partly due to the very small number of capable botanists who are monitoring and collecting propagation material. Overcollection of both seed and wildlings from small subpopulations could lead to restricted genetic diversity and reduced natural regeneration. Training local researchers, foresters and communities to recognise, record data and collect seed sustainably will improve access and bolster populations of threatened and useful trees, providing income for future generations.

2. Project stakeholders/ partners

Partners in this project are Royal Botanic Gardens Kew (RBGK), Herbier National de Guinee (HNG), Missouri Botanical Gardens (MBG), Guinee Ecologie (GE), Ministry of Environment and Sustainable Development (MEDD) and Centre Regionale de Recherche Agricole, Sérédou (CRRAS).

RBGK has been collaborating with our in-country partners HNG and GE for over 10 years, during this time, and this project, we have continued to strengthen this partnership and opened it up to collaboration with other parties. Since the designation of TIPAs (Tropical Important Plant Areas) in 2019, we have collaborated with different departments of MEDD, providing training and on the ground support for projects with communities. This project has particularly enabled training of the technical ground staff in plant identification and survey techniques and enabled them to network with other NGOs and pass on knowledge to the communities they work with.

We have formally collaborated with MBG on this project. Charlote Couch and Ehoarn Bidault had worked together on IUCN Red List assessments in the past, but this project has enabled the institutions to have a formal working relationship taking advantage of our different strengths to develop the course materials and teach the Tropical Plant Families Identification course. MBG and RBGK translated materials into French from the original RBGK lectures and then adapted for a Guinean audience, adding in more relevant examples where possible. The course also enabled us to showcase the importance of the herbaria at HNG and Sérédou for teaching students. We also had a staff member from Sérédou herbarium teaching on the course which gave a boost to the course participants too. This collaboration on developing teaching materials and methods has also led to potential collaborations in other aspects of RBGK/MBG work.

It has been useful for HNG to show their international collaborations and strengthen their position within their ministry ahead of a new institution structure being put in place. The courses also gave us a chance to see who else is working on plant conservation in Guinea and support their staff training.

The UK Embassy in Guinea supported the Tropical Plant Id course by visiting with a student for Women in STEM day and following some of the lectures and returning to present certificates and prizes to the course participants. He also held a dinner with the US Ambassador to Guinea, and the Minister of Higher Education, RBGK, HNG and MBG personnel to discuss the importance of plant taxonomy, the National Herbarium and biodiversity studies.

We have been in talks with ENATEF (the national forestry school) to host training sessions, particularly on vegetation survey techniques. This course should take place in May/June 2025.

The training on seed collection and establishing seed collection networks has enabled better communication and collaboration between the local forestry officers and communities. Many of the forest officers followed the Tropical Plant Id course and so were able to practice their skills and pass this onto the community members. We have fostered an environment of learning together to reduce the conflict between forestry and communities and nurture trust within the group including with the project partners, particularly with the WhatsApp group, setting these up and posting material. This group enables the communities to get direct feedback on queries, identifications or just show us what they have been working on, which is great.

A colleague from the University of Sonfonia led on teaching the basic economics and business planning training with the communities. Dr Mamadi Camara has worked with us in the past to do poverty baseline studies, so it was good to be able to engage with him on this part of the project. He is a good teacher and supported the community participants well, giving more support to people who were struggling to understand the concepts. The nine communities invited to the training, were highly motivated and this has served to deepen the relationship and trust between the project partners and the communities. Not all members of the community groups could be invited to training, members with the most experience were nominated to participate. Similarly, the other training on seed collection and networks involved members who had some understanding of French to facilitate the training, though we translated into local languages where needed. These members were then charged with going back and disseminating their training to the rest of the group. We will follow up on this in future visits.

3. Project progress

3.1 Progress in carrying out project Activities

1.1 Develop criteria to identify participants from among partner and stakeholder organisations: Discussions were held among the partners to decide on the criteria and an application form designed for participants to fill in online. Although priority would go to training participants from partner institutions, we did not want to limit access to the course. Anyone wishing to do the course, even if they were from a partner organisation, had to apply through the online form. Priority would also be given to female applicants who put in a good application. The form was launched through the HNG website and adverts on X and LinkedIn. We asked all our partners to put the advert on their social networks as well to widen the exposure (see advert in Annex 4_1).

Two questions were added to the form to distinguish between candidates: 1) What is your motivation for taking this course? and 2) How do you plan to use the skills you learn in the course? We wanted to see that the candidates had thought about how these skills would be important to them in the future. The idea is to train the next generation of botanists, therefore candidates that had weak responses to using these questions would be marked down (Annex 4_2).

1.2 Design pre and post course assessments:

Plant Identification course: Before the start of the course, participants were asked to do a self-assessment about their knowledge on plant identification, by giving themselves a score out of 10. This was then revisited at the end of the course in the feedback forms. Additionally, there is an individual exam at the end of the course to identify 15-20 specimens to family level. The results would then be discussed so that everyone understands why, if they got something wrong.

Vegetation survey techniques course: A pre-course self-assessment questionnaire had been previously developed. A discussion with participants about their level of knowledge was held before the teaching started. Post course assessment was based on their group analysis based on the practical. There was then an explanation of the scores and discussion with their peers on what was good or how they could have done better.

Red Listing course: IUCN has a standard Training need assessment form which will be circulated to participants before the course, this will be in Y2. There will then be the standard IUCN Red List Assessment course at the end.

- 1.3 Engage MSc students, identify and agree study species and supervisors. We have one MSc student, Youssouf Conté, who has started doing some experiments on seed germination at the HNG nursery in Conakry. A second student, Faya Julien Simbiano, has had his project accepted by their course director at Universite Nzérékoré. He has started to record some data already on the species that he will be studying as he works on our project already.
- 1.4 Blog post written for Kew and HNG websites with contributions from trainees: A Blog post was written by three trainees who attended the Seed Conservation Training in Ghana for the HNG website https://www.herbierguinee.org/blog/renforcement-de-capacite-sur-la-conservation-des-semences-au-ghana.
 We also wrote posts on LinkedIn about the Plant Identification course. Unfortunately, it is quite a slow process to get things published on the Kew website, but we are in the process of doing this. We did write a piece for the Darwin Initiative newsletter on this training course
- 2.1 Organise workshops with local community groups to revalidate safeguarding framework: Our partner Guinee Ecologie led on this activity with the HNG TIPA project assistant in Guinee Forestiere. They held discussions with all the communities we are working with. This document helps to reinforce our commitment to the communities and foster trust between all the partners. Five communities in Guinee Forestiere revalidated the safeguarding framework in October 2024 (see signed version in Annex 4_4).

2.2 Develop easy to use data recording tool with KoboToolbox and field test.

Currently we have set up a WhatsApp group with the communities (see 2.4) for them to increase communication both with each other and the project staff. This was quite an effort and there is less technical ability with smartphones than initially thought.

Therefore, we have delayed developing a data recording tool for use with the community.

Therefore, we have delayed developing a data recording tool for use with the community groups. We have trialled a version to record data on growth rates and mortality of seedlings using Survey 123. This was trialled with field researchers in conjunction with community members, with the researchers filling in the form. We may have to rethink the presentation of data to the community groups for them to use the app themselves, due to the higher than expected levels of illiteracy.

2.3 Organise training workshops with communities in Guinee Maritime and Guinee Forestiere on plant identification and seed collection.

Two workshops on seed collection have been held in Guinee Forestiere with groups from Diéckè, Mt Bero (together) and Pic de Fon. These were held over 2 days, Day 1 was mostly theory covering the different types of seed and how to recognise the species and then setting up the WhatsApp group, Day 2 was a practical visit to the forest to find and identify some of the species and train them in how to take pictures and upload to the WhatsApp group (see 2.4). Informal assessment of the knowledge of the community participants was gained through question-and-answer sessions during the theory sessions e.g. if they could suggest plants they know which had orthodox or recalcitrant seeds. During the practical day, we then assessed how much the participants had retained. In some cases the practical was a few days later, so it was good to see that many participants had really taken on board the information and could suggest the seed type based on the characteristics (see figure 2 and Annex 4 5).



Figure 2: seed collection practical at Diecke

A nursery skills workshop was organised in Guinee Maritime with communities in Feb 2025 (funded by Fondation Franklinia) where we introduced the seed collection training. More advanced training is planned in Y2. We covered the basics of the different types of seed and some of the threatened tree species, but a more specific session is needed with a dedicated practical day.

2.4 Set up seed collection networks supported by trainers through WhatsApp groups.

Following the training in seed collection, we taught the participants how to use WhatsApp. Each group was given a smartphone (refurbished Samsung A14 or A15) specifically to use for work. We taught them how to take photographs using the cameras on the smartphones provided, focusing on taking clear pictures and which parts of the plant to take photos of,

and how to upload these to the WhatsApp group. We have created a WhatsApp group for the community groups in Guinee Forestiere with the forest officers and project partners to monitor activities and so that they can ask questions about specific plants found. Creation of a network in Guinee Maritime will follow seed collection training in Q1 Year 2.

2.5 Organise 2 training workshops in business planning for 4 communities in Guinee Forestiere

A 3-day basic economics training workshop was held with representatives from the 9 communities we work with in Guinee Forestiere in February 2025. This workshop gave the participants a basic grounding in the principles of smallholder financial management, budgeting, and effectively managing smallholder finances, skills in planning farm investments and developing a smallholder business plan.

This included a larger number of community groups than the original 4 (9 communities) planned (see Fig 3). We felt that all the community groups needed this training and it would not be helpful to be exclude those others. In addition, we plan that at least 6 community groups will be selling plants this year and this would be boosted by setting up a social enterprise. Therefore, it made sense provide basic training to all communities (see report in Annex 4 6).



Figure 3: Basic economics training with communities

3.1 Preparation and translation of plant identification course materials

Following a discussion in early May between Kew and MBG partners about which plant families would be included in the course, course materials were acquired from RBG Kew Tropical ID course organisers. Translation of materials started in June, and took longer than anticipated. Materials were translated and updated for a Guinean context where possible.

3.2 Identification of practical materials required for all courses

One of the main practical materials requirements for the Tropical Plant ID course is herbarium specimens for teaching. This was why the decision was taken to teach it at UGAN in Conakry and Sérédou in Guinee Forestiere, so that we could have access to such specimens. There is also some natural or garden vegetation close by that could be accessed for live specimens e.g. of grasses, sedges and daisies.

3.2 Creation of local language posters and materials for seed collection and identification of threatened plants.

A brochure for seed collection and identification of threatened plants has been produced and is available on the HNG website. This is currently in French, though has been translated at in-person workshops into local languages. We have large billboards in several villages (erected through other projects) with pictures of threatened trees and messages in

local languages about protecting the forest and will be adding two more in the next couple of months through a co-funded project.

A manual was also developed for the Tropical Plant Families ID course with key information on each family and some basic plant glossary terms and images to support the participants. There is also space for them to make notes in the booklet. Following feedback from the first courses, we will update the booklet before the second-year courses and provide an electronic version to the previous course participants. See exert in Annex 4)

3.2 Progress towards project Outputs

1.1 80 people trained in vegetation survey techniques by March 2026.

45 people (40 male/ 5 female) have been trained in vegetation survey techniques through courses funded and co-funded by this project. This is an increase on the 35 people previously trained, though not by 45 as 11 people had already undertaken this course two years before. Our partners, Centre Forestiere Nzérékoré wanted these personnel to deepen their knowledge and skills in this area. The remaining people 34 trained were a mix of partner staff/ interns, forestry department officers, National Parks officers and MSc students. Reports of the courses can be found in Annex 4_7.



Figure 4: Field practical Vegetation survey techniques course June 2024

A further 2 courses are planned for 2025 with forestry and National Parks staff in Moyenne Guinee at Mamou and Haute Guinee at Faranah.

1.2 40 people trained in plant identification skills by March 2026.

The baseline for this was 6 people trained, these were previous trainees. Two 6-day courses on Tropical Plant Family Identification were delivered in October 2024, one in Conakry (7-12 Oct) and one in Sérédou (21-26 Oct). A total of 41 people were trained, we had 130 applicants for the course. We had a total of 13/41 female candidates, Conakry was more equal (9/21) than Sérédou. Participants came from a range of partner institutes, NGOs, universities and private sector. Although we prioritized training for partner institutes, we wanted to have a range of participants so that they could also network. Many of these people will continue to use this in their current careers and build on these skills in the field. Many people trained on the Sérédou course were forestry officers and we have been reinforcing these skills during fieldwork sessions on other projects. The participants were highly motivated and worked very hard over the 6-day courses, in groups and individually. The final exam was individual and not all achieved the pass mark set, however, the trainers went over all the answers for clarification. The participants created a WhatsApp group at the Conakry course (which includes the trainers), which we extended to the Sérédou course. Participants can post photos and pose

questions about the family or ask for help to identify a species, the group is still active. There were some very promising students in both groups, giving us confidence that the number of competent botanists will continue to rise in the coming years. Two more courses are planned for Oct 2025 (see Annex 4_8).

1.2 By July 2025, 25 people trained in IUCN Red List assessments.

This target will not be met until later in 2025. However, due to AETFAT in August 2025, this course will be delayed due to the funding and personnel limitations. It is planned to take place in October/November to coincide with a planned visit to deliver the tropical plant id course.

1.3 By March 2026, MSc theses on seed propagation of threatened plants available.

There have been no projects to date that have focussed on the propagation of native species, particularly threatened species. We have two MSc projects that are being co-supervised by Xander van der Burgt at RBG Kew and the project outlines have been submitted and approved (see Annex 4_9). The start of one of the MSc courses (Universite de Nzérékoré) was delayed, this means that it is unlikely that both students will submit their projects and pass their viva before the end of the project.



Figure 5: Kew trainer with students in Conakry course

2.1 Six (mixed gender) community groups trained by project-trained participants in plant identification, data collection and seed collection by May 2025.

To date, no specific training in plant identification and seed collection had taken place with communities. In October/November 2024, nine community groups were given training in seed collection and identification of specific target plant species. For six community groups this followed the tropical identification course in which many of the ecoguards they work with were trained. This enabled follow up training with them and also the opportunity for them to explain to the participants the differences between certain species. A WhatsApp group was set up (see 2.2) and there have been continuous postings. See Annex 4 for report.

In February 2025, we held three combined nursery skills, environmental awareness and seed collection training workshop with communities and schools in Guinee Maritime in collaboration with our Fondation Franklinia project partners. This involved the new project assistant who participated in the Tropical Id course, co-delivering training including on identification of threatened tree species. This was an introductory session, a second seed collection focussed course is planned later in 2025.

2.2 Two community networks, one in Guinee Maritime and one in Guinee Forestiere, set up for seed monitoring and collections with first seed collections made by December 2025.

No seed collection networks previously existed in-country. One has been established in Guinee Forestiere following training in 2.1. Evidence of seed collection and monitoring has been seen on the WhatsApp platform of species e.g. *Tieghemella heckelii and Omphalocarpum ahia*. In addition, the field assistant in Guinee Forestiere and focal points from CFZ and CRRAS have verified these collections and seen them planted in the village nurseries. See Fig 2 & 6 and report in Annex 4.



Figure 6: using the seed collection manual for comparison in the field

2.3 Four community groups develop business models for establishing tree-based businesses.

No previous training in this area has been done with the communities we work with at Diecke, Mt Bero and Southern Simandou mountains TIPAs. A 3-day training course in basic farm economics and business planning was held in Feb 2025 with representatives from 9 communities (see fig 3 and report in Annex 4). Follow up training in 2025/6 will ensure that these skills are embedded and at least four communities have a business plan for their nurseries.

3.1 Course materials developed and translated into French prior to first training course in June 2024

No French version of this course existed. Training materials were translated from English to French and new lectures developed. The course was delayed until October as translation took longer than expected and between June to Sept the rainy season prevents easy travel around the country. Additionally, a course manual was produced with key characters for each family for participants to take away (Annex 4_10).

3.2 Translation of key materials into local language posters for communities by Jan 2025.

Due to the variation of local languages in Guinee Forestiere and the high illiteracy rates, we have not translated the seed collection booklets from French to local languages. However, we are exploring ways to make this more pictorial and demonstrable so that it will be more effective. We have printed an additional 2 large billboard posters in local languages about the protection of the forest and threatened trees.

Progress towards the project Outcome

Fundamental capability established for Guinean researchers and local authorities to identify, survey, protect and propagate threatened plant species, capacity of local communities raised to enhance their livelihoods through plant-based solutions.

Indicator 0.1: baseline: 6 previously trained. We have made significant progress towards the outcome already. 41 people were trained in plant identification in 2024. Though we cannot tell if people will continue to self-learn, we do have a WhatsApp group which the participants can post photos to and test each other or ask for help with an identification. One participant from the Conakry course has now become a project assistant for our Franklinia Foundation funded project and is committed to improving. Additionally, the forestry officers who participated in the

Guinee Forestiere course have taken part in fieldwork with Kew and local botanists and are gradually improving their understanding. The pass rate on the initial course exams was not as high as hoped, but we already made some modifications during the second course and will take on board feedback to improve for the next courses in October 2025.

Similarly with the vegetation survey courses, we have trained 34 people further to the <u>baseline of 35</u>. The course we ran in Nzérékoré in June 2024 had some forestry officers who had previously done the first course taught in 2022. Not having specific opportunities to practice the techniques is a problem, therefore we need to think about setting up some long-term projects for them to collect and analyse data.

Indicator 0.2: baseline: 4 people. We currently have one very active Guinean Red Lister (Topka Seny Dore) who has spent time at Kew to develop her abilities and a second PhD student (Denise Molmou) who has completed a red list assessment as part of her PhD, we expect Topka Seny to assist with training in the next year of the project.

<u>Indicator 0.3: baseline 0 networks.</u> We have one network in place managed via a WhatsApp group. Seed is being collected by the community groups, though still in collaboration with the project assistants and focal points at the moment. However, it is helping to target seed for collection at the right time. We are launching a questionnaire to see what the groups think about the efficacy of the WhatsApp group.

The project is currently on track to attain the project outcome.

3.3 Monitoring of assumptions

Assumption 1: Guinea continues to be politically stable with reduction of poverty linked with sustainable exploitation of natural resources no longer a government priority.

Comment: Assumption holds true at present. However, there have been a couple of incidents which have caused upset within the country and the government has been cracking down on the independent press and opposition parties. There will potentially be elections at the end of 2025, so this could change.

Assumption 2: The current (10-year) strong collaborative partnership between UK-based and in-country scientific partners continues.

Comment: This remains true and continues to prosper.

Assumption 3: The Guinea government Ministry of the Environment maintains its stated commitment to training protected areas staff.

Comment: This assumption holds true. It is likely to remain true for the remainder of the project since there are other valuable projects related to the Ministry of Environment that require their staff to be trained.

Assumption 4: There is no pandemic or outbreak of other diseases which could prevent project going ahead as scheduled.

Comment: True so far. No outbreaks of diseases to prevent travel to Guinea and therefore impact the project.

Assumption 5: Communities involved in the project remain engaged and committed to improving their livelihoods through tree-based activities.

Comment: Continues to hold true. The workshops held with the communities show that they remain committed to the village nurseries and other activities

3.4 Achievement of positive impact on biodiversity and multidimensional poverty reduction

We have increased the number of people trained in plant family identification by 41 people and increased the number of people trained in vegetation survey techniques by 35 people (Figs 4 & 5, plus Annex 4). This will enable better identification and monitoring of threatened plant species in Guinea in addition to being able to competently survey an area to find out the species present. Following training in plant identification and vegetation survey techniques we

expect to see a higher number of specimens collected, properly identified, and deposited at both HNG and SERG herbaria. It will also lead to improved taxonomic capacity and biodiversity research in the long-term. The number of projects in the private and NGO sectors requiring trained botanists is rising due to the advance of mining and restoration projects. Our training will positively contribute to the conservation of plant diversity in Guinea.

The National Herbarium of Guinea has benefitted from three staff members being trained in seed banking in Ghana as a result of a separate project funded through the Millennium Seed Bank, one of whom is doing his MSc project on germination of threatened tree species. This will boost capacity in this area and improve seed banking skills nationally (https://www.herbierguinee.org/blog/renforcement-de-capacite-sur-la-conservation-des-semences-au-ghana).

Through working with communities and forestry officers/ecoguards we are building a network of people able to monitor and collect data on seed of threatened and socioeconomic tree species. The first network has been started, it is still early days, but it has been useful to collect data. Since many of the community group members are illiterate, it is challenging to ask them to fill in data sheets, but uploading photographs is working well (Fig 2 & 6). This will feed into the ability for the communities to eventually run tree nurseries independently of the project and pass on these skills to others. Every year the government of Guinea launches a reforestation campaign and therefore the plants grown by the nurseries can be sold to supply these efforts with indigenous species. Supporting this with economics training (Fig 3) will ensure sustainability and contribute income to local households and contribute to poverty alleviation in the long term (Annex. 4).

Much of this research and data can feed into national policy and the National Conservation Action Plan for threatened trees of Guinea. There will be a workshop in 2025 to map actors and plan implementation for the NCAP under funding obtained from Fondation Franklinia (https://www.herbierguinee.org/conservation-des-arbres-menacees-phase-2.html).

4. Project support to the Conventions, Treaties or Agreements

The project supports the 2016-2020 National Plan for Economic and Social Development (PNDES) Pillar 4: 6.1: Sustainable management of ecosystems which aligns to the UN Sustainable Development Goals demonstrating that the Guinean government is committed to conserving terrestrial ecosystems. MEDD are responsible for ensuring that the government meet their international commitments with the CBD. The new PNDES has not yet been published, but we understand that biodiversity and sustainable use of natural capital will remain a pillar. The project is contributing to the conservation of terrestrial ecosystems not only by working with communities, but also training forestry and National Parks staff in plant identification and vegetation survey techniques to enable them to manage threatened plants. The project with contribute to **SDG 1**: Ensuring access to useful plant species is expected provide extra income to reduce poverty in communities in or near TIPAs, SDG 5: Gender equality by promoting women and equality within the project structure and access to natural resources, SDG 15: by protecting and promoting sustainable use of terrestrial ecosystems, contribute to sustainable management of forests, and reduce biodiversity loss in or near IPAs. The project will also contribute to SDG13 Cultivation of native species, native tree planting will increase resilience of communities to climate change.

The project supports the Global Biodiversity Framework and 30 by 30 goals. Target 3, 9, 20 & 21. through net gain in the size of IPAs through reforestation, effective conservation, sustainable management of wild terrestrial species and training staff.

5. Gender Equality and Social Inclusion (GESI)

GESI Scale	Description	Put X where you
		think your project is
		on the scale

Not yet sensitive	The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach	
Sensitive	The GESI context has been considered and project activities take this into account in their design and implementation. The project addresses basic needs and vulnerabilities of women and marginalised groups and the project will not contribute to or create further inequalities.	х
Empowering	The project has all the characteristics of a 'sensitive' approach whilst also increasing equal access to assets, resources and capabilities for women and marginalised groups	
Transformative	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	

We are doing our best to include people from all backgrounds and genders in training workshops. However, we are not always able to obtain equality in gender ratios. It is hard in Guinea to get equality of genders in training groups e.g. for courses such as vegetation survey techniques, where many of the participants are from the forestry service doing on-the-ground patrolling, this is a male dominated profession. For the tropical plant families identification course, we managed to have 90% equality in Conakry, but only 30% in Sérédou. We will always favour female participation where they meet the criteria.

In the community seed collection training, we advocated for female participation and often this was at 30% which is the minimum level we set. Our sessions are always open and though some of the invited group members of the workshops were female, many 'unofficial' female group members and youngsters also came and listened to the training in Dandano and in the Guinee Maritime villages where we held the training in the village and were actively encouraged to participate. It also enabled groups to get together and exchange knowledge and be empowered through validation of their existing knowledge.

Due to some training being in French, we have been conscious that translating into local languages to ensure understanding and inclusion in the conversations is mandatory. Therefore, we always have colleagues available to translate. Particularly as there is a high level of illiteracy within the village communities, the use of photographs and illustrations to explain seed collection and the use of local examples helps. During the economics training workshop, special attention was given to those who needed extra help to understand the concepts and so they wouldn't be left behind.

6. Monitoring and evaluation

Monthly meetings with all partners has not always been possible due to poor internet connection in Guinea. However, we have good email contact and messages were also sent via WhatsApp. The project coordinator visits Guinea several times a year and has in-person meetings with the partners. We have a project timetable which is discussed and updated with partners. Additionally, Kew has a system for monitoring project progress with a traffic light system to flag up any potential issues.

There has never been any previous formal courses in Plant Family Identification in Guinea, this course was newly adapted from the Kew course and the number of applicants (130 for 40 places) suggest that this course is in high demand. There are many new and existing biodiversity projects including those in the extractive sector that require well trained people to identify and monitor biodiversity and plants are the least known. Therefore, we are confident that our outputs and activities will make a difference and contribute to the project outcome. Training with the village communities reinforces our existing collaboration and their

understanding of taking on the responsibilities for the plant nurseries to make them a successful business in the future.

We have applied an adaptive system of monitoring and evaluation during project activities, rectifying anything that hasn't worked or was not working at the time or for the next iteration. The exam also showed which families people had difficulty with, so we were able to provide extra clarification. The self-evaluation of this course gave interesting feedback on perceptions of improvement. The average was 32-35% but some were as high as 70% perceived improvement. Some participants had prior experience in the field and some didn't, the biggest gains were those who had no prior knowledge.

The M&E is carried out by the project coordinator in collaboration with the British Embassy in Guinea. The British Ambassador, John Marshall, was able to sit in on lectures for the tropical plant identification course in Conakry and also gave out certificates (Annex 4_11). He also observed the nursery and seed collection training in Kindia (Guinee Maritime). Adaptive M&E during the tropical plant id course involved Ehoarn Bidault from Missouri Botanical Garden and Moussa Diabate from SERG.

7. Lessons learnt

The exam for the tropical plant id course was too complicated for the Conakry course, so we reduced the number of specimens for the Sérédou course and chose specimens differently. Some of the lectures and the course manual need updating before the next courses to make them clearer following feedback from both courses.

Feedback from the vegetation survey course indicated that some of the teaching was overly complicated, so this will be addressed in future courses to make sure that lectures are clear and comprehensible. Unfortunately, there were some omissions in the pre-assessment of the vegetation survey course given by partners, the scores awarded to the participants project presentations were not noted. This will be more strictly monitored in the next courses. Few if any of the participants in the Kindia course had prior knowledge of the techniques in the course and those in the Nzérékoré course who had previously taken the course were able to help the participants who had no previous experience which provided a good learning environment for all parties.

We have found it difficult to do any meaningful pre and post workshop evaluations when working with the communities. There is a reticence to share information sometimes and it is only later in the workshop that people feel comfortable and start sharing. Therefore, informal testing such as a quick quiz at the start of the second day of the seed collection workshop coupled with testing in the field worked well to find out what people remembered and understood from the previous day. Though this is difficult to show quantitatively, we were able to gauge if the level of teaching was correct or what needed to be improved.

Internet connectivity issues: Internet connectivity has always been an issue in Guinea, but recently there have been times when the connectivity has been affected through government interference when there has been trouble e.g. in Nzérékoré after the football stadium incident in December 2024. Therefore, communications can be challenging. Also, the reliance on having a working online database to upload data via our partner HNG has not worked out well due to the problems of internet connectivity. This could potentially impact future training for Red Listing in 2025/26 if participants need to connect to complete the assessment. We will assess this risk and decide if we need to submit a change request.

8. Actions taken in response to previous reviews (if applicable)

Not applicable

9. Risk Management

Herbier National de Guinee (national herbarium) has been part of a restructure of government environmental institutions and has been subsumed into the new Institut de Recherche en Environnement de Guinee (IREG). Though assurances were made that this would not interrupt project work with partners, there have been some complications due to delays installing the new management structure. We hope this will be resolved soon, as it could potentially impact training next year. A number of staff at HNG are also undertaking PhD studies and this has also influenced who is available for teaching courses, one member of the team has gone to University of Ghent for a prolonged research visit, so is now unavailable. We will diversify staff and train up new people next year.

10. Scalability and durability

Many of those being trained are at research institutes (HNG, CERE) or government (CFZ, OGPNRF) on permanent contracts ensuring that knowledge and skills will be retained. The head of OGPRNF (national parks service) visited the training course in Kindia and is keen that more of his staff are trained, equally when putting this project together, the deputy minister of Environment and Sustainable Development saw the training being given in Nzérékoré and was keen to have Guinean organisation delivering this training i.e. HNG. HNG staff have already delivered one course on vegetation survey techniques (Kindia) and will start to build training capacity in plant family identification during the courses in 2025, this will enable continued incountry training at all levels. Training of younger in-country researchers will mitigate against loss of skills due to staff turnover.

Training of red list assessors will ensure Guinea can assess its threatened taxa and fulfil international commitments. We have one more experienced red lister who we hope might be trained as a qualified trainer the future.

Community awareness and outreach from this programme will encourage greater trust and collaboration with local authorities and partners to promote conservation of IPAs in Guinea. Translated posters and materials will be available free to download from the National Herbarium website (www.herbierguinee.org) for other organisations/individuals to use. The work done with communities in Guinee Maritime and Guinee Forestiere can be used as examples to promote similar activities in other regions. The government has a reforestation campaign during the wet season every year across the country and therefore there will be a market for the plants being produced by the communities, there is also interest from mining companies and other NGOs.

The development of a network of seed monitors and collectors will benefit other community-based forest projects who can be trained by the original community groups, with support from the trainers, and become part of the network. Development of business models for village plant nurseries will ensure they are viable, independent of project funding being available. Many of these activities also feed into the National Conservation Action Plan for threatened trees of Guinea and will be recognised and

We will facilitate collaborative projects being developed among the partners to continue the activities and maintain momentum after the end of this C&C project.

11. Darwin Initiative identity

The Darwin Initiative logo or wording is used on project documentation, workshop banners etc. There was a joint launch workshop of this project and a Darwin Main project between Guinee Ecologie and Birdlife International on 22 May 2025. The British Ambassador to Guinea was present and spoke about the Darwin Initiative and the link to the UK government. This project supports elements of a larger project on Guinea TIPAs with many strands. This project particularly supports training and capacity building within the larger project. We have used LinkedIn for several posts around training and previously X, but are using this less now. We have tagged BCF in these posts.

12. Safeguarding



Project expenditure

This may change as we have a query with a partner who is currently in the field and unable to respond.

Table 1: Project expenditure during the reporting period (1 April 2024 – 31 March 2025)

Project spend (indicative)	2024/25	2024/25	Variance	Comments
since last Annual Report	Grant	Total	%	(please explain
	(£)	Darwin		significant
		Initiative		variances)
		Costs (f)		
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
operations				
Conital itama (aga halaw)				
Capital items (see below)				
Others (see below)				
	00 700 50	00.400.10		
TOTAL	90,726.50	82,100.43		

Table 2: Project mobilised or matched funding during the reporting period (1 April 2024 – 31 March 2025)

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project (£)			
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project (£)			

13. Other comments on progress not covered elsewhere

Additionally, we ran pilot training sessions in how to communicate environmental awareness with forestry officers at CFZ. The aim of this is to help to reduce conflict between communities and local forest authorities. Currently, the on-the-ground staff have no training other than the paramilitary training given by the government. It is no wonder that



Figure 7: Awareness training with forestry officers

some are unclear about their role in protecting the environment and communicating this to others is a problem. We ran 2 half day participative sessions with 15 participants each (total 30) using some of the tools developed for awareness training in schools and communities such as discussion cards showing different threats and ecosystem services. For many, this was the first time that they had been taught about the terms such as climate change, ecosystem services or extinction or how to explain them. These sessions were very successful, we are looking to secure further funding to role out this training in other regions.

14. OPTIONAL: Outstanding achievements or progress of your project so far (300-400 words maximum). This section may be used for publicity purposes.

I agree for the Biodiversity Challenge Funds to edit and use the following for various promotional purposes (please leave this line in to indicate your agreement to use any material you provide here).

In this section you have the change to let us know about outstanding achievements for your project or significant strides towards attaining a particular goal so far that you consider worth sharing with the wider BCFs community.

We recently submitted a piece for the newsletter. There is nothing to add at this time.

File Type (Image / Video / Graphic)	File Name or File Location	Caption including description, country and credit	Social media accounts and websites to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No

Annex 1: Report of progress and achievements against Indicators of Success for Financial Year 2024-2025

Project summary	Actions required/planned for next period	
Outcome Fundamental capability established for Guinean resesspecies, capacity of local communities raised to enhance their		propagate threatened plant
Outcome indicator 0.1 By March 2026, capacity for plant identification and survey techniques is increased; skills demonstrated and passed on through courses and community outreach. Baseline: 6 people trained in plant identification, 35 people trained to date in Guinee Forestiere.	45 people (40 male/ 5 female) have been trained in vegetation survey techniques through courses funded and co-funded by this project. This is an increase on the 35 people previously trained. 40 people trained in plant identification an increase on the baseline (see section 3.2).	Pre and post questionnaires improved for vegetation survey course in Moyenne Guinée in June 2025 and preparation for the next plant identification courses in Oct 2025.
Outcome indicator 0.2 By July 2025, Guinean led preliminary IUCN Red List assessments are produced for 4 species. Guinea currently has 4 people who have done training, but only 2 actively red listing.	No progress, will be looked at in year 2.	Assessment of logistics and training should internet be essential to the course.
Outcome indicator 0.3 Two community networks for seed monitoring and collection set up and seed collected and distributed by December 2025. Baseline: 0 networks in place.	One network in place with communities and forestry personnel in Guinee Forestiere, monitoring via a WhatsApp group. See section 3.2 and fig 6, plus Annex 4	Evaluation of the WhatsApp group and integration of a data collection app.
Outcome indicator 0.4 Training materials developed for researchers and communities to continue building capacity for plant identification, seed collection and tree planting.	Manual and lectures developed for the Plant identification course. Large posters in local languages produced on threatened trees in Guinee Forestiere. Seed collection booklets produced. See section 3.2 and Annex 4.	Update training manuals and lectures following feedback. Local language posters on seed collection to be developed.
Output 1 Increased national capacity of researchers and local a future national red listing.	uthorities in plant identification, surveying, red listing and en	hance the data available for
Output indicator 1.1 80 people trained in vegetation survey techniques by March 2026.	45 people have been trained in vegetation survey techniques in June and July 2024. See section 3.2 and reports in Annex 4.	Course planned for May/June 2025.
Output indicator 1.2, 40 people trained in plant identification skills by March 2026.	41 people trained in two courses in Conakry and Sérédou, October 2024. 13/41 female to male candidates. Demand for the course was high, 130 applications. All participants were	Next courses planned for October 2025. Incorporation of previous cohort staff to give lectures on certain families.

Insert additional rows depending on how many indicators you have	highly motivated and worked hard over the 6-day courses (see section 3.2 and Annex 4 report.	
1.3 By July 2025, 25 people trained in IUCN Red List assessments.	No action yet.	Assessment of logistics and identification of participants. Course likely to be postponed until October due to AETFAT conference.
1.4 By March 2026, MSc theses on seed propagation of threatened plants available.	2 theses agreed by boards of universities. One at UGAN Conakry, the second at Universite d'Nzérékoré.(Annex 4)	Monitoring of progress of projects.
Output 2. Community groups and other stakeholders collaborate to reforestation.	set up seed monitoring and collection networks to enhance sus	stainable supplies of native seed for
Output indicator 2.1. Six (mixed gender) community groups trained by project-trained participants in plant identification, data collection and seed collection by May 2025	Representatives from eight village groups trained in plant identification and seed collection in Guinee Forestiere (See section 3.2, fig 6 and report in Annex 4.	Training to take place with communities in Guinee Maritime in June 2025
Output indicator 2.2. Two community networks, one in Guinee Maritime and one in Guinee Forestiere, set up for seed monitoring and collections with first seed collections made by December 2025.	One network set up in Guinee Forestiere. See report in Annex 4 and section 3.2.	Network will be evaluated in Guinee Forestiere and second network established in Guinee Maritime.
2.3 Four community groups develop business models for establishing tree-based businesses.	Representatives from nine community groups in Guinee Forestiere received training in basic farm economics and business planning.	Training will be undertaken with Guinee Maritime communities.
Output 3. French and local language course materials developed to	o enable future teaching by local partners.	
3.1 Course materials developed and translated into French prior to first training course in June 2024.	Course materials translated and course manual prepared. See extract in Annex 4.	Manual will be updated following feedback
3.2 Translation of key materials into local language posters for communities by Jan 2025.	Large posters in local languages produced for protection of the forest and threatened trees.	More materials to be translated or made more image based so illiterate members can also have access.

Annex 2: Project's full current Indicators of Success as presented in the application form (unless changes have been agreed)

Project summary	SMART Indicators	Means of verification
Outcome: Fundamental capability established for Guinean researchers and local authorities to identify, survey, protect and propagate threatened plant species, capacity of local communities raised to enhance their livelihoods through plant-based solutions.	 0.1 By March 2026, capacity for plant identification and survey techniques is increased; skills demonstrated and passed on through courses and community outreach. Baseline: 6 people trained in plant identification, 35 people trained to date in Guinee Forestiere. 0.2 By July 2025, Guinean led preliminary IUCN Red List assessments are produced for 4 species. Guinea currently has 4 people who have done training, but only 2 actively red listing. 0.3 Two community networks for seed monitoring and collection set up and seed collected and distributed by December 2025. Baseline: 0 networks in place. 0.4 Training materials developed for researchers and communities to continue building capacity for plant identification, seed collection and tree planting. 	 0.1 Evidence of Guinean researchers and authorities independently, without direct management supervision taking positive actions to address threatened plant species, and of communities beginning to use NBS to improve livelihoods: 0.2 Certificates, pre and post training reports. Preliminary assessments produced by Guinean red listers. 0.3 Numbers of seed collections made by the networks. Numbers of seed accessioned into community nurseries. 0.4 Training materials available on HNG website and distributed to HNG and SERG trainers. Calendar of future training events devised. Data transferred to HNG RHIA platform.
Output 1 Increased national capacity of researchers and local authorities in plant identification, surveying, red listing and enhance the data available for future national red listing.	 1.1 80 people trained in vegetation survey techniques by March 2026. 1.2 40 people trained in plant identification skills by March 2026. 1.3 By July 2025, 25 people trained in IUCN Red List assessments. 1.4 By March 2026, MSc theses on seed propagation of threatened plants available. [DI-A01; DI-A05] 	 1.1 First cohort of HNG and SERG herbarium trainees assist with teaching second cohort and communities. Pre and post course assessments and reports. 1.2 Plant identification tests passed with over 70%. 1.3 Pre and post course assessment and training report. 5 preliminary assessments completed. 1.4 MSc students pass viva. Theses are available open access on the Kew Repository. Blog posts written for HNG and Kew website. Seed germination protocols written and shared with local communities and stakeholders.
Output 2 Community groups and other stakeholders collaborate to set up seed monitoring and collection networks to enhance sustainable supplies of native seed for reforestation.	2.1 Six (mixed gender) community groups trained by project-trained participants in plant identification, data collection and seed collection by May 2025. [DI-A01] 2.2 Two community networks, one in Guinee Maritime and one in Guinee Forestiere, set up for seed monitoring	2.1 Pre and post course assessments and training reports.

	and collections with first seed collections made by December 2025. [DI-B05]	2.2 WhatsApp group set up; data recording app set up and being used; first seed collections made by network.
	2.3 Four community groups develop business models for establishing tree-based businesses. [DI-A10]	2.3 Training report and Initial business plans developed for four businesses.
Output 3 French and local language course materials	3.1 Course materials developed and translated into French prior to first training course in June 2024.	3.1 Course manuals provided to participants after each course. Course materials remain with HNG and SERG for future training workshops.
developed to enable future teaching by local partners.	3.2 Translation of key materials into local language posters for communities by Jan 2025. [DI-A03]	3.2 Translated posters and materials available to download via the HNG website.

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

Activities (each activity is numbered according to the Output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1). Each activity should start on a new line and be no more than approximately 25 words.

- 1.1 Develop criteria to identify participants from among partner and stakeholder organisations,
- 1.2 Design pre and post course assessments,
- 1.3 Engage MSc students, identify and agree study species and supervisors.
- 1.4 Blog post written for Kew and HNG websites with contributions from trainees.
- 2.1 Organise workshops with local community groups to revalidate safeguarding framework.
- 2.2 Develop easy to use data recording tool with KoboToolbox and field test.
- 2.3 Organise training workshops with communities in Guinee Maritime and Guinee Forestiere on plant identification and seed collection.
- 2.4 Set up seed collection networks supported by trainers through WhatsApp groups.
- 2.5 Organise 2 training workshops in business planning for 4 communities in Guinee Forestiere
- 3.1 Preparation and translation of plant identification course materials
- 3.2 Identification of practical materials required for all courses
- 3.3 Creation of local language posters and materials for seed collection and identification of threatened plants.

Important Assumptions

Guinea continues to be politically stable with reduction of poverty linked with sustainable exploitation of natural resources no longer a government priority.

The current (10-year) strong collaborative partnership between UK-based and in-country scientific partners continues.

The Guinea government Ministry of the Environment maintains its stated commitment to training protected areas staff.

There is no pandemic or outbreak of other diseases which could prevent project going ahead as scheduled.

Communities involved in the project remain engaged and committed to improving their livelihoods through tree-based activities.

Annex 3: Standard Indicators

Table 1 Project Standard Indicators

Please see the Standard Indicator guidance for more information on how to report in this section, including appropriate disaggregation.

DI Indicator number	Name of indicator	If this links directly to a project indicator(s), please note the indicator number here	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-A01	Number of people in eligible countries who have completed structured and relevant training	1.1, 1.2	People	Men	67			67	80
DI-A01	Number of people in eligible countries who have completed structured and relevant training	1.1, 1.2	People	Women	17			17	40
DI-A03	Number of local/national organisations with improved capability and capacity as a result of project		Organisation	Improved	2			2	2
DI-A05	Number of trainers trained reporting to have delivered further training by the end of the project.	1.1	People	Men	1			1	3
DI-A05	Number of trainers trained reporting to have delivered further training by the end of the project.	1.1	People	Women	0			0	3
DI-B05	Number of people with increased participation in local communities / local management organisations (i.e., participation in Governance/citizen engagement).	2.3	People	Men	24			24	12
DI-B05	Number of people with increased participation in local communities / local management organisations (i.e., participation in Governance/citizen engagement).	2.3	People	Women	8			8	4
DI-B05	Number of people with increased participation in local communities / local management organisations (i.e., participation in Governance/citizen engagement).	2.3	Governance structure	Existing	9			9	4

Table 2 Publications

Title	Туре	Detail	Gender of Lead Author	Nationality of Lead Author	Publishers	Available from
	(e.g. journals, best practice manual, blog post, online videos, podcasts, CDs)	(authors, year)	Leau Autioi	Leau Autioi	(name, city)	(e.g. weblink or publisher if not available online)
Renforcement de capacité sur la conservation des semences au Ghana	Blog post	Youssouf Conte, Aminata Thiam, Maimouna Toure, 2025	М	Guinean	Herbier National de Guinée, Conakry	https://www.herbierguinee.org/blog/renforcement-de-capacite-sur-la-conservation-des-semences-au-ghana

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the correct template (checking fund, scheme, type of report (i.e. Annual or Final), and year) and deleted the blue guidance text before submission?	х
Is the report less than 10MB? If so, please consider the best way to submit. One zipped file, or a download option is recommended. We can work with most online options and will be in touch if we have a problem accessing material. If unsure, please email to BCF-Reports@niras.com putting the project number in the Subject line.	
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	х
Have you provided an updated risk register? If you have an existing risk register you should provide an updated version alongside your report. If your project was funded prior to this being a requirement, you are encouraged to develop a risk register.	х
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 15)?	
Have you involved your partners in preparation of the report and named the main contributors	
Have you completed the Project Expenditure table fully?	х
Do not include claim forms or other communications with this report.	