

Project Progress Report - End of Year 1 Report

Please write in a short and condensed manner. The report should be written in English or French.

1. Project information

Project Title: Conservation of threatened tree species in three Tropical Important Plant Areas

(TIPAs) of Guinea

Organisation: Royal Botanic Gardens Kew

Contract Period: 01 Oct 2020 to 30 Sept 2023

Current Reporting Period: 01 Oct 2020 – 30 Sept 2021

2. Project Progress

Summary of progress (Provide a brief summary of progress toward your stated objectives and any key accomplishments achieved during this reporting period - max. 2000 words)

Due to the restrictions of the Coronavirus pandemic, the Marburg virus and Ebola virus outbreaks followed by the recent coup, there have been unexpected challenges to the project in this reporting period. These are covered in more detail in the Performance Reporting section below.

Objective 1: Village tree nurseries.

A decision was made early in December 2020 on to focus on one of the three TIPAs initially due to restrictions of movement within Guinea due to Covid-19. Kakiwondi forest, near the village of Tomboya, was chosen as the initial site as it is more accessible from Conakry where our partners are based and the more accessible of the 3 sites. The thought was that Kakiwondi could be set up as a model for the two other sites. We have been working in the area for a few years and the village are keen to protect their forest.

The first project meeting with the village in February, established that the villagers has already been considering ways to protect the forest patch including a fire break or construction of a fence, but lacked funds to do this. The village delegation was keen to set up a meeting between the project and the neighbouring villages surrounding the forest patch, who utilize the path through the forest and take wood from the area, to emphasise the importance of the forest. There was a site visit to Kakiwondi and it was noted that a tree of *Tarenna hutchinsonii* EN has been cut when the path was enlarged.

Our longstanding field guide, Alseny Camara, facilitated the organization of the meeting and will continue to assist in this role to organize meetings with the neighbouring villages.

In March, a meeting with the neighbouring villages was held at Yattarayah. Representatives from nine communities attended the meeting. The project was presented and the local threatened species outlined. The proposal of installing a village nursery was discussed and it was decided that a group of young people will be trained to take on this responsibility. It was suggested that a workshop be held to properly inform the local people about the threatened species and how to identify them. The village delegations gave their agreement to assist the project and protect their own populations of the threatened species.

One member of the delegation was a local schoolteacher. He is very keen to communicate the threats to forest and endangered species to his students. A workshop will be held with both local pupils and the communities to elaborate on these themes.

A site was agreed for the village nursery and the workshops and a site visit scheduled for June 16th 2021. The site visit on 16th June took a different turn than expected due to some misinformation fed to the village by an outsider, making them suspicious of the project. The meeting dealt with this issue and the relationship was restored. An agreement for the setting up of the nursery was obtained. AGEDD who are leading on this part of the project, subsequently arranged to start construction and training of nursery staff in July with Alseny Camara and Ibrahima Soumah. They signed a contract between the parties for three months which will be renewed at the end of October 2021 for another 3-month period.

1.2 Seed collecting



A phenology calendar of the project target species was compiled from existing herbarium data. Due to the pandemic and lockdown in Guinea at the beginning of the project, some opportunities to collect seed were lost this year.

In May our botanist Denise Molmou took out a trainee botanist from Guinee Ecologie to collect seeds and introduce the project to the Kounounkan area. Seed of 3 species was collected and valuable data on other species obtained.

These seeds have been subsequently cleaned and shared with our partners AGEDD who are overseeing the nursery implementation. Seeds of *Apodiscus chevalieri, Diospyros feliciana* and *Gilbertiodendron* sp. were provided to the nursery at Tomboya and sown in seed beds or pots. Seeds of *Neocarya macrophylla* were also planted, this species is a socio-economic tree which could potentially provide revenue in the future. Currently only the *Neocarya* seeds have germinated. Seeds of all species were checked in September, and it was found that most of them had rotted away. Due to the lack of information around these threatened trees, some assumptions were made based on the MSB predictor for seeds being orthodox or not and in some cases this may have been wrong. Seeds which were treated as orthodox and dried may have resulted in seed death, or the quality of the seeds collected was poor.

Wildlings and cuttings of *Talbotiella cheekii* and *Diospyros* were collected in Sept/Oct to transfer to the nursery from the forest. Herbarium staff will visit to confirm that the species are correctly named during a follow up seed collecting trip planned for November 2021.

The position of an assistant horticulturalist was advertised in this reporting period, but not filled. Our initial person named in the proposal had to pull out due to family reasons. We have been trying to fill this post to help with germination and propagation protocols. The project officer also has experience in this area, but was unable to travel, so this part has been delayed. We have now found someone to take on this post temporarily, so hope to get this part back on track next month.

Objective 2: National Action Plan for threatened trees

A launch of the project with the Working Group on TIPAs and CAPs was held in February in Conakry and on Skype. This meeting was attended by the CBD focal point Colonel Aboubacar Oulare and was very productive. The provisional list of 48 threatened tree species (CR, EN & VU) was presented and discussed and an excel spreadsheet circulated after the meeting to gather information known on these species from the group members.

Discussion about how the plan should be organised was deferred until we had more information on the species. It was decided that CR and EN species should have species recovery actions associated with the action plans and monitoring actions for VU species. Timber tree species e.g. *Pterocarpus erinaceus* were excluded from the list due to the different existing legislation around them. It was felt by the group that these should be treated separately.

Species identification sheets for the 13 threatened tree species (CR or EN) of the project have been produced and are available on the HNG website (http://www.herbierguinee.org/franklinia-documents.html), alongside the project documentation.

A first version of an individual action plan for CR and EN species was drafted and used to complete a draft CAP for *Cola angustifolia* (see attachments), this improves upon the first CAPs produced in 2019 by including more details on recovery actions required and threats. Subsequently, 13 draft CAPs have been completed.

In March 2021 we were notified that we had been awarded CEPF funding to extend the TIPA implementation into Guinea Forestière. This will assist with the national action plan on threatened trees and protected of 6 of the 13 species targeted by the project which also occur in that region. In addition, two TIPAs will be given protection under provisional designations as community protected areas and conservation actions for threatened species will be added into the management plans for a total of five TIPAs.

Meetings for the Working group are usually held monthly, but this was reduced to over the summer and a smaller committee met to discuss the national action plan. The working group has been enlarged to incorporate more stakeholders including collaborators from Missouri Botanical Gardens and Centre Forestier Nzérékoré and is also working together for the CEPF funded project which incorporates TIPAs in Guinee Forestière.



Objective 3: Public awareness

Posters for 12 threatened tree species have been produced. Additionally, new teaching materials for engaging students in discussion about the environment and ecosystem services have been produced and 2 games to assist with understanding threats and threatened plant species: snakes and ladders and top trumps. An example of these can be found in attachment.

A presentation to the local primary school pupils at Yattaraya was given on June 16th 2021. A team from HNG and Guinee Ecologie gave the presentation with the schoolteachers to c. 45 pupils about why the environment is important, what benefits the forest provides and what the threatened trees are that can be found in their area.

Due to Covid-10 restrictions the public engagement part of the project has been harder to implement due to school closures and travel restrictions.

All field reports, species identification sheets, meeting minutes and posters can be found through the project webpage http://www.herbierguinee.org/conservation-des-arbres-menacees.html

Concrete results (Briefly summarise any concrete conservation results/impacts achieved during this period. Did the project stabilize or improve the conservation status of the target species? Did the project improve the quality or condition of target species' critical habitat? Did the project stop or reduce important direct threats to target species? Did the project contributed to improving, or worsening enabling conditions that facilitate future successful conservation for target species)

In September 2021, a meeting was held to discuss a new network of protected areas. This new network will incorporate the majority of the TIPAs outlined in Couch et al, 2019 as National Parks or Reserves. This new network was voted on and adopted by the meeting participants from the Ministry of Environment, Water and Forests. This will secure better protection for the TIPAs as official protected areas contributing the M&E indicators of 1) Number of hectares of Pas with strengthened management of threatened tree diversity and 2) Number of hectares with strengthened law enforcement activities focused on illegal logging.

Products (List any formal products that have been produced as a result of the project during this period, such as publications)

Teaching materials have been produced in the form of posters, games (snakes and ladders) and a card battle game (Top Trumps). Posters and discussion cards can be found on the project document webpage http://www.herbierguinee.org/franklinia-documents.html

3. Project Performance Reporting by Component (Please use additional sheets as necessary and compile according to Objectives, Results, Activities listed in the project Logical Framework. Add as many rows as needed to include all the Objectives, Results and Activities listed in the Logical Framework (including those activities not implemented during the reporting period or already completed)

Objective 1: By growing trees at the HNG-UGANC nursery and in school and village nurseries, increase by 10% in 3 yrs, the numbers of known individuals of, and reduce threats by fire to species by 50% for 13 globally EN/CR tree species in three Tropical Important Plant Areas in Guinea.

Result	Activities	Progress during reporting period
R.1.1 Three tree nurseries	A.1.1.1 Local communities	One community consulted and nursery
established in schools and villages	consulted, agree, and designate	set up in the Tomboya village environs. A
of local communities that border	areas in schools and villages for	

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each of the three target TIPAs, and the nursery enhanced at HNG- UGANC, by end Yr 1.	tree nurseries, agree terms to provide labour, and construct. A.1.1.2 Equipment and materials for constructing nurseries bought by the project and supplied to	contract signed between the partner and community workers for an initial 3 mths. 2 communities near Kounounkan introduced to project. Equipment and materials purchased for one village nursery.
	communities.	
	A.1.1.3 Training given to communities in nursery construction and maintenance, correct use of materials and plant propagation, supported by RBGK and AGEDD.	Training given to one of three community tree nurseries.
R.1.2 Seed collecting of 13 EN/CR tree species delivers 1800 seeds for propagation in nurseries by end Y1 and end Y2.	A.1.2.1 Existing data reviewed and used to plan location and timing of seed collection of 13 CR/EN tree species.	A phenology calendar has been created from data available. It is being used to orientate fieldwork for seed collections. One expedition for seed collection resulted in three threatened species collected and one yet to be identified.
	A.1.2.2 Authorisation obtained to collect seed, collection missions executed, seed obtained and delivered to nurseries.	Authorisation obtained via the National Herbarium of Guinea for seed collections.
R.1.3 Tree nurseries produce 250-300 seedlings of EN/CR trees annually at yr 1.5 and yr 2.5 for enrichment planting with protection from firebreaks in habitat, for incorporation in reforestation programmes, for planting in arboreta, botanic	A.1.3.1 Local community nurseries monitored weekly by phone reports and monthly inspections during propagation phase January-June to ensure plants available for planting in June of Y2.	Phone and credit provided to community liaison at Tomboya and provides regular updates. AGEDD staff have weekly telephone reports and visit monthly to check on progress and propagation. Reports can be found on the webpage http://www.herbierguinee.org/franklinia-documents.html
gardens, local schools (with interpretation to educate), and for sale to the gardening public.	A.1.3.2 Germination patterns and growth rates monitored at the HNG-UGANC nursery to develop protocols for use in future propagation.	Slightly delayed. Germination sheets have been provided to monitor growth rates of seeds. Horticultural assistant appointed at HNG starting Nov 21.
R.1.4 Fire breaks installed and maintained to protect further losses at key sites of CR/EN trees species within the 3 TIPAs in the first 6 months and monitored annually in November before the main fire season.	A.1.4.1 Community meetings to agree to accept fire-breaks held at project inception; agreement on which community members designated to create the fire breaks with advice and supervision from project staff and partners, location of fire-breaks agreed, implementation schedule agreed (MEEF, AGEDD) and progress monitored during monthly visits.	Discussed with community at Tomboya at initial meeting who are in favour. More discussions required to implement in Nov 21.
	A.1.4.2 Equipment and training supplied by project to local communities to enable creation of fire-breaks.	Delayed. See above.



Objective 2: Through ongoing close cooperation with the Guinean government's Ministère de l'Environnement des Eaux et Forêts (MEEF) and our other in-country partners, achieve policy change on in situ conservation of globally threatened tree species in Guinea through the creation and acceptance of a National Action Plan which will provide official protected status for the 27 globally threatened (CR and EN) tree species in Guinea, and which will include them in forest reforestation programmes. As part of the proposed project, we will ensure direct implementation of this National Action Plan in the Guinée Maritime region.

Result	Activities	Progress during reporting period
R.2.1 National Action Plan to recommend inclusion of indigenous tree species including EN/CR species nationwide in reforestation programmes, by end Yr1.5	A.2.1.1 The existing Working Group for Conservation Action plans (CAP) and TIPAs to write a CAP for each of the 27 threatened trees species in Guinea to international standards, with recommendations to plant threatened EN/CR tree species as part of current reforestation programmes run by MEEF.	Draft CAPs written for 13 of the CR/EN species. Discussions had on how to make this an overarching document for acceptance by policymakers and include monitoring requirements for VU species.
R.2.2 Inclusion of indigenous CR/EN tree species in three Guinée Maritime province tree replanting programmes, agreed with managers,	A.2.2.1 CAP advise on and negotiate channels to gain acceptance of action plan by reforestation programmes.	For Y2/3
by end Yr 1, implementation begun, by end Y2.	A.2.2.2. Engage local forestry units and NGOs to propagate threatened indigenous species and include in their plantation mixes.	Discussion with working group about forest restoration and use of the framework species method. Proposal to trial at Kakiwondi TIPA to show plausibility of including threatened species in restoration. Implementation is likely to be Y2/3
R.2.3 National Biodiversity Strategy (Monographie National) includes the 27 EN/CR threatened tree species and national protected status provided, both by end Yr 2, to protect them nationally in law, enforcement invigilated by MEEF.	A.2.3.1 List of 27 threatened EN/CR tree species with justification developed for inclusion in National Biodiversity Strategy and for national protected status.	List drawn up and being verified. At least two species removed from list due to doubtful presence in Guinea (misidentification or no specimen confirmation). Any old IUCN Red List assessments being redone to support the status.
	A.2.3.2 Workshops held by CAP at HNG-UGANC to develop documents needed for incorporation by government into legislation.	For Y2.

Objective 3: Create public awareness, especially amongst schoolchildren, to the fact that: (1) Guinean rare and endemic tree species exist, and (2) are highly threatened by human activities and should therefore be protected to ensure a healthy environment which provides ecosystem services.

Result	Activities	Progress during reporting period
R.3.1 Incorporation of key facts on	A.3.1.1 Project team, with input and	No progress yet.
Guinea's 27 EN/CR tree species in a	review from the Working Group for	
new expanded and revised edition	Conservation Action Plans, in	
of the Guide to the Threatened	consultation with the Guinean	
species and Habitats for Secondary	Ministry of Secondary Education,	
School Teachers, by end Yr 2.	draft text for revised edition. Engage	
	designer and printer to produce	
	copies for dispersal through	
	secondary schools.	



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R.3.2. Awareness built in local	A.3.2.1. Creation of three school	Delayed due to Covid-19
schools and communities by creating	gardens and tree planting groups to	
gardens of rare plant species and	plant and care for newly planted	
distribution of improved cook	areas. Improved cook stoves	
stoves.	distributed to reduce wood	
	consumption for cooking.	
	A.3.2.2. Competition to create an	Delayed due to Covid-19
	emblem for the project based on the	
	target tree species with the local	
	schools, with the aim to use this	
	emblem for t-shirts etc. to promote	
	the project and engagement with the	
	target species.	

Performance Reporting (Describe any delays or changes in activities' implementation, any problems that have led to this and any actions taken to adjust the plan in order to achieve stated results. Include details on any staff turnover that occurred during the reporting period, which affected the project)

Since the pandemic started in 2020, Kew staff have been unable to travel to Guinea due to the Kew Health and Safety department ruling out overseas travel during the pandemic. Therefore, the project officer has been assisting the partners remotely as much as possible. This has meant that progress has been slower than envisaged as communications can often be difficult with poor internet and equally tough lockdown conditions imposed in Guinea. The lack of having the project officer on the ground has affected the project quite substantially however, we envisage that this will change in the near future, and she will be able to resume a more active in-country role. Travel around the Guinea has now become less restricted, but a negative Covid-19 test taken 48hrs before travel or proof of double vaccination is still required to leave Conakry for the interior. Until recently, there was also a night-time curfew in place.

This restriction in movement led to a decision in December 2020 to focus on one of the three TIPAs initially, which was most accessible from Conakry, where most of the partners are based. The intention was to set up Kakiwondi and the nursery at Tomboya as a model to show the other villages what can be achieved. However, progress has been slower than anticipated. It has also meant that seed collecting has not happened to the extent that we had hoped and only a few species were collected this year.

In September 2021 there was a military coup in Guinea, which has also affected progress since the government was dissolved and some chaos ensued. The country has now opened up again and appears to be functioning well and moves to stabilise the government have started.

We had difficulty in recruiting a horticultural assistant at HNG during this period. The original candidate had to drop out for personal reasons and the wages were perhaps too low for someone with more experience. The project officer would have taken on some of this work, having previous experience, but was also unable to be onsite. However, a person has been found to take on this part time role from Nov. 2021 with a slight increase in wage, possible through the lack of wage expenditure in Y1. This should enable us to start working on propagation protocols to assist the local tree nurseries and prevent further losses of valuable seed.

Lessons Learned (Describe any lessons learned during this period)

More training on remote meetings software and investment in the internet structure of the partners is required. However, despite the difficulties, numerous online meetings have occurred with positive outcomes.

We were unaware of just how vulnerable the project would be to an unpredictable event such as Covid in respect of not having the project officer on the ground to support the partners in seed propagation and collection and push the project forward. However, we should have Kew staff on the ground again shortly and will endeavour to put better support systems in place.

There are many challenges to a project such as this since there is a lack information on seed germination and properties for the threatened species we are dealing with. Some seeds that were predicted to be orthodox by the Millennium Seed Bank (MSB) predictor have since been discovered not to be. Seed had been treated according to the protocols for orthodox seed and therefore they have died. Going forwards we will sow seed within a week of collection, whilst keeping a small sample to test for orthodoxy.



Revised Programme for next year's

work (Describe major changes. Please attach a

revised logical framework with changes highlighted)

- R.1.1 Establishment of tree nurseries in buffer zones of 3 TIPAs will extend into Y2, due to pandemic travel restrictions in Y1. Some activities within this section will therefore also be pushed into Y2.
- R.1.2 Seed collecting will continue throughout the project and not be restricted to the end of Y2, due to seasons missed in Y1.
- R1.3 specifically A.1.3.2: germination patterns and growth rates monitored at HNG nursery will extend to the end of the project.
- R.1.4 specifically A.1.4.2: equipment and training for firebreaks will extend into Y2.
- R.2.1 National Action Plan activities will extend to the end of Y2 due to changes resulting from the military coup.
- R.2.2 Inclusion of indigenous CR/EN tree species in 3 Guinée Maritime province tree replanting programmes, agreement with managers and implementation begun will extend by 6 mths to end of Y2 and end Y2.5 respectively.
- R.3.1 Incorporation of key facts on Guinea's 27 EN/CR tree species in new expanded and revised edition of the Guide to the Threatened species and habitats for Secondary School Teachers will be extended to end Yr 2.5.
- R.3.2 Awareness built in schools, specifically A.3.2.2. creating an emblem for the project will move into Y2 due to the delays and lockdown of the pandemic.
- **4. Sustainability** (Describe how you have managed any external assumptions or risks during this period that were identified during the planning stage. Have any new risks or opportunities developed? Please address all assumptions and risks listed in the project proposal)

So far, the communities approached have been receptive to the project, though there was some outside misinformation spread among the community at Tomboya, but this has been resolved. Now the nursery is up and running, there is more understanding about the project commitments.

Due to the recent military coup, there is some uncertainty that support at ministry level for the project could change in the future. However, all the partners remain committed to the project and outcomes.

Unfortunately, there have been cases of Ebola and Marburg virus in Guinea in the past 12 months. This coupled with the Coronavirus pandemic led to Guinea being listed as essential travel only by the UK Foreign, Commonwealth and Development office. The travel advice and Kew's H&S policy disallowing overseas travel rendered travel to Guinea impossible during the past 12 months. We are hoping to rectify this soon, given the change in the FCDO advice and relaxing of the Kew travel ban.

5.	Additional comments (Provide any additional comments you feel have not been captured in the previous sections of this report)