

## 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: 30<sup>th</sup> April 2024**

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### Darwin Initiative Project Information

Project reference	<i>DARCC037</i>
Project title	Growing threatened trees’ restoration capacity in Côte d’Ivoire’s cocoa landscapes
Country/ies	Côte d’Ivoire
Lead Partner	ICRAF-CIFOR – International Centre for Research in Agroforestry
Project partner(s)	CNF – Centre National de Floristique BGCI – Botanic Gardens Conservation International
Darwin Initiative grant value	<i>200,000£</i>
Start/end dates of project	May 2023 – October 2024
Reporting period (e.g. Apr 2023 – Mar 2024) and number (e.g. Annual Report 1, 2, 3)	May 2023 – March 2024 Annual Report 1
Project Leader name	<i>Jean-</i> [REDACTED]
Project website/blog/social media	<a href="https://forestsnews.cifor.org/fr/">https://forestsnews.cifor.org/fr/</a> <a href="https://x.com/CIFOR_ICRAF_WCA/status/1781652130039779603">https://x.com/CIFOR_ICRAF_WCA/status/1781652130039779603</a>
Report author(s) and date	CIFOR – ICRAF, Jean-Claude N’zi, April 2024 (for CIFOR – ICRAF part) CNF – Konan [REDACTED], April 2024 (for CNF part) BGCI - Cristina [REDACTED], March 2024 (for BGCI part)

### 1. Project summary

In Côte d’Ivoire restoration deploys a sparse set of indigenous tree species and only a fraction of the spectacular tree diversity of the former high conservation value forests. This project will build capability/capacity to use a wide array of indigenous, particularly threatened, through inventory of a degraded 6800 ha botanic reserve, seed collection, propagation, supporting nurseries to raise and stock a wider range of trees, and growing the market for those nurseries by raising awareness of biodiversity among cocoa industry stakeholders and other restoration actors.

Most restoration projects use a limited palette of indigenous species, and a significant portion of exotic species. Additionally, the new nurseries that have sprung up to supply the millions of seedlings required are a huge opportunity to build back diversity. But currently, documentation and protection of seed sources are absent.

Layers of capacity and capability development are planned with this project – from state bodies (MINEF, SODEFOR and the National Rural Development Support Agency / Agence Nationale d'Appui au Développement Rural - ANADER)), to cocoa companies and cooperatives, to nursery operators and their full time and casual employees, to grassroot communities.

The Reserve Botanique de Divo, like many other forests in the country, is highly degraded due to the cocoa farms. The intensive, monocultural cocoa farms are facing a loss in production, due to climate change and diffusion of brown rot, a fungal disease of cocoa pods.

The expected project outcome is: cocoa landscape actors grasp the importance of biodiversity (including threatened species) and acquire skills to translate this into practical action. This grows their capacity for each to play their role in high-quality ecological restoration, and to contribute towards the conservation of the Reserve Botanique de Divo that is inventoried, characterized, and supports local communities through livelihoods in seed collection and tree nurseries, with threatened species being propagated.

The Reserve Botanique de Divo, the subject of this proposal, was created in 1975, and has similar protection status to a forêt classée. Today, all but six of CDI's 234 forêts classées have been 25-75% replaced with cocoa by communities within or adjacent to them. Recent land degradation studies by ICRAF report over 12 threatened native tree species in the cocoa landscape.

## **2. Project stakeholders/ partners**

The project Steering Committee (SC) was established with representatives from ICRAF, CNF, MINEF and BGCI and has met to plan the project implementation, clarify roles (See Terms of Reference in Annex 5) of all project partners and discuss about the current pictures of the target area, the Reserve Botanique de Divo and ongoing initiatives. Meetings of the SC are planned biannually. Next meeting will be at the beginning of April to plan the Year 2 implementation.

The three partners held monthly online meetings for activities planning, implementation monitoring and discussion about challenges and progress (See example minutes in Annex 6).

The three partners have complementary knowledge and experiences, needed for implementing successfully the project.

CIFOR-ICRAF (World Agroforestry) has over a decade of experience in building nursery networks, surveilling land health (inventory), trialing payment for ecosystem services for biodiversity, species prioritization, large tree planting and climate smart systems. ICRAF Côte d'Ivoire has supported stakeholders to scale tree-based nature-based solutions and restoration of degraded cocoa, shea, and cashew nut landscapes. It has a network of nurseries around Divo that has been involved in the training program. It brings its longstanding support to the government to develop cocoa agroforestry and the national forest rehabilitation policy, and it has public– private partnerships with cocoa actors including Mars, Unilever, Cargill, Conseil Café Cacao, which will be key for the National Forum organisation. CIFOR-ICRAF's inclusion of threatened species in strategies and the knowledge on best practice seed collection and propagation practices for wild species was limited and so identified as a gap in which closer collaboration and support from CNF and BGCI was identified as a way to ensure threatened plant conservation in their work in Côte d'Ivoire.

CNF is the specialized department of the Université Félix Houphouët-Boigny, which holds the national herbarium of 4,257 species and a botanical garden of 750 species. It ensures the in-situ and ex-situ conservation of the Ivorian flora. They are therefore national experts in the flora of Côte d'Ivoire and so staff from CNF have been leading the Reserve inventory, providing local botanical knowledge.

BGCI is the world's largest plant conservation network with over 650 member organisations in >100 countries, and >3,000 botanical and forestry organisations on our digital register. BGCI led the recent State of the World's Trees report, which involved >500 contributors, highlights that at least 30% of the world's tree species are threatened with extinction and has generated threat and cleaned up spatial data for 48,000 tree species. BGCI's main strength is its partner institutions, which have unparalleled technical knowledge relating to botanical diversity. BGCI

has a co-ordinating role on this project, including monitoring and evaluation, reporting and problem solving, and sub-contracting funds for a member of the BGCI's Ecological Restoration Alliance, Tooro Botanical Garden from Uganda, who participated in the ToT training about seed collection, processing, conservation, propagation and nursery management. Through the project BGCI has involved 7 Botanic organisations from the country, into the BGCI membership programme, through which they will be supported to upload data onto the BGCI databases (PlantSearch, SheepCrm, GobaITreePortal, GardenSearch, etc.) to increase availability of data to the wider community and access to BGCI's training materials.

BGCI will also lead the Conservation Planning Workshop for the Divo Botanical Reserve, during which will be presented a documented summary of the threats facing the Reserve, showing the results of the inventory, and of the obstacles to its preservation and restoration. During the workshop a successful restoration plan will be pictured, with recommended goals to restore the Reserve for the next 5-10 years and recommended strategies and activities aimed at achieving those goals. With the key actors involved in the process a proposed framework for coordinated implementation will be defined. BGCI's conservation planning lead, Yvette Harvey Brown, has worked with teams from CNF and CIFOR-ICRAF in remote meetings and with electronic communications in year 1 to plan for a planning workshop in May 2024 (see section 3.1 below).

Another relevant stakeholder is MINEF, Ministry of Water and Forests, who is committed to restore the Reserve Botanique de Divo. Given the importance of this heritage at regional and even national level, MINEF launched Phase 1 of the reserve rehabilitation project in September 2022, facing some challenges such as: weak community mobilisation and awareness, technical resources and logistic (nurseries, lack of seeds database), prioritisation of right species. Four Divo MINEF staff took part in the seed collection and propagation training, including the Director who is set to join the steering committee meetings and participate actively in the planning workshop, following presentations made by CNF on their inventory work towards the end of the first year (see section 3.1 for more details).

Another relevant partnership of this project is the participation of Tooro Botanical Garden (TBG) from Uganda. TBG is a long-standing partner of BGCI and member of the Ecological Restoration Alliance (ERA), with many years of experience on working with native trees and restoration. They are participating as trainers, as described in Section 3.1, Activity 2.3.

### **3. Project progress**

#### **3.1 Progress in carrying out project Activities**

Output 1- Restoration plan for Reserve Botanique de Divo jointly developed by key stakeholders, including actions to counter threats for over 12 threatened tree species known at the reserve by project end

Activity 1.1: The project Steering Committee (SC) was established with representatives from ICRAF, CNF and BGCI. In Annex 5 is reported the SC Terms of Reference.

Multiple activities have been carried out on the ground during the first months of the project. In July 2023, ICRAF-CNF scoped Jardin Botanique de Bingerville under Ministry of Water and Forests (MINEF), ORSTOM botanical garden under National Agricultural Research Service (CNRA), the botanical garden at University of Felix Houphouet-Boigny, and then visited the Reserve Botanique de Divo.

Activity 1.2: ICRAF-CNF during their visit in Divo (17<sup>th</sup>-22<sup>nd</sup> July 2023), introduced the project to the regional MINEF office, led by forester Lt-Colonel Anvo Banga and spent time with MINEF staff in the reserve, who welcomed the project and learnt about the inventory. An inception workshop was held on 24<sup>th</sup> July 2023 with 15 participants in which an overview of the past work and the project were presented and agreed: introduction of the project, Divo Botanical Reserve/Forest and past/ongoing initiatives, BGCI's role in tree and seed conservation and planning, and CNF's role and planning for inventory (See Annex 7).

Activity 1.3: A floristic and land use inventory of the Divo Botanical Reserve, with a particular focus on endangered species was undertaken by National Floristic Center of the Félix

Houphouët-Boigny University under the supervision of the International Center for Research in Agroforestry (ICRAF) between September and October 2023 (See Annex 8). A total of 213 species with a DBH  $\geq$  5 cm were identified. Sixteen species are listed as threatened (See Check list in Annex 9) on the IUCN Red List. *Tieghemella heckelii* is listed as Endangered and 15 as Vulnerable. Five threatened species on the IUCN Red List were encountered only once are: *Cordia platythyrsa*, *Milicia regia*, *Tieghemella heckelii*, *Vitellaria paradoxa* and *Zanthoxylum mezoneurispinosum*. These species are consequently considered to be very rare in the Réserve Botanique de Divo. It also confirmed that cocoa farms, rubber and oil palms have replaced much of the original forest (34% cocoa farms, 23% lowlands-young fallow, 14% palm groves-rubber farms, 11% forest farms and 8% secondary forest).

Activity 1.4: Maps have been produced following the inventory that show land use, forest remnants, and wild seed collection zones (See Annex 10).

At the end of March, the inventory results have been presented in Divo to MINEF representatives, administrative representatives of Ministry of Environment and Ministry of Agriculture, the representative of the mayor of Divo, the representative of the General Council of the Loh-Djiboua, the Prefect and sub-prefect, the technical partners, the chiefs of the communities nearest of the reserve (See Annex 11).

Activity 1.5: The preliminary activities for the conservation planning workshop started with the stakeholders' analysis (Annex 12), identifying around 20 institutions as key stakeholders to invite to the workshop, in addition to community representatives.

Activity 1.6- Activity 1.7: The workshop will take place in Divo in May 2024 to discuss about: scene-setting of the Divo Botanical Reserve; defining success, understanding the challenges and opportunities; set objectives for action, strategies and activities (Annex 13- Draft Agenda). After the workshop, the conservation plan will be draft based on the workshop results.

Output 2- Capacity to provide native planting materials of 110 individuals from 20 nurseries and at least three botanical- natural resource-related institutions (e.g., Jardin Botanique de Bingerville) increased by October 2023

Activity 2.1: To select the trainers of trainer participants, ICRAF identified and selected botanical gardens of Côte d'Ivoire and sent invitation letters to their managers who proposed 2-3 staffs to be trained. A total of 23 of them were available for the training of trainers.

Activity 2.2: The team interviewed nine nursery operators supplying seedlings and trained by ICRAF; visited ANADER, the national agricultural extension agency, in Divo; and held an inception meeting with cocoa farmers resident within the Reserve, who expressed dislike for exotic species such as Teak and stated that it is now hard to find native medicinal trees (See Annex 14). The trip's aim was to strengthen partnerships with stakeholders of the Botanic Reserve. The team collected information on the reserve, land uses, challenges and main threats and explained about trainings offered by the partners.

CNF analysed the nursery survey, finding 44 different tree species propagated, of which 24 were native. Of those, 21 were on the IUCN Red List: 13 of Least Concern, 1 Near Threatened (*Irvingia gabonensis*), 6 Vulnerables (*Entandrophragma angolensis*, *Milicia regia*, *Terminalia ivorensis*, *Khaya ivorensis*, *Pterygota macrocarpa*, *Garcinia kola*, and *Nesogordonia papaverifera*) and one Endangered (*Tieghemella heckelii*). Nursery operators identified 10 native species for which mother trees are absent, few or only at great distances. Most difficult to obtain seeds for was *Tieghemella heckelii* then *Milicia regia*, *Garcinia kola* and *Irvingia gabonensis*. Nurseries welcomed capability and capacity development. Unfortunately, the collected data was deleted due to handling errors and the investigation will be repeated.

Activity 2.3: In November BGCI visited the partners in Côte d'Ivoire delivering different activities. During the visit the ToT training on best practices in seed collection and propagation of native trees has been organised in Divo with 23 participants from 12 institutions (Annex 15- List of training participants). The objective of the training was to disseminate awareness of threatened species and document how to collect, process and propagate species under threat, create capacity in seed collection to increase availability of high-quality material of native species. The training had a theoretical part and a practical component in the Divo reserve and nursery. Focus of the training were:

- Practical planning of seed sourcing, identification and mapping of mother trees;
- Best practices on seed collection: planning a seed collection trip, sampling strategy, handling, filed data, herbarium voucher, post-harvest handling;
- Propagation techniques for native species;
- Nursery management.

The training was delivered by Tooro Botanical Garden (TBG) of Uganda, in collaboration with BGCI.

A trainee assessment has been done before and after the training, showing an improvement on average of increase of 12% of the participants' understanding of the course topic, across all participants, except one which score was the same. (Annex 16).

Activity 2.4 & 2.5: From 19<sup>th</sup> to 21<sup>st</sup> March 2024 at Divo, two of the Trainers trained in November, delivered the training to 58 community members and nursery operators (Annex 17 – List of training participants). The training delivered was based on the modules delivered in November that were translated into French. It took place over three days with two days of theory and a final day practical.

Activity 2.6: Seed collection started in February 2024 led by ICRAF and CNF. The species currently available are *Pterygota macrocarpa* (1500 seeds), *Entandrophragma angolense* (400 seeds) and *Terminalia ivorensis* (3500 seeds). Some trainees trained on March 2024 are producing seedlings of *Terminalia ivorensis*, *Pterygota macrocarpa* and *Entandrophragma angolense*. Species such as *Nesogordonia papaverifera* and *Berlinia occidentalis* will get mature seeds in the months of May and June 2024, respectively. As for the other selected threatened species will give fruits after the month of August 2024. Ultimately, the harvest of seeds will be done gradually depending on the fruit's maturity date of the selected mother trees (See Annex 18- Pictures of seeds collected).

Activity 2.7: planned in Y2

Activity 2.8: Planned in Y2

Output 3- Three government organisations, 3 botanical institutes, 4 cocoa companies and the CDI cocoa government body commit to and support threatened tree conservation and restoration of cocoa landscapes by project end

Activity 3.1 Threatened species will be promoted and planting in reserve and nurseries publicised in the year 2. Currently seedlings or plants of endangered species are not available, but during the Conservation Planning Workshop in May and during the National Forum in October 2024, a ceremonial planting will take place in the Reserve Botanique de Divo.

Activity 3.2: The National Forum is planned for beginning of October 2024, to be able to present the Conservation Plan of the Reserve and the other achievement of the project.

Activity 3.3: During the visit in November 2023, and after meeting with the partners, CIFOR-ICRAF and CNF, BGCI visited different botanical institutions: CNF Herbarium and Botanical Garden, Institut Botanique Aké-Assi d'Andokoi (IBAAN), CNRA Botanic Garden (ORSTOM) at Adiopodoumé, Jardin Botanique de Bingerville, SODEFOR seed centre at Adzopé.

At the end of BGCI visit, a workshop with 8 representatives of 7 botanical institutions has been organised in ICRAF office. BGCI gave an overview of the organisation and its work in support of its partners in conservation, presenting the membership programme and its benefits, and small grants opportunities as BGCI members (See BGCI presentation given and list of participants in Annex 19).

The 7 institutions have been included to BGCI membership programme, with access to BGCI training modules. During the next months, BGCI will support them with mentorship and the institution plants collections will be uploaded to BGCI's PlantSearch database.

Activity 3.4: Four of the new member institutes (proper Botanic Gardens Institutes) have been added to the BGCI's GardenSearch tool. In order to progress with archival and inventory work to document the species and their provenances to increase the collections' conservation value and submission to BGCI PlantSearch database, a new activity has been proposed through a change request, to implement during year 2 for Jardin Botanique de Bingerville, Jardin des Palmiers de Divo and CNRA-Jardin de Adiopodoumé.

## 3.2 Progress towards project Outputs

### **Output 1- Restoration plan for Reserve Botanique de Divo jointly developed by key stakeholders, including actions to counter threats for over 12 threatened tree species known at the reserve by project end**

*1.1 Available information on 12 target threatened species compiled (maps of distribution, phenology, propagation attempts) by September 2023*

Over 16 threatened species were identified in the Reserve Botanique de Divo, we have repair maps for 14 species, phenology for 15 species and propagation attempts for 10 species, following the floristic inventory (See Annex 10)

*1.2 Reserve species checklist created / updated with maps of locations of mother trees for 12 target threatened tree species by December 2023*

The reserve inventory has been finalised in October 2023 by the CNF Botanist Yao Konan and CNF team. A comprehensive report (Annex 8) has been produced showing the presence of 595 plant species. Of these species, 16 are threatened according to the IUCN Red List (2022), 35 are endemic to the Upper Guinea Forest Block (GCW) and 23 are recognized as endemic to Upper Guinea (HG). Unfortunately, the floristic structure of the reserve has changed enormously in the last decades due to the anthropogenic pressure and some characteristic species of this area such as *Cola lorougnonis*, *Aubregrinia taiensis* and *Drypetes singroboensis*, have not been observed there anymore. Nowadays, the reserve is gradually being enriched with introduced species such as *Tectona grandis*, *Gmelina arborea* and *Hevea brasiliensis* and becoming depleted in native species.

A checklist of 14 threatened species out of 16 has been created and maps of locations of mother trees are available for 16 species (See Annex 9 & 10).

*1.3 Conservation plan for the 12 threatened tree species produced by the project end: on going.* Stakeholders to invite at the workshop have been mapped and the agenda drafted and agreed (See Annex 12 and 13).

### **Output 2- Capacity to provide native planting materials of 110 individuals from 20 nurseries and at least three botanical- natural resource-related institutions (e.g., Jardin Botanique de Bingerville) increased by October 2023**

*2.1 10 locally identified champions trained to be trainers of others in seed collection and propagation best practices by August 2023: 23 people (18 male and 5 female) were trained to be trainers in seed collection and propagation of native trees.*

*2.2 50 local community members from around Divo and 50 staff from 20 Divo nursery operators by October 2023*

57 people (community members and nursery operators) have been trained in which (51 male and 6 female).

*2.3 At least 20 trained nurseries propagate seedlings of at least 15 native trees*  
Planned in Year 2.

*2.4 Propagation protocols developed (at least 5 of difficult/rarer species) and published on BGCI's PlantSearch database, and so accessible to others in CDI and other countries, by project end: seed collection has started for 3 species (*Terminalia ivorensis*, *Pterygota macrocarpa* and *Entandrophragma angolense*).*

### **Output 3- Three government organisations, 3 botanical institutes, 4 cocoa companies and the CDI cocoa government body commit to and support threatened tree conservation and restoration of cocoa landscapes by project end**

*3.1 The influential Cocoa governing body endorses commitment to incorporate threatened trees into their planting activities by project end*

Planned in Year 2.

*3.2 At least ten entities putting in orders to nurseries for native seedlings to plant in degraded areas and agroforestry systems in and around Reserve Botanique de Divo by project end*

Planned in Year 2.

*3.3 At least three Ivorian institutes become members of the BGCI network by project end and 9 of their staff receive benefits of BGCI network and accessing at least 1 of BGCI's online training tools by project end.*

Botanical institutes were convened in November 2023 for the first time with BGCI and ICRAF, as a start for sharing experiences and accessing benefits of the BGCI network and the support it can be provided to them (guidance, training, funding etc.). The meeting was the first time ever in the country that botanical institutions gathered to share experiences, lessons learnt and challenges. It was learnt that these institutions need further support to confirm, document and protect their botanical collections.

Part of the funds saved for the inventory were used to cover the membership fees for the 7 botanical institutions to become members of BGCI network, giving access to courses and mentorship to their teams.

The 7 institutions that are now BGCI members are (those marked \* are botanic garden institutes and so also now appear on the BGCI GardenSearch database - <https://gardensearch.bgci.org/>):

- Centre National de Floristique (CNF)\*;
- Jardin Botanique de Bingerville\*;
- Jardin des Palmiers de Divo\*;
- Institut Botanique Aké-Assi d'Andokoi (IBAAN);
- Jardin Botanique de Divo;
- Jardin de Adiopodoumé (CNRA)\*;
- Centre de Semences Forestières d'Adzopé (SODEFOR).

During the Year 2, BGCI will support their team in access to trainings and other services.

*3.4 Records of plants within institutional collections uploaded for at least three institutes to BGCI's PlantSearch database by project end*

Four of the new member institutes have been added to the BGCI's GardenSearch tool. In order to progress with archival and inventory work to document the species and their provenances to increase the collections' conservation value and submission to BGCI PlantSearch database, a new activity has been proposed through a change request, to implement during year 2 for Jardin Botanique de Bingerville, Jardin des Palmiers de Divo and CNRA-Jardin de Adiopodoumé.

### **3.3 Progress towards the project Outcome**

**Outcome- Capability, capacity and commitment to restore the Botanical Forest of Divo and other areas within the cocoa landscape with native trees, including threatened tree, increased.**

*0.1 Three government organisations and four cocoa industry organizations and governing bodies make written commitments to restore in and around the Botanical Forest of Divo using native tree species, including threatened species, by the project end*

Planned in Year 2 as a result of the Conservation Planning Workshop and the National Forum.

*0.2 20 local nurseries receiving a 50% increase in number of sales of threatened tree species' seedlings above a baseline taken at project start, by the project end*

Planned in Year 2 as a result of the Conservation Planning Workshop and the National Forum.

*0.3 20 local nurseries and 3 botanical institutes contributing to new published and publicly available propagation protocols on BGCI PlantSearch database by the project end*

Seed collection has started for 3 of the threatened target species: *Terminalia ivorensis*, *Pterygota macrocarpa* and *Entandrophragma angolense*.

### **3.4 Monitoring of assumptions**

Assumption 1.: Organisations and communities involved along cocoa value chain willing to engage with project.

Comments: this assumption holds true. Major involvement from organisations linked to the cocoa value chain will happen in year 2 during the Conservation Planning Workshop and the National Forum. ICRAF has a long-standing relationship with cocoa companies and other relevant stakeholders, which should guarantee a good audience and commitment.

Assumption 2.: Target native threatened tree species can be propagated, using existing information or through investigations in project.

Comments: this assumption holds true. Due to the degraded status of the reserve, species identification and seed collection has been difficult. The results on propagation will depend on possible localization and phenology of the species in the next months. Since March 2024, 3 species (*Terminalia ivorensis*, *Pterygota macrocarpa* and *Entandrophragma angolense*) being propagated. A survey of targeted species and mother trees outside the reserve is planned in Year 2.

Assumption 3.: External trainers/consultants able to travel to Côte d'Ivoire unhindered within project schedule (i.e. no pandemic or other restricting travel).

Comments: this assumption has reduced risk. COVID-19 disruption has been lifted. National election has been held in September so no further disruption should happen to the end of the project.

Assumption 4.: Interest in native and threatened tree use in restoration strategies grows enough to provide market for seedlings grown at nurseries.

Comments: this assumption holds true. The project is managing this assumption, with the organisation of the Conservation Planning Workshop and the National Forum, to create awareness on integration of native and threatened species in cocoa landscape restoration and endorse commitment from different stakeholders.

Assumption 5.: Institutes that join BGCI can be supported in process and to access benefits available to them and their staff and provide data back to BGCI databases.

Comments: this assumption has reduced risk. After the introduction workshop and the visit to most of the institutions, a direct link has been established between BGCI and the botanical organisations. Translation of BGCI training materials into French will be beneficial staff of member institutes being able to access the benefits available to them.

### **3.5 Achievement of positive impact on biodiversity and poverty reduction**

In Côte d'Ivoire, tropical forests continue to be replaced with cocoa, facing encroachment of forêts classées and loss of rural forest. The benefits of biodiverse cocoa agroforestry and forest landscape restoration are weakly understood. The aim of this project is to disseminate awareness of threatened species and document how to collect, process and propagate species under threat, create capacity in seed collection, and increase availability of high-quality material of native species.

Changes expected in the short-term:

- At least 50 community members and 20 local nursery operators and members of their staff for a total of 100 – many of them youth and 50% females - will receive training on mother tree mapping and monitoring, seed collection, and propagation techniques with a greater range of trees species: a total of 80 people have been trained with a ration of 69 male and 11 female.
- At least ten individuals – half women – from botanical institutions such as the Jardins botaniques of CNF, Adiopodoumé and Bingerville; Orchidées Bonafos-Parc Floral de Bingerville, Domaine BINI, Réserve forestière Dékpa d'Agbaou; Site de Conservation du garage de Soubré, and SODEFOR seed centre will be trained to be trainers in how to map, collect and propagate native plant species from the wild: 23 people (18 male and 5 female) were trained to be trainers in seed collection and propagation of native trees.
- Increased information for native threatened tree species, such as seed collecting calendars and mother trees maps, are now available.

Changes expected in the long-term:



7 botanic gardens became members of BGCI and have been supported to upload data onto the BGCI databases (e.g. PlantSearch, SheepCrm, Global Tree Portal) to increase availability of data to the wider community and access to BGCI's training materials.

#### 4. Project support to the Conventions, Treaties or Agreements

CDI has myriad national and global commitments, e.g., its Stratégie Nationale de Prévention, de Réhabilitation des Forêts and its NDCs to reduce deforestation by 70% with respect to 2015 and increase forest area by one million ha by 2030; under Bonn challenge, to restore 20% of its forest. Signatory to CBD, it has adopted 17 Aichi Biodiversity Targets: its NBSAP aims to “preserve biodiversity components and their ecological functions; assure use that is compatible with carrying capacity of ecosystem and reproductive capacity of species; allow everyone to profit from opportunities presented from biodiversity”.

Meanwhile, the most recent Stratégie et Plan d'Action pour la Diversité Biologique Nationale says that by 2020 “genetic resources of particularly important forests are inventoried”.

The project so far has helped with the inventory of the Divo Forest, in line with the Stratégie et Plan d'Action pour la Diversité Biologique Nationale, and it is laying the groundwork for restoration of forests, preserving the biodiversity.

In the second year, with the involvement of the cocoa stakeholders, the project will promote the integration of native and threatened trees into the cocoa landscape.

#### 5. Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board <sup>1</sup> .	The board is: Cathy (woman) Cristina (woman) Yvette/Itxaso (woman) Alex (man) JC (man) Yao (man) Col Banga (man)
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women <sup>2</sup> .	BGCI Senior Management team is at least 50% women  CNF Senior Management team is led by a woman. The team is composed of 12 males and 6 females for a ration 1/3.  ICRAF Senior Management team is led by a woman. The team is constituted by 7 females and 10 males for a percentage of 41%

GESI Scale	Description	Put X where you think your project is on the scale
<b>Not yet sensitive</b>	The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach	
<b>Sensitive</b>	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	X

<sup>1</sup> A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

<sup>2</sup> Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

	women and marginalised groups and the project will not contribute to or create further inequalities.	
<b>Empowering</b>	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	
<b>Transformative</b>	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	

## 6. Monitoring and evaluation

Steering committee and management meetings between partners have been used to discuss project progress, decide on project direction and plan changes to project activities as necessary, including confirming how to request a transfer of year 1 underspend for identified needed activities in year 2 (See meeting minutes in Annex 6).

For the seed collection and propagation training delivered by Tooro Botanical Gardens in November (See section 3, activity 2.3 above), the success of knowledge transfer was assessed by participants completing a pre and post course survey. This showed an average increase of understanding of the course topics by 12% across all participants, with all seeing improvements in their scores, except one participant that stayed the same (See Annex 16).

The inventory of the reserve, carried out by the CNF team has provided a baseline of the current situation in the reserve that will be able to be used to measure progress in the future as restoration activities are undertaken. It will also feed into the conservation planning workshop helping to direct what restoration activities are needed most.

The capacity buildings programme, including mentoring on line through BGCI platform and experience changes with ERA partners (Tooro Botanical Garden from Uganda), are all activities contributing to increase capability and capacity for restoration. The active involvement of MINEF since the beginning of the project, the integration of their Restoration plan for the reserve with the Conservation Plan that will come out from the workshop to be held in May, and based on the results from the forest inventory, are all actions bringing commitment to restore the Botanical Forest of Divo and integrate native trees into cocoa landscape restoration.

## 7. Lessons learnt

French language: translation services provided at the ToT event in November was excellent and made communication and lessons learnt much easier and more impactful. The realisation on language difficulties at different levels in Côte d'Ivoire mean that BGCI has learnt of the pressing need for online training resources to be available in French.

Need for tree climbing support is needed – in the training course, TBG and BGCI noticed practices being undertaken that need to be improved for the safety of tree climbers as well as reduction of the impact on the trees themselves (currently cutting branches completely for collection is standard practice). The TBG team has the knowledge and skills to improve these practices, and so a Change Request for funding was sent to Darwin before the year end to request that unspent funds support further training in year 2. Budget for equipment and training for these would be a recommendation for other similar projects if the capacity is not there already.

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

Comments to address:

- *you should provide more information on how you would train the cultivation of unknown species or understand fruit phenology for rare species in the timeframes suggested:*

A comprehensive floristic inventory of the Divo Botanical Reserve has been conducted in Year 1, presenting the results of the land uses and the floristic composition, with particular

focus on endangered species (595 species have been identified; of these species, 16 are threatened according to the IUCN Red List (2022), 35 are endemic to the Upper Guinea Forest Block (GCW) and 22 are recognized as endemic to Upper Guinea (HG)).

Mother trees has been mapped for threatened species and phenology will be monitored for seed collection, so that propagation trials will be conducted for some species.

However, some species that were expected to be in the reserve were not present, and the local nursery inventory showed that some species are so rare and threatened that nursery operators obtain seed from 120 km away. For this reason, a change request has been submitted and approved to move some extra funds in the final year to be used to map mother trees of threatened tree species in Côte d'Ivoire outside of Divo to act as seed sources and start to bring them into propagation for future restoration, in Divo and elsewhere.

- *how many seed collectors can be maintained, and what would their livelihood uplift be worth to them in terms of change from the baseline;*

At least five seed collectors will be maintained in the job assuming that, threatened tree species production will broaden the seedling market for planting and reforestation in the reserve and other sites of the cocoa landscapes of Côte d'Ivoire. Their livelihood will therefore be improved or increased as the seedlings market will permit them to have a best quality of life.

- *safeguarding risk / mitigation should consider the broader vulnerabilities of local people (not just the physical danger):*

In fieldwork in forested areas, community members, nurserymen, or tree climbers engaged to collect seed or raw food materials are injured or worse, and because of this, they feel unsupported refuse to collect further, impacting the ability to establish nurseries and agroforestry plots. Safety and welfare are paramount. Professional tree climbers will be employed with relevant training and insurance. Community collectors will be supported by SODEFOR and OPIR, institutions in charge of forêts classées, parks and reserves, with phone communication and support visits. No solo fieldwork will be allowed.

- *the resilience of seed collecting livelihoods or nurseries of (probably) slower growing forest trees is likely to be lower than alternatives. Consider if additional support may be needed to ensure sustainability of nurseries but also the planted forests;*

Nurseries produce certain slow-growing endangered species. We work with 5 nurserymen to identify and monitor mother trees. They are currently motivated; they know that we will buy the plants with them. To sustain the production of endangered species, we should convince the population to plant these trees through awareness campaigns. Nurseries also have ways of raising awareness about imposing certain species to farmers. Among the selected species, some are companion species of cocoa trees.

- *you should consider strengthening the exit strategy in terms of maintaining and expanding influence after the project:*

In year 2 (May), we will organise the Conservation Planning Workshop during which key stakeholders will discuss the goals to restore the Reserve Botanique de Divo for the next 5-10 years, the recommended strategies and activities aimed at achieving those goals, with key actors identified, and the proposed framework for coordinated implementation of these recommended strategies and activities. Once the restoration plan will be finalised, it will be disseminated and presented at the National Forum, to raise awareness and endorse native and threatened species planting by more stakeholders.

- *the logframe reflects the main activities but needs additional work regarding the means of verification. For example, Indicator 0.1: how will the project verify and measure the commitments of government and cocoa industry? See also Indicators 3.1 and 3.2.*

Indicators 0.1/3.1/3.2 - as a result of the National Forum and the Conservation Planning Workshop we hope to have a manifesto signed by key stakeholders of the cocoa landscape and government institutions, with the commitment to restore in and around Divo reserve, including ordering native seedlings to be planted in degraded areas and agroforestry systems.

## 9. Risk Management

The full project team realised in November 2023 that some tree climbing is currently done with few safety protocols. It was therefore requested that funds be moved to the second year to fund a consultant to deliver tree climbing training, through an expert at Tooro Botanical Gardens in Uganda (Sebastian Wailata). This was accepted and will be organised, along with the provision of the necessary equipment, from May to September.

## 10. Sustainability and legacy

Colonel Banga, the Reserve botanique de Divo director from MINEF attended the seed collection and propagation training and has become more engaged in the project attending steering committees since this and the presentation of the inventory results given by Yao Konan (CNF) in March. This interest and involvement are vital for the project continuation beyond the project time. This interest along with the plan for the reserve to be developed will help to drive the need and market of native plants to ensure that the seed collect and propagation capacity that has been built in the first year continues to be used and relevant beyond the project. The National Forum towards the end of the project will further enhance this impact.

With the seed collection and propagation training delivered and inventory completed, many of the short-term sustainable benefits mentioned in the proposal have been achieved or are likely to be achieved by the project conclusion. Incomes from seedlings sales remains relevant, as well as improved data collection from collection and propagation activities. Information on the native threatened species found within the reserve is also already increased (localities, knowledge on phenology) and will be expanded to sites outside of the reserve following acceptance of a change request to move underspend to the final year for this activity.

These activities will also help to maintain the longer-term benefits mentioned in the proposal by leading to increased native seedling availability to be planted and with self-sustaining nurseries providing these, and further training to be delivered by those trained in November in other parts of the country, with course materials to be shared in French. The contacts made by BGCI with botanical institute staff, and the membership now being sorted along with acceptance of a change request to move underspent funds from year one to translate online training materials into French will ensure these are more readily available to the community in Cote d'Ivoire and other francophone countries leading to increased engagement from francophone countries with BGCI and BGCI's online databases.

## 11. Darwin Initiative identity

CIFOR-ICRAF and BGCI have published 1 activity report and 3 blogs about the project, that mention the Darwin Initiative as a funder and have been shared with the Darwin Initiative social media channels:

- A CIFOR-ICRAF activity report titled "Reserve floristic and land use inventory report"
- A CIFOR-ICRAF blog titled "[Côte d'Ivoire's neglected botanic gardens key for conservation](#)"
- A CIFOR-ICRAF blog titled "[Sowing the seeds of change in Côte d'Ivoire](#)" (English) or "[Semer les graines du changement en Côte d'Ivoire](#)" (French)
- A BGCI blog title "Improving seed collection & propagation of threatened trees in Divo Botanique Reserve, Côte d'Ivoire"

BGCI have also set up a project webpage titled “Threatened trees in Cocoa landscapes” that publicising the Darwin Initiative and the Biodiversity Challenge Funds as the funders, including both logos at the end of the page.

## 12. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	Yes
Have any concerns been reported in the past 12 months	No
Does your project have a Safeguarding focal point?	<p>Yes</p> <ul style="list-style-type: none"> <li>• Local focal point: <ul style="list-style-type: none"> <li>- Name: [REDACTED] Konan [REDACTED]</li> <li>- Email: [REDACTED]</li> </ul> </li> <li>• Focal point Headquarters <ul style="list-style-type: none"> <li>- Name: [REDACTED] Peter</li> <li>- Email: [REDACTED]</li> </ul> </li> </ul>
Has the focal point attended any formal training in the last 12 months?	<p>Yes.</p> <ul style="list-style-type: none"> <li>- UNDSS Security training is a security awareness training course 21 September 2023</li> <li>- A review of safety and health at work rules and measures introduced by the CNPS in August 2023.</li> </ul>
What proportion (and number) of project staff have received formal training on Safeguarding?	<p>Past: BGCI 100% staff involved in the project receiving training [4 staff]; ICRAF 100% staff involved in the project receiving training [2 staff]; CNF100% of staff involved in the project receiving training [2 staff]</p>
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses. The "zero security incident" challenge has been met.	
Please describe any community sensitisation that has taken place over the past 12 months; include topics covered and number of participants. Safety awareness training covering all health and safety measures at work, health, safety in the field and health and safety outside the workplace for all CIFOR-ICRAF staff and partners. Community sensitization was made through the collaboration with the MINEF of Divo at the village of Nguessandankro in the Divo Botanical Reserve on July 2023. The date of this activity and the meeting of the community (about 40 persons) was schedule with the MINEF. Topic covered was the conservation of threatened tree species in the Divo Botanical Reserve.	
Have there been any concerns around Health, Safety and Security of your project over the past year? If yes, please outline how this was resolved. No health, safety and security issues reported in the past year.	

## 13. Project expenditure

**Table 1: Project expenditure during the reporting period (1 April 2023 – 31 March 2024)**

Project spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total Darwin Initiative Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Consultancy costs	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Overhead Costs	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Travel and subsistence				
Operating Costs				
Capital items (see below)				We are waiting for the delivery of the motorbike.
Others (see below)				
<b>TOTAL</b>	<b>140,034</b>	<b>91,626</b>	<b>35</b>	

**Project mobilised or matched funding during the reporting period (1 April 2023 – 31 March 2024)**

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

**14. Other comments on progress not covered elsewhere**

Through the activities carried out in the first year -the floristic inventory of the Divo Botanical Reserve, the ToR training and the workshop and visits to the Botanic Gardens and Seed Centre conducted in November 2023- a better picture of the context and a clearer assessment of needs emerged, providing guides for improvement needed for successful threatened tree conservation and restoration work. This modification and integration have been submitted in a change request and approved, so additional activities will be implemented in year 2:

- a) **Mother tree mapping:** map mother trees of threatened tree species in Côte d'Ivoire outside of Divo to act as seed sources and start to bring them into propagation for future restoration, in Divo and elsewhere;
- b) **Fauna inventory:** Understand the impacts on other wildlife by carrying out a bird and other wildlife inventories (a lack of fauna during the reserve inventory was observed);
- c) **Tree climbing training:** Support Tooro Botanical Gardens to deliver tree climbing for seed collection training using their expertise in Uganda;
- d) Purchase tree climbing equipment for institutes (e.g. CNF, SODEFOR) involved, with two sets of equipment needed per institute for safety (if one climber is injured when up a tree the other can rescue);
- e) **Botanic Garden inventories:** archival and inventory work to document the species and their provenances to increase the collections' conservation value and submission to BGCI Plant Search database – Jardin Botanique de Bingerville, Jardin des Palmiers de Divo and CNRA-Jardin de Adiopodoumé;
- f) **Translation services:** translation of six BGCI online training courses into French.

**15. 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).

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

## Annex 1: Report of progress and achievements against Indicators of Success for Financial Year 2023-2024

Project summary	Progress and Achievements April 2023 - March 2024	Actions required/planned for next period
<b>Outcome</b>		
Capability, capacity and commitment to restore the Botanical Forest of Divo and other areas within the cocoa landscape with native trees, including threatened tree, increased		
<p>Outcome indicator 0.1</p> <p>Three government organisations and four cocoa industry organizations and governing bodies make written commitments to restore in and around the Botanical Forest of Divo using native tree species, including threatened species, by the project end</p>	<p>0.1 Planned in Y2, resulting from the Conservation Planning Workshop and the National Forum.</p>	<p>MINEF is actively involved in the project, and it will be a main stakeholder of the Conservation Planning Workshop and the National Forum, which will be organised in May and October 2024 respectively. MINEF has a restoration project on going for the Reserve, which will be integrated with native and threatened trees. Actions will be defined during the Conservation Planning Workshop.</p>
<p>Outcome indicator 0.2</p> <p>20 local nurseries receiving a 50% increase in number of sales of threatened tree species' seedlings above a baseline taken at project start, by the project end</p>	<p>0.2 Planned in Y2, resulting from the Conservation Planning Workshop and the National Forum.</p>	
<p>Outcome indicator 0.3</p> <p>20 local nurseries and 3 botanical institutes contributing to new published and publicly available propagation protocols on BGCI PlantSearch database by the project end</p>	<p>0.3 Seed collection has started for 3 of the threatened target species: <i>Terminalia ivorensis</i>, <i>Pterygota macrocarpa</i> and <i>Entandrophragma angolense</i>.</p> <p>Propagation protocols will be developed in Year 2.</p>	
<b>Output 1.</b>		
Restoration plan for Reserve Botanique de Divo jointly developed by key stakeholders, including actions to counter threats for over 12 threatened tree species known at the reserve by project end		
<p>Output indicator 1.1</p> <p>Available information on 12 target threatened species compiled (maps of distribution, phenology, propagation attempts) by September 2023</p>	<p>1.1 Information about 14 target threatened species are described in section 3.1 and reported in Annex 9 and 10.</p>	
<p>Output indicator 1.2</p>	<p>1.2 Information described in section 3.2 and reported in Annex 9 and 10.</p>	



Reserve species checklist created / updated with maps of locations of mother trees for 12 target threatened tree species by December 2023		
Output indicator 1.3 Conservation plan for the 12 threatened tree species produced by the project end	1.3 Conservation Planning Workshop is planned in May (Y2). A stakeholders mapping has been outlined and the agenda for the meeting defined. (Annex 12 and 13)	
Activity 1.1 Steering committee established and meets bi-annually to monitor and adaptively manage the project as needed	The SC has been established with members from ICRAF, CNF and BGCI (Annex 5- Terms of Reference). The first meeting was held the 24 <sup>th</sup> of July 2023 (Annex 6 – Minute)	Next SC is planned for beginning of April, to evaluate results achieved during Y1 and to plan activities for Y2.
Activity 1.2 Local inception workshop to consult and involve community in the project	In July 2023 an inception meeting with cocoa farmers resident within the Reserve has been held. The farmers expressed dislike for exotic species such as Teak and stated that it is now hard to find native medicinal trees.	Community representatives will be involved during the Conservation Planning Workshop.
Activity 1.3 ICRAF/BGCI/CNF and MINEF workshop to review current information on species and then conduct Inventory of Reserve Botanique de Divo with attention to threatened species and map land use noting forest, cultivation, wetlands inter alia.	In July 2023 ICRAF and CNF had a project introductory meeting with the regional MINEF office in Divo, led by forester Colonel Anvo Banga and spent time with MINEF staff in the reserve. In March a workshop to present the results of the inventory has been organised in Divo with the participations of XX people (See Annex 11).	During the Conservation Planning Workshop, action plans to include threatened species into the restoration plan of the Reserve Botanique de Divo will be discussed.
Activity 1.4 Partners generate maps of land use, forest remnants, and wild seed collection zones to guide restoration approach and wild seed collection.	Maps have been produced following the inventory. See Annex 10.	
Activity 1.5 ICRAF/BGCI/CNF and relevant partners including local communities collaborate to develop a plan for restoration of the Reserve and rescue and conservation of threatened species, which may include special botanical zones (woodlots, seed orchards) within the Reserve.	Stakeholders' analysis completed,	Conservation Planning Workshop to be held in May 2024.
Activity 1.6 Planning workshop held between key project partners, representatives from community groups, and other local stakeholders.	Agenda for the workshop prepared.	Conservation Planning Workshop to be held in May 2024.
Activity 1.7 Reserve Botanique de Divo restoration plan agreed and published	Planned in Year 2.	As a result of the workshop a restoration plan will be published.

<b>Output 2.</b> Capacity to provide native planting materials of 110 individuals from 20 nurseries and at least three botanical- natural resource-related institutions (e.g., Jardin Botanique de Bingerville) improved) increased by October 2023		
Output indicator 2.1. 10 locally identified champions trained to be trainers of others in seed collection and propagation best practices by August 2023	2.1 In November 2023, 23 people, from 12 institutions, have been trained as Trainers of Trainees in seed sourcing, identification and mapping of mother trees; seed collection and propagation techniques; nursery management (Activity delayed due to national election happened in September).	
Output indicator 2.2. 50 local community members from around Divo and 50 staff from 20 Divo nursery operators by October 2023	2.2 In March 2024, 57 people (51 male and 6 female) have been trained on the same modules in French.	
Output indicator 2.3. At least 20 trained nurseries propagate seedlings of at least 15 native trees	2.3 Planned in Year 2.	
Output indicator 2.4 Propagation protocols developed (at least 5 of difficult/rarer species) and published on BGCI's PlantSearch database, and so accessible to others in CDI and other countries, by project end	2.4 Seed collection has started for 3 species ( <i>Terminalia ivorensis</i> , <i>Pterygota macrocarpa</i> and <i>Entandrophragma angolense</i> ).	
Activity 2.1. Locate and select 10 individuals from botanical institutions that have a strong interest and outstanding ability in botany, seed systems and ecological restoration to be trainers of trainers	23 people from 12 institutions have been involved in the ToT training.	
Activity 2.2. Survey of 20 Divo nurseries to understand baseline stocks and sales of native and threatened tree species across a month	In July 2023 the project team interviewed nine nursery operators supplying seedlings and trained by ICRAF, and visited ANADER, the national agricultural extension agency, in Divo.  The collected data was deleted due to handling errors. That is why the investigation is currently being redone.	
Activity 2.3. Three BGCI/CNF experts train 10 selected individuals to be trainers of others in Millennium Seed Bank, Kew and BGCI best practice in seed collection and propagation for conservation use, including data collection	2 trainers from Tooro Botanical Garden (TBG) of Uganda and 2 from BGCI have trained 23 people in seed sourcing, identification and mapping of mother trees; seed collection and propagation techniques; nursery management	
Activity 2.4. New trainers, supported by ICRAF/BGCI/CNF, deliver training to 50 local community members in seed collection and propagation using best practice standards	2 trainers have trained 57 people in seed collection and propagation	

Activity 2.5. New trainers, supported by ICRAF/BGCI/CNF, deliver training to 50 staff of Divo nursery operators in same principles but emphasizing new topics such as seed sources, threatened species, propagation protocols, phenology, seed calendars, and running seed collection networks	2 trainers have trained 57 people in nursery management	
Activity 2.6. 100 trained community members and nursery operators collect seed and propagate seedlings of at least 15 native tree species, including the target threatened tree species	Seed collection and seedlings propagation have started for 3 species: <i>Pterygota macrocarpa</i> (1500 seeds), <i>Entandrophragma angolense</i> (400 seeds) and <i>Terminalia ivorensis</i> (3500 seeds).	
Activity 2.7. Assist nurseries to document their propagation protocols, at least five of which should be for more difficult/rarer species. By project end, publish protocols on line	Planned in Y2.	
Activity 2.8. Re-survey of 20 Divo nurseries to understand updated stocks and sales of native and threatened tree species across a month	Planned at the end of the project.	
<b>Output 3.</b>		
Three government organisations, 3 botanical institutes, 4 cocoa companies and the CDI cocoa government body commit to and support threatened tree conservation and restoration of cocoa landscapes by project end		
Output indicator 3.1 The influential Cocoa governing body endorses commitment to incorporate threatened trees into their planting activities by project end	3.1 Expected after Conservation Planning Workshop and National Forum.	
Output indicator 3.2 At least ten entities putting in orders to nurseries for native seedlings to plant in degraded areas and agroforestry systems in and around Reserve Botanique do Divo by project end	3.2 Expected after Conservation Planning Workshop and National Forum.	
Output indicator 3.3 At least three Ivorian institutes become members of the BGCI network by project end and 9 of their staff receive benefits of BGCI network and accessing at least 1 of BGCI's online training tools by project end	3.3 7 Ivorian institutes become members of BGCI network. 8 staff from the 7 institutes participated to a workshop in November 2023 where BGCI presented its work, the database tools, the membership programme and its benefit, small grants opportunities.	During the Year 2 other meetings will be organised to present more in detail BGCI network and additional documents will be translated in French.
Output indicator 3.4 Records of plants within institutional collections uploaded for at least three institutes to BGCI's PlantSearch database by project end	3.4 Four of the new member institutes have been added to the BGCI's GardenSearch tool.	A new activity has been proposed through a change request, to implement during year 2 for Jardin Botanique de Bingerville, Jardin des Palmiers

		de Divo and CNRA-Jardin de Adiopodoumé, to document the species and their provenances to increase the collections' conservation value and submission to BGCI PlantSearch database.
Activity 3.1. Promote threatened species with planting in Reserve and publicize nurseries so at least ten entities order native seedlings for degraded areas and agroforestry systems in Divo.	A planting will be done at Conservation Planning Workshop and at the National Forum with native tree species on May and October 2024 (Year 2)	
Activity 3.2. Hold a national forum in Abidjan with 200 people from influential bodies like Conseil Café Cacao to disseminate results and chart way forward to increase use of threatened species in restoration	Planned beginning of October 2024.	
Activity 3.3. Work to ensure that at least three Ivorian institutes join the BGCI network and 15 of their staff receive benefits and access online training tools	7 institutions are now BGCI members and 8 representatives attended a workshop. All institutions have now access to the online training platform.	Support the 7 institutions to access to the platform and to apply to the Global Botanic Garden Fund. If possible, translate more module course in French.
Activity 3.4. Collaborate with Ivorian botanists to ensure that records of plants in at least three institutional are uploaded	4 Botanic Garden are in GardenSearch.	In order to progress with archival and inventory work to document the species and their provenances to increase the collections' conservation value and submission to BGCI PlantSearch database, a new activity has been proposed through a change request, to implement during year 2 for Jardin Botanique de Bingerville, Jardin des Palmiers de Divo and CNRA-Jardin de Adiopodoumé.

## 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
<p><b>Outcome:</b></p> <p>Capability, capacity and commitment to restore the Botanical Forest of Divo and other areas within the cocoa landscape with native trees, including threatened tree, increased</p>	<p>0.1 Three government organisations and four cocoa industry organizations and governing bodies make written commitments to restore in and around the Botanical Forest of Divo using native tree species, including threatened species, by the project end</p> <p>0.2 20 local nurseries receiving a 50% increase in number of sales of threatened tree species' seedlings above a baseline taken at project start, by the project end</p> <p>0.3 20 local nurseries and 3 botanical institutes contributing to new published and publicly available propagation protocols on BGCI PlantSearch database by the project end</p>	<ul style="list-style-type: none"> <li>- Sign-up sheets, photographs, footage, minutes</li> <li>- Catalogue of botanical institutions</li> <li>- Records of capability, capacity of groups from surveys and local knowledge e.g., species ranking</li> <li>- Evidence of meetings e.g., reports, action points, decisions</li> <li>- Baseline and endline reports, nursery checklists, sales data</li> <li>- Pre and post surveys, and joint plans developed and executed</li> <li>- Baseline study of nursery operations, species, seed sources, current practices; one endline study</li> </ul>
<p><b>Output 1</b></p> <p>Restoration plan for Reserve Botanique de Divo jointly developed by key stakeholders, including actions to counter threats for over 12 threatened tree species known at the reserve by project end</p>	<p>1.1 Available information on 12 target threatened species compiled (maps of distribution, phenology, propagation attempts) by September 2023</p> <p>1.2 Reserve species checklist created / updated with maps of locations of mother trees for 12 target threatened tree species by December 2023</p> <p>1.3 Conservation plan for the 12 threatened tree species produced by the project end</p>	<ul style="list-style-type: none"> <li>- Inventory of Reserve and maps published and shared</li> <li>- Joint plan for restoration available</li> </ul>
<p><b>Output 2</b></p> <p>Capacity to provide native planting materials of 110 individuals from 20 nurseries and at least three botanical- natural resource-related institutions (e.g., Jardin Botanique de Bingerville) improved) increased by October 2023</p>	<p>2.1 10 locally identified champions trained to be trainers of others in seed collection and propagation best practices by August 2023</p> <p>2.2 50 local community members from around Divo and 50 staff from 20 Divo nursery operators by October 2023</p> <p>2.3 At least 20 trained nurseries propagate seedlings of at least 15 native trees</p> <p>2.4 Propagation protocols developed (at least 5 of difficult/rarer species) and published on BGCI's</p>	<ul style="list-style-type: none"> <li>- Training curricula, records, names, photos,</li> <li>- Pre-tests, post-tests, certificates issued</li> <li>- Record of species raised</li> <li>- Protocols available</li> <li>- Photos, GPS coordinates of nurseries, seed sources</li> <li>- Seedling order records</li> </ul>

	PlantSearch database, and so accessible to others in CDI and other countries, by project end	
<p><b>Output 3</b></p> <p>Three government organisations, 3 botanical institutes, 4 cocoa companies and the CDI cocoa government body commit to and support threatened tree conservation and restoration of cocoa landscapes by project end</p>	<p>3.1 The influential Cocoa governing body endorses commitment to incorporate threatened trees into their planting activities by project end</p> <p>3.2 At least ten entities putting in orders to nurseries for native seedlings to plant in degraded areas and agroforestry systems in and around Reserve Botanique de Divo by project end</p> <p>3.3 At least three Ivorian institutes become members of the BGCI network by project end and 9 of their staff receive benefits of BGCI network and accessing at least 1 of BGCI's online training tools by project end</p> <p>3.4 Records of plants within institutional collections uploaded for at least three institutes to BGCI's PlantSearch database by project end</p>	<ul style="list-style-type: none"> <li>- Project results summarized and shared in document</li> <li>- National forum statement</li> <li>- Proof of membership in international botanical networks</li> </ul>
<p><b>Activities</b> (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)</p> <p>1.1 Steering committee established and meets bi-annually to monitor and adaptively manage the project as needed</p> <p>1.2 Local inception workshop to consult and involve community in the project</p> <p>1.3 ICRAF/BGCI/CNF and MINEF workshop to review current information on species and then conduct Inventory of Reserve Botanique de Divo with attention to threatened species and map land use noting forest, cultivation, wetlands inter alia.</p> <p>1.4 Partners generate maps of land use, forest remnants, and wild seed collection zones to guide restoration approach and wild seed collection.</p> <p>1.5 ICRAF/BGCI/CNF and relevant partners including local communities collaborate to develop a plan for restoration of the Reserve and rescue and conservation of threatened species, which may include special botanical zones (woodlots, seed orchards) within the Reserve.</p> <p>1.6 Planning workshop held between key project partners, representatives from community groups, and other local stakeholders.</p> <p>1.7 Reserve Botanique de Divo restoration plan agreed and published</p> <p>2.1 Locate and select 10 individuals from botanical institutions that have a strong interest and outstanding ability in botany, seed systems and ecological restoration to be trainers of trainers</p> <p>2.2 Survey of 20 Divo nurseries to understand baseline stocks and sales of native and threatened tree species across a month</p> <p>2.3 Three BGCI/CNF experts train 10 selected individuals to be trainers of others in Millennium Seed Bank, Kew and BGCI best practice in seed collection and propagation for conservation use, including data collection.</p> <p>2.4 New trainers, supported by ICRAF/BGCI/CNF, deliver training to 50 local community members in seed collection and propagation using best practice standards.</p> <p>2.5 New trainers, supported by ICRAF/BGCI/CNF, deliver training to 50 staff of Divo nursery operators in same principles but emphasizing new topics such as seed sources, threatened species, propagation protocols, phenology, seed calendars, and running seed collection networks.</p>		

2.6 100 trained community members and nursery operators collect seed and propagate seedlings of at least 15 native tree species, including the target threatened tree species.

2.7 Assist nurseries to document their propagation protocols, at least five of which should be for more difficult/rarer species. By project end, publish protocols on line.

2.8 Re-survey of 20 Divo nurseries to understand updated stocks and sales of native and threatened tree species across a month

3.1 Promote threatened species with planting in Reserve and publicize nurseries so at least ten entities order native seedlings for degraded areas and agroforestry systems in Divo.

3.2 Hold a national forum in Abidjan with 200 people from influential bodies like Conseil Café Cacao to disseminate results and chart way forward to increase use of threatened species in restoration

3.3 Work to ensure that at least three Ivorian institutes join the BGCI network and 15 of their staff receive benefits and access online training tools

3.4 Collaborate with Ivorian botanists to ensure that records of plants in at least three institutional are uploaded

#### **Important Assumptions**

1. Organisations and communities involved along cocoa value chain willing to engage with project.

2. Target native threatened tree species can be propagated, using existing information or through investigations in project. 3. External trainers/consultants able to travel to Côte d'Ivoire unhindered within project schedule (i.e. no pandemic or other restricting travel).

4. Interest in native and threatened tree use in restoration strategies grows enough to provide market for seedlings grown at nurseries

5. Institutes that join BGCI can be supported in process and to access benefits available to them and their staff and provide data back to BGCI databases.

## Annex 3: Standard Indicators

**Table 1 Project Standard Indicators**

DI Indicator number	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-A01	10 locally identified champions trained to be trainers of others in seed collection and propagation best practices by August 2023	People	Men Women	18 5			18 5	18 5
DI-A01	50 local community members from around Divo and 50 staff from 20 Divo nursery operators by October 2023	People	Men Women	51 6			51 6	51 6
DI-A03	At least three Ivorian institutes become members of the BGCI network by project end and 9 of their staff receive benefits of BGCI network and accessing at least 1 of BGCI's online training tools by project end	Number of organisations	Botanical institutions	7			7	7
DI-A05		People	Men Women					

**Table 2 Publications**

Title	Type (e.g. journals, best practice manual, blog post, online videos, podcasts, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
"Côte d'Ivoire's neglected botanic gardens key for conservation"	Blog post	Cathy Watson	Female	Australia		<a href="https://forestsnews.cifor.org/86701/cote-divoires-neglected-botanic-gardens-key-for-conservation?fnl=en">https://forestsnews.cifor.org/86701/cote-divoires-neglected-botanic-gardens-key-for-conservation?fnl=en</a>
Sowing the seeds of change in Côte d'Ivoire" (English) or "Semer les graines du	Blog post	Gilberte Koffi	Female	Côte d'Ivoire		<a href="https://forestsnews.cifor.org/87137/sowing-the-seeds-of-change-in-cote-divoire?fnl=en">https://forestsnews.cifor.org/87137/sowing-the-seeds-of-change-in-cote-divoire?fnl=en</a> (English) or



<b>Title</b>	<b>Type</b> (e.g. journals, best practice manual, blog post, online videos, podcasts, CDs)	<b>Detail</b> (authors, year)	<b>Gender of Lead Author</b>	<b>Nationality of Lead Author</b>	<b>Publishers</b> (name, city)	<b>Available from</b> (e.g. weblink or publisher if not available online)
changement en Côte d'Ivoire**						<a href="https://forestsnews.cifor.org/87365/semer-les-graines-du-changement-en-cote-divoire?fnl=fr">https://forestsnews.cifor.org/87365/semer-les-graines-du-changement-en-cote-divoire?fnl=fr</a> (French)
"Improving seed collection & propagation of threatened trees in Divo Botanique Reserve, Côte d'Ivoire**"	Blog post	Alex Hudson	Male	British		<a href="https://www.bgci.org/news-events/improving-seed-collection-propagation-of-threatened-trees-in-divo-botanique-reserve-cote-divoire/">https://www.bgci.org/news-events/improving-seed-collection-propagation-of-threatened-trees-in-divo-botanique-reserve-cote-divoire/</a>
Threatened trees in cocoa landscapes*	Project information webpage	Alex Hudson	Male	British		<a href="https://www.bgci.org/our-work/projects-and-case-studies/threatened-trees-in-cocoa-landscapes">https://www.bgci.org/our-work/projects-and-case-studies/threatened-trees-in-cocoa-landscapes</a>

## **Annex 4: Onwards – supplementary material (optional but encouraged as evidence of project achievement)**

### **Annex List**

- Annex 5- Steering Committee's Terms of Reference
- Annex 6- Example of meeting's minutes
- Annex 7- Inception Workshop
- Annex 8- Reserve floristic and land use inventory report
- Annex 9- Check list of threatened species
- Annex 10- Land use, forest remnants, and wild seed collection zones maps
- Annex 11- Inventory presentation list of participants
- Annex 12- Stakeholders' analysis
- Annex 13- Conservation Planning Workshop's Draft Agenda
- Annex 14- Inception meeting minute with cocoa farmers resident within the reserve
- Annex 15- List of ToT training's participants
- Annex 16- ToT Trainee assessment
- Annex 17- List of training participants
- Annex 18- Pictures of seeds collected
- Annex 19- Botanic Gardens Workshop

## 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 <b>correct template</b> (checking fund, type of report (i.e. Annual or Final), and year) and <b>deleted the blue guidance text</b> before submission?	X
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:BCF-Reports@niras.com">BCF-Reports@niras.com</a> putting the project number in the Subject line.	X
<b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:BCF-Reports@niras.com">BCF-Reports@niras.com</a> about the best way to deliver the report, putting the project number in the Subject line.	
<b>Have you included means of verification?</b> You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	X
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 15)?	X
Have you involved your partners in preparation of the report and named the main contributors	X
Have you completed the Project Expenditure table fully?	X
Do not include claim forms or other communications with this report.	