Darwin Initiative Extra Annual Report

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

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

Submission Deadline: 30th April 2024

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Darwin Initiative Project Information

Project reference	DAREX001
Project title	Developing a Global Biodiversity Standard certification for tree-planting and restoration
Country/ies	Brazil, China, India, Jordan, Kenya, Madagascar, Malaysia, Peru, Uganda
Lead Partner	Botanic Gardens Conservation International (BGCI)
Project partner(s)	Society for Ecological Restoration (SER), Centre for International Forestry Research and World Agroforestry Centre (CIFOR-ICRAF), TRAFFIC, Ecosia, The Plan Vivo Foundation (PVF), 1t.org, Jardim Bôtanico Araribá, Huarango Nature, Auroville Botanical Gardens, Missouri Botanical Gardens Madagascar, Brackenhurst Botanic Gardens, Tooro Botanical Gardens.
Darwin Initiative grant value	£2,693,374.00
Start/end dates of project	01/04/2022 - 31/03/2027
Reporting period (e.g. Apr 2023 – Mar 2024) and number (e.g. Annual Report 1, 2, 3)	April 2023 – March 2024 Year 2
Project Leader name	Paul [redacted]
Project website/blog/social media	https://www.biodiversitystandard.org/
Report author(s) and date	David [redacted] & Paul [redacted] – 15/04/2023

1. Project summary

Governments, corporations, and civil society have pledged hundreds of millions of hectares for tree-planting, reforestation, and forest restoration, primarily to sequester carbon. The Bonn Challenge alone comprises pledges by 61 countries covering over 200mha to date, and a target of 350mha by 2030.

The massive scale and the speed at which tree-planting has gained momentum during the past few years has led to many poorly designed projects, with challenges, and failures frequently highlighted in the scientific literature (e.g., Bond et al., 2019; Lewis et al., 2019; Crane, 2020; Fagan et al., 2020; Friggens et al., 2020; Hohl et al., 2020; Holl & Brancalion, 2020; Coleman et al., 2021; Parr et al. 2024). Tree-planting brokers have also proliferated, offering companies the opportunity to offset their CO_2 emissions but without the data and expertise to ensure that biodiversity is not harmed (see WWF's Tree Planting by Businesses, Mansourian and Vallauri, 2020).

Furthermore, large-scale tree-planting efforts have continued to be promoted and celebrated often without any indication of the species planted, the large-scale use of (sometimes invasive) non-native species (e.g., Richardson & Kluge, 2008; Kull et al., 2019; Dyderski & Jagodziński, 2020), and the potential for associated deforestation of intact native forests, thus potentially causing net carbon loss instead of gain. Despite good intentions, many tree-planting efforts use a restricted palette of inappropriate but readily available tree species, with potentially negative consequences for biodiversity and for the people whose livelihoods

depend on those trees – through either carbon payments, the ecosystem services they provide or their commodity value. When implemented poorly, these projects do not help alleviate poverty.

Simultaneously, BGCI's recent State of the World's Trees report, shows that 30% of the world's trees (17,500 species) are threatened with extinction. Clearly, we are missing opportunities for species recovery and positive biodiversity outcomes.

The botanical, ecological restoration and agroforestry communities have attempted to influence a wide range of large-scale tree-planting initiatives, including the IUCN Bonn Challenge Secretariat, The Nature Conservancy, 1t.org, Trillion Trees, the Global Evergreening Alliance, Ecosia, Plan Vivo and various corporate entities. However, few financial mechanisms reward positive impacts on biodiversity, and there is little incentive to incorporate native species into planting programmes. Furthermore, the imperatives to sequester carbon as fast as possible and to deliver income benefits through fast growing cash-crops means that exotic tree species are often preferred. Following discussions with corporate and NGO partners, we believe that an accessible certification recognising positive impacts on biodiversity would be highly valued, particularly if combined with mentoring to improve biodiversity and local capacity in tree-planting and reforestation initiatives.

While some current certifications incorporate biodiversity (e.g., FSC's High Conservation Value scheme), they are primarily geared to large-scale commercial tree-planting, e.g., palm oil. Our intention is to create a certification that is accessible and affordable to all, including grassroots organisations, NGOs, and government agencies. The Global Biodiversity Standard will focus on tree planting and reforestation initially before broadening it to include more ecosystems over time.

This project aims to develop a site- based Global Biodiversity Standard certification, which will provide assurances to investors, build local capacity to assess impacts on biodiversity, and mentor practitioners on planting the right trees in the right places for better biodiversity, carbon, and livelihood outcomes.

2. Project stakeholders/ partners

Thirteen partner organisations implement this project. Botanic Gardens Conservation International (BGCI) acts as the lead partner of The Global Biodiversity Standard (TGBS) project. BGCI coordinates TGBS, leads the development of relationships among the various partners, and leads various components of the project.

In addition to BGCI, six partner organisations provide technical input on the development of TGBS. The technical partners of the project are the Society for Ecological Restoration (SER), the Centre for International Forestry Research and World Agroforestry Centre (CIFOR-ICRAF), TRAFFIC, Ecosia, the Plan Vivo Foundation (PVF) and the World Economic Forum - 1t.org. The technical partners meet quarterly during steering committee meetings to plan project activities, monitor progress, and make decisions.

Six additional project partners help to implement TGBS across six biodiverse countries, with three additional partners signing up across an additional three countries during year 2 of the project. Driven by demand stemming from the host countries, these hub partners are Jardim Botânico Araribá (Brazil – São Paulo, Paraná and Mato Grosso hubs), Huarango Nature (Peru – Dry Forest, Andean and Amazonian hubs), Auroville Botanical Gardens (India), Missouri Botanical Gardens (Madagascar), Centre for Ecological Restoration - Kenya (Kenya – Highlands, Coastal and Savanna hubs) and Tooro Botanical Gardens (Uganda – Lwamunda and Fort Portal hubs). The additional three partners are Royal Botanic Gardens, Jordan, Kadoorie Farm and Botanic Garden (Hong Kong, China) and the Tropical Rainforest Conservation and Research Centre (Malaysia – Peninsular and Sabah hubs). The hub partners meet monthly to share ideas and project updates, with BGCI coordinating these interactions. The partnerships have been strengthened during year 2 with hubs regularly meeting bilaterally to share ideas, and were further enhanced during a shared training workshop. The hubs have shared expertise on a wide range of topics, including biodiversity survey techniques, geo-spatial data processing and stakeholder engagement. The sharing of knowledge among these partners has ensured the TGBS methodology has been rigorously tested and improved over the past 2 years.

Collaboration across the thirteen partner organisations has helped to make progress with the implementation of the four outputs of the TGBS project as follows:

Output 1: A scientifically credible, objective, and accessible Global Biodiversity Standard (TGBS) and certification methodology in place and available to tree-planting and forest restoration initiatives by the end of year 2.

BGCI, SER, TRAFFIC and PVF have worked together to develop the TGBS methodology. BGCI and SER have worked together to develop a methodology that assesses the core biodiversity and ecosystem

integrity components of the standard. They have co-led the writing of “The Global Biodiversity Standard: Manual for assessment and best practices”, developing a comprehensive guide that outlines the full technical specification of the methodology. BGCI and SER have also worked collaboratively to ensure the methodology aligns with global policy frameworks and promotes best practices for ecosystem restoration. TRAFFIC and PVF have worked together to lead the development of the assessment of TGBS criterion 3: “Protect, restore and manage biodiversity in consultation and partnership with local communities and other stakeholders”. TRAFFIC and PVF contributed to the TGBS manual, providing guidance on best practices for assessing stakeholder engagement on social benefits. They have also worked together to develop a safeguarding risk assessment process and refinement of the TGBS exclusion list. Ecosia, PVF and 1t.org have supporting testing the TGBS methodology, by providing sites for testing and have shared feedback on improvement of both the methodology and best practices. The nine hub organisations have worked closely with all the technical partners, a range of other tree-planting/restoration organisations and local communities to test the methodology across a range of locations and conditions.

Output 2: Hubs of expertise and data established to support Global Biodiversity Standard assessments and forest restoration mentorship in at least 6 highly biodiverse countries by the end of year 3.

All technical partners and hub partners collaborated to develop a training module for assessors in the TGBS assessment methodology. This module was a major development and supported the training of the first cohort of assessors and trainers that was delivered in January 2024 at Jardim Botânico Araribá, São Paulo, Brazil. In addition to development of the assessor training module, BGCI, SER and CIFOR-ICRAF are collaborating to provide data, tools and resources to support the TGBS assessment and mentoring processes. TRAFFIC and Ecosia have also collaborated on sustainable use case studies that provide a key mentoring resource on restoration best practices. All of the above-mentioned have worked closely with the nine hub partners to identify the data and training needed to implement the TGBS assessment process. By working together, they ensure a feedback loop is closed and appropriate data and training are provided.

Output 3: A self-sustaining business model and plan for scaling up the Global Biodiversity Standard (GBS) to at least 10 highly biodiverse countries and a communications plan for promoting the GBS worldwide developed by the end of year 3.

BGCI, SER, CIFOR-ICRAF, TRAFFIC and PVF are working together to support the development of a business case for TGBS. BGCI, SER, TRAFFIC and PVF have experience of certification, accreditation and standards. They have worked together to share experiences that are helping to optimise the TGBS business model. Moreover, the hub partners have worked closely with BGCI and consultants JS Global to collate costs of the testing process, with this data feeding directly into the business model.

Output 4: The Global Biodiversity Standard and certification adopted and used by policymakers, financiers, brokers and practitioners of tree-planting, reforestation and forest restoration managing at least 250 sites in at least 10 countries by project end.

BGCI has collaborated with Ecosia on development of a communications and PR plan to promote TGBS among policymakers, financiers, brokers and practitioners. BGCI has worked closely with each of the hub partners to ensure that the engagement is tailored to each region where TGBS is currently implemented.

Beyond the official partners of the project, the project is engaging various other stakeholders. Restoration practitioners have interacted with BGCI and the hub partners to allow testing of the TGBS methodology. These practitioners have also been engaged with mentoring, helping them to include their practices. Meanwhile, local communities have been engaged during the testing process via social surveys that identify the stakeholder engagement and social benefits of projects.

3. Project progress

3.1 Progress in carrying out project Activities

Activity 1.1. Draft GBS certification assessment methodology developed by the end of year 1.

This activity was completed in year 1 of the project, with a draft version of the methodology published on the BGCI website: (i) an online application form, (ii) a remote sensing methodology, and (iii) a field survey form.

Activity 1.2. Draft methodology tested in real world conditions in at least 6 countries by the end of year 2.

During the first two years of the project, the TGBS methodology has been tested across 116 sites in eight biodiverse countries (see Annex 1 for full details). The methodology has been iteratively tested with regular meetings to review the effectiveness of the methodology. This has led to updates in the methodology, with additional testing verifying the effectiveness of these updates. The methodology has been tested across a diverse range of sites. It has been tested in protected areas under restoration, other ecological restoration areas, tree plantations, agroforestry and mixed land use sites. It has tested across a range of biomes that include rainforests, dry forests, montane forests, savannas, lowland and montane grasslands and coastal mangrove forests. Moreover, it has been tested across sites that range in age from recently implemented (0 years) to long-established restoration sites (>70 years). A large diversity in the size of sites has also been tested with sites ranging from 0.04ha to 5000 ha.

In Brazil, the hubs coordinated by Jardim Botânico Araribá tested the methodology across 7 sites in year 2 of the project (see Annex 2). This included testing at RPPN Renopolis, a protected area under restoration in the Atlantic Forest of São Paulo state, by the São Paulo hub. For this field test, the project manager, Dr David Bartholomew, from BGCI joined the team from Jardim Botânico Araribá for the field survey in June 2023. Two agroforestry sites were tested in Mato Grosso by a new TGBS hub established in Cuiabá, testing the effectiveness of the methodology in the cerrado savanna ecosystem. Both the São Paulo and Mato Grosso hubs combined to test agroforestry sites in Paraíba to apply the methodology to the Caatinga dry forest ecosystem. The São Paulo hub also tested the methodology in Minas Gerais at 2 restoration sites coordinated by Ecosia in the cerrado ecosystem.

In India, Auroville Botanical Gardens tested the methodology in year 2 of the project across 7 sites (see Annex 3). The sites tested in India ranged in size from 10-150 ha and covered restoration and agroforestry sites in Tamil Nadu, Haryana and Rajasthan states. In addition to applying the methodology to established restoration projects, the methodology was tested at two sites where restoration has yet to begin. These surveys were done to collect baseline data and to test the feasibility of certifying plans.

In Kenya, the Centre for Ecosystem Restoration – Kenya (CER-K) have tested the methodology across 14 sites in the last 12 months, with an additional site tested on a Darwin Initiative funded project in the Mulanje region of Malawi (see Annex 4). These sites covered protected areas, other ecological restoration sites and agroforestry areas in both the highlands and coastal areas of Kenya. These projects are implemented by a range of different organisations and included sites supported by the Plan Vivo Foundation (PVF) and Ecosia. The project lead, Dr Paul Smith, from BGCI joined the CER-K team for the test in Malawi in March 2024.

In Madagascar, Missouri Botanical Gardens tested the TGBS methodology at two sites in year 2 of the project (see Annex 5). These were at two protected areas under restoration in Ankafobe and Kalanoro of 135 ha and 1000 ha, respectively. In addition, data collected during testing of sites in year 1 of the project was re-analysed to review whether updates in the methodology were effective.

In Peru, Huarango Nature tested the TGBS methodology across four sites (see Annex 6). These tests covered protected areas under restoration in the dry forest region and sites of multiple land uses in the Amazon region. The project manager, joined the Huarango Nature team for the tests in the dry forest region in August 2024.

In Uganda, Tooro Botanic Gardens tested the TGBS methodology across 32 sites (Annex 7). These sites encompassed a wide range of land uses, including agroforestry, protected area, restoration and botanical garden sites.

Additional tests of the methodology were done in Malaysia and France. A new hub established by the Tropical Rainforest Conservation and Research Centre (TRCRC) in Malaysia tested the methodology in Sabah state with the support of Amarizni Mosyaftiani, Restoration Fellow at the Society for Ecological Restoration (SER). (see Annex 8). The methodology was tested in an urban area at Elminia and at a living collection of dipterocarps in Merusuli. In France, a test was carried out by the Reforest'Action team on one of their sites. The site was a restoration area and the purpose of the testing was to confirm applicability of the methodology to a temperate ecosystem (see Annex 9). Some challenges were encountered in this test, highlighting the need for further testing before applying the methodology to temperate ecosystems.

Many of these tests had both the field survey and remote sensing methodology tested (see Annex 1). Additionally, the remote sensing methodology was tested by the Acorn programme by Rabobank and Reforest'Action. This included testing of new remote sensing methods, such as trait volume and spectral species that are derived from satellite remote sensing products. Reforest'Action additionally undertook fieldwork with Jardim Botânico Araribá in the Atlantic Forest to ground truth their technology in a tropical forest setting (see Annex 1).

Activity 1.3. Methodology refined and finalised by end of year 2.

In the second year of the project, substantial progress has been made to refine and finalise the methodology for assessing sites under The Global Biodiversity Standard.

The refinement of our methodology included a significant review of feedback based on testing of the draft assessment process. We refined the evaluation of ecosystem integrity by developing protocols for methods to assess the various key attributes and sub-attributes. The revision involved identifying and integrating key methods for both remote sensing techniques and field surveys, ensuring a comprehensive and accurate evaluation process. In total 125 field and 59 remote sensing methodologies were identified as options to support the evaluation process (see TGBS Manual Annex 10: Appendices C & D).

The refinement of both the field and remote sensing methodologies was done following feedback discussions between the technical partners and hub partners following testing by hub partners (see activity 1.2). Moreover, collaborative discussions between partners related to the field component (BGCI & SER) and remote sensing (BGCI, Rabobank and Reforest'Action) were critical in advancing and finalising the methodology to assess ecosystem integrity. In addition, Bioflore, a specialist remote sensing company, were contracted by BGCI to do a comprehensive review of the remote-sensing methodology and to outline key scripts that can be used in the analysis process (see Annex 11).

Progress was also made in assessing the level of protection for biodiversity for TGBS. The adaptation of a 5-star system, as opposed to the previous points system, was necessitated by challenges in categorising projects under the old system. The new system is centred around assessing both the legal protection status and the percentage of sustainable management activities, making it more straightforward and relevant. This enhancement was led by BGCI and SER (see Annex 10: Sections 5-6 & Appendix B).

The methodology for Criterion 3, which assesses stakeholder engagement and social benefits, has been updated (see Annex 10: Sections 5-6 & Appendix D). This criterion now aligns with the SER Social Benefits Wheel. A more streamlined points and evidence system has been developed, simplifying the assessment process and making it more accessible to our assessors. This task was led by PVF and TRAFFIC, ensuring the methodology not only measures engagement effectively but also aligns with current best practices in social impact assessment.

Criterion 8 has also undergone a thorough refinement process, spearheaded by SER and BGCI. The methodology has been adjusted to align more closely with the UN Decade Standards of Practice (FAO, IUCN & SER 2023) and the Restoration Project Information Sharing Framework (Gann et al. 2022). This alignment is crucial for synchronising our assessment process with global policy initiatives and ensuring our methodologies are globally relevant and standardised.

Further, PVF and TRAFFIC have refined the exclusion list (see Annex 12) and developed a new safeguarding risk assessment process aimed at protecting against social risks (see Annex 13). This development is vital for ensuring that our project adheres to the highest ethical standards and effectively manages potential risks for both the reputation of the standard and of vulnerable people.

We have also refined the tiering system associated with our project certifications. New scoring thresholds have been set for basic, advanced, and premium certifications, and we have introduced new pre-certification and certified plan tiers (see Annex 10: Section 1). These additions are designed to make our methodology more accessible, particularly for early-stage projects, enabling broader application and inclusivity.

An additional major advancement over the past twelve months was the development of a mobile app. This app has been designed by RadixWeb, in collaboration with BGCI and Auroville Botanical Gardens, to allow assessors to collect and submit data for assessment of sites. The app has functionality to help the assessor design the sampling effort, a species survey tool to collect data on the biodiversity at a site and the assessment form, allowing for standardised data collection and management. A beta version of the app is available at: https://appdistribution.firebase.google.com/testerapps/1:80478004512:android:ab7ba05ab164f300676345/releases/4bq2o850vvun8 (link only compatible on Android phones). In addition, RadixWeb have supported the development of a web-based portal to host the online application form and a platform for reviewers to review applications and assessments. This platform has advanced functionality on the previous version of the application form, with the inclusion of a feature that allows applicants to draw the polygon of their site over a basemap. The updated application is available in English, French, Portuguese and Spanish at: https://gbsc.dev.radixweb.net/

The methodological refinements were achieved through a collaborative and inclusive process, involving online workshops with partners and input from a technical consultation where over 60 experts contributed. Additionally, a key workshop held in Brazil in January provided a platform to further refine and finalise the methodology. This collective effort ensured a wide range of expert insights and practical feedback, enhancing the robustness and applicability of our methodologies.

The final, detailed methodology is comprehensively outlined in our project manual (see Annex 10 and https://www.biodiversitystandard.org/what-is-the-global-biodiversity-standard/). This manual will serve as

a vital resource for current and future assessors, encapsulating all methodological refinements and providing a structured approach to applying our assessment criteria across different ecosystems and projects. The overall methodology has garnered strong support, including from Dr David Cooper, Acting Executive Secretary of the CBD, Dr Elian Ubalijoro, CEO of CIFOR-ICRAF and Dr Grethel Aguilar, Director General of IUCN, who collectively have contributed a foreword for the manual. This milestone marks a significant achievement for the project, ensuring that our methodologies are both effective and aligned with global conservation standards.

Activity 1.4 GBS application process available to tree-planting and forest restoration practitioners online in English, Spanish, Portuguese and French by the end of year 2

The application form for The Global Biodiversity Standard (TGBS) has been finalised during year 2 of the project. Questions have been updated to provide a simpler application process and to ensure that all the necessary information needed for an assessment is collected through the application form. The application form is presented in Appendix A of the TGBS manual and online in English, French, Portuguese and Spanish (see Annex 10: Appendix A and at https://gbsc.dev.radixweb.net/).

Activity 2.1 At least 10 training hubs established in at least 6 biodiverse countries by the end of Q2, year 2

Sixteen training hubs have been established in nine countries over the first two years of the project (see Figure 1). In Brazil, hubs have been established in Jardim Botânico Araribá and Sociedade Chauá covering the Atlantic Forest, Araucaria forests and cerrado ecosystems. Kadoorie Farm and Botanic Garden host a TGBS hub in Hong Kong to cover the South China region. Meanwhile in India, Auroville Botanical Gardens host a TGBS training hub, covering the South Asian sub-continent. The Royal Botanic Gardens, Jordan have agreed to host a hub in Jordan that covers the Middle East and North Africa region. Across Kenya, CER-K have established training hubs that cover the three major biomes of the highlands, coastal forest and savanna. Missouri Botanical Gardens have established a training hub in Madagascar, and the Tropical Rainforest Conservation and Research Centre (TRCRC) have set up two training hubs in Malaysia, covering peninsular Malaysia and Sabah. In Peru, Huarango Nature have established three hubs to cover the major regions in the country: Amazonia, the Andes and the coastal dry forests. In Uganda, two hubs have been set up, covering the Western and Lake Victoria crescent regions of the country.

All of these hubs have been building capacity over the past year. In the six countries that were outlined in the Darwin Initiative Extra project proposal (Brazil, India, Kenya, Madagascar, Peru, Uganda), funding from the project has been used to purchase equipment necessary for the assessment process, including field survey tools, personal protective equipment, training materials, computers and biodiversity identification guides.

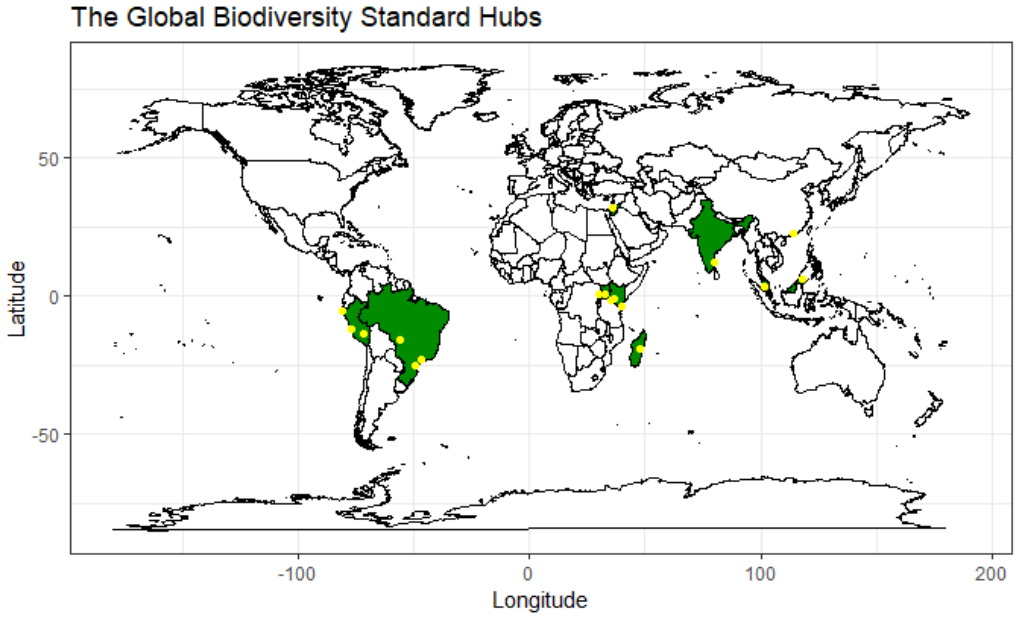

Figure 1 - The location of The Global Biodiversity Standard Hubs, located across nine countries with high levels of biodiversity,

Activity 2.2 Full suite of GBS training materials developed and delivered to training hubs by the end of Q2, year 2

Training materials have been developed by the technical partners over the past year. BGCI and SER led the writing of The Global Biodiversity Standard Manual, with support from PVF and TRAFFIC (see Annex

10 & Activity 1.3). This manual provides a comprehensive guide to the whole assessment process and also includes details of a training module for assessors and a list of key mentoring resources that can support the implementation of best practices for restoration practitioners. This manual is substantial, totally 154 pages. The length, complexity and detail of the manual has meant that delivery of this activity was slightly delayed, with a first draft available in Y2Q3 and a final version finalised in Y2Q4. The manual has been translated in French and Spanish, with a Portuguese translation under way. The Portuguese translation has been delayed because our translator was leading the coordination of the Train the Trainer workshop and therefore without capacity to complete the translation before the end of Y2 of the project (see Activity 2.3).

In addition, a set of training materials was developed by the technical and hub partners to train trainers and assessors in the TGBS methodology. These resources cover the TGBS assessor module, a 54-hour training course that is detailed in section 8 of the TGBS manual (see Annex 10). The training resources include a set of presentation, workshop and discussion sessions, with additional practical lessons on how to implement the assessment process in the field. A full set of training materials are available here, with additional training resources on field survey techniques available here. These materials were used in the inaugural Train the Trainer workshop in January 2024 (see Activity 2.3).

SER also led the development of the certification scheme of TGBS trainers and assessors in collaboration with BGCI. This included development of both practical and written examinations to verify learning and understanding. Moreover, a knowledge base requirement that is based on SER's certified ecological restoration practitioner (CERP) programme was decided as a requirement for certification of trainers. This requirement was decided to ensure high integrity of the standard.

Additional training workshops were run on R and GIS in Y2Q3, helping build capacity in these skills at the training hubs. Moreover, training resources on use of various biodiversity databases and tools were developed by CIFOR-ICRAF, including resources on the Global Useful Native Trees and TreeGOER databases (see Annex 14).

Activity 2.3. At least 200 people from at least 10 biodiverse countries (50% women) trained in biodiversity assessment and forest restoration mentoring to improve capacity to do GBS assessments and advise on best practices by the end of year 3

In January 2023, a two-week train the trainer workshop was run to train the first cohort of assessors and trainers in the TGBS methodology that covers both assessment and mentoring on best practices. At the event, 20 people from nine countries were trained (14 men, 6 women; see Annex 15) by the technical partners (BGCI, SER, CIFOR-ICRAF, PVF, TRAFFIC, Ecosia, Reforest'Action, Royal Botanic Gardens, Kew). The training workshop was a great success with content on a wide range of topics covered, a substantial uplift in knowledge and understanding of ecosystem restoration and the TGBS methodology achieved. In total, 13 trainers have met the requirements to be certified as TGBS trainers. These trainers have been issued with certificates to verify their status as a trainer and assessor of the standard (see Annex 16). Certificates are valid for five years before verification of understanding must be re-assessed.

Following the Train the Trainer workshop, training workshops have been held in Brazil, India, Kenya, Madagascar and Peru, training an additional 64 assessors making 84 trainees in total (52 men; 32 women) (see Annex 15). There is currently an imbalance in the number of men and women (38%) who have been trained, but this will be addressed in year 3 of the project with contractual enforcement for hub partners to train a minimum of 68 women (equivalent to 50%). Funding from the project has also helped to support the application of 15 people to become registered under the CERP programme (see Annex 17).

Activity 2.4 Comprehensive data on spatial distribution of biodiversity, seed sources, vegetation and tree distribution, socio-economic biodiversity values etc. compiled, processed and available online for at least 6 biodiverse countries by the end of year 3.

This year, significant progress made against this activity with the assembly and dissemination of comprehensive biodiversity data through both global and regional databases (see Annex 14). The GlobalUsefulNativeTrees (GlobUNT) database was a key achievement, now encompassing details on 14,014 tree species. This resource outlines tree species that have uses to support local livelihoods. The database has been enhanced this year by including information on the climate, geographical distribution, lifeform, invasiveness, economic uses, climatic information, threat status and seed information (see publication below). The database is published open access in *Scientific Reports*:

> Kindt, R., Graudal, L., Lillesø, JP.B. *et al.* GlobalUsefulNativeTrees, a database documenting 14,014 tree species, supports synergies between biodiversity recovery and local livelihoods in landscape restoration. *Sci Rep* **13**, 12640 (2023). https://doi.org/10.1038/s41598-023-39552-1

Furthermore, the Tree Globally Observed Environmental Ranges (TreeGOER) database was expanded to include environmental data for 48,129 tree species. This database outlines both climatic and edaphic

ranges of tree species globally, enhancing the precise selection of species for targeted restoration efforts. In order to create this database, geo-referenced tree species digital distribution data from GBIF and BIEN were collated. Guidelines on compiling, cleaning and bias-reduction, in these data is outlined in the methods section of the associated publication of this database. The TreeGOER database is published as open access in *Global Change Biology*:

> Kindt, R. (2023). TreeGOER: A database with globally observed environmental ranges for 48,129 tree species. *Global Change Biology*, 29, 6303–6318. https://doi.org/10.1111/gcb.16914

Additional data tools and guidance have been developed by CIFOR-ICRAF over the past 12 months, including:

i) The Trees of India that outlines the nativeness of tree species in India
Kindt, R. (2024). Trees of India Version 1: Standardization to Records in World Flora Online and the World Checklist of Vascular Plants, with matches in GlobalTreeSearch and GlobalUsefulNativeTrees (2024.01) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.10448364

ii) A database that standardises names with the Tallo database to support calculations of aboveground carbon calculations for useful trees
Kindt, R. (2023). Tallo database with World Flora Online taxonomic matches, also including information on presence in the TreeGOER and GlobalUsefulNativeTrees databases (v.2023.08) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.8268758

iii) The CitiesGOER database that provides environmental data for 52,602 cities and 48 environmental variables helping to support filtering of suitable species when used in conjunction with the TreeGOER database
Kindt, R. (2023). CitiesGOER: Globally Observed Environmental Data for 52,602 Cities with a Population ≥ 5000 (2023.10) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.10004594

iv) The TreeGOER Global Zones that provides an atlas for climatic moisture index ranges, months with mean temperature above 10°C and Maximum Climatological Water Deficit, helping to guide selection of native species for restoration.
Kindt, R. (2023). TreeGOER Global Zones: Global atlas for the Climatic Moisture Index (CMI), Maximum Climatological Water Deficit (MCWD) and the number of months with average temperature > 10 degrees C (Tmo10) (v.2023.10) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.8411069

v) ClimateForecasts database that provides environmental data for 15,504 weather station locations and 49 environmental variables. This data can be combined with TreeGOER and GlobUNT to support selection of species for planting in restoration projects.
Kindt, R. (2024). ClimateForecasts: Globally Observed Environmental Data for 15,504 Weather Station Locations (2024.03) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.10776414.

vi) Guidance on how to standardise species names using the WorldFlora R package to avoid duplication of species because of synonyms
Kindt, R. (2024). Developing a global biodiversity standard certification for tree-planting and restoration: Tutorials for standardizing species names with WorldFlora [Data set]. Zenodo. https://doi.org/10.5281/zenodo.10628407
Standardizing tree species names of GlobalTreeSearch with WorldFlora and recent versions of World Flora Online and the World Checklist of Vascular Plants. https://rpubs.com/Roeland-KINDT/1134151. 29-DEC-2023.

vii) A compendium of country-level invasive tree species helping to identify invasive and potentially invasive species during TGBS assessments
Kindt, R. (2023). Country Compendium of the Global Register of Introduced and Invasive Species: Standardization to Records in World Flora Online or the World Checklist of Vascular Plants (v.2023.11) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.10183725

More details are outlined in Annex 14.

Activity 2.5 Climate Resilience Assessment Tool and other spatial seed source and tree-planting guidance tools available online by the end of year 3

BGCI published the Climate Assessment Tool in year 1 of the project:

Climate Change Alliance of Botanic Gardens. 2024. Climate Assessment Tool v1. Botanic Gardens Conservation International. Richmond, U.K. Available at https://cat.bgci.org Accessed on 16/04/2024.

In year 2 of the project, additional tools to assess the climate resilience of trees have been provided by the TreeGOER database (see activity 2.4). This database builds on the Climate Assessment Tool by including

data on edaphic factors as well. These two data tools were showcased to practitioners at COP-28 (see activity 1.4). Moreover, additional data tools and guidelines have been provided to practitioners via upload of the resources presented in Activity 2.4 to the Global Tree Knowledge Platform.

Activity 2.6. Germination/propagation protocols available online for at least 10,000 tree species in at least 10 Darwin eligible biodiverse countries by project end.

This activity is scheduled for years 3-5 of the project. However, in preparation for this activity, BGCI has developed a manual to support the development of propagation protocols. This is freely available on BGCI's website: https://www.bgci.org/resources/bgci-tools-and-resources/propagation-protocol-manual/ (e.g., see Annex 18).

Activity 3.1. Business model options paper developed and published by the end of year 2.

The Global Biodiversity Standard (TGBS) requires a sustainable business model to ensure the continuity and sustainability of the standard beyond the life cycle of the project. During year 2 of the project, data on the costs associated with assessments were collected during the testing of the TGBS methodology (see activity 1.2). Data was collected from hub partners in six countries (Brazil, India, Kenya, Madagascar, Peru, Uganda) using a standardised template, covering costs associated with the application review, the construction of reference models, the safeguarding procedure, the field survey, the social survey and the scoring process. In addition, costs on consumables, travel and subsistence and the remote sensing analysis were collected. Annual overheads were also collected to understand running costs of the hub, including purchase of reusable equipment, office costs, administrative costs and other expenses (see Annex 19).

Additional costs are required to run the Secretariat of TGBS. These include salary costs for a chief executive officer, a business development lead, a technical director, a reviewer and other staff to support finance, communications, and other administration. Estimates were made based on BGCI's current salary rates, with costs that are already covered by current funding identified. Additional costs needed to run the organisation, such as website, marketing, equipment and other expenses have been identified (see Annex 19).

Market research was also undertaken in year 2 to understand the demand and competitive charging rates for a biodiversity certification. This work was implemented by BGCI with consultancy support from JS Global Advisory. This research was carried out via a public consultation survey, whereby participants answered 10 questions through an online questionnaire (see Annex 20). The questionnaire was answered by 113 participants, covering a range of stakeholders, including implementers and practitioners of restoration projects, in addition to academics, other certification schemes and the carbon market. In addition to the survey, interviews were set up with key potential markets, including with the carbon credit industry, the nature finance industry and the NGO sector. Collectively, the market research showed strong demand for a biodiversity certification scheme and support for the TGBS methodology. The survey also identified an amount of US$12,000 as a competitive charging rate for an assessment of an average 100ha sized project (see Annex 21).

Using the data on costs and the market research as a foundation, a business model options paper has been drafted (see Annex 22). This paper outlines key activities and decisions to be made related to the governance, business development and marketing of TGBS, the integrity of the methodology, key markets, the financial model and scenarios of the 5-year outlook of the TGBS as a business. The paper outlines that an independent entity needs to be formed to host the TGBS Secretariat and to manage the day to day running of the certification scheme, with a board and steering committee providing oversight of activities. A key area that needs to be addressed in order to develop a sustainable business is an increase in marketing activities. Additional funding options have been identified as options to generate finance to support these activities.

A wide range of key markets have been identified during the business model development, including the carbon sequestration and credit markets, the finance sector, the agricultural and non-timber forest products sector, the corporate sector, regulators, government agencies and government overseas aid donors. These markets have a range of interests related to tree planting and restoration projects, with demand coming to both reduce risk in investments and to provide opportunities to add market value to products derived from certified sites.

The financial model outlined in the paper highlights that the cost of TGBS assessments will be similar to the competitive charging rates identified from the market research. This provides strong support that a sustainable business model can be achieved. However, the five-year forecast shows the sensitivity of the business to being profitable, with substantial variability in the profit generated depending on the number of assessments implemented and growth of the hub network over time. Promisingly, the medium scenario does highlight the potential for the TGBS Secretariat to build over US$1 million in excess revenue over the next 5 years if sufficient demand can for the standard can be generated.

Activity 3.2 Business Plan finalised and published by the end of year 3

This activity is scheduled for year 3 of the project. However, substantial progress has already been made with 16 hubs established in nine countries (target 15 hubs in 10 countries) and committed to implementing assessments and mentoring under The Global Biodiversity Standard programme. Substantial progress on the business model has also been made as showcased by the business model options paper (see activity 3.1 and Annex 22).

Activity 3.3 GBS Communication and Public Relations (PR) Plan published by end of year 3.

In the second year of this project, a dedicated communications working group has been formed, comprising both technical and hub partners, to develop and implement The Global Biodiversity Standard (TGBS) Communication and PR Plan. This collaborative effort is producing a variety of promotional materials including press releases, social media posts, and newsletters. PLMR have been contracted to provide support and have led to the creation of a new promotional video which can be seen on the homepage of the GBS website here. A key messaging document (see Annex 23), stakeholder engagement letters (see Annexes 24 & 25), and a thorough review of the existing website have also been carried out. To bolster our outreach, the group plans to use stakeholder engagement letters to secure key endorsements and foster early adoption of TGBS. Additionally, we are developing case studies using projects funded by Ecosia that highlight the benefits projects can achieve by using TGBS, further illustrating its practical applications and impacts.

The use of digital platforms is central to our communication strategy, with a significant focus on webinars as a promotional tool. We ran a webinar to explain the methodology of TGBS in August 2023, which was attended by over 500 participants (https://www.biodiversitystandard.org/2023/08/23/the-global-biodiversity-standard-webinar/) and are planning further webinars to continue to promote the standard. Recognising the importance of reaching corporate audiences, LinkedIn has been identified as the primary social media platform for our promotional material. This strategic choice is aimed at leveraging LinkedIn's professional network to connect with corporates who are a key potential market for TGBS, enhancing visibility and engagement through tailored content and interactive discussions. This has included the creation of a new TGBS LinkedIn profile: https://www.linkedin.com/company/the-global-biodiversity-standard.

In order to enhance interest in TGBS, the methodology was publicised at UNFCCC COP-28 in Dubai. Prof Alexandre Antonelli (in person) and Dr David Bartholomew (remotely) presented the finalised methodology during an event run in the IUCN pavilion on 4th December 2023. The event was attended by an estimated 80-100 people with additional people joining the event online via a livestream on youtube. A recording of the event is available to watch here: https://www.youtube.com/watch?v=kb4K1DOMHdg&t=33360s.

The culmination of our promotional efforts over the next year will be the official launch of TGBS at the UN CBD COP16 in Colombia. At this global event, we will host a booth and run several side events to draw international attention to the standard. In preparation for this, we are planning to set up bilateral meetings with interested parties both before and during the conference. These activities are part of a formalised plan that will be implemented during year three and beyond, setting the stage for TGBS to gain substantial traction and support from a global audience.

Activity 3.4 Business and Communications/PR Plans implemented in years 4-5.

This activity is planned for years 4-5 of the project.

Activity 3.5 Business development on the prototype for return on investment (ROI) on use of the GBS methodology with respect to socio-economic and environmental outcomes (carbon sequestration, soil conservation, rural household reached, job creation).

This activity is planned for years 4-5 of the project.

Activity 4.1. GBS certification scheme promoted in at least 10 highly biodiverse countries by the end of year 4

This activity is planned for year 4 of the project.

Activity 4.2. GBS certification achieved by at least 250 tree-planting/forest restoration projects in at least 10 countries by project end.

This activity is planned for years 4-5 of the project.

Activity 4.3. At least 5 governments, 20 companies and 10 NGOs/CBOs recommending or mandating the use of the Standard by project end.

This activity is planned for years 3-5 of the project.

3.2 Progress towards project Outputs

Output 1. A scientifically credible, objective, and accessible Global Biodiversity Standard (GBS) and certification methodology in place and available to tree-planting and forest restoration initiatives by the end of year 2.

The Global Biodiversity Standard (TGBS) started at the beginning of the project as a conceptual framework consisting of a remote sensing survey and a field survey. Over the past two years, a detailed, scientifically robust and objective methodology has been developed. This methodology have evolved iteratively over the past 2 years, building on feedback from both hub partners, external experts and potential users of TGBS. This methodology has been outlined in a comprehensive manual that is available in English (Annex 10), French and Spanish, with translation into Portuguese currently in progress. A web-based application form (https://gbsc.dev.radixweb.net/ - user name: applicant1; password: applicant1) and TGBS assessor mobile app (https://appdistribution.firebase.google.com/testerapps/1:80478004512:android:ab7ba05ab164f300676345/releases/4bq2o850vvun8 – link only compatible on Android phones) have also been developed to support the implementation of the certification methodology.

Other than the Portuguese translation, this output is complete and will be completed by end of quarter 1 of year 3.

Output 2: Hubs of expertise and data established to support Global Biodiversity Standard assessments and forest restoration mentorship in at least 6 highly biodiverse countries by the end of year 3.

During the first two years of the project, 17 training hubs for The Global Biodiversity Standard (TGBS) have been established (baseline of zero hubs), 13 people have been trained as trainers of TGBS (baseline of zero) and 84 people have been trained as assessors (baseline of zero) from nine biodiverse countries (see Annex 15). A range of data tools and training materials required to implement TGBS certification have been developed and used for training, including the TGBS manual (see Annex 10 and training resources here). Various data tools have been compiled during the first two years of the project (see Activities 2.4-2.5). Thirteen trainers have been certified to deliver training on the TGBS methodology, with an additional 7 pending verification of the knowledge base requirements.

This output is expected to be achieved on schedule by the end of year 3 of the project.

Output 3. A self-sustaining business model and plan for scaling up the GBS to at least 10 biodiverse countries worldwide developed by the end of year 3.

The business model and plan for The Global Biodiversity Standard is currently under development (baseline of no business plan). Over the first 2 years of the project, costs associated with the certification process have been collected through the testing phase of the methodology. These costs have been supplemented by an analysis of the costs needed to run the central Secretariat entity that will manage the business. This data has been used to build a business model, a fee structure and develop forecasts for the five-year financial model. In addition, market research has been implemented to understand the demand for the standard across markets and sectors, with strong demand indicated.

The business plan will be completed during year 3 of the project and it is expected that at least 10 countries will be using TGBS by end of year 3.

Output 4. The Global Biodiversity Standard and certification adopted and used by policy-makers, financiers, brokers and practitioners of tree-planting, reforestation and forest restoration managing at least 250 sites in at least 10 countries by project end.

This output is scheduled to be delivered during years 3-5 of the project. Progress has been made to ensure that this output can be delivered by generating a list of stakeholders to engage with, drafting engagement letters and by starting discussions with some potential users of TGBS.

3.3 Progress towards the project Outcome

Project Outcome: Global Biodiversity Standard certification achieved by 250 tree-planting/restoration projects, ≥200 people trained with improved capacity to do GBS assessments and 10 hubs of biodiversity assessment and restoration mentoring expertise established in 6 highly biodiverse countries by 2027.

This project has made substantial progress towards achieving the project outcome during years 1 and 2 of the project. A certification methodology has been developed and tested on over 100 sites across six biodiverse countries. These sites are all potential candidates for certification by The Global Biodiversity Standard (TGBS). Additional interest has been received from many other stakeholders declaring their

interest in becoming early adopters via our public consultation. 84 people have started to be trained in the TGBS assessment methodology so far, with further training and capacity building planned for year 3 of the project that will ensure at least 200 people are trained by the project end. Currently 17 hubs have been established in nine biodiverse countries and each has capacity to carry out TGBS biodiversity assessment and restoration mentoring. This is expected to be strengthened and expanded over the remaining three years of the project. The indicators of the project have been effective at measuring the intended outcome of the project.

The project is expected to achieve its outcome by the end of the funding period.

3.4 Monitoring of assumptions

Assumption 1: COVID-19 or other national/global disruption does not prevent the deployment of local or international expertise for site testing and methodological development (see below).
Comments: This assumption carries reduced risk now. COVID-19 disruption has reduced over the past two years as restrictions, especially related to travel, have largely been removed.

Assumption 2: Carrying out GBS assessments is financially viable for local entities (e.g. botanic gardens, existing certification organizations, other types of biodiversity/ agroforestry/forest restoration organizations) and can compete with other income-generating priorities (see below).
Comments: This assumption still holds true. This assumption has been managed by detailing the costs of carrying out assessments and modifying the methodology accordingly, e.g., by modifying the length of field surveys to account for the financial cost. The financial viability is being managed by developing a sustainable business model that covers all of the costs, whilst maintaining competitive charging rates. Other income-generating priorities have been managed by providing funds to recruit staff dedicated to TGBS work.

Assumption 3: A cost-effective but scientifically robust methodology is affordable to a wide range of practitioners (see below).
Comments: This assumption still holds true. The project is managing this assumption by exploring various business model options.

Assumption 4: Biodiversity impacts carry financial incentives either as a risk or as an opportunity and are sufficiently attractive to financiers, brokers and practitioners of tree-planting and forest restoration to apply for certification (see below).
Comments: This assumption still holds true. There has been increased publicity over the last two years about minimising risks of failure and greenwashing in tree planting projects. This is especially true for the carbon credits market, meaning a certification scheme for restoration activities is likely to carry more incentives now than at project inception. Moreover, there is the growing need for nature-related disclosures that enhance the demand for a biodiversity certification scheme.

Assumption 5: COVID-19 or other national/global disruption does not prevent the deployment of local expertise for site testing (mitigated by wide potential selection of partner institutions/countries and the possibility of moving testing to another country).
Comments: This assumption carries reduced risk now. COVID-19 disruption has almost ceased over the past two years as restrictions, especially related to travel have been lifted.

Assumption 6: Tree-planting/forest restoration practitioners are willing to participate in the testing phase (low risk; Ecosia, Plan Vivo and 1t.org have agreed to participate).
Comments: This assumption has been met. Ecosia and Plan Vivo have contributed sites for testing over the past two years. There have also been numerous additional sites who have been willing to participate in the testing phase (116 sites in total).

Assumption 7: COVID-19 or other national/global disruption doesn't prevent the deployment of international expertise to lead training and development (Mitigated by online training and a regional/national approach to face-to-face capacity building).
Comments: This assumption carries reduced risk now. COVID-19 disruption has reduced over the past two years as restrictions, especially related to travel, have been lifted. Online training events have been scheduled for some activities and are working well in a virtual setting and an in-person training workshop has already taken place.

Assumption 8: Global partners with biodiversity data and/or forest restoration information are willing to share their data and data tools (low risk: much of these data is already in the public domain).
Comments: This assumption holds true. This assumption has been managed because several of the partners, including BGCI, SER and ICRAF have well established relationships with many global partners

that hold biodiversity data and/or restoration information. In addition, many datasets are increasingly becoming freely available under open access licences.

Assumption 9: Biodiversity, agroforestry, restoration, or other certification institutions/entities are willing to host training and data hubs (to a large degree this will be dependent on 3, below).
Comments: This assumption has reduced risk. 17 hubs across nine countries have already signed up to be TGBS hubs over the first two year of the project and there is already interest from other organisations to host hubs.

Assumption 10: Hosting the GBS hubs and carrying out the certification assessments is financially viable for local biodiversity institutions and can compete with other income-generating priorities (low risk; we believe that it is possible for host entities to cover their costs and still be affordable compared to the very expensive schemes currently available).
Comments: This assumption still holds true. The project is considering various business model options that will maximise the financial viability of the certification scheme and TGBS hubs.

Assumption 11: Positive biodiversity impacts carry financial incentives either as a risk or as an opportunity and/or are sufficiently attractive to financiers, brokers and practitioners of tree-planting and forest restoration to apply for certification (mitigated by working with biodiversity +ve corporate partners packaging biodiversity and carbon together in premium packages).
Comments: This assumption still holds true. During years 1 and 2 of the project BGCI and the other technical partners have participated in regular meetings with the World Economic Forum and Biodiversity Credit Alliance regarding (i) the need for transparency around corporate impacts on biodiversity; (ii) metrics for measuring biodiversity impact and (iii) developing mechanisms for mitigating/compensating for biodiversity impacts. We have also met bilaterally with >50 organisations including Verra, Gold Standard, Rio Tinto, Anglo-American, HSBC, and Rabobank who have all expressed an interest in TGBS either as a carbon plus package or as a mechanism for assessing/managing risks associated with biodiversity impact. We will continue to engage with these and similar organisations in year 3 with the aim of deploying the TGBS methodology on their sites.

Assumption 12: A cost-effective but scientifically robust methodology is affordable to a wide range of practitioners. (Risk reduced by already having a strong technical network in place).
Comments: This assumption still holds true. The hub partners in all nine countries have had no difficulty in finding practitioners and sites who see the value in The Global Biodiversity Standard. Of course, in years 1 and 2, the financial costs associated with TGBS assessments have largely been borne by the project. However early adopters of TGBS have been identified with practitioners who are willing to pay for TGBS assessments and mentoring declaring an interest in the standard. Based on this, we are confident that there will be a market for TGBS provided that costs can be kept at a reasonable level (commensurate with actual hub costs covered in years 1-2 by the Darwin Initiative).

3.5 Impact: achievement of positive impact on biodiversity and poverty reduction

This project aims to have a positive impact on biodiversity by promoting the incorporation of native and threatened species into ecosystem restoration and agroforestry projects. The Global Biodiversity Standard also aims to mobilise local and global biodiversity knowledge and skills to increase the use of native and resilient species in Nature-based Solutions projects, improving the biodiversity outputs of these projects. TGBS has started to drive change in promoting the use of native and threatened species in NbS projects. Stakeholders of NbS projects have received mentoring from botanical experts during the project and have been informed on how to improve the biodiversity benefits of their projects.

This project aims to reduce poverty in the short-term by providing training and increasing capacity of biodiversity institutions in low- and middle-income countries. The project has expanded the skillset of 84 individuals through training in the TGBS methodology, which includes planning, implementation, monitoring, and evaluation of restoration and agroforestry projects. The project has helped to mobilise funds from high income countries to low- and middle-income countries for testing of the TGBS methodology.

In the medium term, this project aims to reduce poverty by generating an economy centred around native species tree-planting and ecosystem restoration. By developing the standard, momentum around this economic sector has begun, with interest in native seed supplies increasing.

Over the long-term, the project aims to reduce poverty by creating a paradigm shift in tree planting and NbS projects towards a focus on biodiversity rather than a simplistic focus on carbon and numbers of trees planted. By focusing on the concept of ‘right trees planted in the right place’, TGBS is increasing tree

survival rates and the benefits received by local communities from native ecosystems. These benefits include generating income from employment, carbon credits, payment for ecosystem services, agroforestry, or commodity production (e.g., timber and NTFPs), in addition to providing local and sustainable fuelwood, increased water quantity and quality, and other environmental services that can increase quality of life.

4. Project support to the Conventions, Treaties or Agreements

The recently agreed Global Biodiversity Framework has a stronger focus on ecological restoration than the preceding Aichi targets. Global Biodiversity Framework Targets 1 (participatory management), 2 (ecosystem restoration), 3 (protection), 4 (species recovery/conservation), 5 (sustainable harvesting), 6 (eliminate invasive species), 7 (reduced pollution), 8 (impacts of climate change), 9 (sustainable management of wild species), 10 (sustainable production), 11 (restoration of ecosystem services), 15 (biodiversity disclosure), 20 (capacity building), 21 (availability of data & knowledge), 22 (participation and justice for IPLCs) and 23 (gender equality) are all explicitly addressed by the TGBS methodology (see Annex 10: Section 1).

While it will take time for the new biodiversity framework to be incorporated into NBSAPs, this project is already helping to deliver existing NBSAP goals, for example:

- Uganda's NBSAP (2015-2025) notes that present National Forest Authority tree planting focuses on introduced species and that, although this is useful to meet short-term timber needs, they could threaten the survival of native species if there are no guidelines for private planting. To date, there are still no national guidelines, hence TGBS implementation will address a need specifically identified in Uganda's NBSAP. TGBS will promote the incorporation of medicinal species in tree planting, and their sustainable use, which is of particular importance in Uganda, where 80% of the population depend on indigenous plant medicine.
- Kenya's NBSAP (2019-2030) Goal 2, Strategic target 22 calls for ecosystem resilience and the contribution of biodiversity to carbon stocks to be enhanced, through conservation and restoration, including restoration of at least 30% of degraded ecosystems by 2030. There is huge interest in tree planting in Kenya, but the NBSAP also reports that, whilst plantations have increased in cover in recent years, all types of natural forest have decreased over the same period. TGBS will help to shift tree planting towards an approach that restores natural forest and benefits biodiversity, rather than solely increasing plantations.

Six of the hub countries have made Bonn Challenge pledges; Uganda: 2.5m ha, Kenya: 5.1m ha, Madagascar: 4m ha, Peru: 3.2m ha, Brazil: 12m ha, and India: 21m ha. All countries have set NDCs under the UNFCCC and Brazil, Kenya and Peru have submitted NAPs that include tree-planting and sustainable forests (other countries not yet submitted). For example, Brazil's NAP notes that demarcation of green areas, planting of trees, recovery, and protection of natural areas, should serve as the basis for local-level programmes for fostering adaptation and resilience, and Goal 3.4 calls for incorporation of climate risk into current policies for conservation, restoration, and sustainable use of biodiversity.

This project will develop and share climate-appropriate portfolios of tree diversity to reduce risks and seeks to shift the current 'carbon rush' towards ensuring Bonn Challenge pledges, NAPs and NDCs are biodiversity-positive, benefit people, and support climate change mitigation and resilience.

This project also addresses national development priorities in all the hub countries and the following global SDGs:

- SDG8 (decent work and economic growth) by training >200 people as auditors and to be certified restoration practitioners.
- SDG5 (gender equality) by ensuring all genders have equal opportunities in these training and employment opportunities.
- SDG13 (climate change) by creating biodiverse landscapes that support people, are resilient and have a greater capacity to adapt to a changing climate.
- SDG15 (life on land) by promoting biodiverse tree planting and restoration which reduces degraded land and biodiversity loss.

The aim is to have GBS certified projects in ten countries by project end (four countries in addition to the six where hubs were initially established). The business model and plan will scale up GBS adoption, contributing to national targets in many additional countries in the medium-term.

5. Project support for multidimensional poverty reduction

The direct beneficiaries of this project are:

1. **The staff members of TGBS hubs comprising local biodiversity experts, educators, and administrators.** The TGBS business model focuses on empowering and enabling local biodiversity organisations, creating income opportunities and the opportunity to influence and improve land use and restoration outcomes in their own countries and regions. This is very different from prevalent carbon certification processes that sub-contract survey and certification work to international consultancy companies, using fly in, fly out consultants. Not only will TGBS hub staff members be more familiar with their own biodiversity, but they will also understand local socio-economic drivers, enabling them to make much better value judgements about biodiversity trends in local contexts.
2. **Local communities and stakeholders.** A key criterion that the TGBS methodology assesses is the extent to which local communities and stakeholders are participating in and benefitting from the restoration and management of biodiversity on the site being assessed. To achieve a high score and pass TGBS certification, restoration and tree-planting practitioners need to show that local people are part of value chains, including direct employment and supply of materials such as seeds and seedlings. This contrasts with high throughput, commercial forestry in which large volumes of cloned, exotic seedlings are sourced from multinational biotech or forestry companies, with no involvement or benefits accruing to local people other than perhaps tree-planting.

As indicated above, in the medium term, this project aims to reduce poverty by generating an economy centred around native species tree-planting and ecosystem restoration. By developing the standard, momentum around this economic sector has begun, with interest in native seed supplies increasing.

Over the long-term, the project aims to reduce poverty indirectly by creating a paradigm shift in tree planting projects towards a focus on biodiversity rather than a simplistic focus on carbon and numbers of trees planted. By focusing on the concept of 'right trees planted in the right place', TGBS is increasing tree survival rates and the benefits received by local communities from native ecosystems. These benefits include generating income from employment, carbon credits, payment for ecosystem services, agroforestry, or commodity production (e.g., timber and NTFPs), in addition to providing local and sustainable fuelwood, increased water quantity and quality, and other environmental services that can improve health and quality of life.

6. Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board[1].	46% (13/28)
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[2].	BGCI - Yes Auroville – No CER-K – No CIFOR-ICRAF – Yes Ecosia – No Huarango Nature – No Araribá – No Missouri BG – Yes Plan Vivo – Yes SER – Yes TRAFFIC – Yes Tooro BG - No

[1] 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.

[2] 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.

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

This project has promoted equality between persons of different gender and social backgrounds through the development of a methodology to assess criterion 3 of TGBS: Protect, restore and manage biodiversity in consultation and partnership with local communities and other stakeholders. This methodology promotes the inclusion of stakeholders that are disadvantaged and vulnerable. It also promotes capacity building amongst these stakeholders and encourages the use of local knowledge and supply chains. These skillsets and local knowledge often belong to women and ethnic minorities. The methodology therefore promotes the inclusion of these groups in ecological restoration projects. The assessment methodology for this year has been refined to enhance the ability to detect and therefore promote the equal distribution of benefits derived from restoration projects.

7. Monitoring and evaluation

The Project Manager (10% of time) and Project Leader (5% of time) from BGCI lead monitoring and evaluation activities for this project. The restoration hub managers who take the leading role for monitoring and evaluation of activities within their respective countries support these staff from BGCI.

In addition, a Steering Committee for the project has been established from the technical and hub partners who meet quarterly to assess progress against the log frame and performance indicators. These meetings take place online to maximise attendance and minimise unnecessary expenditure on travel. The Steering Committee reviews progress against the project implementation timetable, compares ongoing and completed activities against performance standards, reviews expenditure against the project budget and identifies new potential risks and mitigating measures. These meetings additionally review how the project activities and outputs are contributing towards the overall project outcome. After each Steering Committee meeting, a report is prepared to document progress, adaptive management changes to the implementation timetable (see Annex 26).

The hub partners additionally meet on a monthly basis to provide updates on project progress. In addition to providing monitoring and evaluation for the project, these meetings provide an opportunity for ideas and knowledge to be shared amongst the regional partners and hence builds capacity. The Project Manager writes up minutes from these meetings (see Annex 27).

Capacity building is a key aim of this project. The impact of capacity building efforts is monitored by assessing baseline knowledge and expertise related to restoration and biodiversity specifics, before and after trainees receive training and when trainees have put their skills into practice. The final measure of success here will be if trainees progress fully through the Certified Ecological Restoration Practitioner programme. Currently 3 trainees have been awarded Certified Ecological Restoration Practitioner (1 CERP and 2 CERPIT) recognition from this project with an additional 3 applied and 9 working on applications (see Annex 17).

8. Lessons learnt

Some key lessons learnt are as follows:

1. A more detailed methodology was required to effectively assess all components of biodiversity. Initially the methodology focused on measuring actual biodiversity with a strong focus on botanical diversity as a surrogate for all biodiversity. However, we realised during testing that we needed to be measuring changes to biodiversity on site, and across the taxonomic array, because different components of biodiversity would be relevant on different sites. The assessment methodology has significantly evolved as a result.
2. Safeguarding processes have been strengthened in order to protect against social risks and to protect the reputation of the standard.
3. The hubs have become increasingly important in guiding the direction of the project as they have taken ownership of the methodology and business model. It has therefore been important to expand the Steering Committee to include the hubs.

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

The Y1 reviewer made the following comments:

i. Indicators 0.2 and 2.3 can be improved. Please adjust these to ensure that they reflect intentions to develop capacity and set a goal for the extent to which capacity will be improved (scoring system, etc), rather than simply mentioning the number of people who will be trained (more detail in Section 8 below). These indicators can be adjusted through a Change Request (CR). Very little is needed by way of explanation in this CR and you can simply state that we asked you for the change, then simply adjust the indicators in the logframe and submit for approval. You can also use this as an opportunity to add indicators in line with the new Standard Indicators if you would like to.

The logframe has been altered through a Change Request and the new wording is indicated in red in Annex 2 of this report

ii. Please pay close attention to representation between genders in training and other areas of engagement. Where low proportions of women have been engaged I would like to see an explanation for this as well as an account of the measures that have been taken to improve representation.

Currently our training figures show 32 women and 52 men have received TGBS assessor training through the project, i.e. only 38% of women versus a 50% target. This is despite an explicit requirement in our grant agreements that our hub partners achieve a 50/50 gender split in trainees. The reason this target has not yet been met is largely cultural, with ecological field-based jobs traditionally in the male domain in the hub partner countries. It was only in the most developed of the partner countries (Brazil) where equal gender balance was achieved. BGCI and the other technical partners will continue to actively request that women are selected for this training, including amongst the larger cohort of trainees planned for Y3.

10. Risk Management

No new risks have arisen.

11. Sustainability and legacy

The project has attracted considerable interest, as evidenced by:

- >500 attendees of the TGBS webinar last August
- >50 organisations and individuals indicating interest in early adoption through the public consultation and survey
- >250 interested parties contacting us via the website contact form (Annex 28).

As explained under Activity 3.1, above, the following progress has been made in understanding and tapping into the market for a biodiversity standard:

- Costs have been assessed and modelled for hubs and secretariat to run a sustainable business model (see Annex 19).
- A public consultation has been carried out to gauge the interest in using TGBS, and has concluded that there is substantial interest (see Annexes 20 and 21).
- On this basis a business model paper has been produced (Annex 22), indicating that with medium-level uptake and delivery of TGBS, a profit of >US$1 million could be achieved over a 5 year period.

More work will be carried out to refine the business model and transition to sustainable financing in years 3-5 of the project.

12. Darwin Initiative identity

The Darwin Initiative is fully acknowledged as the main funder of the Global Biodiversity Standard on the project website https://www.biodiversitystandard.org/ . It is also credited in the Manual (Annex 10), social media and all presentations that have been made about the project. The project has its own LinkedIn site https://www.linkedin.com/company/the-global-biodiversity-standard, which links back to the Darwin Initiative/Biodiversity Challenge social media channels.

The Darwin Initiative is recognised by all partners and in all participating countries both as a UK Government fund but also as the sole funder for TGBS.

13. 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?	Yes [*If yes, please provide their name and email]* Ane [redacted]	
Has the focal point attended any formal training in the last 12 months?	Yes	
What proportion (and number) of project staff have received formal training on Safeguarding?		Past: 100% BGCI project staff – 6 people Planned: %
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses. A safeguarding policy and assessment methodology has been developed for TGBS (Annex 13). Through each stage of the GBS process (registration, application, assessment and review) social safeguarding risks are scrutinised, documented and reviewed. High risk projects are not eligible for TGBS certification.		
Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify. Arariba (Brazil) With the expansion of the team to carry out TGBS activities, these policies will be extended and applied to internal and external work teams involved in this activity over the next 12 months. Huarango Nature, Peru. The safeguarding policy has been recently updated. The person in charge of its preparation is Maricarmen Arteaga. It is available in Annex 6. In addition to this, some members have undergone previous individual training, and the entire team has received an update using Kaya's Safeguarding Essentials virtual training: https://kayaconnect.org/course/view.php		
Please describe any community sensitisation that has taken place over the past 12 months; include topics covered and number of participants. Community engagement has been carried out at all test sites assessed, and more detail is provided in the hub reports on these interactions (Annexes 2-7). Topics covered include: • Indigenous Peoples • Gender equity and gender dynamics • Vulnerable groups (For example, People with disabilities, low incomes, children or the elderly) • Access restrictions & livelihoods • Human Wildlife interactions (e.g leading to conflict and displacement) • Cultural and religious heritage • Stakeholder engagement and participation		

• Legacy issues (e.g. land tenure, resettlement) • Community Health and Security • Human rights and dignity
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. Not applicable

14. Project expenditure

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

Project spend (indicative) sinc last Annual Report	2023/24 Grant (£)	2023/24 Total Darwin Initiative Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)	[redacted]			
Consultancy costs				Radix software devt offset w Capex and Other underspend
Overhead Costs				
Travel and subsistence				£10k T&S and Op Cos overspend due to double-count with partners?
Operating Costs				£10k T&S and Op Cos overspend due to double-count with partners
Capital items (see below)				Radix software devt offset w Capex and Other underspend
Others (see below)				Radix software devt offset w Capex and Other underspend
TOTAL	**725,898**	**737,220**	**+2**	**DRAFT: need to consult with project manager on his return from honeymoon**

Table 2: 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 (£)	0	[redacted]	Income from 250 TGBS assessments @ average [redacted] per assessment (see Annex 22 medium scenario)
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project (£)			An additional 110 TGBS assessments @ [redacted] each are modelled during the lifetime of the project (see Annex 22 medium scenario)

15. Other comments on progress not covered elsewhere

Not applicable

16. 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.

We are in the midst of a biodiversity crisis. The world urgently needs nature-based projects that protect, enhance, and restore ecosystems. Despite nature-based solutions being formally recognised by UNEP in 2022, **there is a glaring lack of standardised criteria to accurately measure and quantify biodiversity outcomes.** As a result, many climate and biodiversity interventions, including tree planting, land management and agroforestry practices, fail to record positive outcomes and can inadvertently cause harm to ecosystems and local communities.

Indeed, 90% of the world's largest corporations that complete ecosystem restorations fail to report a single positive ecological outcome.

In response, BGCI - the world's largest plant conservation network, the Society for Ecological Restoration (SER), the World Agroforestry Centre (CIFOR-ICRAF), and a coalition of global biodiversity experts have developed the Global Biodiversity Standard (GBS) to act as a **definitive framework to recognise and promote best practice in biodiversity outcomes**.

The GBS is the most rigorous biodiversity standard, with the purpose of driving positive outcomes for biodiversity, ecosystems and the communities that rely on them. The standard and its methodology have been developed, and are supported, by leading biodiversity, ecosystem restoration and land management experts which form the GBS Secretariat. These include the prestigious Society for Ecological Restoration (SER), Centre for International Forestry Research and World Agroforestry Centre (CIFOR-ICRAF), TRAFFIC, the International Union for the Conservation of Nature Species Survival Commission (IUCN SSC) and highly respected biodiversity organisations in biodiverse countries around the world.

What distinguishes the GBS from existing initiatives is not only its meticulous methodology, developed by scientists and global experts, but its site-based assessment processes carried out by regional biodiversity hubs and its real-time monitoring capabilities, which significantly enhance the accuracy of assessing biodiversity outcomes. The GBS also champions inclusivity, transparency, and the imperative of partnering with indigenous peoples and local communities. It supports and promotes best practice by recognising and encouraging positive actions, such as the incorporation and conservation of native species and reduction of land degradation in carbon credit projects.

With support from the UK Government's Darwin Initiative, the Global Biodiversity Standard methodology has been tested on over 100 sites in 9 countries to date, and the methodology has recently been published as a Manual on the GBS website. The foreword to the Manual is written by the Executive Secretary of the Convention on Biological Diversity, the Director General of IUCN and the Director General of CIFOR-ICRAF. A video summarising the objectives of the GBS can be viewed here.

Image, Video or Graphic Information:

File Type (Image / Video / Graphic)	File Name or File Location	Caption including description, country and credit	Social media accounts and websites to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
Video	https://www.biodiversitystandard.org/	Global Biodiversity Standard promotion	https://www.linkedin.com/company/the-global-biodiversity-standard	Yes

		al video. Credit PLMR/BGCI		

Annex 1: Report of progress and achievements against logframe for Financial Year 2023-2024

Project summary	SMART Indicators	Progress and Achievements April 2023 - March 2024	Actions required/planned for next period
Impact Biodiversity impacts of tree-planting and forest restoration for carbon sequestration and livelihoods are valued by policy-makers, financiers and practitioners, and 'right tree, right place' practices lead to better biodiversity/livelihood outcomes		There has been increased interest from financiers and practitioners in the Global Biodiversity Standard and the desire to incorporate native biodiversity into restoration projects. This has come earlier than expected in the project.	[redacted]
Outcome Global Biodiversity Standard certification achieved by 250 tree-planting/restoration projects, ≥200 people trained and 10 hubs of biodiversity assessment and restoration mentoring expertise established in 6 highly biodiverse countries by 2027	0.1. Global Biodiversity Standard (GBS) methodology completed and applications available to tree-planting and forest restoration practitioners online in English, Spanish, Portuguese and French by the end of year 2.	0.1 The GBS methodology has been tested at additional sites in Y2, with the total sites now at 116. Using feedback from the tests and public consultation, the methodology has been refined and a manual published. In addition, a mobile app has been developed for the application and assessment of the GBS. The manual and app have been translated from English into Spanish, Portuguese, and French.	0.1. Completed
	0.2. At least 10 training hubs established, ≥200 people trained and comprehensive data tools and resources available in at least 6 highly biodiverse countries by the end of year 3.	0.2 13 trainers and 7 assessors from 9 countries and 10 hubs were trained in the GBS methodology and assessment process during Y2. A further 64 people were trained as assessors. Data tools and training resources were compiled and developed during Y2. Identification of people to train will continue during Y3.	0.2. A further 120 people will be trained as trainers and assessors in Y3.
	0.3. A self-sustaining business model and plan for scaling up the GBS to at least 10 biodiverse countries worldwide developed by the end of year 3.	0.3 Market research on the sustainability of business model options was undertaken during Y2. drafted into a business model options paper. In addition, a cost analysis of hub costs was carried out.	0.3. A self-sustaining business model and plan for scaling up the GBS to at least 10 biodiverse countries worldwide will be developed by the end of year 3
	0.4. GBS certification applied for and achieved by at least 250 tree-planting/forest restoration projects by project end.	0.4 Activities to achieve this outcome are planned for Y3-5.	0.4. TGBS certification will be available to financiers and practitioners by Q3 Y3.
Output 1.	1.1. Draft GBS certification assessment methodology developed by the end of year 1.	1.1 A draft version of the GBS certification assessment methodology is available online in English, French, Portuguese and Spanish.	

A scientifically credible, objective, and accessible Global Biodiversity Standard (GBS) and certification methodology in place and available to tree-planting and forest restoration initiatives by the end of year 2.	1.2. Draft methodology tested in real world conditions in at least 6 countries by the end of year 2.	1.2 The draft methodology has been tested at 116 sites across 9 countries. A full list of test sites is available in Annex 1.	
	1.3. Methodology refined and finalised by end of year 2.	1.3 The GBS final methodology has been published in a Manual (Annex 10) which is available on the GBS website here.	
	1.4. GBS application process available to tree-planting and forest restoration practitioners online in English, Spanish, Portuguese and French by the end of year 2.	1.4 The GBS application is available online at https://gbsc.dev.radixweb.net/ and is available in English, Spanish, French and Portuguese.	
Activity 1.1 1.1.1. Development of GBS certification methodology components assessment methodology, including online application process, remote sensing review and ground survey methodology, sub-contracted to technical partners by the end of Q1, year 1.		1.1.1 The online application process and ground survey methodology components were sub-contracted to SER, TRAFFIC and Plan Vivo. The remote sensing review was sub-contracted externally to Space Intelligence and to Bioflore.	1.1.1 Completed.
1.1.2. Draft GBS certification assessment methodology developed and published in English, French, Portuguese and Spanish online by the end of Q4, year 1.		1.1.2 The draft GBS certification methodology has been developed and is published online in English, French, Portuguese, and Spanish.	1.1.2 Completed.
Activity 1.2 1.2.1. Agreements signed with at least 12 tree-planting/forest restoration project sites in at least 6 different biodiverse countries by the end of Q4, year 1.		1.2.1 Contracts have been signed with 116 project sites.	1.2.1 Completed.
1.2.2. Online application, remote sensing and ground survey methods tested with at least 12 tree-planting/forest restoration project sites in at least 6 different highly biodiverse countries by the end of Q3, year 2.		1.2.2 The remote sensing methodology has been tested on 11 sites. The online application and ground survey methodology has been tested on 116 sites.	1.2.2 Completed.
Activity 1.3 1.3.1. Meetings held with project site practitioners and assessors, and verbal and written feedback received by the end of Q3, year 2.		1.3.1 The regional hub partners have held meetings with 116 project site practitioners.	1.3.1 Completed.
1.3.2. Final methodology agreed and published online by the end of Q4, year 2.		1.3.2 The final methodology is published in the TGBS Manual on the GBS website	1.3.2 Spanish, French and Portuguese versions of the Manual will be published in Q1 Y3
Activity 1.4 1.4.1. GBS certification launched and publicised at UNFCCC COP-28 by the end of year 2		1.4.1 TGBS certification was launched and publicised at UNFCCC COP-28. See https://www.youtube.com/watch?v=kb4K1DOMHdg&t=33360s	1.4.1. TGBS will be further publicised at CBD COP-16 in Y3

1.4.2. GBS application available online in English, Spanish, Portuguese, and French by the end of year 2.		1.4.2 The GBS application is available online in English, Spanish, Portuguese, and French.	1.4.2 Completed.
Output 2. Hubs of expertise and data established to support Global Biodiversity Standard assessments and forest restoration mentorship in at least 6 highly biodiverse countries by the end of year 3.	2.1. At least 10 training hubs established in at least 6 biodiverse countries by the end of quarter 2, year 2.	2.1 16 training hubs have been identified in nine countries, and are being equipped to implement the GBS (see Figure 1, above).	
	2.2. Full suite of GBS training materials developed by the end of quarter 2, year 2.	2.2 A full set of training materials are available here, with additional training resources on field survey techniques available here (see section 3.1).	
	2.3. At least 200 people from at least 10 highly biodiverse countries (50% women) trained in biodiversity assessment and ecological restoration mentoring by the end of year 3.	2.3 13 trainers have been trained and 71 assessors (38% women) (see Annex 15).	
	2.4. Comprehensive data on spatial distribution of biodiversity, seed sources, vegetation and tree distribution, socio-economic biodiversity values etc. compiled, processed and available online for at least 6 biodiverse countries by the end of year 3.	2.4 Data on spatial distribution of biodiversity, vegetation and tree distribution and socio-economic values of trees have been compiled and processed (see Annex 14). Databases are available on the Global Tree Knowledge Platform.	
	2.5. Climate Resilience Assessment Tool and other spatial seed source and tree-planting guidance tools available online by the end of year 3.	2.5 The Climate Resilience Assessment Tool is available online (https://cat.bgci.org/).	
	2.6. Germination/propagation protocols available online for at least 10,000 tree species in Darwin eligible countries by project end.	2.6 Activities to achieve this output are planned for Y3-5.	
Activity 2.1. 2.1.1. At least 10 GBS hub host entities in at least 6 biodiverse countries identified and equipped with computers, survey and inventory equipment by the end of Q2, year 2.		2.1.1 16 GBS hub entities have been identified across nine biodiverse countries and have been equipped with computers, survey, and inventory equipment.	2.1.1. Completed.
2.1.2. Potential trainers in each training hub vetted and identified by the end of year 1.		2.1.2 19 trainers were identified from the 10 hubs in Y1.	2.1.2 Completed.
Activity 2.2. 2.2.1. Data, tools, and resources necessary for GBS assessments specific to each training hub collated and used in at least 10 hubs in 6 biodiverse countries by the end of Q2, year 2.		2.2.1 Data and resource needs have been identified. Compilation of data, tools and resources has begun.	2.2.1 Continued collation of data resources will be made during Y3.
2.2.2. Training modules in GBS and ER (online and face to face) developed in English, Spanish and French by the end of Q2, year 2.		2.2.2 Training modules in GBS and ER have been developed and are available here	2.2.2 Completed.

Activity 2.3 2.3.1. At least 20 trainers trained and certified in GBS assessment by the end of year 2.	2.3.1 13 trainers have been trained in Y2 (see Annex 15)	2.3.1 Additional trainers will be identified and trained during Y3.
2.3.2. At least a further 180 people trained and certified in GBS assessment (≥200 people total), including through either formal CERP level achievement or through a dedicated certificate, issued by the SER CERP program credentialing these people as qualified to conduct GBS audits related to tree-planting and reforestation/forest restoration by the end of year 3.	2.3.2 A total of 84 people have been trained as TGBS assessors in Y2 (see Annex 15)	2.3.2 Additional assessors of the GBS will be identified during Y3 and formal training will continue.
Activity 2.4 2.4.1. Digital potential vegetation maps (high resolution corresponding to the resolution of bioclimatic raster data) available online providing natural habitat reference data for at least 6 biodiverse countries by the end of year 3.	2.4.1 Digital potential vegetation maps are currently available in 2 biodiverse countries.	2.4.1 Digital potential vegetation maps will continue to be developed during Y3.
2.4.2. Provide guidelines on compiling, cleaning, and bias-reduction of geospatial data on species occurrence, including from GBIF and BIEN by end of year 2.	2.4.2 Guidelines on compiling, cleaning, and reducing bias of GBIF geo-spatial data have been outlined and shared. See https://doi.org/10.1111/gcb.16914	2.4.2 Completed.
2.4.3 Comprehensive geo-referenced tree species digital distribution data available to GBS assessors and mentors in at least 6 biodiverse countries by the end of year 3 (note that access to data on distributions of rare and threatened species will be carefully managed).	2.4.3 Geo-referenced tree species distribution data is being compiled.	2.4.3 Compilation of species distribution data will continue to be compiled during Y3.
Activity 2.5 2.5.1. Climate Resilience Assessment Tool calibrated for native tree floras and available to tree-planting/forest restoration practitioners in at least 6 biodiverse countries by the end of year 3.	2.5.1 The Climate Resilience Assessment Tool has been calibrated as is freely available online.	2.5.1 Completed
2.5.2. Tree planting/forest restoration practitioners have access to and are familiar with the different databases, guidelines and maps available via the Global Tree Knowledge Platform (https://www.worldagroforestry.org/tree-knowledge) by the end of year 3	2.5.2 Databases and maps are available on the Global Tree Knowledge Platform.	2.5.2 Guidelines on databases and maps will be compiled, alongside additional databases during Y3. Training on use of the Global Tree Knowledge Platform will be made to GBS trainers and assessors during Y3.
Activity 2.6 2.6.1. Germination protocols for native tree species in at least 10 highly biodiverse countries available digitally online and accessible to tree-planting/forest restoration practitioners through a forest restoration resource hub and tools such as SER's Restoration Resource Center, Kew's Seed Information Database (n= at least 10,000 native tree species), and the UN FAO/CIFOR-ICRAF Transformative Partnership Platform for Agroecology by project end.	2.6.1 This activity is planned for Y3-5.	2.6.1 This activity is planned for Y3-5.
2.6.2. Propagation and aftercare protocols for native species in at least 10 Darwin eligible biodiverse countries available digitally online and accessible to tree-planting/forest restoration practitioners through an ER resource hub and BGCI's PlantSearch propagation tool (n= at least 10,000 native tree species) by project end.	2.6.2 This activity is planned for Y3-5.	2.6.2 This activity is planned for Y3-5.

Output 3. A self-sustaining business model and plan for scaling up the Global Biodiversity Standard (GBS) to at least 10 highly biodiverse countries and a communications plan for promoting the GBS worldwide developed by the end of year 3.	3.1. Business model options paper developed and published by the end of year 2.	3.1 Costs associated with undertaking assessments were collected during Y1 & Y2 (see Annex 19). Business model options have been assessed and published in Annex 22.	
	3.2. Business Plan finalised and published by the end of year 3	3.2 Significant progress on the business model has been made in the form of the business model options paper (see activity 3.1 and Annex 22). Activities to achieve this output are planned for Y3.	
	3.3. GBS Communication and Public Relations (PR) Plan published by end of year 3.	3.3 A new promotional video has been produced which can be seen on the homepage of the GBS website here. Activities to achieve this output are planned for Y3.	
	3.4 Business and Communications/PR Plans under implementation in years 4-5.	3.4 Activities to achieve this output are planned for Y4-5	
	3.5 Business development on the prototype for return on investment (ROI) on use of the GBS methodology with respect to socio-economic and environmental outcomes (carbon sequestration, soil conservation, rural household reached, job creation). (Matched funding dependent)	3.5 Activities to achieve this output are planned for Y4-5.	
Activity 3.1 3.1.1. Data collected on costs associated with carrying out GBS assessments throughout testing phase (i.e., by end of Q3, year 2)		3.1.1. Costs of the carrying out the GBS assessments have been collected during testing of the methodology during Y1-2. See Annex 19.	3.1.1. Completed.
3.1.2. Market analysis (internet research, questionnaire, and interviews) carried out to gather data on costs and cost/benefits of other certification schemes to estimate (1) demand for biodiversity certification, and (2) competitive charging rates by end of Q3, year 2		3.1.2 A market research study has been carried out and analysed (see Annexes 20 & 21)	3.1.2 Completed.
3.1.3. Business model options paper developed by the end of year 2 and shared with implementing partners.		3.1.3 A business model options paper has been drafted and published (see Annex 22).	3.1.3 Completed.
Activity 3.2 3.2.1. At least 15 implementing partners in at least 10 countries committed to hosting GBS hubs, and formally signed up by Q2, year 3.		3.2.1 16 implementing partners in nine countries have committed to hosting GBS hubs.	3.2.1 Identification of additional implementing partners will be identified during Y3.
3.2.2. Business plan finalised and published by the end of year 3.		3.2.2 This activity is scheduled for Y3.	3.2.2 This activity is scheduled for Y3.
Activity 3.3 3.3.1. GBS communication and PR plan drafted by the end of Q1, year 3.		3.3.1 A TGBS promotional video has been produced which can be seen on the homepage of the GBS website here. A key messaging document (see Annex 23),	3.3.1 A communication and PR plan for the GBS will be drafted during Y3 Q1.

		stakeholder engagement letters (see Annexes 24 & 25), and a thorough review of the existing website have also been carried out.	
3.3.2. GBS officially launched at UNFCCC COP29 in Q3, year 3		3.3.2 A recording of a TGBS awareness-raising event at UNFCCC COP28 is available to watch here: https://www.youtube.com/watch?v=kb4K1DOMHdg&t=33360s.	3.3.2 TGBS will be publicised at UNCBD COP-16 in Cali, Colombia in Q3 Y3.
3.3.3. GBS final communication and PR plan published by the end of year 3.		3.3.3 This activity is scheduled for Y3.	3.3.3 This activity is scheduled for Y3.
Activity 3.4 3.4.1. Target tree planting practitioners and financiers to promote adoption of GBS certification (see output 4)		3.4.1 This activity is scheduled for Y4-5.	3.4.1 This activity is scheduled for Y4-5.
Activity 3.5 3.5.1. Setting up a standard, repeatable and robust framework for measuring impact of GBS methodology at the local scale by monitoring a set of socio-ecological indicators (carbon sequestration, soil conservation, rural household reached, job creation) by end of project (matched funding dependent)		3.5.1 This activity is scheduled for Y4-5.	3.5.1 This activity is scheduled for Y4-5.
3.5.2. Identify priority areas for further implementation of GBS methodology based on a set of relevant indicators (e.g., biodiversity loss, population density, land degradation, connectedness to existing natural forests) to upscale local impact to national and regional scale by project end.		3.5.2 This activity is scheduled for Y4-5.	3.5.2 This activity is scheduled for Y4-5.
Output 4. The Global Biodiversity Standard and certification adopted and used by policymakers, financiers, brokers and practitioners of tree-planting, reforestation and forest restoration managing at least 250 sites in at least 10 countries by project end.	4.1. GBS certification scheme promoted in at least 10 countries by the end of year 4.	4.1 Activities to achieve this output are planned for Y4.	
	4.2. GBS certification achieved by at least 250 tree-planting/ forest restoration projects in at least 10 countries by project end.	4.2 Activities to achieve this output are planned for Y4-5.	
	4.3. At least 5 governments, 20 companies and 10 NGOs/CBOs recommending or mandating the use of the Standard by project end.	4.3 Activities to achieve this output are planned for Y3-5.	
Activity 4.1 4.1.1. Project partners and GBS hub organisations promote the GBS scheme in at least 10 countries via their websites and newsletters and through meetings with policymakers, financiers, and practitioners of tree planting/forest restoration to encourage GBS uptake.		4.1.1 This activity is scheduled for Y4.	4.1.1 This activity is scheduled for Y4.
4.1.2. A further 4 hubs (i.e., 14 hubs in total) are identified and formalised in a further 4 countries (i.e., 10 countries in total) by the end of year 4.		4.1.2 This activity is scheduled for Y4.	4.1.2 This activity is scheduled for Y4.

Activity 4.2 4.2.1. GBS assessments carried out and results certified at >250 sites in at least 10 countries during years 4 and 5.	4.2.1 This activity is scheduled for Y4-5.	4.2.1 This activity is scheduled for Y4-5.
Activity 4.3 4.3.1. Meetings arranged with governments and donor agencies, including FCDO, at or shortly after UNFCCC COP29 in Q3, year 3 coinciding with the launch of the GBS to raise awareness of the Standard and certification process.	4.3.1 This activity is scheduled for Y3.	4.3.1 This activity is scheduled for Y3.
4.3.2. BGCI, SER, CIFOR-ICRAF, and project corporate partners (Ecosia, 1t.org and Etihad) promote the adoption of the Standard and certification to their peers, including leading by example, during years 4 and 5.	4.3.2 This activity is scheduled for Y4-5.	4.3.2 This activity is scheduled for Y4-5.
4.3.3. BGCI, SER, CIFOR-ICRAF, and Plan Vivo promote the adoption of the GBS to the NGO community through our own platforms, through the Global Partnership for Forest and Landscape Restoration, and through NGO tree planting fora such as the Global Evergreening Alliance, during years 4 and 5.	4.3.3 This activity is scheduled for Y4-5.	4.3.3 This activity is scheduled for Y4-5.

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

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
Impact: Biodiversity impacts of tree-planting and forest restoration for carbon sequestration and livelihoods are valued by policy-makers, financiers and practitioners, and 'right tree, right place' practices lead to better biodiversity/livelihood outcomes (Max 30 words)			
Outcome: Global Biodiversity Standard certification achieved by 250 tree-planting/restoration projects, ≥200 people trained with improved capacity to do GBS assessments and 10 hubs of biodiversity assessment and restoration mentoring expertise established in 6 highly biodiverse countries by 2027. (Max 30 words)	0.1. Global Biodiversity Standard (GBS) methodology completed and applications available to tree-planting and forest restoration practitioners online in English, Spanish, Portuguese and French by the end of year 2. 0.2. At least 10 training hubs established. At least 10 training hubs established, ≥200 people trained to improve capacity in biodiversity assessment and ecological restoration mentoring and use of comprehensive data tools and resources to carry out GBS assessments in at least 6 highly biodiverse countries by the end of year 3. 0.3. A self-sustaining business model and plan for scaling up the GBS to at least 10 biodiverse countries worldwide developed by the end of year 3. 0.4. GBS certification applied for and achieved by at least 250 tree-planting/ forest restoration projects by project end.	0.1. Published methodology online and application forms available online in English, Portuguese, French and Spanish. 0.2. Project report; training attendance records; knowledge/understanding attainment confirmed via testing; certificates issued; number of GBS assessments carried out by trainees; data library online. 0.3. Project report; options paper; business plan; report on effectiveness of the model; PR and outreach strategy. 0.4. No. of applications for GBS certification; no. of GBS certificates issued.	COVID-19 or other national/global disruption does not prevent the deployment of local or international expertise for site testing and methodological development (see below). Carrying out GBS assessments is financially viable for local entities (e.g. botanic gardens, existing certification organizations, other types of biodiversity/ agroforestry/forest restoration organizations) and can compete with other income-generating priorities (see below). A cost-effective but scientifically robust methodology is affordable to a wide range of practitioners (see below). Biodiversity impacts carry financial incentives either as a risk or as an opportunity and are sufficiently attractive to financiers, brokers and practitioners of tree-planting and forest restoration to apply for certification (see below).
Outputs: **1**. A scientifically credible, objective, and accessible Global Biodiversity Standard (GBS) and certification methodology in place and available to tree-planting and	1.1. Draft GBS certification assessment methodology developed by the end of year 1.	1.1. Draft methodology published in report. 1.2. Feedback records from assessors and site-managers.	COVID-19 or other national/global disruption does not prevent the deployment of local expertise for site testing (mitigated by wide potential selection of partner institutions/countries and the

forest restoration initiatives by the end of year 2.	1.2. Draft methodology tested in real world conditions in at least 6 countries by the end of year 2. 1.3. Methodology refined and finalised by end of year 2. 1.4. GBS application process available to tree-planting and forest restoration practitioners online in English, Spanish, Portuguese and French by the end of year 2.	1.3. Final methodology published online. 1.4. Online application forms available in English, Spanish, Portuguese and French.	possibility of moving testing to another country). Tree-planting/forest restoration practitioners are willing to participate in the testing phase (low risk; Ecosia, Plan Vivo and 1t.org have agreed to participate).
2. Hubs of expertise and data established to support Global Biodiversity Standard assessments and forest restoration mentorship in at least 6 highly biodiverse countries by the end of year 3.	2.1. At least 10 training hubs established in at least 6 biodiverse countries by the end of quarter 2, year 1. 2.2. Full suite of GBS training materials developed by the end of quarter 2, year 2. 2.3. At least 200 people from at least 10 highly biodiverse countries (50% women) trained in biodiversity assessment and ecological restoration mentoring to improve capacity to do GBS assessments and advise on best practices by the end of year 3 2.4. Comprehensive data on spatial distribution of biodiversity, seed sources, vegetation and tree distribution, socio-economic biodiversity values etc. compiled, processed and available online for at least 6 biodiverse countries by the end of year 3. 2.5. Climate Resilience Assessment Tool and other spatial seed source	2.1. Project report; photos of training hubs and lists of staff at each hub. 2.2. Training materials, including webinars, powerpoints and other online materials available in English, Spanish, Portuguese and French. 2.3. Training attendance records; knowledge attainment documented through testing (both field and “classroom” based); certificates issued. 2.4. Data library portals online 2.5. Climate Resilience Assessment Tool and other tools available online in portals	COVID-19 or other national/global disruption doesn’t prevent the deployment of international expertise to lead training and development (Mitigated by online training and a regional/national approach to face to face capacity building). Global partners with biodiversity data and/or forest restoration information are willing to share their data and data tools (low risk: much of these data is already in the public domain). Biodiversity, agroforestry, restoration, or other certification institutions/entities are willing to host training and data hubs (to a large degree this will be dependent on 3, below).

	and tree-planting guidance tools available online by the end of year 3. 2.6. Germination/propagation protocols available online for at least 10,000 tree species in Darwin eligible countries by project end.	2.6. No. of records in BGCI's propagation protocols database online	
3. A self-sustaining business model and plan for scaling up the Global Biodiversity Standard (GBS) to at least 10 highly biodiverse countries and a communications plan for promoting the GBS worldwide developed by the end of year 3.	3.1. Business model options paper developed and published by the end of year 2. 3.2. Business Plan finalised and published by the end of year 3 3.3. GBS Communication and Public Relations (PR) Plan published by end of year 3. 3.4 Business and Communications/PR Plans under implementation in years 4-5. 3.5 Business development on the prototype for return on investment (ROI) on use of the GBS methodology with respect to socio-economic and environmental outcomes (carbon sequestration, soil conservation, rural household reached, job creation). (matched funding dependent)	3.1. Project report; options paper. 3.2. Published Business Plan. 3.3. Communication and PR plan. 3.4 Communications and PR materials. 3.5 Report published.	Hosting the GBS hubs and carrying out the certification assessments is financially viable for local biodiversity institutions and can compete with other income-generating priorities (low risk; we believe that it is possible for host entities to cover their costs and still be affordable compared to the very expensive schemes currently available).
4. The Global Biodiversity Standard and certification adopted and used by policy-makers, financiers, brokers and practitioners of tree-planting, reforestation and forest restoration managing at least 250 sites in at least 10 countries by project end.	4.1. GBS certification scheme promoted in at least 10 countries by the end of year 4. 4.2. GBS certification achieved by at least 250 tree-planting/ forest restoration projects in at least 10 countries by project end. 4.3. At least 5 governments, 20 companies and 10 NGOs/CBOs	4.1. Media coverage metrics; meeting records; enquiries received and responded to 4.2. No. of GBS applications; no. of GBS assessments complete and certificates issued.	Positive biodiversity impacts carry financial incentives either as a risk or as an opportunity and/or are sufficiently attractive to financiers, brokers and practitioners of tree-planting and forest restoration to apply for certification (mitigated by working with biodiversity +ve corporate partners packaging biodiversity and carbon together in premium packages).

	recommending or mandating the use of the Standard by project end.	4.3. No. of policy documents recommending or mandating use of standard.	A cost-effective but scientifically robust methodology is affordable to a wide range of practitioners. (Risk reduced by already having a strong technical network in place).

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

Output 1.1. Draft GBS certification assessment methodology developed by the end of year 1

1.1.3. Development of GBS certification methodology components assessment methodology, including online application process, remote sensing review and ground survey methodology, sub-contracted to technical partners by the end of Q1, year 1.

1.1.4. Draft GBS certification assessment methodology developed and published in English, French, Portuguese and Spanish online by the end of Q4, year 1

Output 1.2. Draft methodology tested in real world conditions in at least 6 countries by the end of year 2

1.2.1. Agreements signed with at least 12 tree-planting/forest restoration project sites in at least 6 different biodiverse countries by the end of Q4, year 1.

1.2.2. Online application, remote sensing and ground survey methods tested with at least 12 tree-planting/forest restoration project sites in at least 6 different highly biodiverse countries by the end of Q3, year 2.

Output 1.3. Methodology refined and finalised by end of year 2.

1.3.3. Meetings held with project site practitioners and assessors, and verbal and written feedback received by the end of Q3, year 2.

1.3.4. Final methodology agreed and published online by the end of Q4, year 2.

Output 1.4. GBS application process available to tree-planting and forest restoration practitioners online in English, Spanish, Portuguese and French by the end of year 2.

1.4.3. GBS certification launched and publicised at UNFCCC COP-28 by the end of year 2

1.4.4. GBS application available online in English, Spanish, Portuguese and French by the end of year 2.

Output 2.1. At least 10 training hubs established in at least 6 biodiverse countries by the end of Q2, year 2

2.1.1. At least 10 GBS hub host entities in at least 6 biodiverse countries identified and equipped with computers, survey and inventory equipment by the end of Q2, year 2

2.1.2. Potential trainers in each training hub vetted and identified by the end of year 1.

Output 2.2. Full suite of GBS training materials developed and delivered to training hubs by the end of Q2, year 2

2.2.1. Data, tools and resources necessary for GBS assessments specific to each training hub collated and used in at least 10 hubs in 6 biodiverse countries by the end of Q2, year 2.

2.2.2. Training modules in GBS and ER (online and face to face) developed in English, Spanish and French by the end of Q2, year 2.

Output 2.3. At least 200 people from at least 10 biodiverse countries (50% women) trained in biodiversity assessment and forest restoration mentoring by the end of year 3.

2.3.1. At least 20 trainers trained and certified in GBS assessment by the end of year 2
2.3.2. At least a further 180 people trained and certified in GBS assessment (≥200 people total), including through either formal CERP level achievement or through a dedicated certificate, issued by the SER CERP program credentialing these people as qualified to conduct GBS audits related to tree-planting and reforestation/forest restoration by the end of year 3.

Output 2.4. Comprehensive data on spatial distribution of biodiversity, seed sources, vegetation and tree distribution, socio-economic biodiversity values etc. compiled, processed and available online for at least 6 biodiverse countries by the end of year 3.

2.4.1. Digital potential vegetation maps (high resolution corresponding to the resolution of biocllimatic raster data) available online providing natural habitat reference data for at least 6 biodiverse countries by the end of year 3.
2.4.2. Provide guidelines on compiling, cleaning and bias-reduction of geospatial data on species occurrence, including from GBIF and BIEN by end of year 2.
2.4.3 Comprehensive geo-referenced tree species digital distribution data available to GBS assessors and mentors in at least 6 biodiverse countries by the end of year 3 (note that access to data on distributions of rare and threatened species will be carefully managed).

Output 2.5. Climate Resilience Assessment Tool and other spatial seed source and tree-planting guidance tools available online by the end of year 3

2.5.1. Climate Resilience Assessment Tool calibrated for native tree floras and available to tree-planting/forest restoration practitioners in at least 6 biodiverse countries by the end of year 3.
2.5.2. Tree planting/forest restoration practitioners have access to and are familiar with the different databases, guidelines and maps available via the Global Tree Knowledge Platform (https://www.worldagroforestry.org/tree-knowledge) by the end of year 3

Output 2.6. Germination/propagation protocols available online for at least 10,000 tree species in at least 10 Darwin eligible biodiverse countries by project end.

2.6.1. Germination protocols for native tree species in at least 10 highly biodiverse countries available digitally online and accessible to tree-planting/forest restoration practitioners through a forest restoration resource hub and tools such as SER's Restoration Resource Center, Kew's Seed Information Database (n= at least 10,000 native tree species), and the UN FAO/CIFOR-ICRAF Transformative Partnership Platform for Agroecology by project end.
2.6.2. Propagation and aftercare protocols for native species in at least 10 Darwin eligible biodiverse countries available digitally online and accessible to tree-planting/forest restoration practitioners through an ER resource hub and BGCI's PlantSearch propagation tool (n= at least 10,000 native tree species) by project end.

Output 3.1. Business model options paper developed and published by the end of year 2.
3.1.1. Data collected on costs associated with carrying out GBS assessments throughout testing phase (i.e. by end of Q3, year 2)
3.1.2. Market analysis (internet research, questionnaire and interviews) carried out to gather data on costs and cost/benefits of other certification schemes to estimate (1) demand for biodiversity certification, and (2) competitive charging rates by end of Q3, year 2
3.1.3. Business model options paper developed by the end of year 2, and shared with implementing partners.

Output 3.2. Business Plan finalised and published by the end of year 3

3.2.1. At least 15 implementing partners in at least 10 countries committed to hosting GBS hubs, and formally signed up by Q2, year 3
3.2.2. Business plan finalised and published by the end of year 3.

Output 3.3. GBS Communication and Public Relations (PR) Plan published by end of year 3.
3.3.1. GBS communication and PR plan drafted by the end of Q1, year 3
3.3.2. GBS officially launched at UNFCCC COP29 in Q3, year 3
3.3.3. GBS final communication and PR plan published by the end of year 3

Output 3.4 Business and Communications/PR Plans implemented in years 4-5.
3.4.1. Target tree planting practitioners and financiers to promote adoption of GBS certification (see output 4)

Output 3.5 Business development on the prototype for return on investment (ROI) on use of the GBS methodology with respect to socio-economic and environmental outcomes (carbon sequestration, soil conservation, rural household reached, job creation).
3.5.1. Setting up a standard, repeatable and robust framework for measuring impact of GBS methodology at the local scale by monitoring a set of socio-ecological indicators (carbon sequestration, soil conservation, rural household reached, job creation) by end of project (matched funding dependent)
3.5.2. Identify priority areas for further implementation of GBS methodology based on a set of relevant indicators (e.g. biodiversity loss, population density, land degradation, connectedness to existing natural forests) to upscale local impact to national and regional scale by project end.

Output 4.1. GBS certification scheme promoted in at least 10 highly biodiverse countries by the end of year 4
4.1.1. Project partners and GBS hub organisations promote the GBS scheme in at least 10 countries via their websites and newsletters and through meetings with policymakers, financiers and practitioners of tree planting/forest restoration to encourage GBS uptake.
4.1.2. A further 4 hubs (i.e. 14 hubs in total) are identified and formalised in a further 4 countries (i.e. 10 countries in total) by the end of year 4.

Output 4.2. GBS certification achieved by at least 250 tree-planting/forest restoration projects in at least 10 countries by project end.
4.2.1. GBS assessments carried out and results certified at >250 sites in at least 10 countries during years 4 and 5.

Output 4.3. At least 5 governments, 20 companies and 10 NGOs/CBOs recommending or mandating the use of the Standard by project end.
4.3.1. Meetings arranged with governments and donor agencies, including FCDO, at or shortly after UNFCCC COP29 in Q3, year 3 coinciding with the launch of the GBS to raise awareness of the Standard and certification process.
4.3.2. BGCI, SER, CIFOR-ICRAF, and project corporate partners (Ecosia, 1t.org and Etihad) promote the adoption of the Standard and certification to their peers, including leading by example, during years 4 and 5.
4.3.3. BGCI, SER, CIFOR-ICRAF, and Plan Vivo promote the adoption of the GBS to the NGO community through our own platforms, through the Global Partnership for Forest and Landscape Restoration, and through NGO tree planting fora such as the Global Evergreening Alliance, during years 4 and 5.

Annex 3: Standard Indicators

Table 1 Project Standard Indicators

DI Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggre-gation	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Year 5 Total	Total to date	Total planned during the project
D1-A01	At least a further 180 people trained and certified in GBS assessment (≥200 people total), including through either formal CERP level achievement or through a dedicated certificate, issued by the SER CERP program credentialing these people as qualified to conduct GBS audits related to tree-planting and reforestation/forest restoration by the end of year 3.	Number of people from key national and local stakeholders completing structured and relevant training	People	Men Women	38 26					64	200
DI-A03	At least 15 implementing partners in at least 10 countries committed to hosting GBS hubs, and formally signed up by Q2, year 3.	Number of local/national organisations with improved capability and capacity as a result of project.	Number of organisations	None	10	16				16	15
DI-A05	At least 20 trainers trained and certified in GBS assessment by the end of year 2	Number of trainers trained reporting to have delivered further training by the end of the project.	People trained	Men Women	0	14 6				20	20
DI-A07	At least 5 governments recommending or mandating the use of the Standard by project end	Number of government institutions/departments with enhanced awareness and understanding of biodiversity and associated poverty issues	Government institutions	None	0	0				0	5
DI-C01	Germination/propagation protocols available online for at least 10,000 tree species in at least 10 Darwin eligible biodiverse countries by project end.	Number of best practice guides and knowledge products published and endorsed.	Number	None	0	0				0	10,000

DI Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggre-gation	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Year 5 Total	Total to date	Total planned during the project
DI-C07	GBS certification achieved by at least 250 tree-planting/forest restoration projects in at least 10 countries by project end.	Number of projects contributing biodiversity conservation or poverty reduction evidence to policy/regulation/standards consultations.	Number	None	0	116				0	250
DI-C10	Number of case studies published.	Number of case studies published.	Number	Sustainable Use	0	0				0	2
DI-C17	Business model options paper developed and published by the end of year 2.	Number of unique papers submitted to peer reviewed journals	Number	None	1	1				2	2
DI-C18	Business model options paper developed and published by the end of year 2.	Number of papers published in peer reviewed journals	Number	None	0	2				2	2
DI-C19	GBS application process available to tree-planting and forest restoration practitioners online in English, Spanish, Portuguese and French by the end of year 2.	Number of other publications produced	Number	English French Spanish Portuguese	0	1 1 1 0				3	4

In addition to reporting any information on publications under relevant standard indicators, in Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, e.g. title, name of publisher, contact details, cost. You should include publications as supporting materials with your report. Mark with an asterisk (*) all publications and other material that you have included with this report.

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)
GlobalUsefulNativeTrees, a database documenting 14,014 tree species, supports synergies between biodiversity recovery and local livelihoods in landscape restoration.	Journal	Kindt, R., Graudal, L., Lillesø, JP.B. *et al.* (2023)	Male	Kenyan	*Sci Rep* **13**, 12640 (2023).	https://doi.org/10.1038/s41598-023-39552-1
TreeGOER: A database with globally observed environmental ranges for 48,129 tree species.		Kindt, R. (2023)	Male	Kenyan	*Global Change Biology*, 29, 6303–6318.	https://doi.org/10.1111/gcb.16914

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the **correct template** (checking fund, type of report (i.e. Annual or Final), and year) and **deleted the blue guidance text** before submission?	Yes
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line.	Yes
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 16)?	n/a
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	