



Submit by Tuesday 1 December 2015

DARWIN INITIATIVE APPLICATION FOR GRANT FOR ROUND 22: STAGE 2

Please read the Guidance Notes before completing this form. Where no word limits are given, the size of the box is a guide to the amount of information required.

Information to be extracted to the database is highlighted blue. Blank cells may render your application ineligible

ELIGIBILITY

1. Name and address of organisation

(NB: Notification of results will be by email to the Project Leader in Question 6)

Applicant Organisation Name:	The Royal Botanic Gardens, Kew (Kew)
Address:	Royal Botanic Gardens, Kew
City and Postcode:	Richmond TW9 3AB
Country:	United Kingdom
Email:	
Phone:	

2. Stage 1 reference and Project title

Stage 1 Ref:	Title (max 10 words):	
3333	Important Plant Areas in Guinea-Conakry	

3. Project description (not exceeding 50 words)

(max 50 words)

Identification of the Important Plant Areas of Guinea-Conakry, and the globally threatened and valuable plant species and habitats they contain, will enable national authorities and London-listed investors to make effective decisions on the avoidance and protection of priority sites for conservation, reducing the reputational risk of development causing species extinctions.

4. Country(ies)

Which eligible host country(ies) will your project be working in? You may copy and paste this table if you need to provide details of more than four countries.

Country Conakry)	1:	Guinea	Republic	(Guinea-	Country 2:
Country 3) :				Country 4:

5. Project dates, and budget summary

Start date: 01/04/2016		End date: 31/03/2019		Duration: 3 years				
Darwin request 2016/17			2017/18		2018	/19	Total requ	est
	£ 106,394		£ 121,40	6	£ 63,	613	£ 291,413	
Proposed (confirmed & unconfirmed) matched			d) matche	d fundin	g as %	of total Pro	ject cost	43%
Are you applying for DFID or Defra		Defra						
funding? (Note you	funding? (Note you cannot apply for both)							

6. Partners in project. Please provide details of the partners in this project and provide a CV for the individuals listed. You may copy and paste this table if necessary.

23-002 ref 3333

Details Project Leader		Project Partner 1	Project Partner 2
Surname	Cheek	Magassouba	
Forename (s)	Martin	Sekou	
Post held	Head of Africa & Madagascar	Director-Général Adjointe, Herbier National Guinée	
Organisation (if different to above)		Université Gamel Abdel Nasser, Conakry	
Department	Identification & Naming	Herbier National De Guinée	
Telephone			
Email			

7. Has your organisation been awarded a Darwin Initiative award before (for the purposes of this question, being a partner does not count)? If so, please provide details of the most recent awards (up to 6 examples).

Reference No	Project Leader	Title		
22-005	Paul Wilkin	Conserving Madagascar's Yams through cultivation for livelihoods and food security.		
22-006	Aaron Davis	Mainstreaming biodiversity conservation and climate resilience at Yayu Biosphere Reserve.		
22-012	Philip Stevenson	Harnessing agricultural ecosystem biodiversity for bean production and food security		
21-006	Kate Gold	Balancing conservation and livelihoods in the Chimanimani forest belt, Mozambique		
21-005	Moctar Sacande	Pesticide plants for organic cotton, livelihoods and biodiversity in Mali		
21-003	Hugh Pritchard	Protecting Ugandan endemic cycads from biodiversity loss and trafficking		

8a. If you answered 'NO' to Question 7 please complete Question 8a, b and c.

If you answered 'YES', please go to Question 9 (and delete the boxes for Q8a, 8b and 8c)

9. Please list all the partners involved (including the Lead Institution) and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. This section should illustrate the capacity of partners to be involved in the project. Please provide written evidence of partnerships. Please copy/delete boxes for more or fewer partnerships.

Lead institution and website:

Details (including roles and responsibilities and capacity to lead the project): (max 200 words)

Royal Botanic Gardens, Kew (Kew)

www.kew.org

Global botanical research institute, focussing on the tropics and on conservation. Its reference collections and expertise for identifying plant species and redlisting in Tropical Africa are unrivalled. Kew's major commitment to Tropical Africa began with the Flora of Tropical Africa project (1868-1937) and a series of regional Floras, including the Flora of West Tropical Africa (1954-1972) which remains the basis for identifying all plant species in West Africa, now an ebook (http://www.kew.org/discover/blogs/kew-science/floras-it-long-haul). Kew initiated the Sampled Red List Index for plants and is a partner of IUCN's redlisting programme. Kew published the first Red Data Book for any tropical African country (Cameroon) in 2011.

Kew has been active in research and capacity building in Guinea since 2005, funded by consultancies for the extractive sector. Guinea is a priority for Kew because it has the lowest botanical capacity and yet the highest plant endemism in West Africa, e.g. *Pitcairnia feliciana* the only Bromeliaceae native outside the Americas, is restricted to a small corner of Guinea and is globally threatened. Kew holds an MoC with HNG-UGAN dating from 2008 (below), coteaches their MSc. in Biodiversity & Sustainable Development and is committed to developing a seedbank and nursery for threatened species in Guinea.

Have you included a Letter of Support from this institution?

Yes

Partner Name and website where available:

Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)

Plantlife International (Plantlife)

www.plantlife.org.uk

The UK-based plant conservation NGO that developed the concept of Important Plant Areas in the 1990s and ensured that it became a CBD target in the Global Strategy for Plant Conservation (GSPC). Plantlife co-ordinates IPA identification and conservation in Europe, the Mediterranean and the Himalaya. Kew first sought Plantlife expertise and input over five years ago respecting IPA methodology for Kew projects in the UK Overseas Territories.

In 2014, Kew began engaging with Plantlife about Kew's developing plans to promote and apply the IPA system throughout the tropics as part of Kew's new Science Strategy (2015-2020) for which Tropical IPAs is a key strategic output. A Plantlife representative sits on the Kew committee for delivering this output. Plantlife has unrivalled expertise in IPA methodology and IPA stakeholder engagement and experience of implementation in numerous countries over many years. For these reasons Plantlife assistance in running the consultative and capacity-building workshops at the start of the project has been sought and agreed. Stakeholder engagement from the inception of an IPA project is seen as essential to its success, since without local buy-in and understanding from the outset, recognition and implementation of IPAs on the ground can be difficult.

Have you included a Letter of Support from this institution?

Yes

Partner Name and website where available:

Herbier National De Guinée (HNG),L'Université Gamal Abdel Nasser, Conakry (UGAN), Guinée

www.herbierguinee.org

Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)

UGAN botanists proposed a National Herbarium at the turn of the millennium, at which time Guinea did not have a single registered herbarium. In 2005 Kew, seeking to support a Herbarium in Conakry, facilitated the provision of specialist materials, equipment, training and specimens to this end. In 2008 a Memorandum of Collaboration was signed between Kew and HNG-UGAN, and in 2009 a Government decree officially created the National Herbarium as a legal entity with rights and responsibilities. In 2011, HNG was registered on Index Herbariorum. The staff at HNG-UGAN requested that Kew co-teach a new Masters course in Biodiversity and Sustainable Development, to train the next generation of conservation biologists. This began 2012, and the third course is now advertised.

HNG-UGAN leads botanical exploration and conservation in Guinea and identified a national Red List for plants and site-based conservation prioritisation as key areas for research collaboration with Kew.

The staff and associates of HNG-UGAN, together with the MSc students, will provide significant input into the datagathering operation that will allow IPAs to be identified, confirmed and characterised, providing the data that will allow their official recognition, and, with the support of GE and MEEF, their sustained protection.

Have you included a Letter of Support from this institution?

Yes

Partner Name and website where available:

Guinée-Ecologie (GE).

www.ramsar.org/ongguin%C3%A9e-ecologie

Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)

Guinée-Ecologie is Guinea's premier environmental NGO. It trains students in environmental studies and techniques, and works with a network of local communities, especially in the Fouta Dialon area, to improve conservation nationally. Kew has been in dialogue with GE to discuss national conservation approaches since 2005, and supported its plan to redevelop the Camavenne Garden with biodiversity conservation interpretation for the population of Conakry. GE is also vociferous about the need to protect additional areas in Guinea. GE's part in this Darwin project will be to use data and images of threatened species provided by Kew and HNG-UGAN to alert local communities to species of conservation priority in their area. Once IPAs have been confirmed, GE's advice and experience will be important to secure engagement of local communities, particularly where IPA sites are too small to be afforded formal protection and so will depend entirely on community support.

Have you included a Letter of Support from this institution?	'es
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Partner Name and website where available:

(CBD & GBIF focal points:COSIE)

Centre d'Observation de Surveillance et D'Informations Environnementales (COSIE), Ministère de l'Environnement des Eaux et Forêts (MEEF).

(Centre for Observation and Surveyance and of Environmental Information, Ministry of the Environment of Water and Forests).

https://www.cbd.int/countries/nfp/default.shtml?country=gn

Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)

In 2011, Kew staff began a dialogue with current COSIE focal point Saidou Doumboyah, MEEF, for Guinea, concerning joint botanical missions for the extractive sector, during which enhanced conservation of Guinea's threatened plant species was first discussed. COSIE has responsibility for all of Guinea's National Biodiversity, including data and protected areas. Since 2011 this project has been jointly developed, at a series of Kew training workshops with the current project partners at HNG-UGAN. In October 2015 COSIE, with technical support from Kew, led an application for a GBIF Biodiversity Information for Development grant which includes all the current project partners, expressly to support this Darwin IPA project, by mobilising plant specimen data from Europe and Guinea to enable Red List assessment of species in Guinea and thus the identification of concentrations of threatened species which represent priorities for protection.

The role in the project of the CBD/GBIF focal point staff, Abouboucar Oulare and Saidou Doumbiouyah, is to represent key policymakers COSIE, MEEF, which is interested in expanding the protected area network.

IPAs identified by this Darwin project have a real possibility of becoming protected areas as stated by the CBD focal point in the COSIE letter of support.

Have you included a Letter of Support from this institution?

Yes

10. Key Project personnel

Please identify the key project personnel on this project, their role and what % of their time they will be working on the project. Please provide 1 page CVs for these staff, or a 1 page job description or Terms of Reference for roles yet to be filled. Please include more rows where necessary.

Name (First name, surname)	Role	Organisation	% time on project	1 page CV or job description attached?
Martin Cheek	Project Leader	RBG, Kew	20	Yes
Charlotte Couch	Project co-ordinator	RBG, Kew	10	Yes
Sekou Magassouba	Guinean botanical expert and main project partner	UGAN-HNG	40	Yes
Seona Anderson	IPA and stakeholder engagement support	Plantlife International	20% yr1, 10% yrs 2-3	Yes

11. Problem the project is trying to address

Please describe the problem your project is trying to address in terms of biodiversity and (essential for DFID projects) its relationship with poverty. For example, what are the drivers of

loss of biodiversity that the project will attempt to address? Why are they relevant, for whom? How did you identify these problems?

If your project is working on an area of biodiversity or biodiversity-development linkages that has had limited attention (both in the Darwin Initiative portfolio and in conservation in general) please give details.

(max 300 words)

Guinea-Conakry depends for income on increasing open-cast mining by multinational companies, the largest being listed in London, with investments by British taxpayers through pension funds. These initiatives and new infrastructure projects, will result in major losses of natural habitat. Yet Guinea has numerous highly range-restricted plant species and rare vegetation types which are consequently at risk of unwitting extinction, posing reputational risks to companies which will affect their share prices and investor income.

The existing protected area network focusses on maintaining timber resources for exploitation (Foret Classe) or protecting large animals (National Parks) or wetlands (Ramsar sites); most of the rarest plant species are therefore offered little or no protection.

An effective means of conservation prioritisation is required if Guinea's biodiversity is to be safeguarded, focussing efforts on the sites that require protection. Guinea's capacity to do this is severely hampered by a lack of scientific expertise and infrastructure. The 2014 fifth national progress report on Guinea's CBD commitments¹ emphasises the need for greater capacity in the identification of Guinea's biodiversity, and more accessible data on its threatened species and key sites for protection, as well as the need to disseminate these findings effectively to encourage community-level engagement in biodiversity protection. While considerable progress has been made with regard to Guinea's charismatic fauna, access to data and expertise on plants remains limited.

The assessment of Important Plant Areas (IPAs) offers a practical but rigorous means of identifying site-based conservation priorities. IPAs are aligned to Target 5 of the CBD's Global Strategy Plant Conservation and so offer an important step towards fulfilling national CBD targets. Discussions between Kew and partners in Guinea have indicated enthusiasm to adopt the IPA approach and threatened species data to inform decision making on prioritisation of areas for conservation efforts.

12. Biodiversity Conventions, Treaties and Agreements

Which of the conventions supported by the Darwin Initiative will your project support? Note: projects supporting more than one convention will not achieve a higher scoring

Convention On Biological Diversity (CBD)	Yes
Nagoya Protocol on Access and Benefit Sharing (ABS)	No
International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)	No
Convention on International Trade in Endangered Species (CITES)	No

12b. Biodiversity Conventions

Please detail how your project will contribute to the objectives of the convention(s), treaties and agreements your project is targeting. You may wish to refer to Articles or Programmes of Work here. Note: No additional significance will be ascribed for projects that report contributions to more than one convention

(Max 200 words)

Contribution to Aichi targets - https://www.cbd.int/sp/targets:

Target 1 "...people are aware of the values of biodiversity...";

Target 11 "By 2020, at least 17 per cent of terrestrial...especially areas of particular importance

¹ https://www.cbd.int/doc/world/gn/gn-nr-05-fr.pdf R22 St2 Form

for biodiversity and ecosystem services, are conserved..."

Target 12 "By 2020 the extinction of known threatened species has been prevented and their conservation status...has been improved and sustained".

The project will improve the conservation status of our c.300-330 potentially threatened species (most to be assessed by the project) protected in the estimated 15-20 IPAs we expect to be selected from a candidate list of 32 sites.

Global Strategy for Plant Conservation (GSPC) - https://www.cbd.int/gspc/targets.shtml:

We will contribute significantly to targets 2, 4, 7, 8, 9, but crucially our project addresses:

Target 5: "At least 75 per cent of the most important areas for plant diversity of each ecological region protected with effective management in place for conserving plants and their genetic diversity".

The IPA approach outlined in this proposal is exactly aligned to target 5 of GSPC, and we are confident as a result that if the project is funded in 2016, Guinea will be the first country in Tropical Africa for which target 5 is achieved.

12c. Is any liaison proposed with the CBD/ABS/ITPGRFA/CITES focal point in the host country?

Yes if yes, please give details: The CBD focal point at COSIE, MEEF, is a project partner, will attend IPA consultation and training workshops with other COSIE staff and has expressed interest in recognising IPAs identified and documented by this project as future protected areas (see section 9 and letter of support) and in fact requested that our project logframe be amended to include inter alia, based on the project results, the addition of new protected areas which is within the power of COSIE to deliver.

13. Methodology

Describe the methods and approach you will use to achieve your intended outcomes and impact. Provide information on how you will undertake the work (materials and methods) and how you will manage the work (roles and responsibilities, project management tools etc.).

(Max 500 words – this may be a repeat from Stage 1, but you may update or refine as necessary. Tracked changes are **not** required.)

This project will combine the botanical and species redlisting expertise of Kew with the experience in IPA designation and dissemination of Plantlife, the on-the-ground knowledge of Guinean environments and communities of HNG and GE and the policy influence of MEEF. This partnership will deliver the first identification of IPAs for a Tropical African country, enabling protection and sustainable management of the highest priority sites for vascular plant conservation in Guinea. IPA sites are identified based on the presence of threatened species, threatened habitats and concentrations of the most important wild species including those of highest socio-economic value. The following steps will be taken:

- a. Inception workshop held in Conakry to (i) compile a working list of priority plants for Guinea, including candidate threatened species and those of highest socio-economic importance; (ii) review threats to Guinean plant species and habitats; (iii) identify candidate IPA sites and priority targets for field survey; (iv) provide critical training in IPA and species redlisting methodologies and their application to conservation planning.
- b. Available plant specimen data, held at relevant herbaria and from the literature, collated and georeferenced for priority species so that range data can be generated and sites containing concentrations of these species identified. Ongoing data gathering at Kew will be supplemented through this project by a Kew-based student intern, HNG staff and UGAN postgraduate student projects.
- c. GIS analysis of satellite imagery to identify and predict the current distribution of key habitats and species.
- d. A series of collaborative nationwide botanical field surveys conducted, informed by (a-c), to infill knowledge gaps for poorly known but potentially botanically rich areas, and to gather population and threat data for the priority species and candidate IPA sites. A series of UGAN MSc projects will survey local communities and markets to identify and document key sites for nationally important wild-harvested socio-economic species.
- e. IUCN species assessments (redlisting) carried out on all potentially threatened species of Guinea, reviewed at a second workshop in Conakry and subsequently published both online and in book format to maximise in-country use.
- f. Based on the data generated through (a-d), IPAs of Guinea identified, mapped and published, incorporating management recommendations for each site. IPAs will be mapped against existing protected areas and areas of development e.g. mining concession and prospection areas to highlight threats and opportunities for protection. Detailed maps of each IPA, identifying core and buffer / zones-of-opportunity are required by COSIE-MEEF for protected status decrees.

Throughout the project, the scientific partners will liaise with COSIE-MEEF and other relevant stakeholders from the national to community level to promote the use of IPA and threatened species data in conservation planning and sustainable development. Succinct booklet-form guides to Guinea's IPAs and threatened and valuable species, together with a series of province-specific species conservation posters will be produced for secondary school teachers and for university students, in order to help educate the next generation of professionals and community leaders in the benefits of biodiversity conservation for Guinea's future prosperity.

14. Change Expected

Detail the expected changes this work will deliver. You should identify what will change and who will benefit a) in the short-term and b) in the long-term.

- If you are applying for Defra funding this should specifically focus on the changes expected for biodiversity conservation and its sustainable use.
- If you are applying for DFID funding you should in addition refer to how the project will contribute to reducing poverty. Q15 provides more space for elaboration on this.

By identifying, mapping, characterising and publicising Important Plant Areas, we will enable the national authorities of Guinea-Conakry and multinational companies and contractors (the largest of which are listed in London and have substantial UK investment from British taxpayers) to avoid or minimise their reputational risk of adversely impacting threatened plant species and habitats, and to support their protection and sustainable management through offsetting (multinationals) and by improved focussing of scarce national conservation resources (Government of Guinea-Conakry, advised by MEEF). This will improve investor-confidence in Guinea, and increase investment further, since the reputational risks of unwittingly causing extinction of threatened plant species will be reduced. Well-paid jobs and poverty reduction will be lifted.

Publication of IPAs and a national Red List for plants will enable Guinea to deliver on its CBD commitments under GSPC Targets 2 and 5.

The project will build technical capacity in Guinea to apply biodiversity data to decision-making in natural resource management as new challenges and opportunities arise in the future, and will promote the possibility of developing a national monitoring programme.

Guineans depend on plant resources for survival, including traditional medicines from threatened species. By identifying and demarcating the most important areas for plant conservation, we will support the survival of this national resource for utilisation by future generations. Inclusion of plant species of socio-economic importance within IPAs will establish a direct link between the preservation and sustainable management of areas of high biodiversity value and human livelihoods, in line with Aichi Biodiversity Targets 1 and 2

Stakeholder engagement at national to community levels, through a combination of workshops, community-based field survey work and teaching materials for education institutions, will emphasise this link and will promote both community-led and national protection of IPAs, so helping to preserve Guinea's unique and threatened plants and habitats.

15. Pathway to poverty alleviation – ESSENTIAL FOR DFID PROJECTS, OPTIONAL FOR DEFRA PROJECTS

Please describe how your project will benefit poor people living in low-income countries. Give details of who will benefit and the number of beneficiaries expected to be impacted by your project. The number of communities is insufficient detail – number of households should be the largest unit used. If possible, indicate the number of women who will be impacted.

(Max 300 words)

Identifying and mapping concentrations of threatened species in Guinea will enable extractive companies to better avoid impacting them, so reducing their reputational risk, and thus increasing their profitability that is likely to maintain their investment and position as employers in Guinea, all other factors being equal. Most of Guinea's foreign income is earned through the extractive sector.

16. Exit strategy

State whether or not the project will reach a stable and sustainable end point. If the project is not discrete, but is part of a progressive approach, give details of the exit strategy and show how relevant activities will be continued to secure the benefits from the project. Where individuals receive advanced training, for example, what will happen should that individual leave?

(Max 200 words)

This 3-year project is expected to reach a stable and sustainable endpoint, with IPAs confirmed, documented and mapped. As data are assembled they will be fed through CBD/GBIF focal points into COSIE-MEEF who are responsible for Guinea's protected areas. National lobbying for IPA protection will be led by Guinée-Ecologie, who will also advise local communities on the value of protecting IPAs.

Post-project, Kew is committed to remaining active in Guinea in the long-term and is particularly keen to maintain training and research co-operation with UGAN-HNG, as it has done over the last 25 years with the National Herbarium of Cameroon. Further projects are planned which will build on the achievements of the current Darwin IPA project. Kew will also maintain its existing strong links with the CBD-GBIF focal points and Guinée-Ecologie, building on the achievements of this project in the protection of important sites for plant diversity and publicising the importance of conservation of Guinea's threatened plant species.

It is conceivable that new IPAs will come to light post-project, with further exploration into remote sites. In that event it should not be difficult to incorporate them into the revised protected area network using the model developed during the current project.

17a. Harmonisation

Is this a new initiative or a development of existing work (funded through any source)? Please give details (Max 200 words)

This is a new initiative, the first time that this IPA approach has been applied in any tropical African country so far as we are aware, although it is a well-known and widely applied approach in the north temperate zone, led by Plantlife International, which has resulted in some major conservation successes in Europe. Kew have also had previous success with the IPA approach in the UK Overseas Territories, where the 17 IPAs identified are now written into the conservation planning strategy of the Falklands government.

17b. Are you aware of any other individuals/organisations/projects carrying out or applying for funding for similar work? Yes

If yes, please give details explaining similarities and differences explaining how your work will be additional to this work and what attempts have been/will be made to co-operate with and learn lessons from such work for mutual benefits.

The Guinean IPA project partners, supported by Kew, have applied for 50,330 euros of GBIF Biodiversity Information for Development (BID) funds in November 2015 to enhance training and gathering of specimen data for species redlisting in Guinea. This will supplement and boost the achievements expected from the Darwin project and should result in the publication of a Red List of Globally Threatened Plant Species in Guinea.

18. Ethics

Outline your approach to meeting the Darwin Initiative's key principles for research ethics as outlined in the guidance notes.

(Max 300 words)

Kew's Policy on Access to Genetic Resources and Benefit Sharing dates from 2001 (www.kew.org/conservation/index.html). All staff undertaking fieldwork must apply to Kew's Overseas Fieldwork Committee; this process ensures that staff are aware of, and fulfil, Health and Safety requirements and comply with CITES and CBD protocols, including all national and local legislation on collecting and exporting genetic resources and associated traditional knowledge.

Kew signed an MoC with UGAN-HNG, in 2008; valid until 2020 following two extensions. This document details the ethical course that Kew has committed to following in Guinea, in particular Access and Benefit sharing e.g. co-authorship of scientific publications, ensuring that a complete set of specimens collected are deposited in Guinea (collections from Kew-led expeditions currently form 90% of the Guinean specimens in UGAN-HNG), obtaining funding, and building capacity in staff and resources. Kew obtained funds and provided expertise to set up the UGAN-HNC website, is providing technical and financial support to set up a nursery to propagate and reintroduce threatened species, and likewise in the near future, for seed banking.

On all fieldwork in Guinea, for health and safety reasons as well as for social and traditional diplomatic needs, Kew will be accompanied by UGAN-HNC. Through the "ordre de mission" system, introductions will be made through the government hierarchy from Prefet and Sousprefet level to that of community elders, and prior informed consent obtained for the recording of local names and uses of plants during fieldwork. Local guides employed in the field missions can give feedback to their communities; in this way the local population is kept informed of the aims and objectives of the work and can verify what transpires, building trust and engagement.

To address gender balance, we will give preferential consideration to the employment and participation of female scientists and students in the project.

19. Raising awareness of the potential worth of biodiversity

If your project contains an element of communications, knowledge sharing and/or dissemination please provide a description of your intended audience, how you intend to engage them, what the expected products/materials there will be and what you expect to achieve as a result. For example, are you expecting to directly influence policy in your host country or is your project a community advocacy project to support better management of biodiversity?

Knowledge-sharing is essential to the success of this project and will happen at different levels targeting four audiences. Communication will be conducted in French, except for conservation posters which will be either in French or one of the main tribal languages (Pula, Susu or Malinke) depending on the range of the species concerned:

- Communication with policy makers at COSIE-MEEF, has the objective of full engagement in the progress of the project, from raising awareness of the significance of the confirmed IPAs through to their inclusion in the national protected areas network. Workshops, tuition during fieldwork, the hardcopy reference book on the IPAs of Guinea and the online IPA database will deliver this.
- 2. Communication with communities in the vicinity of IPAs. Not all IPAs will be suitable as government protected areas, and even those that are risk failure without the understanding and buy-in of local communities. Therefore engagement with communities through meetings, feedback before and after field missions in their areas, and posters illustrating and conveying facts on species specific to tribal areas will be effective as we know from our experience in Cameroon.

- 3. The general public; through national television coverage of the workshops and events such as launches of the IPA publication. Kew has organised three events at UGAN-HNG which had national television coverage in recent years, so we are confident of repeating this for the IPA Guinea project.
- 4. The survival of Guinea's national patrimony depends on its next generation. To this end we will produce a guide for secondary school teachers incorporating the basic facts on the importance of conserving Guinea's unique plant diversity, and will also organise a "nation's favourite flower" campaign within schools to spark children's interest in Guinea's natural heritage. This met with success in Cameroon with our Red Data book.

20. Capacity building

If your project will support capacity building at institutional or individual levels, please provide details of what form this will take and how this capacity will be secured for the future.

(Max 300 words)

At the request of UGAN-HNG in 2011, Kew signed up to co-teach the Masters course on Biodiversity and Sustainable Development at UGAN-HNG from its inception in 2012. The third intake, with 14 students is now starting. Through the IPA project for Guinea, Kew will be able to increase the amount of training it gives to students on the course, both in teaching modules on IPAs, and in supervising MSc projects on IPA-related topics, particularly those on socio-economic species present in candidate IPA areas. Post-project this course will continue, as before, with Kew. Kew trainees from former years have been retained in country by employment by the extractive sector, one company alone employing three as permanent environment dept staff, with four others retained on contracts.

MEEF, through the focal points, COSIE have repeatedly requested training in biodiversity conservation techniques and skills, which up to now Kew has addressed in an ad hoc way through training MEEF staff at UGAN-HNC. This project will enable more structured training to be given, with more depth, to a greater number of COSIE staff. These staff have permanent positions already.

21. Access to project information

Please describe the project's open access plan and detail any specific costs you are seeking from Darwin to fund this.

(Max 250 words)

We seek, in this project, to publish our outputs and disseminate them as widely as possible, including in the research community, in order to encourage uptake and also similar research on IPAs. For this reason our budget includes £26,840 for publication costs, primarily to publish hard copy of "The IPAs of Guinea", fact sheets on individual IPAs, and a guide for secondary school teachers on "Important Plant Areas and Red Data Plant Species in Guinea", but also to pay for open access in peer-reviewed journals for our 3 research articles. These will be linked to our project websites for ease of access.

Data on IPAs in Guinea will be freely available on the Plantlife-Kew IPA website.

All our outputs for and in Guinea will be in the national language of Guinea and in five adjoining countries, i.e. French, excepting those that are in Guinean tribal languages. In international scientific journals, the papers will be in the international scientific language, English.

Kew recognises that free and open access to publicly-funded research, datasets and technical reports offers significant social and economic benefits (and maximises the impact of taxpayer money). Following the "Finch Report" on "Accessibility, sustainability, excellence: how to expand the access to research publications", and the government's response, RBG Kew began a process of developing a new internal policy to comply with new open access recommendations. This process is currently underway with "gold" route and "green" / archiving options still being explored.

22. Match funding (co-finance)

a) Secured

Provide details of all funding successfully levered (and identified in the Budget) towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity.

Rio Tinto has donated funding and equipment (including a field vehicle), valued at £XXX in total to Kew and, with their agreement, we have donated this to UGAN-HNG as a contribution to the Guinea IPA project (see letter of support). Kew has contributed core staff costs of £XXX (50% of the Project Leader's time on this project) as well as indirect costs of £XXX. Plantlife have provided an in-kind contribution to indirect costs of £XXX, and have secured £XXX towards the development of the IPA database to ensure user-friendly dissemination of the IPA site data.

22b) Unsecured

Provide details of any matched funding where an application has been submitted, or that you intend applying for during the course of the project. This could include matched funding from the private sector, charitable organisations or other public sector schemes.

Date applied for	Donor organisation	Amount	Comments
November 2015	BID-GBIF	£35,450 (50,330 euros)	To support plant redlist assessment work in Guinea, useful for identifying concentrations of threatened species which will feed into IPA identification and justification.
December 2015	HSBC	£30,000	HSBC has awarded funds to Kew that, subject to success of this Darwin application, Kew will commit to work on Guinea IPAs.

22c) None

If you are not intending to seek matched funding for this project, please explain why.

(max 100 words)
Not applicable.

PROJECT MONITORING AND EVALUATION MEASURING IMPACT

23. LOGICAL FRAMEWORK

Darwin projects will be required to report against their progress towards their expected outputs and outcomes if funded. This section sets out the expected outputs and outcomes of your project, how you expect to measure progress against these and how we can verify this.

Project summary	Measurable Indicators	Means of verification	Important Assumptions			
Impact: IPA methodology is widely adopted in Africa as a means of identifying conservation priorities, promoting the protection and sustainable management of key for biodiversity and important plants for livelihoods. (Max 30 words)						
Outcome: Effective conservation prioritisation in Guinea is enabled through the identification of Important Plant Areas, providing a critical contribution to Guinea's CBD commitments through the Global Strategy for Plant Conservation. (Max 30 words)	 0.1 Baseline data on Guinea's rarest, most threatened and most valuable plant species and habitats, and their distributions, assembled and documented, and key sites for their protection identified as IPAs by end of project.15-20 IPAs are expected to be selected. 0.2 IPAs integrated into national policy and action plans on biodiversity conservation and sustainable development in Guinea, in line with GSPC and Aichi Biodiversity targets by end of project. 0.3 IPAs and Red List of Threatened Plants recommended as a tool in best-practice Environmental & Social Impact Assessment (ESIA) studies for industrial development projects in Guinea by end of project. 	 0.1 The expected 15-20 IPAs of Guinea published both in hard copy and through the IPA database; Red List assessments of threatened species published on IUCN Red List website. 0.2 MEEF adopt IPAs and threatened species within national strategy for conservation and sustainable development; 6th CBD national report for Guinea includes sections on IPA designation and Red List of Plants. 0.3 New ESIA reports in Guinea include reference to IPA and Red List data and recommendations. 	National government in Guinea will continue to commit to the incorporation of IPAs within their conservation / resource management strategies as an integral element of their obligations under the CBD. Other tropical African countries will adopt the IPA approach as a means of effective conservation prioritisation, as a result of publicity of the successful outcomes of the Guinea project.			
Outputs: 1. Priority species, habitats and sites for plant conservation in Guinea identified, documented and published.	1.1 Guinea's globally threatened and national priority (socio-economic, range-restricted and endemic) plant species identified and mapped by end of year 2, from a candidate list of c. 330 species.	1.1 Priority species for Guinea published in peer-reviewed journal; threat assessments formally submitted to the IUCN Red List.	Current (6-year) strong collaborative partnership between UK-based and incountry scientific partners continues. Political and health and safety			

	 1.2 Guinea's estimated 9 national and global priority (threatened and/or range restricted) habitats identified and mapped by end of year 2. 1.3 The estimated 15-20 Important Plant Areas of Guinea identified, documented and mapped by end of project. 	 1.2 Priority habitat list published together with 1.1; priority habitat maps submitted to MEEF. 1.3 "Important Plant Areas of Guinea" report published in hard copy; IPA sites searchable on the IPA database, available via Kew and Plantlife websites. 	conditions remain favourable to work in Guinea, with no further outbreaks of ebola or equivalent (conditions are currently stable and safe).
2 IPAs and National Red List of Plants incorporated into national action plans on conservation and sustainable development.	 2.1 Key stakeholders including MEEF, Ministry of Education, conservation NGOs and representatives of key industries engaged from the outset through involvement in inception workshop in year 1 Q1. 2.2 Results of site and species surveys relayed rapidly to MEEF; progress on IPA designation and its contribution to national CBD targets highlighted to MEEF and to wider public, in years 2 and 3. 	 2.1 Workshop report; stakeholder feedback sought and documented. 2.2 Reports to MEEF; national and international press coverage on Guinean IPAs; Guinea CBD national reports incorporate IPA data. 	National and local government in Guinea remain committed to incorporating IPAs within their conservation / resource management strategies as an integral element of their obligations under the CBD. Key industries in Guinea remain engaged with environmental impact assessment procedures and the environmental mitigation hierarchy.
	2.3 Management recommendations provided to national and local government for all IPA sites by end of project; c. 80% identified IPA sites and c. 75% of Guinea's globally threatened species identified for formal protection within the national protected area network and/or community management by end of project. 2.4 Results disseminated via stakeholder workshop in year 3, with attendees including MEEF, Ministry of Education, conservation NGOs and	2.3 MEEF integrate reported recommendations within national biodiversity action plan, the "Monographie Nationale". 2.4 Workshop report; stakeholder feedback sought and documented.	
3. National capacity to assess plant conservation priorities built through training of scientists, post-graduate students, citizen scientists and school children, and through repatriation of	representatives of key industries. 3.1 Seven staff at HNG, GE and COSIE-MEEF successfully complete training in IUCN species conservation assessments and IPA methodology and application by mid year-2.	3.1 Training course attended; joint publication of Red List and IPA assessments.	Ministry of Education welcome our proposal for materials for teaching plant conservation in schools and incorporate into science curriculum.

plant datasets	3.2 15-20 students per year on UGAN	3.2 Examination results of MSc.	Sufficient MSc. students select projects
•	MSc. in Biodiversity and Sustainable	students.	on IPA identification and are able to
	Development successfully complete		conduct quality field research following
	training in species- and site-based		training.
	conservation prioritisation methodologies		
	and their application.		HNG and GE staff are able to obtain
	3.3 IPA identification methodology	3.3 Results of MSc. projects published	visas for research visit to Kew.
	focussing on socio-economically	in peer-reviewed journal; students co-	
	important species applied in MSc.	author relevant IPA database entries.	
	student research projects at UGAN (2 in		
	year 2, 2 in year 3).		
	3.4 Community outreach on the	3.4 Annual report on schools	
	importance of Guinea's unique plant	programme; teaching materials	
	species and habitats through a simple	incorporated into national science	
	schools campaign developed in years 1	curriculum.	
	& 2, and through engaging with		
	administrative hierarchy during field		
	missions.	3. F. Complete detecate held in	
	3.5 All resulting scientific datasets,	3.5 Complete datasets held in	
	including national IPA database and	databases at HNG, GE and MEEF. IPA	
	priority species specimen database,	database accessible online.	
	available to all partners, updated each		
1	year of project, in line with Nagoya		

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)

- 1.1 Priority species list, including candidate threatened species (estimated at 330 species), priority habitat list (estimated 9 key habitats) and candidate IPA sites (estimated 32 candidates) identified and agreed through literature and data review and inception workshop by end of year 1 Q1.
- 1.2 All existing data on priority species gathered from herbaria and literature (estimated 3000 records) by end of year 2 Q2.

protocol.

- 1.3 Four targeted field surveys conducted in years 1 & 2 to gather contemporary data on at least 30 priority species in Guinea, focusing on threatened species and indicator species of threatened habitats, and to provide contemporary data on candidate IPA sites including habitat intactness and threats; these surveys will inform species conservation assessments, IPA assessments and future monitoring of sites.
- 1.4 Maps produced detailing the distribution and aerial extent of each of the 9 priority habitats, compiled through GIS analysis and field ground-truthing, by end of year 2.
- 1.5 Full IUCN Red List assessments compiled for c. 150 priority plant species selected from the candidate list following 1.1 and 1.2, by end of year 2.
- 1.6 IPA criteria formally applied to candidate IPA sites in Guinea, using the data compiled in 1.2-1.5, and qualifying IPA sites identified by end of year 3 and published, summary results published in peer reviewed journals Q3.
- 2.1 Key stakeholder engagement event at inception workshop to highlight benefits of the IPA approach to conservation, resource management and industry, year 1 Q1.
- 2.2 Post-expedition summaries and annual report on IPAs and threatened species of Guinea produced for MEEF, in Q4 of each year.

- 2.3 Management recommendations, including mapped core zone and buffering "zone of opportunities", documented for all formally evaluated IPAs, in years 2 & 3.
- 2.4 National and international press releases on the identification of IPA identification in Guinea and its impact upon conservation and resource management produced in year 2, Q3-4.
- 2.5 Results dissemination workshop, attended by key stakeholders, held in year 3 Q4.
- 3.1 Training booklet on Guinea's plant diversity, the IPA approach and species Red Listing produced in French, by year 1 Q3.
- 3.2 IPA site data recording and assessments sheet developed for field surveys, by year 1 Q1.
- 3.3 Lectures and reading materials species-based and site-based plant conservation strategies for UGAN MSc. developed in year 1 and modified as required in years 2 and 3; lectures delivered.
- 3,4 Two HNG staff apply training received in Red List and IPA assessments during 5-week research visit to Kew in years 1 & 2.
- 3.5 Four MSc. student research projects at UGAN completed on IPA identification (2 in year 2, 2 in year 3), focusing on socio-economically important species.
- 3.6 Locally-focused posters for schools and communities on Guinea's rare and threatened species and habitats produced in years 1 & 2, disseminated to c. 550 schools to educate children on Guinea's unique biodiversity; a "national flower" campaign run through the school network to raise awareness of the diversity of Guinea's floral patrimony.
- 3.7 GE to run teachers' training workshop for teaching on Guinea's plant diversity including developing a simple booklet based on 3.1, in year 1 Q3.
- 3.8 IPA Guinea dataset and project specimen data repatriated to Guinean partners, every 6 months.

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24. Provide a project implementation timetable that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project (Q1 starting April 2016)

	Activity	No of		Yea	ar 1			Year 2			Year 3			
		months	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1														
1.1	Priority species and habitat lists and candidate IPA sites compiled	2												
1.2	Existing data on priority species gathered	18												
1.3	Targeted field surveys conducted	2												
1.4	Priority habitats mapped and ground-truthed	16												
1.5	IUCN Red List assessments compiled for c. 150 species	21												
1.6	IPA sites in Guinea identified and verified	30												
Output 2														
2.1	Key stakeholder engagement event at inception workshop	<1												
2.2	Post-expedition summaries, and annual progress report on IPAs and threatened species of Guinea produced for MEEF	4												
2.3	Management recommendations, including mapped core zone and buffering "zone of opportunities", documented for all formally evaluated IPAs	15												
2.4	National and international press releases on IPAs in Guinea and its impact upon conservation and resource management	4												
2.5	Results dissemination workshop, attended by key stakeholders	<1												
Output 3														
3.1	Training booklet on Guinea's plant diversity, the IPA approach and species Red Listing produced	9												
3.2	IPA site data recording and assessments sheet developed for field surveys	<1												
3.3	Lectures and reading materials species-based and site-based plant conservation strategies for UGAN MSc. developed and delivered	5												

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3.4	Two HNG staff apply training received in Red List and IPA assessments during research visit to Kew	2.5						ı	
3.5	Two MSc. student research projects at UGAN completed on IPA identification focusing on socio-economically important species	12							
3.6	Posters for schools on Guinea's rare and threatened species and habitats produced and a "national flower" campaign run through the school network								
3.7	Teachers' training workshop for teaching of Guinea's plant diversity and conservation								
3.8	IPA Guinea dataset and project specimen data repatriated to Guinean partners								

25. Project based monitoring and evaluation (M&E)

Describe, referring to the Indicators above, how the progress of the project will be monitored and evaluated, making reference to who is responsible for the project's M&E. Darwin Initiative projects are expected to be adaptive and you should detail how the monitoring and evaluation will feed into the delivery of the project including its management. M&E is expected to be built into the project and not an 'add' on. It is as important to measure for negative impacts as it is for positive impact.

(Max 500 words)

The logframe above will provide the basis for monitoring and evaluation. The assumptions identified will be revisited and tested during the life of the project and if necessary, the logframe will be updated. This "adaptive management" approach will help ensure that the project team learns, adapts and make informed decisions throughout the project to respond to the needs of the beneficiaries. This includes in terms of planning and allocating resources to ensure value for money.

We will have monthly teleconferences of all partners, and produce 6-monthly project progress reports to assess project progress against the logframe and budget.

A yearly evaluation, coinciding with major workshop meetings with all partners, and a final evaluation, disaggregated by gender, by Professor Isabel Larridon, University of Ghent (specialist in Tropical Africa, accredited IUCN SIS species assessor), supported by the British Ambassador to Guinea, Her Excellency, Catherine Inglehearn, will assess the project's impact (intended or unintended, direct and indirect impacts).

Lessons learnt will be shared with all partners through UGAN in Conakry. The final evaluation will be made available on Kew's website.

Total budget for M&E	£3300
Percentage of total budget set aside for M&E	1%

FUNDING AND BUDGET

Please complete the separate Excel spreadsheet which provides the Budget for this application. Some of the questions earlier and below refer to the information in this spreadsheet. You should also ensure you have read the 'Finance for Darwin' document and considered the implications of payment points for cashflow purposes.

NB: The Darwin Initiative cannot agree any increase in grants once awarded.

26. Value for Money

Please explain how you worked out your budget and how you will provide value for money through managing a cost effective and efficient project. You should also discuss any significant assumptions you have made when working out your budget.

(max 300 words)

The costs for all in-country activities are based upon 10 years' experience of conducting collaborative research, fieldwork and data dissemination in Guinea by the project partners. Field costs are for two 3-week field expeditions in both years 1 & 2, as well as fieldwork towards two UGAN MSc. projects in years 1 & 2. All international travel from the UK will be covered by alternative secured funding sources (£10,000), which has provided a significant saving on the Stage 1 budget. HNG will contribute use of a dedicated vehicle to the project; vehicle maintenance and taxation charges of £2000 p.a. are included under fieldwork operating costs.

Staff costs are based on the salaries for the named individuals on the project, with a projected 3% annual inflation rate. Half of the Principal Investigator's 20% time on the project will be covered inkind by Kew. A one-year in-country IPA coordinator is proposed for year two with the intention to extend this post to a two-year appointment through Kew securing alternative funding sources. Overheads for Kew and Plantlife staff are calculated at 40% of the staff costs but both institutions will contribute the additional overhead costs associated with the project as in-kind institutional contributions.

Hardcopy publication and dissemination costs are based upon the experience of similar project work by the UK partners, including a DI funded project on a Red Data Book of the Plants of Cameroon, led by Kew. External quotes have been obtained for development of the IPA database; £10,000 of funding towards this is requested from DI (as a consultancy cost), with Plantlife supplying secured matched funding of £10,000. Post-project, this database will be maintained and regularly updated by Plantlife and Kew.

It is assumed that exchange rates between GBP and Guinean Francs will remain broadly similar to current rates.

27. Capital items

If you plan to purchase capital items with Darwin funding, please indicate what you anticipate will happen to the items following project end.

(max 150 words)

Capital costs comprise only 4% of the budget. Essential field equipment purchased during the project, including GPS units, pole pruners and a field camera, will remain with HNG at the project end. These will supplement the sizable amount of botanical field equipment already built up in Guinea through the ongoing collaboration with Kew and will be a key resource for future botanical exploration.

Geospatial data purchased for key sites and habitats will be shared with all partners, subject to license. Specialist GIS software and data storage space will remain at Kew for future use in collaboration with Guinean scientists. The computer hardware purchased for the in-country IPA coordinator will be donated to UGAN at the project end.

FCO NOTIFICATIONS

Please check the box if you think that there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise the project's success in the Darwin competition in the host country. NO SENSITIVITIES

Please indicate whether you have contacted your Foreign Ministry or the local embassy or High Commission (or equivalent) directly to discuss security issues (see Guidance Notes) and attach details of any advice you have received from them.

Yes (no written advice)

Yes, advice attached

No

CERTIFICATION

On behalf of the trustees of the Royal Botanic Gardens, Kew

I apply for a grant of £291,413 in respect of **all expenditure** to be incurred during the lifetime of this project based on the activities and dates specified in the above application.

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)

- I enclose CVs for key project personnel and letters of support.
- Our most recent signed audited/independently verified accounts and annual reports can be found at the following link: https://kewnet.kew.org/about-kew/annual-reportand-accounts

Name (block capitals)	Dr Charlotte Sweeney
Position in the organisation	Head of the Office of the Science Directorate



If this section is incomplete or not completed correctly the entire application will be rejected. You must provide a real (not typed) signature. You may include a pdf of the signature page for security reasons if you wish. Please write PDF in the signature section above if you do so.

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Stage 2 Application - Checklist for submission

	Check
Have you read the Guidance Notes?	х
Have you provided actual start and end dates for your project?	х
Have you indicated whether you are applying for DFID or Defra funding? NB: you cannot apply for both	DEFRA
Have you provided your budget based on UK government financial years	х
i.e. 1 April – 31 March and in GBP?	
Have you checked that your budget is complete , correctly adds up and that you have included the correct final total on the top page of the application?	х
Has your application been signed by a suitably authorised individual ? (clear electronic or scanned signatures are acceptable)	x
Have you included a 1 page CV for all the key project personnel identified at Question 10?	х
Have you included a letter of support from the <u>main</u> partner organisations identified at Question 9?	х
Have you been in contact with the FCO in the project country/ies and have you included any evidence of this?	YES
Have you included a signed copy of the last 2 years annual report and accounts for the lead organisation?	х
Have you checked the Darwin website immediately prior to submission to ensure there are no late updates?	X

Once you have answered the questions above, please submit the application, not later than 2359 GMT on Tuesday 1 December 2015 to Darwin-Applications@ltsi.co.uk using the application number (from your Stage 1 feedback letter) and the first few words of the project title **as the subject of your email**. If you are e-mailing supporting documentation separately please include in the subject line an indication of the number of e-mails you are sending (eg whether the e-mail is 1 of 2, 2 of 3 etc). You are not required to send a hard copy.

DATA PROTECTION ACT 1998: Applicants for grant funding must agree to any disclosure or exchange of information supplied on the application form (including the content of a declaration or undertaking) which the Department considers necessary for the administration, evaluation, monitoring and publicising of the Darwin Initiative. Application form data will also be held by contractors dealing with Darwin Initiative monitoring and evaluation. It is the responsibility of applicants to ensure that personal data can be supplied to the Department for the uses described in this paragraph. A completed application form will be taken as an agreement by the applicant and the grant/award recipient also to the following:- putting certain details (ie name, contact details and location of project work) on the Darwin Initiative and Defra websites (details relating to financial awards will not be put on the websites if requested in writing by the grant/award recipient); using personal data for the Darwin Initiative postal circulation list; and sending data to Foreign and Commonwealth Office posts outside the United Kingdom, including posts outside the European Economic Area. Confidential information relating to the project or its results and any personal data may be released on request, including under the Environmental Information Regulations, the code of Practice on Access to Government Information and the Freedom of Information Act 2000.