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:	BirdLife International
Address:	The David Attenborough Building, Pembroke Street
City and Postcode:	Cambridge, CB2 3QZ
Country:	UK
Email:	
Phone:	

2. Stage 1 reference and Project title

Stage 1 Ref: 3258	**Title (max 10 words):** Building resilient landscapes and livelihoods in Burkina Faso's shea parklands

3. Project description (not exceeding 50 words)

(max 50 words)

Shea trees provide vital food and income for 80m people throughout the Sudano-Sahel. However, unsustainable shea parkland management has reduced tree, pollinator and bird diversity, threatening long-term livelihoods. The project will research and pilot best management practices for optimum pollination, and inform sustainable shea production in Burkina Faso and beyond.

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 1:Burkina Faso	**Country 2:**
Country 3:	**Country 4:**

5. Project dates, and budget summary

Start date:1 April 2016		**End date:** 31 March 2019		**Duration:** 3 years
Darwin request	**2016/17 £128500**	**2017/18 £97994**	**2018/19 £76501**	**Total request £302996**
Proposed (confirmed & unconfirmed) matched funding as % of total Project cost				**20%**
Are you applying for DFID or Defra funding? (Note you **cannot** apply for both)		DFID		

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.

Details	Project Leader	Project Partner 1	Project Partner 2
Surname	Tayleur	Nana	Vickery
Forename (s)	Cath	Adama	Juliet
Post held	Project Officer – Agriculture, biodiversity and livelihoods	Head of Research	Head of International Research
Organisation (if different to above)	BirdLife International	Naturama	RSPB
Department	Partnership, Capacity and Communities	Department of Research	Centre for Conservation Science
Telephone			
Email			

Details	Project Partner 3	Project Partner 4	Project Partner 5
Surname	de Bruijn	Stout	Adu
Forename (s)	Bernd	Jane	Aaron
Post held	Senior Conservation Officer	Professor	Director, Africa Operations
Organisation (if different to above)	Vogelbescherming Nederland (VBN)	Trinity College Dublin	Global Shea Alliance
Department	Conservation	Natural Sciences	
Telephone			
Email			

Details	Project Partner 6	Project Partner 7	Project Partner 8
Surname	Nombré		
Forename (s)	Issa		
Post held	Senior Lecturer		
Organisation (if different to above)	University of Ouagadougou		
Department	Plant Biology and Ecology Laboratory		
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
21-2665	David Thomas	Mainstreaming biodiversity and ecosystem services into community forestry in Nepal
20-024	Dr Mark O'Brien	Delivering sustainable forest management for Fiji's people and wildlife
19-022	Melanie Heath	Ecosystem conservation for climate change adaptation in East Africa
18-005	Alison Stattersfield	Understanding, assessing and monitoring ecosystem services for better biodiversity conservation
18-011	David Wege	Building a future for Haiti's unique vertebrates
17-026	Steve Cranwell	Restoration of priority Pacific Island ecosystems for people and biodiversity

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)**
BirdLife International **www.birdlife.org**	BirdLife International is the world's largest network of independent national conservation NGOs. The UK-based Secretariat has led, or participated in, many large-scale and multi-national conservation projects worldwide and BirdLife has globally-respected expertise in biodiversity science, civil-society engagement and local livelihoods. Integration of biodiversity and livelihoods is a key component of BirdLife's mission. BirdLife (Secretariat and Partnership) has experience of biodiversity and agriculture (including setting standards and certification) across a range of regions and crops, including cocoa (Brazil), coffee (El Salvador), wine and salt (South Africa) and beef (Southern Cone). BirdLife has worked with Naturama, the BirdLife Partner in Burkina Faso, for over 19 years, including on the 'Living on the Edge' project which restored habitat at 3 Ramsar sites, improving rural livelihoods through the promotion of sustainable land use. For the proposed project, BirdLife will contribute its capacity development and training design expertise; and its experience in biodiversity and ecosystem services assessment and monitoring to the community training and strategy development; and support wider adoption of the guidance through sharing project results and tools via its communications and regional and international networks. BirdLife will also provide overall project coordination, and lead on reporting and liaison with the Darwin Secretariat.
Have you included a Letter of Support from this institution?	Yes

Partner Name and website where available: **Naturama** **www.Naturama.bf**	**Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)** Naturama, national Birdlife Partner, is based in Ouagadougou (Burkina Faso) and is focused on: the conservation of biodiversity (ecological monitoring, habitat management, protected areas and IBA management), improving livelihoods (agriculture and development of Non-Timber Forest Products (NTFP) around critical areas for bird conservation (IBAs)) and contributing to natural resource management policies and strategies. Naturama is a member of several national consultation frameworks on environmental and development issues: National Council on Environment and Sustainable Development (CONEDD), National Water Council (CNeau), civil society platform on climate change and REDD+. Naturama has expertise in project management, socio-economic and ecological monitoring, community capacity building and policy advocacy at national and international levels. Naturama has been working with shea parklands communities around Kaboré Tambi National Park for 25 years and led implementation of 'Living on the Edge', an ambitious project that improved livelihoods and habitats for migratory birds across the Sahel, and a corporate sector-sponsored tree-planting initiative. Naturama will lead the project's field activities, including: identification and monitoring of pollination sites in liaison with local pollination scientist, Issa Nombré; building capacity of local communities; agro-forestry activities (seedling production, reforestation, assisted natural regeneration), and the management, monitoring and promotion of the project at national level.
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)
RSPB **www.rspb.org.uk**	The RSPB is BirdLife's UK Partner, through which it can make a greater impact worldwide, helping to stem the loss of global biodiversity and achieve a more sustainable world. RSPB's Centre for Conservation Science has extensive knowledge and expertise in the field and of analytical techniques required to assess density distribution and resource use of migrant and resident birds in sub-Saharan west Africa. RSPB has worked with Naturama (and the Ghanaian Birdlife Partner) for six years on addressing the decline of Afro-Palearctic migrant birds, a programme which integrates science, policy and advocacy and capacity building of BirdLife Partners in land use change in these dryland habitats. Under the proposed project RSPB will lead, and advise on, the bird monitoring work in the project areas. In addition, RSPB will contribute its experience and expertise in support of advocacy, at national, regional and international levels. The RSPB played a central role in advocating for the development of (the Africa-Eurasian Migratory Landbirds Action Plan (AEMLAP), adopted under the Convention on Migratory Species CMS), and is leading advocacy to identify sustainable land management solutions within West Africa, working with relevant national BirdLife Partners and Birdlife's West Africa Regional Secretariat in Accra.
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)
VBN **www.vogelbescherming.nl**	Vogelbescherming Nederland (VBN) is the BirdLife Partner in The Netherlands. VBN is working with other BirdLife partners throughout the Afro-Eurasian migration flyway to conserve migratory bird habitat and promote ecologically sustainable use of natural resources. VBN has been a supporting partner to Naturama since 2005 and has collaborated on numerous projects, including 'Living on the Edge', the research programme of which established the habitat use of tree-inhabiting migratory birds in the region. The non-preference of birds for shea trees prompted further exploration of the shea chain and landscape, which subsequently highlighted the sustainability issues, on which the proposed project was built. In this project, VBN will organize input of scientific ecological information and of best practice from the 'Living on the Edge' project to guide habitat restoration (tree species and management). VBN will create a multiplier effect by working with development NGOs and carbon sequestration initiatives, with which it has established relationships, in Burkina Faso and in the wider region (notably Mali, initially).
Have you included a Letter of Support from this institution?	Yes

Partner Name and website where available: **Full Legal Name:** The Provost, Fellows, Foundation Scholars & the Other Members of Board of the College of the Holy and Undivided Trinity of Queen Elizabeth near Dublin **(Trinity College Dublin)** **www.tcd.ie**	**Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)** Trinity College Dublin (TCD) is one of the world's leading research-intensive universities, has an international reputation for producing high quality scientists and is the only Irish university ranked in the top 100 world universities. A key strategic research theme of TCD is the "Smart and Sustainable Planet", which focuses on global environmental change, the cause and impacts of change, and their mitigation. Central to delivering this research is the School of Natural Sciences, which brings together biologists, geoscientists, and social scientists. Forty Principal Investigators, 18 postdoctoral fellows and over 150 research students work in the School. Several research groups focus on sustainable livelihoods and agriculture, particularly in Africa. Dr Jane Stout will be responsible for overseeing the pollination research to be undertaken in this project, building on her involvement in the BirdLife-led pilot project in the shea parklands. Dr Stout is Ireland's leading pollination researcher, and much of her work is interdisciplinary. She has co-led the publication of the All-Ireland Pollinator Plan and has 20 years of experience in planning, conducting, analysing and reporting pollination research and supervising researchers. Desk space is available in Dr. Stout's research laboratory which has facilities for sampling insects, nectar and pollen, and plant biomass.
Have you included a Letter of Support from this institution?	Yes

Partner Name and website where available: **The Global shea Alliance** **www.globalshea.com**	**Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)** The Global Shea Alliance (GSA) is a non-profit industry association promoting quality and sustainability in the shea industry. Its mission is to develop and deliver strategies that drive a competitive and sustainable shea industry worldwide, improving the livelihoods of rural African women and their communities. The GSA has 380 members from 28 countries, representing every level of the industry, including women's groups, small businesses, suppliers, international food and cosmetic brands, retailers, and non-profit organizations. BirdLife is a sustainability partner of the GSA. Each year, GSA hosts 3 annual conferences in the US, European Union, and West Africa. The West African conference is the largest of the three events, attracting more than 500 key stakeholders from the shea industry annually. The conference provides a critical opportunity to disseminate new information about developments in the shea industry and in shea research. Aaron Adu, Director of Africa Operations, will oversee the integration of the findings from this project into future conference presentations. The GSA website also serves as a repository for shea research. The GSA also works to source funding to implement shea sustainability projects. An application under development to USAID offers potential future support to continuing/extending the impact of the proposed project.
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) 172**
University of Ouagadougou **http://www.univ-ouaga.bf/**	The University of Ouagadougou was formed in 1974 for both education and research and is the largest University in Burkina Faso. The Laboratoire de Biologie et Ecologie Végétales, has contributed to many projects concerning biodiversity conservation, landscape utilization, climate change and improving livelihoods. This project will contribute to the University's strategic objectives: namely the sustainable use of natural resources and sustainable development. The project will also contribute to improving, restoring and monitoring significant sites and habitats for biodiversity conservation, improving livelihoods for communities, influencing national policies and promoting good practice in natural resource management. Dr Issa Nombré is a Senior Lecturer at the University and has expert knowledge of the insect pollinators of Burkina Faso and the plants that they use. He has been collaborating with BirdLife and Naturama during the pilot pollination work near to the Kaboré Tambi National Park. Dr Nombré will collaborate on the research component of the project and act as an expert consultant, building the understanding and capacity of Naturama staff in pollination, and improving pollination services.

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?
Cath Tayleur	Project Leader	Birdlife	30	**Yes**
David Thomas	Project Advisor	BirdLife	10	**Yes**
Francois Kamano	Policy Officer	BirdLife	15	**Yes**
To be recruited	Conservation Scientist	RSPB	100	
Juliet Vickery	Project advisor/ornithological expert	RSPB	10	**Yes**
Adama Nana	National Coordinator	Naturama	100	**Yes**
Prudence Tankoana	Research Assistant	Naturama	100	**Yes**
Fatimata Idani	Site manager – Socio-Economic lead	Naturama	100	**Yes**
To be recruited	Site manager – Biodiversity lead	Naturama	100	**Yes**
Laure Assan	Accountant	Naturama	20	**Yes**
Jane Stout	Pollination expert	Trinity College Dublin	5	**Yes**
Issa Nombré	Pollination expert	University of	10	**Yes**

		Ouagudogou		

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) 300

Butter, from insect-pollinated shea trees (*Vitellaria paradoxa*) grown in 21 sub-Saharan countries, is the primary edible oil for 80 million people[1], while the fruit-pulp is vital food during the 'hungry season'. Women collect 92% of shea and local trade provides crucial income - supporting the education and diet of 18.4 million families[,2], although women are often unable to capitalise on the valuable export market.[3i].

About 40% of Sub-Saharan Africa is covered by drylands, a rapidly degrading habitat[4,5]. West African Shea parklands form part of this critically threatened ecosystem facing pressure from: rapid agricultural intensification, fuelwood demand and climate change. Currently, shea management exacerbates these problems: with anthropic selection[ii], reduced natural regeneration and no tree-planting culture[6] greatly reducing habitat diversity.

Global declines of insect pollinators in productive landscapes[7,8] are linked to losses of habitat diversity and shea monocultures are unlikely to maintain the pollinator richness required for optimal pollination services[9]. Additionally, rapid declines of Afro-Palearctic migrant birds[10], that overwinter in the shea-zone, have been linked to the loss of preferred insect-rich tree species[11].

Southern Burkina Faso communities live in extreme poverty (<0.41$/day) and rely heavily on the parklands' environmental resources (~43% of income). Parkland degradation and pollinator loss has contributed to shea yields declining by 40% over 20 years[12], with severe implications for food security and livelihoods.

A pilot study has highlighted:

1) An urgent need to understand the habitat required to maintain pollination services in the shea parklands to inform a landscape scale solution to degradation.
2) Little awareness within communities, the shea industry and existing agroforesty programmes of pollination service value.

This project will address these gaps and pilot sustainable management across 10 villages. Restoring tree and pollinator diversity, will increase resilience of shea parklands within Burkina Faso, benefitting community livelihoods and providing habitat for Afro-Paleartic birds.

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

[i] The shea export market is valued at an estimated $120 million USD

[ii] Farmers show positive discrimination for shea, removing other tree species, leading to shea monocultures.

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)

Burkina Faso's NBSAP (2010-2015) identifies the need for research and dissemination of good management practice for socio-ecologically significant productive landscapes including shea parklands. The project (facilitated by key stakeholders being members of AEMLAP's[iii] sustainable land management working group) will address two NBSAP Objectives: Conservation of Biodiversity (2.2.1) and Sustainable Use (2.2.2):-

- 2.2.1 - the development of agro-forestry-pastoral production systems adapted to climate change via restoration of degraded vegetation (Action 1h, 5.); education on biodiversity, climate change impacts and desertification (Action 2a, 2b), improved capacity for conservation action (Action 1 & 3a), conservation of threatened ecosystems, habitats and species (Action 8).
- 2.2.2- strengthening agro-forestry (Action 4); reduction in damaging activities (Action 5); capacity building in ecological monitoring (Action 6a); good practice promotion in agricultural systems (Action 8).

Incorporating project results into shea industry guidance, NGO tree-planting programmes and local government plans will contribute to Aichi Strategic Goal A: addressing the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society, specifically Targets 1, 2 and 4, and Goal B, Target 7 (sustainable agriculture), 4, 13, 14 and 15.

Addressing pollinator decline is integral to the CBD's International Initiative for the Conservation and Sustainable use of Pollinators.

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

Yes **if yes, please give details:**

The project partner in Burkina Faso, Naturama has met with the CBD focal point, Mr Somanegré Nana, from the Permanent Secretariat of the National Council on Environment and Sustainable Development (SP/CONEED). He is fully supportive of the initiative in terms of its potential contribution to achieving Burkina Faso's NBSAP targets, and to fulfilling Burkina Faso's commitment and reporting requirements to the CBD (See letter of support). The CBD focal point will take an active role in the project by attending workshops and visiting the project sites and will contribute to ensuring the lesson drawn from the project will contribute to national strategies related to sustainable resource management.

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 build on earlier pilot work as follows:

1) A working group of community stakeholders, scientists and industry representatives, drawing on previous socio-economic, pollination and bird fieldwork, and existing local

[iii] African-Eurasian Migratory Landbirds Action Plan specifically strives to implement sustainable land use to conserve migratory birds. See http://www.cms.int/sites/default/files/document/CMS_AEMLWG-2_Landbirds-Action-Plan.pdf

knowledge, will draft a "trees, bees and birds" (TBB) management strategy aimed at:
   a. Diversifying agroforestry systems through tree/shrub planting and natural regeneration;
   b. Creating foraging and nesting sites for insect pollinators; and habitat for migrant birds;
   c. Diversifying NTFP incomes.

   100 smallholders in the Kaboré Tambi National Park (KTNP) region will pilot the strategy to evaluate practical implementation.

2) Research tree diversity and density, pollination services, and migratory bird numbers in shea parklands of KTNP region to refine advice and policy recommendations. Fieldwork will:
   i. Quantify shea yields in 10 degraded and 10 diverse parklands and use flower 'super-saturation' and 'bagging' experiments to quantify insect-pollinator contribution to shea yields in both.
   ii. Quantify pollinators present during the shea flowering season using standard assessment methods[iv].
   iii. Assess bird density and diversity through standardised point counts.
   iv. Characterise tree species richness and density at all 20 sites and surrounding landscapes using GIS, satellite imagery, and field surveys.
   v. Build capacity for pollination monitoring within Burkina Faso.

3) 20 people[v] will be supported to become 'pollination ambassadors', through demonstration visits to research sites to understand insect pollinator contribution to shea production, and assisted to form a network to promote, via farmer-to-farmer education[vi], the role of pollination in increasing crop yields. Sessions in communities and local schools run by Naturama and ambassadors, will increase pollination knowledge amongst 1800 adults and 900 schoolchildren[vii], assessed through surveys in years 1 and 3.

4) Refine the TBB strategy using results from the pollination research and 100 pilot sites, plus shea supply-chain feedback. Train 400 additional small-holders (40% women) in TBB implementation across 10 KTNP villages, who will raise awareness of the strategy via word-of-mouth amongst 1000 further smallholders.[viii]. Women trained in TBB will be empowered to contribute to on-farm decision-making

5) Provide training in organic and fair trade shea certification to 10 women producer groups (200 women) to improve market access and incomes.

6) Raise awareness of industry and government representatives via policy and training workshops, education materials and 'open days' at pilot sites.

7) Conduct baseline and end-of-project surveys at TBB sites on shea yields and income; tree, pollinator and bird diversity[ix]; NTFP use and fuelwood sustainability; attitudes to tree removal and replanting; understanding of pollination services and the capacity and willingness to implement restorative management. A longer-term monitoring program of socio-economic and biodiversity impacts within the KTNP region will be established the .

8) Work with BirdLife Partners, industry, local, national and regional government and development organisations (e.g. World Agroforestry Centre) to integrate project results into policy

[iv] Pan-trapping and/or observations.
[v] Pollination ambassadors will be carefully selected to ensure gender balance and excellent leadership skills.
[vi] Pollination ambassadors will each support 5 of the original TBB sites, and 20 of the additional 400.
[vii] Calculations are based on 60 adults attending each dissemination event, 1 held each year in each village, and 30 schoolchildren attending each education event, 1 held in each village each year.
[viii] Based on rate at which farmers trained in FMNR techniques passed on knowledge in 'Living on the Edge'.
[ix] Quantitative indicators will be compared to control sites to account for inter-annual variation due to other factors such as climate.

and practice, targeting existing agroforestry initiatives (e.g. TreeAid). GSA will support inclusion of TBB into sustainability best-practice guidelines for their 380 members.

BirdLife will lead project management, monitoring and reporting, with partners contributing as outlined above (Q9).

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.

(Max 300 words)

By project end:

- 100 smallholders will have arrested tree and shrub removal, improved habitat for pollinators and birds, and acquired a source of sustainable fuelwood and more diverse NTFP[x] from their lands.
- An additional 400 smallholders from, in total, 10 villages in the Nobéré and Po districts, will be managing their land to gain similar benefits under the TBB strategy; 1000 additional people (through farmer-farmer dissemination) will have the knowledge to do so.
- Through targeted education programme and ambassadors, 1800 adults (1000 women), 900 school-children, two district councils, Burkinabe and West-African regional governments, three certification schemes[xi], 20 NGOs and 190[xii] members of industry (through GSA sustainability guidance) will have greater understanding of the importance of pollination services and diverse agro-forestry to the resilience of shea parklands.
- At least 200 women amongst the 500 smallholder TBB implementers will be benefitting and contributing to on-farm decision-making affecting shea production.
- 10 womens' producer groups (200 women) will, via training in certification, have improved market access and income from shea butter (estimated 20% price premium) boosting cash income by 5%[xiii].
- 4 Naturama staff will have pollination monitoring and TBB implementation experience and capacity to replicate it across other Sahel communities.

Longer-term:

- Diversifying the shea agro-ecosystem will halt habitat decline, increasing pollinator[8] and bird densities (contributing to the CMS/AEMLAP[xiv]), and increase shea (by a predicted minimum 10%[xv]) and other crop yields, improving livelihoods and food security. Ecosystem services[xvi] from diverse parklands will contribute to livelihood resilience and regeneration of the drylands ecosystem.
- The approach of the shea industry, Burkinabé national and regional Governments *(e.g. the Economic Community of West African States)*, and agencies *(e.g. CILSS[xvii])* to parkland management, will reflect project learning, with potential to influence 3.41 million km^2 of land[1].

[x] e.g seeds and medicinal products

[xi] Fairtrade, organic and Ethical Bio-trade

[xii] We identified relevant NGOs working on development issues and total members of the GSA and estimated a 50% uptake in knowledge of pollinators.

[xiii] Based on current Fairtrade premium, prices achieved and shea contribution to incomes of households.

[xiv] CMS/AEMLAP(Convention on Migratory Species/African-Eurasian Migratory Landbirds Action Plan)

[xv] Conservative estimate based on research by Okullo and Hall that shea is pollination limited by 23%.

[xvi] e.g. improve soil quality, reduce wind erosion and evaporation and increase organic matter.

[xvii] CILSS – the Permanent Interstates Committee for Drought Control in the Sahel

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)

66% of people in Nobéré Department[xviii] (over 22,000 people) earn <0.41$/day, with over 25% of income (43% for the poorest) derived from the parklands' environmental resources - primarily shea[2]. Women (400,000 in Burkina Faso) are the main recipients of shea income; a livelihood threatened by agricultural intensification and associated pollinator declines.

By designing and building awareness and capacity for agro-ecological approaches, this project will increase parkland-ecosystem resilience, improve livelihoods, and reduce poverty, with disproportionate benefits for women.

Direct beneficiaries will be 500 smallholders (including 200 women) who will receive training and support in on-farm TBB implementation and 200 women trained in shea certification (Organic/Fairtrade) Dissemination events and farmer-to-farmer education via pollination ambassadors, will raise awareness of pollinator and habitat diversity importance for sustainable parklands amongst a further 1,800 people (1000 women).

Mainstreaming biodiversity into land management will have long-term poverty benefits, in relation to food security[xix], resilience to climate change[xx]; and fuel security[xxi]. The project will provide the following (measurable) benefits to poor people (numbers as above):

- *Increased yields*. Improved knowledge and skills of producers and women will restore pollination services, ensuring resilient production and productivity gains (10% for shea).
- *Increased prices*. Participation in shea certification increases incomes (expected 20% price premium[xxii]).
- *Diversification of on-farm production*. Training and support for farm management which enriches on-farm trees and shrubs will diversify production, enhancing resilience. The poorest tend to be most dependent on 'wild' production.

Through evidence-based mainstreaming of pollination into policy and programmes of sector agencies, NGOs, and the shea industry, the project has potential to benefit poor people beyond the project area.

The project will contribute to Sustainable Development Goals 1, 2, 5, 10, 12 and particularly 15 in relation to the protection, restoration and promotion of sustainable use of terrestrial ecosystems.

[xviii] One of the regions in the KTNP in which the project will operate.

[xix] Burkina Faso rates as 'Serious' on the Global Hunger Index with high prevalence of malnutrition and stunting. shea is essential during the 'hungry season' directly (consumed) and indirectly (sales increase food budgets). Biodiverse agroforestry systems provide additional food and micro-nutrients e.g. " Soumbala " a protein-rich paste from *Parkia biglobosa* seeds, and Tamarind (*Tamarindus indica*) rich in vitamin B and calcium.

[xx] Biodiverse systems show greater resilience to climatic shocks; increased vegetation cover (through tree-replanting and regeneration) will improve soil and microclimate, reduce erosion and desertification and increase carbon sequestration.

[xxi] Firewood, used heavily in shea butter production, is increasingly imported and/or harvested from protected forests. Replanting coppice species (e.g. *Detarium sp.*) will provide sustainable fuelwood –leading to cost-effective shea processing and reduced habitat degradation.

[xxii] Based on Fairtrade prices of $2.55 USD per kg and typical current prices of $2.00 USD

References for Sections 11-15

1. Naughton CC, Lovett PN, Mihelcic JR. Land suitability modeling of shea (Vitellaria paradoxa) distribution across sub-Saharan Africa. *Appl Geogr*. 2015;58:217–227. doi:10.1016/j.apgeog.2015.02.007.
2. Pouliot M. Contribution of "Women"s Gold' to West African Livelihoods: The Case of Shea (Vitellaria paradoxa) in Burkina Faso. *Econ Bot*. 2012;66(3):237–248. doi:10.1007/s12231-012-9203-6.
3. Schreckenberg K, Awono a., Degrande a., Mbosso C, Ndoye O, Tchoundjeu Z. Domesticating indigenous fruit trees as a contribution to poverty reduction. 2006;16:35–51. doi:10.1080/14728028.2006.9752544.
4. Kandji ST, Verchot L, Mackensen J. *Climate change and variability in the Sahel region : impacts and adaptation strategies in the agricultural sector*.; 2006.
5. Bodart C, Brink AB, Donnay F, Lupi A, Mayaux P, Achard F. Continental estimates of forest cover and forest cover changes in the dry ecosystems of Africa between 1990 and 2000. *J Biogeogr*. 2013;40(6):1036–1047. doi:10.1111/jbi.12084.
6. Lovett PN, Haq N. Evidence for anthropic selection of the Sheanut tree (Vitellaria paradoxa). *Agrofor Syst*. 2000;48(3):273–288. doi:10.1023/A:1006379217851.
7. Potts SG, Biesmeijer JC, Kremen C, Neumann P, Schweiger O, Kunin WE. Global pollinator declines: Trends, impacts and drivers. *Trends Ecol Evol*. 2010;25(6):345–353. doi:10.1016/j.tree.2010.01.007.
8. Kennedy CM, Lonsdorf E, Neel MC, et al. A global quantitative synthesis of local and landscape effects on wild bee pollinators in agroecosystems. *Ecol Lett*. 2013;16(5):584–599. doi:10.1111/ele.12082.
9. Dormann CF, Schweiger O, Arens P, et al. Prediction uncertainty of environmental change effects on temperate European biodiversity. *Ecol Lett*. 2008;11(3):235–44. doi:10.1111/j.1461-0248.2007.01142.x.
10. Vickery J a., Ewing SR, Smith KW, et al. The decline of Afro-Palaearctic migrants and an assessment of potential causes. *Ibis (Lond 1859)*. 2014;156(1):1–22. doi:10.1111/ibi.12118.
11. Zwarts L. Long-term decline of European migratory woodland birds explained by decline of their preferred tree species in Western Africa. 2015:in prep.
12. FAO. FAOSTAT Statistical Database: Burkina Faso. :1–9. Available at: http://faostat3.fao.org/faostat-gateway/go/to/home/E. Accessed October 1, 2015.

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 project will reach a sustainable end-point whereby 10 KTNP village communities will be equipped with the knowledge and capacity to implement the TBB strategy. Moreover, collaborative development of the strategy, in dialogue with the shea industry (through GSA), certification schemes, development NGOs, and the CBD/CMS[xxiii] focal points, will support incorporation of the project outputs into future agro-forestry and development initiatives in the region.

This project will significantly build the capacity and technical expertise in pollination research of Naturama and the University of Ouagadougou, particularly staff directly involved. The collaborations formed between BirdLife/Naturama/RSPB/VBN and the international and in-country pollination scientists will support future expansion of the activities across the country and wider Sahel.

Naturama's increased capacity, and enhanced profile as an independent nature conservation organisation within Burkina Faso, will strengthen its national and international advocacy in relation to mainstreaming biodiversity and ecosystem services into land management planning. Project results will also feed into AEMLAP's sustainable land management working group.

The project's long-term impact will be evaluated and fed into future revision of the parklands management guidance through Naturama's biodiversity/site monitoring programme and BirdLife's membership of GSA. The GSA is leading fundraising efforts to implement further parkland sustainability projects.

[xxiii] Via AEMLAP

17a. Harmonisation

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

BirdLife, with its partners, has undertaken pilot work to quantify the role of pollinators in shea production, implications of habitat change for birds and the socio-economic factors influencing current practices. This methodological groundwork, relationship-building, site selection and trialling of research approaches will minimise the start up time and ensure a rapid move to implementation. Pilot work in the KTNP region provides baseline information regarding land and tree management practices and tenure, use of NTFP's and options for enhancing tree cover.

The project will draw on extensive bird monitoring work commissioned by VBN, examining tree-use by birds across the Sahel. Tree species preference information from this study will inform the development of the TBB strategy. The project will also benefit from integration with, and input from, an extensive programme of work by RSPB that includes wider bird surveys in comparative habitats in Burkina Faso and Ghana (applicable to more northerly and southerly shea sites) and from support for data analysis' and reporting of the results. RSPB policy staff working on land use change in Africa for migrant birds,and those supporting capacity building of BirdLife Partners in the region, will help roll out project results during and beyond the project lifetime.

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 tis work and what attempts have been/will be made to co-operate with and learn lessons from such work for mutual benefits.

There are a number of other initiatives that work on increasing tree-cover in this region of the Sahel, e.g. TreeAid, SOS Sahel and the Great Green Wall initiative. However, we are not aware of any work that integrates benefits for birds, pollinators and livelihoods simultaneously.

In Mali and Burkina Faso, ICCO and FairClimateFund are supporting shea women cooperatives on making the shea chain carbon neutral. VBN/BirdLife have already established links and a willingness to collaborate. This proposed Darwin project is complementary in that is adds the biodiversity perspective and a more inclusive approach.

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)

The project will meet all relevant legal obligations, follow ethical principles of respect for persons, beneficence and justice, and apply social safeguards principles in accordance with BirdLife's social assessment framework for projects.

The project will be led in Burkina Faso by Naturama, who will ensure that all local cultural sensitivities are considered during the fieldwork and BirdLife's ethical principles are adhered to. Through close collaboration with communities and their organisations we will ensure that full account is taken of traditional knowledge.

Free Prior and Informed Consent will be obtained from all communities involved in the project as a matter of process, to ensure they are fully aware of its purpose and context, undertaking collective decision-making and giving their consent and views throughout. The project will adopt participatory approaches and promote gender inclusivity.

In relation to research, we will refer to the ethical guidelines of the Social Research Association (http://the-sra.org.uk/wp-content/uploads/ethics03.pdf) as a benchmark.

BirdLife has policies relevant to UK legal and ethical obligations, including staff behaviour and conduct; data protection; risk; hospitality and bribery; and equal opportunities. The BirdLife Partnership (including Naturama) is committed to a rights-based approach to conservation and has an agreed position on conservation and human rights (http://www.birdlife.org/worldwide/programme-additional-info/conservation-and-rights) and gender (http://www.birdlife.org/sites/default/files/attachments/BirdLife%20position%20Conservation%20and%20Gender%20-%20FINAL.pdf). BirdLife has a health and safety policy, including a risk assessment procedure which project staff will follow.

The pollination fieldwork will be conducted in line with Trinity College Dublin's Policy on Good Research Practice (www.tcd.ie/research/dean/assets/pdf/FINAL_Good%20Research%20Practice%20policy_COUNCIL%20APPROVEDandminutedgg.pdf).

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?

(Max 300 words)

Audience	Engagement	Product/Materials	Results
KTNP communities , particularly women shea producers	Training and demonstration activities (reforestation, managed regeneration) and pollination pilot-site visits	Training documents, educational posters, records & photographs of site visits. Pollinator Ambassadors.	Better knowledge on the role and importance of pollination Adoption of TBB good management practices for land and trees.
School children within project area.	Visits to schools to hold pollinator education sessions.	Pollinator education materials.	Increased local awareness of role and importance of pollinators.
Local elected representatives and local technical services (environment, agriculture, animal resources)	Awareness raising and advocacy work. Guided visits to pollination pilot and 'trees, bees, birds' implementation sites.	Policy briefs, presentations, records/photographs from site visits. Information-sharing Workshops Press articles, Synopses of scientific articles Promotion of main advocacy messages via the use of blog articles, disseminated via Facebook and twitter.	Integration of results and approaches in decision-making on land management at the local level be-come a reference document that will guide planning ac-tions of municipal councils.
National policy makers (officials of ministries of environment, animal resources and			Improved sustainable management policies and strategies of natural

agriculture)			resources.
Members of the Global shea Alliance (shea producers and buyers)	Awareness raising and advocacy, sustainability guidance		Integration of project findings into sustainability guidance for shea industry.
Development NGOs			Integration of project findings into tree planting/agro-forestry projects.
Certification schemes			Integration of project findings into certification requirements for sustainable shea.
General public (national/inter-national)	Mass media – including BirdLife, Naturama and GSA websites - and social media (Facebook, Twitter).	News stories, case studies, profiles, Tweets	Increased public awareness of the value of biodiversity Public support for development assistance

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.

KTNP communities (particularly women engaged in shea production)

Within the focal communities surrounding the KTNP, 1500 will have the knowledge to implement the TBB strategy, while 1800 will have raised awareness of NTFP and the role of pollinators and relationship between pollinators and habitat diversity. Further dissemination of the results to other villages in the region will be facilitated by the network of pollination ambassadors, GSA guidance and BirdLife Partners.

Naturama

Staff will improve their understanding of pollination and its role as an ecosystem service, expanding the organisation's areas of competence with regards to biodiversity. Site managers will also gain technical knowledge of pollination and site monitoring protocols for bees and birds. Through the new relationships with pollinator scientists, this project will build capacity for Naturama to collaborate with researchers and support ongoing scientific research and monitoring.

The project will strengthen Naturama's experience in project management, and community capacity building. The project will also enhance Naturama's ability to undertake policy and advocacy at national and international levels, and strengthen the organisation's relationship with the CBD focal point in terms of cooperation and joint implementation of biodiversity conservation projects. Overall, the project will build Naturama's national and international credibility as a leading Burkinabé nature conservation organisation, supporting future conservation advocacy.

BirdLife International

The African regional secretariat will have increased its capacity to undertake international policy and advocacy work, particularly with regards to sustainable agriculture (including international supply chains).

Other organisations

The project will strengthen the University of Ouagadougou's research capacity through the collaborative work with Trinity College Dublin and the education of a Master's student in pollination field research.

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 intend that all original research, documents and presentations that arise from this project will be freely available and widely disseminated.

Research papers will be published in open-access journals or made available via TCD's open access repository, TARA www.tara.tcd.ie . We are seeking funding for the costs of two open-access articles at the current rate of £980 per article – the fee charged by PLOS ONE a well-respected and widely read journal.

All Powerpoint presentations and posters will be shared via the website, www.figshare.com

All relevant project documents, particularly information on the strategy and strategy documents will be hosted on the BirdLife and Naturama websites.

The Global Shea Alliance will host all relevant outputs on its website.

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.

Confirmed:

RSPB secured co-funding of £41756 allocated as follows:

Migratory birds research and advocacy - £XXX

In-kind contribution to cover 60 days and overheads over 3 years for Juliet Vickery's time - £XXX

LUSH secured co-funding of £9022 allocated as follows:

5 months of project management including overheads- £XXX

Advocacy work - £XXX (including £XXX for international travel).

Trinity College Dublin secured co-funding of £XXX allocated as follows:

In-kind contribution to cover 5% of Jane Stout's time over 3 years - £XXX

Naturama (EU/Project PONASI (Pô-Nazinga-Sissili))

Naturama secured co-funding of £14,412 allocated as follows:

Pollinator training and education:	£XXX
TBB training and education	£XXX
Tree planting by communities:	£XXX
Natural regeneration equipment:	£XXX

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
Intended June 2017	Nationale Postcode Lotterij, The Netherlands	To be established	Aiming for joint proposal with ICCO, will extend project to additional countries.

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: Shea parklands in sub-Saharan Africa are managed for improved tree diversity and pollination, enhancing food and livelihood security for 80 million people, and enhancing habitat for wintering Afro-Palearctic migrant birds.			
Outcome: (Max 30 words) Understanding of the relationship between tree diversity, pollination, shea yields, agricultural land use and migratory birds in Burkina Faso, informs management of 500 parkland smallholdings, and sector-wide guidance, promoting livelihood resilience and biodiversity.	**0.1.** By the mid-point of the project, the role and importance of insect pollinators for resilient shea production has been quantified, and habitat requirements for healthy populations of pollinators and birds established, through field research undertaken at 10 pairs of sites in habitats of differing tree diversity around KNTP. Capacity for pollinator and bird research and monitoring in Burkina Faso will have increased. Baseline: The status of insect pollinators in West African agro-ecosystems poorly understood; in particular, only limited information on their role in the pollination and yield of shea trees. **0.2.** By the end of the project, awareness of the value of pollination services and diverse on-farm habitats to sustainable agriculture and availability of non-timber forest products (NTFP) has increased from a baseline assessment in year one, amongst: 1800 adults (800 men and 1000 women); 900 school children in the 10 target communities[24]; 20 agroforestry NGOs; 3	**0.1.1** Two open-access peer-reviewed scientific papers on pollinators and habitat management co-authored by Naturama and University of Ouagadougou employees. Executive lay summary of research Update to the CBD Pollination Information Management System. **0.1.2** Baseline and end of project survey of the communities to examine the change in understanding and valuation of pollination services and NTFPs (Gender disaggregated statistics collected).	Political stability in the project area does not decline. The production and processing of shea remains a high priority for regional development Communities and the wider shea industry find the sustainability arguments convincing. There are no extreme or unseasonal weather patterns (drought, floods) that affect research results or the level of interest and uptake of management recommendations. Demand for certified shea remains high.

[24] Calculations are based on 60 adults attending each dissemination event, 1 held each year in each village, and 30 schoolchildren attending each education event, 1 held in each village each year.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	certification schemes; regional and national government stakeholders as defined in the project's advocacy plan. Baseline: Our pilot socio-economic work highlighted little to no appreciation amongst shea-growing communities of the importance and value of pollination services.	Baseline and end of project surveys of attitudes to sapling removal, fallows and tree-planting on farms. Quarterly training reports and materials	
	0.3. By the end of the project, 500 smallholdings within 10 villages in the KTNP region are being managed under the pilot 'trees, bees, and birds' strategy, optimising tree diversity for pollination, increasing supply of sustainable fuelwood, NTFP and habitat for migrant birds. Sapling removal will have halved, while migrant bird densities and pollinator levels will remain steady or improved relative to the year one baseline.	**0.1.3** Baseline and end of project participatory surveys within the pilot region measuring willingness and capacity to implement "trees, bees and birds", uptake of the scheme. Baseline and end of project measures of on-farm tree diversity and density, including number of coppice and NTFP species. Baseline and end of project measures of habitat diversity, pollinator and bird abundance.	
	0.4 By the end of the project 100 household incomes will have increased via a combination of increased shea yields (10% increase[25]) on farms implementing TBB and through better prices and market access achieved by certification (20% price premium, increasing total household cash incomes by 5%). Livelihood benefits generated through a more diverse supply of NTFP (at least 3 extra products) and sustainable fuelwood on 100 farms. 200 female shea producers will be empowered to contribute to on-farm decision making.	**0.1.4** Baseline and end of project measures of shea yield on TBB sites relative to control sites. Baseline and end of project measures of cash income generated by shea. Baseline and end of project measures of firewood sourced sustainably from on-farm. % of firewood sourced sustainably	

[25] 10% increase will be measured relative to control farms to account for inter-annual variation in yields due to climate.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
		Baseline and end of project measures of community use of NTFP. Baseline and end of project participatory surveys of women's contribution to on-farm decision making. Quarterly reports and maps of pilot scheme implementation and demonstration sites. Training materials and records of attendance at training and demonstration site open days.	
	0.5 By the end of the project, guidance on optimising pollination for shea yields and sustainable habitat diversity, informed by the "trees, bees and birds" strategy pilot, incorporated into GSA sustainability programme[26] and awareness and willingness to implement raised amongst at least half of GSA's 380 members – compared to baseline survey in year one. Baseline: Current GSA sustainability guidelines do not include guidance in relation to improving pollination services or negating biodiversity loss.	**0.1.5** GSA sustainability guidelines and best practice manual. Copies of minutes and presentation from GSA AGM Results from baseline and end of project questionnaires directed at relevant NGOs and Development agencies on the awareness and importance of pollination. Presentations and attendance records from end of project workshop.	
Outputs: 1 Research outputs completed and used to educate the shea-growing community around KTNP via pollination	**1.1.** A working group formed and workshop held in Quarter 1 of Year 1, bringing together key stakeholders and experts to draft a "trees, bees and birds" shea parkland management strategy.	**1.1.1** List of working group members Minutes from workshop meetings Draft TBB strategy, including list of trees with justifications.	Experimental work is not adversely affected by weather conditions. Availability of government staff and pollination ambassadors can be timed to coincide with fruiting

[26] Current GSA sustainability guidelines for shea do not include any specific guidance in relation to improving pollination services or negating biodiversity loss.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
demonstration sites. The entire evidence base reviewed and used to inform development of the "trees, bees and birds" agri-environment strategy.	**1.2.** By the mid-point of the project, a study of the impact of pollination on shea yields and optimum diversity of tree species for pollinators, planned and carried out at 10 degraded and 10 non-degraded sites around KTNP. **1.3.** By end of Quarter 2 Year 2, 20 "pollination ambassadors" (2 per village, including at least 10 women) from the shea farming community, along with at least 2 local government officials, will have visited an experimental pollination plot leading to increased awareness of the link between pollinators and yield. A pollinator ambassadors network established. **1.4.** By the beginning of Quarter 3 in Year 2, a "Trees, bees and birds" strategy revised and finalised incorporating updated information from pilot implementation and pollination research and feedback from the wider shea industry. **1.5.** A final assessment of the efficacy of the TBB strategy is completed in the final Quarter of the project and the strategy published. A launch event will be timed to coincide with a GSA meeting. Social media campaign to promote the strategy.	**1.1.2** Research strategy and field-work plan. Map of experimental sites Report from field-work component **1.1.3** Reports and photos from visits to the pollination sites. Notes of meetings from the pollination ambassadors network. **1.1.4** Notes from stakeholder consultations. Final TBB strategy document published. **1.1.5** Assessment of the TBB strategy. Reports from the launch event. Details from social media campaign, including 'audience reached'	periods of the shea trees.
2 500 people from 10 communities around KTNP have implemented the "trees, bees and birds" parkland management strategy, while another 1000 via farmer-to-farmer education have the knowledge and capacity to do so. Access to market and potential revenue streams have increased	**2.1** Development of a training and capacity building plan for the wider KTNP region for the "trees, bees and birds" strategy completed by the end of Quarter 1 in Year 1. **2.2** 100 small-holders (including 40 women) from the pilot region will have attended "trees, bees and birds" training sessions led by Naturama, will have implemented key on-farm management measures (tree retention, fallow, shrub) in the strategy by the end of year 1 and a further 400 (including 160 women) from the	**2.1.1** Training and development plan. **2.1.2** Training materials attendance reports, and feedback. Maps and records from implementing farms. Reports of baseline and end of	Those farmers trained and supported to do so implement TBB strategies. Those attending training sessions are able to disseminate the findings to a further two people.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
via better knowledge of certification.	KTNP region will have undergone direct training by Naturama by the end of year 2. Women who participate in TBB training increase their contribution to on-farm decision making.	project surveys of women's contribution to decision making.	
	2.3 10 "trees, bees, birds" demonstration sites (1 per village) drawn from the initial 100 pilot farms used to illustrate the "trees, bees and birds" strategy during open-days for farmer-to-farmer education and training purposes by the beginning of year 2.	**2.1.3** Photos, maps and reports from demonstration sites. Reports of education events held on sites.	
	2.4 By the end of the project, the 500 who have received direct training have participated in farmer-to-farmer education, each trained individual disseminating information to 2 more[27], educating a further 1000 people in the TBB strategy. Knowledge will be reinforced through a mix of community training sessions, and visits to pilot site open days. Women in the project area show an increase in their empowerment to contribute to farm management decisions.	**2.1.4** End of project survey of community understanding, desire and capacity to implement "trees, bees and birds" strategy. Reports of baseline and end of project measures of empowerment.	
	2.5 By the end of Year 2, 200 women from 10 producer groups, have received training in certification opportunities. By the end of the project at least 5 of the communities have women producer groups that have obtained certification (Fairtrade or Organic).	**2.1.5** Certification agreements. Records and photos from training events.	
3 Capacity of the host country for pollination research, long-term impact monitoring, and pollination education has been developed via mentoring by	3.1 Pollination advisory team formed by the end of the first quarter, consisting of local expert (Issa Nombré), international expert (Jane Stout). Expert recruited for Conservation Scientist research role, plus student recruited for local Master's project.	**3.1.1** CV's for recruited Conservation Scientist and Master's student. Minutes /ToRs of advisory team meetings	.

[27] A dissemination reach of two people is based on work by Naturama for the 'Living on the Edge' project which trained famers in natural regeneration techniques and tree-planting.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
in-country and international pollination experts. Naturama have the capacity for ongoing development and monitoring of the "Trees, bees and birds" strategy.	3.2 By the end of Year 1, 4 Naturama staff, involved in pollination education, via mentoring via the Pollination advisor team, have an understanding of pollination services that allows them to develop and lead an educational program. 3.3 By the end of Year 1, a Naturama research assistant trained in methods for surveying of pollinators and birds. 3.4 By the end of Year 3, 1 Masters student gains training in pollination fieldwork, contributing to degree. 3.5 Monitoring protocols for surveys of pollinators, bird populations, tree diversity and shea yields by the end of Quarter 2 Year 1.. 3.6 Strategy for continued support of monitoring and development of "Trees, bees and birds" by the end of Year 3.	**3.1.2** Copies of education materials produced for the community by Naturama about pollination. **3.1.3** Records of Naturama assistants that have received training. Naturama capacity statement. **3.1.4** Masters theses **3.1.5** Records of survey protocols and reporting strategy. **3.1.6** Strategy document.	
4 An advocacy programme for integration of the 'trees, bees and birds' management strategy into policy and practice leading to the integration of TBB advice into GSA sustainability guidelines.. **5** .	**4.1** By end of Quarter 3, Year 1, a policy and advocacy plan prepared by BirdLife, under guidance from the RSPB and Naturama, identifying key sector-wide organisations and decision-makers and advocacy channels. **4.2** Presentations at the AGM of the Global Shea Alliance in 2017 and 2018. Participation in the GSA working groups from 2016 onwards. **4.3** Presentations at the annual AEMLAP meetings . from 2016 onwards. And discussed within the sustainable land use working group.	**4.1.1** Policy and advocacy strategy document. **4.1.2** Global Shea Alliance policy documents, minutes from AGM and working group meetings. Presentations. **4.1.3** Minutes from working group meetings. Presentations.	Industry and policy makers see value in supporting and participating in the scheme.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	4.4 Advocacy workshops held in Years 2 and 3 of the project in collaboration with the GSA with the aim of disseminating the results of the "Trees, bees and birds" more widely throughout the shea industry, and receiving stakeholder feedback.	**4.1.4** Workshop reports and list of attendees. Presentation detailing "trees, bees and birds" (will be openly available on FigShare).Feedback reports from participants.	
	4.5 By end of Year 2 policy briefs prepared that include executive summaries following completion of the "trees, bees and birds" strategy development.	**4.1.5** Policy briefs and list of recipients.	
	4.6 An end of project advocacy workshop with the aim of integrating the "Trees, bees and birds" into policy held for government, NGOs and certification standards.	**4.1.6** Workshop reports and list of attendees. Meeting feedback reports from participants.	

Output 1 Research outputs completed and used to educate the shea-growing community around KTNP via pollination demonstration sites. The entire evidence base reviewed and used to inform development of the "trees, bees and birds" agri-environment strategy.

1.1 Form TBB working group and hold a workshop to draft a preliminary strategy
1.2 Plan fieldwork, including site selection and GIS analysis of habitat degradation and tree density
1.3 Fieldwork to determine pollinators, tree species and fruit set. Taxonomic identification, data analysis.
1.4 Write scientific papers on shea pollination and habitat management.
1.5 Recruit pollination ambassadors and facilitate visits to pollination research sites. Establish ambassador network.
1.6 Hold workshop to refine "trees, bees and birds" strategy and publish document
1.7 Pollinator education activities– one public meeting a year in each of the ten villages
1.8 Surveys to establish knowledge of pollinators
1.9 Final assessment of TBB efficacy
1.10 Publication of TBB, launch event and social media campaign

Output 2 500 people from 10 communities around KTNP have implemented the "trees, bees and birds" parkland management strategy, while another 1000 via farmer-to-farmer education have the knowledge and capacity to do so. Access to market and potential revenue streams have increased via better knowledge of certification

2.1 Develop the training and capacity building plan for education of KTNP stakeholders on "trees, bees and birds"
2.2 Hold "trees, bees and birds" farmer training sessions for 100 stakeholders in the KTNP region initially, followed by 400 after revision of the strategy.
2.3 Surveys to monitor shea yields, socio-economics, biodiversity, habitat, including a review of the 100 pilot sites to inform TBB revision.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
2.4 Identify 10 suitable “trees, bees and birds” demonstration sites			
2.5 Provide support to stakeholders who have attended training session in order to facilitate farmer-to-farmer communication.			
2.6 Surveys to monitor capacity of community empowerment and ability to implement TBB, including mid-point review of pilot.			
2.7 Provide training in certification and support in becoming certified			
Output 3 Capacity of the host country for pollination research, long-term impact monitoring, and pollination education has been developed via mentoring by in-country and international pollination experts. Naturama have the capacity for ongoing development and monitoring of the “Trees, bees and birds” strategy.			
3.1 Form pollination advisory committee			
3.2 Recruit Pollination Scientist and Masters Student.			
3.3 Education of Naturama staff about the role of insect pollinators..			
3.4 Training of Naturama research assistant in survey methods for pollinators and birds.			
3.5 Training of Masters student in pollination research.			
3.6 Monitoring protocols for pollinators, birds, tree diversity and shea yields developed in collaboration with bird and pollinator experts..			
3.7 Legacy strategy developed for on-going monitoring of the efficacy of the TBB strategy.			
Output 4 An advocacy programme for integration of the ‘trees, bees and birds’ management strategy into policy and practice leading to the integration of TBB advice into GSA sustainability guidelines.			
4.1 Develop a policy and advocacy plan			
4.2 Hold advocacy workshops for Shea Industry			
4.3 Prepare and distribute policy briefs			
4.4 Participation at the Global Shea Alliance AGMs			
4.5 Participation at annual AEMLAP meetings.			
4.6 Advocacy workshop for government, NGOs and certification schemes			
4.7 Participation in GSA working groups			

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 months	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1	*Research outputs completed and used to educate the shea-growing community around KTNP via pollination demonstration sites. The entire evidence base reviewed and used to inform development of the "trees, bees and birds" agri-environment strategy.*													
1.1	Form TBB working group and hold a workshop to draft a preliminary strategy	3												
1.2	Plan fieldwork, including site selection and GIS analysis of habitat degradation and tree density	3												
1.3	Fieldwork to determine pollinators, tree species and fruit set. Taxonomic identification, data analysis. Write Scientific Paper.	12												
1.4	Write scientific papers on shea pollination and habitat	6												
1.5	Recruit pollination ambassadors and facilitate visits to pollination research sites. Establish ambassador network.	4												
1.6	Hold workshop to refine "trees, bees and birds" strategy and publish document	1												
1.7	Pollinator education activities – one public meeting a year in each of the ten villages.	36												
1.8	Surveys to establish knowledge of pollinators	12												
1.9	Final assessment of TBB efficacy	3												
1.10	Publication of TBB, launch event and social media campaign	1												
Output 2	*500 people from 10 communities around KTNP have implemented the "trees, bees and birds" parkland management strategy, while another 1000 via farmer-to-farmer education have the knowledge and capacity to do so. Access to market and potential revenue streams have increased via better knowledge of certification.*													
2.1	Develop the training and capacity building plan for education of KTNP stakeholders on "trees, bees and birds"	1												

	Activity	No of months	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2.2	Hold “trees, bees and birds” farmer training sessions for 100 stakeholders in the KTNP region initially, followed by 400 after revision of the strategy.	12												
2.3	Surveys to monitor shea yields, socio-economics, biodiversity, habitat, including a review of the 100 pilot sites to inform TBB revision.	6												
2.4	Identify 10 suitable “trees, bees and birds” demonstration sites	1												
2.5	Provide support to stakeholders who have attended training session in order to facilitate farmer-to-farmer communication.	33												
2.6	Surveys to monitor capacity of community empowerment and ability to implement TBB, including mid-point review of pilot.	6												
2.7	Provide training in certification and support in becoming certified	6												
Output 3	*Capacity of the host country for pollination research, long-term impact monitoring, and pollination education has been developed via mentoring by in-country and international pollination experts. Naturama have the capacity for ongoing development and monitoring of the “Trees, bees and birds” strategy.*													
3.1	Form pollination advisory committee	1												
3.2	Recruit Pollination Scientist and Masters Student.	3												
3.1	Education of Naturama staff about the role of insect pollinators..	3												
3.2	Training of Naturama research assistant in survey methods for pollinators and birds.	6												
3.3	Training of Masters student in pollination research.	20												
3.4	Monitoring protocols for pollinators, birds, tree diversity and shea yields developed in collaboration with bird and pollinator experts.	3												
3.5	Legacy strategy developed for on-going monitoring of the efficacy of the TBB strategy.	4												
Output 4	*An advocacy programme for integration of the ‘trees, bees and birds’ management strategy into policy and practice leading to the integration of TBB advice into GSA sustainability*													

	Activity	No of months	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	guidelines...													
4.1	Develop a policy and advocacy plan	3												
4.2	Hold advocacy workshops for Shea Industry	2												
4.3	Prepare and distribute policy briefs	6												
4.4	Participation at the Global Shea Alliance AGMs	2												
4.5	Participation at annual AEMLAP meetings.	3												
4.6	Advocacy workshop for government, NGOs and certification schemes	2												
4.7	Participation in GSA working groups	3												

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)

Two experienced Program Managers (PMs) will oversee monitoring and evaluation, one UK based (Dr Cath Tayleur) and one in Burkina Faso (Adama Nana). The PMs will monitor the timely and satisfactory achievement of all indicators by agreeing and reporting on quarterly work-plans, and holding monthly project update meetings. In addition, a project advisory committee (PAC) will be established and meet every 6 months to review progress and provide input to an adaptive management strategy, ensuring satisfactory achievement of indicators. The PAC will bring different areas of expertise, experience and knowledge – including in relation to scientific research (CT), socio-economics (DT), biodiversity& livelihoods in Burkina Faso (AN), migrant birds & project implementation (BdB, JV) and pollination research (JS).

Specific M&E plans are outlined below:

Outcome Indicators: Naturama will conduct a baseline and end of project survey to examine the change in understanding and valuation of pollination services and NTFPs. Baseline and end of project participatory surveys will also be undertaken in the pilot region measuring awareness of, desire and capacity to implement the TBB strategy, attitudes to tree removal and planting, uptake of the scheme and women's empowerment. Baseline and end of project measures of habitat and tree diversity, pollinator and bird abundance will be established. BirdLife will lead baseline and end of project surveys of Industry and NGOs to examine the understanding of the TBB strategy and their willingness to integrate TBB into their future work.

Output 1: Pollinator research will be overseen by Prof. Jane Stout. Weekly field reports will be sent and bi-weekly skype calls held to monitor and address issues. Success of this work will be measured by the acceptance of 2 peer-reviewed articles. The TBB strategy will be evaluated periodically, with the results from the mid-term analysis feeding into the guidelines revision. End of project monitoring will evaluate the efficacy of the strategy and propose additional amendments and future research priorities.

Output 2: Attainment will be monitored via interim targets established within the training and capacity plan with progress monitored at monthly intervals by the national coordinator (AN) and program coordinator (CT). Site establishment will be monitored with maps, photos and written reports from the two site managers. BirdLife will undertake at least one trip to the pilot region in Years 2 and 3 to evaluate progress on-the-ground. Women's empowerment and community capacity to implement tree, bees and birds will be evaluated via baseline and end of project social surveys, overseen by AN.

Output 3: Naturama's capacity to undertake pollination work will be assessed via their ability to develop education material for pollination and TBB training. Success of these education and training events will be assessed via the change in community understanding of and desire to implement TBB. Burkina Faso's capacity for pollination research will also be assessed via their contributions to peer-review papers and Master's thesis.

Output 4 – Success of the advocacy programme will be evaluated by the change in knowledge of and willingness to consider pollination services in policy, industry sustainability guidelines, and tree-planting programs.

Total budget for M&E	£13,087 plus 15% of the salary costs for 2 site managers (£3,176) = £16,263
Percentage of total budget set aside for M&E	3% (4.3 % including salary costs)

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)

How we worked out the budget

All partners contributed individual budgets with detailed costs for individual activities. These costs were comparable to those reported in pilot work and similar projects managed by BirdLife.

Value for money

This project benefits from a number of existing research projects and initiatives. For example, much of the research required to inform the TBB strategy has been completed or is underway (e.g. socio-economic, bird tree-use, preliminary pollination work). In addition, Naturama has existing relationships with the communities near KTNP, enabling an immediate start to project activities. BirdLife will leverage its in-country partnerships to help deliver a cost-effective project, and will make use of staff located in our West African office for advocacy work to minimise travel costs.

There will be a significant overall 'return on investment', through the multiplier effect from initial capacity building to mainstreaming of biodiversity into policy and process. By 2019, the project will have:

- Trained 500 people directly, and 1000 indirectly in TBB – influencing management on at least 500 farms in 10 villages surrounding KTNP.
- Educated 1800 adults and 900 schoolchildren about pollination via dissemination meetings and the use of pollination ambassadors.
- Improved capacity of Naturama and the University of Ouagadougou for pollination research and monitoring.
- Achieved longer-term, landscape scale impacts by using our relationship with the Global Shea Alliance to influence industry, with further advocacy work targeting NGO's and governments.
- The project's outcomes will add significant, long-term value to other initiatives including the NBSAP and SDGs.

Salaries constitute a large proportion of the funding, providing full-time employment for 4 Burkinabé staff. An EU based pollination scientist was included due to the lack of in-country capacity for a large field study. This role was costed via our NGO partner partly to reduce costs compared to academia.

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)

Within the project we intend to purchase 2 motorbikes, 2 laptops and 1 camera for the host organisation. These items will be retained by Naturama at the end of the project to facilitate on-going engagement with the communities around KTNP and with the shea industry. Equipment for pollination surveys will also be purchased which will also be retained by Naturama, but will be available on loan to the University of Ouagadougou for future research. Equipment purchased for agro-foresty activities will be retained by the communities of the KTNP.

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.

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 ✓**[28]

CERTIFICATION

On behalf of the trustees of **BirdLife International**

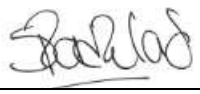
I apply for a grant of £302,996 in respect of **all expenditure** to be incurred during the lifetime of this project based on the activities and dates specified in the above application.

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.
- I enclose our most recent signed audited/independently verified accounts and annual reports (if appropriate)

Name (block capitals)	PATRICIA ZURITA
Position in the organisation	Chief Executive Officer

Signed**  **Date:** 1st December 2015

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.

[28] Guidance on the www.gov.uk website indicates no security issues for this region of Burkina Faso.

Stage 2 Application – Checklist for submission

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

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.