EIDPO028

Submit by Monday 1 December 2008

DARWIN INITIATIVE: APPLICATION FOR GRANT FOR ROUND 16: POST PROJECT

Please read the Guidance Notes for both Main Round and Post Project applications 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.

1. Name and address of organisation (NB: Notification of results will be by post)

Name:	**Address:**
Fauna & Flora International	4th Floor, Jupiter House, Station Road, Cambridge, CB1 2JD, UK

2. Post-Project details

Project Title (max 10 words):				
Phase II - Building University Capacity to Train and Support Cambodian Conservationists				
Proposed start and end dates: 1 April 2009 to 31st March 2011 Duration of project: 2 years				
Darwin funding requested	**2009/10**	**2010/11**	**2011/12**	**Total**
	£68,925	**£66,050**	**£**	**£134,975**

3. Original Project Title and Defra reference number (eg 162/-/--- or 10-065)

Building University Capacity to Train Future Cambodian Conservationists (14-037)

4. Principals in project. Please provide a one page CV for each of these named individuals. Letters of support must also be provided from the host country partner(s) endorsing the partnership and value of the Post Project funding. You may copy and paste this table if you need to provide more than one overseas project partner.

Details	**Project Leader**	**Other UK personnel (working more than 50% of their time on project)**	**Main project partner and co-ordinator in host country/ies**
Surname	Daltry	McCulloch	Rath
Forename (s)	Jennifer Catherine	Callum	Sethik
Post held	Project Leader	FFI Project Manager	RUPP Project Coordinator
Institution (if different to above)	as above	as above	Royal University of Phnom Penh (RUPP)
Department	Conservation Partnerships	Cambodia Programme	Environmental Sciences
Telephone			
Email			

5. Define the purpose of the Post Project (extracted from logframe) and explain how it is linked to the objectives of the original Darwin project? (Max 200 words)

The Post Project builds directly on the highly successful Darwin project to maximise its impact.

Intended to "build capacity in conservation and applied research at Cambodia's premier universities", the original project established new biodiversity learning resources (including a national conservation library and reference collections) at the Royal University of Phnom Penh (RUPP), and exceeded its target by launching Cambodia's first Masters of Science curriculum.

This Post Project will **strengthen and consolidate Cambodia's conservation science capacity by developing the Centre for Biodiversity Conservation (CBC) as the national hub for original biodiversity research, postgraduate education, information dissemination and inter-agency collaboration**. Offices and other resources developed under the first project will evolve into a registered body within, and co-funded by, RUPP. In addition to running the MSc course every year, the Centre will enable scientists and organisations nationwide to access learning resources, collaborate on joint projects and disseminate their findings. Importantly, outstanding Masters graduates from the first project will be offered placements at the Centre as permanent, sustainably funded Darwin Research Officers. These will be the first full-time academic scientists in Cambodia, with unprecedented opportunities to build up their experience and develop new lines of research to support Cambodia's commitments to the Conventions.

6. What have been the main outcomes (achievements) of the original project to date? (max 300 words)

The Darwin project far exceeded its original aim (develop a diploma course) by establishing Cambodia's first MSc course. 108 Cambodians gained advanced training in Biodiversity Conservation, more than 60% of whom were 'in service' government and non-government employees and thus immediately able to apply their new skills and knowledge to address national biodiversity management needs. In creating this course, the project also renovated classrooms and laboratories, established a biodiversity library with over 230 titles, and built up a stock of field research equipment. These assets are valued at over £76,000.

During their studies, the Masters candidates conducted dozens of small (from 2-week to 12-month) research projects covering numerous subjects pertaining to biodiversity management, from pure taxonomy to community use of natural resources. By the project's end, six full research theses had been submitted, and dozens more are in progress.

The Darwin project also constructed the country's first national zoological reference museum and herbarium at the Royal University of Phnom Penh, with trained curators and facilities to accommodate specimens for years to come. In addition, the project launched the *Cambodian Journal of Natural History* – the country's first scientific journal – to encourage and enable Cambodian scientists to disseminate their knowledge.

16 national and 15 international organisations became intimately involved in this project by providing students, teachers or learning resources, contributing guest lectures, or hosting students while conducting field research. This interest and generous response from so many government and non-governmental stakeholders is evidence of the great appreciation of the Darwin project's importance in building national capacity. The project helped to draw many different agencies together to communicate and collaborate for the first time: a vital function that will be further expanded under the Post Project.

7. What steps have been taken to ensure that project purpose and outputs of the original project will be achieved within the original project term? (max 200 words)

The original Darwin project officially ended on 1 October 2008. As will be clear in the forthcoming Final Report, all of the planned targets were achieved and, in most cases, greatly exceeded. The project unequivocally fulfilled its original purpose 'to build capacity in conservation and applied research at Cambodia's premier universities, chiefly by establishing new teaching modules and diploma in conservation biology, supported with practical field experience.' (Remarkably, the planned diploma course was upgraded into the country's first MSc curriculum within the first year).

Although the first project has ended, FFI has continued working with local partners to continue to sustain ongoing teaching and research at the Royal University of Phnom Penh, including running the Masters curriculum and enlarging the herbarium, with funding from other sponsors. If Darwin Initiative is able to award a new grant in 2009, the original FFI project staff and our local partners will therefore still be in place to initiate and deliver the Post Project without incurring any start-up costs or delay.

8. Please list the UK/collaborative (where there are partners <u>in addition</u> to the applicant organisation) and host country partners that will be involved in the Post Project, and explain their roles and responsibilities in the project and in the original project (if applicable). Describe the extent of their involvement at all stages, including Post Project development. This section should illustrate the capacity of host country partners to be involved in the project. Please provide written evidence of partnerships. Please copy/delete boxes for more or fewer partnerships.

Partner Name: **Royal University of Phnom Penh (RUPP)**	**Details** (including roles and responsibilities and capacity to engage with the project): The RUPP is the main host partner, which houses the project office, library, reference collection, as well as other resources that were developed under the first project and are to be enhanced under the Post Project. RUPP personnel took an active role in designing the Post Project, starting with the log frame, and will continue to commit co-funding and in-kind support to future activities. The Steering Committee, established under the first project with staff from the Faculty of Science, will continue to meet monthly to evaluate progress and resolve any problems on the Post Project. The RUPP is administered by the Ministry of Education, Youth and Sports, which gives it the authority to issue Masters degrees. Staff from the Ministry also contribute regularly to monitoring student performance, including marking theses.

Partner Name: **Ministry of Environment (MoE)**	**Details** (including roles and responsibilities and capacity to engage with the project): The Ministry is the CBD National Focal Point of Cambodia and will: • Contribute Mr Neang Thy, MSc (a potential Darwin Research Officer) to run the Ecological Field Techniques course. • Contribute Mr Sour Sethy, Deputy Director for Environmental Impact Assessments, to deliver the EIA module of the Masters programme. • Provide permits for students and Darwin Research Officers to conduct field research in protected areas and collect specimens for the reference collection. In addition, at least five MoE staff from the national headquarters and provincial offices will enrol as students on the MSc programme.

Partner Name: **Harrison Institute**	**Details** (including roles and responsibilities and capacity to engage with the project): The UK-based Harrison Institute has special expertise in the taxonomy and ecology of Indochinese wildlife, and its recent Darwin project (14-011) established multiple, mutually beneficial links to FFI's original Darwin project (14-037). Our successful collaboration will be further strengthened under the Post Project. The Harrison Institute is working to secure additional funds for biological research in this region, and its staff and associates, including the Director Dr Paul Bates, will add considerable value to this Post Project by:- • Providing advanced training and supervision in taxonomy for Cambodian MSc students and Darwin Research Officers • Fostering additional links and collaborations with universities and reference collections in neighbouring Laos, Thailand and Vietnam. • Assisting with the collection and identification of mammal specimens for the national zoological reference collection.

9a. Have you consulted stakeholders not already mentioned above? ☑ **Yes** ☐ **No**

If yes, please give details:

The project team have already consulted with staff from the following stakeholders, many of which could also qualify as 'partners', because of their direct involvement in project implementation (by providing trainees or trainers, hosting student researchers in the field, providing specimens to the reference collection, etc):-

National stakeholders: Fisheries Administration; Forestry Administration; Ministry of Environment; Department of Education; Royal University of Agriculture; Royal Government of Cambodia Senate; Save Cambodia's Wildlife; Turtle Conservation Project; CEDAC; SBK Research and Development; GTZ Cambodia; CBNRM Learning Institute; PACT Cambodia; Apsara Authority, Inland Fisheries Research and Development Institute; and Mlup Baitong.

International stakeholders (international groups with an active interest in Cambodian biodiversity): The Natural History Museum, London; Frontier; Birdlife International; Cambridge University; Oxford University; Murdoch University; Centre ValBio; Copenhagen University; Conservation International; University of Queensland; Prince of Songkhla University; WWF Cambodia; Wildlife Conservation Society; Museum National d'Histoire Naturelle, Paris/ Sud Plantes Experts; US Fish & Wildlife Service; Zoological Parks and Gardens Board of Victoria; North Carolina Museum of Natural Sciences; and Royal Botanic Gardens, Edinburgh.

9b. Do you intend to consult other stakeholders? ☑ **Yes** ☐ **No**

If yes, please give details:

Other prospective stakeholders not yet listed above include the national Association for Buddhist Education (which specialises in environmental education), the Angkor Centre for Biodiversity Conservation (a wildlife rescue centre), the international Maddox-Jolie-Pitt Project, and IUCN.

The project team will remain open to collaboration with all such groups interested in biodiversity research and education in Cambodia, and especially seek every opportunity for cooperation on teaching or research.

9c. Have you had any (other) contact with the government not already stated? ☑ **Yes** ☐ **No**
If yes, please give details:

Besides our frequent interactions with government officers (both as trainers and trainees) during the original Darwin project, FFI operates several other conservation projects in Cambodia in partnership with Royal Government of Cambodia. These include a major protected landscape programme in the Cardamom Mountains (in partnership with the Ministry of Environment and relevant local and provincial governments) and two community-based programmes focused on conserving Siamese crocodiles and Asian elephants (in collaboration with Forestry Administration and Ministry of Environment).

Although the latter are not directly linked to the Darwin project, these joint FFI/ Royal Government of Cambodia conservation projects are willing to help to host and co-fund any postgraduates and Darwin Research Officers who choose to conduct applied research in their field sites.

9d. Is liaison proposed with the CBD/CMS/CITES focal point in the host country? ☑ **Yes** ☐ **No**
If yes, please give details:

FFI's office in Cambodia has long-standing working relationships with the national focal point staff of both the CBD and CITES. The CBD Focal Point is in the Ministry of Environment, while the Ministry of Agriculture, Forestry and Fisheries is the National Management Authority for CITES (with the Scientific Authorities being the Forestry Administration and Fisheries Administration). Cambodia is not yet a Party of the CMS, but it is a signatory of the Indian Ocean-South East Asian Marine Turtle MoU, with the Fisheries Administration being the Temporary National Focal Point.

The original Darwin project involved staff from all of the above agencies as students, trainers and research collaborators. Under the next phase of this project, we propose to liaise with the CBD and CITES focal points when the Darwin Research Officers and final year MSc students begin to develop their research proposals, in order to identify original studies that will usefully contribute to one or both conventions.

POST PROJECT DETAILS

10. Please provide a Concept Note (max 1,000 words). Describe the problem to be addressed, explain why it is a priority for the host country and how its resolution will improve host country ability to meet its obligations under CBD/CMS/CITES. The proposed strategy and its intended outcomes should be described adequately, including justification for and brief details of the contribution of each UK and host country partner.

This Darwin project addresses an urgent need to strengthen Cambodia's scientific capability to identify, develop and evaluate more effective biodiversity conservation management strategies. The Post Project phase is intended to run for two years.

Cambodia emerged from nearly three decades of conflict to be among the least populated and most heavily forested (>50%) countries in Southeast Asia. It forms a key part of the Indo-Burma Hotspot, with numerous endemics and species that have become scarce or extirpated elsewhere, e.g., the critically endangered Siamese crocodile, tiger, Eld's deer, giant ibis, slender-billed vulture, and eaglewood. The past ten years have seen an astonishing rise in the number of species discovered in Cambodia, with sharp increases in the number of identified species including mammals (from 100 to 147 species), birds (410 to 552), reptiles (82 to >165), amphibians (9 to 63), and freshwater fishes (215 to >474) (Daltry, 2008).

Significantly, most of this research has been led by British and other foreign biologists, owing to the shortage of experienced Cambodian scientists. The dearth of national scientists resulted from many decades of underinvestment in the education sector in Cambodia, followed by the deliberate destruction of the education system by the Pol Pot Regime (1970s). Scientists, doctors, lawyers, teachers, professors, and college graduates were killed or forced to work in labour camps. Between 75 and 80% of Cambodian educators died or left the country, and more than half of the written material in Cambodia was destroyed.

The need for improved understanding and management of Cambodia's biodiversity has urgent implications for its fast-growing human population, more than half of whom depend on forest products, bushmeat and other natural resources for their daily survival. Economic development is clearly essential, and is proceeding apace with foreign aid and investments, but with insufficient attention to the needs of biodiversity or the impoverished millions who depend on natural resources. EIAs, for example, are often ill conceived, poorly executed, and typically appear only *after* the mine, hydro-dam or other development has been approved! Nevertheless, Cambodia recognises its responsibilities to the CBD, and as much as 25% of the country is under protection, at least on paper. Its capacity to do more remains severely hampered by lack of skilled national personnel to identify and address biodiversity needs. Few species, habitats or issues are being adequately studied, managed and monitored, as is evident from the national reports to the conventions.

Until the first Darwin project began, Cambodian organisations struggled to find skilled staff to conduct biodiversity research or conservation. Most initiatives depend on expensive short-term foreign consultants, which is clearly unsustainable. The chronic lack of national capacity and reliable biodiversity data has been highlighted in all recent priority-setting exercises, including the National BSAP. Our Darwin project made enormous steps to alleviate this problem, however, by developing and equipping an MSc Biodiversity Conservation course to generate qualified nationals with appropriate skills and knowledge. 108 postgraduates have received advanced training to date, most of whom are now employed by relevant agencies within Cambodia.

Without Post Project support, the MSc course, which is currently housed in the Biology Department, will end after the current students graduate, due to insufficient qualified local lecturers (RUPP rules require postgraduate trainers to have PhDs, but only 3% of RUPP lecturers qualify). With many more Cambodians wishing to enrol, and employers hungry for more graduates, it is clearly desirable to continue this service, and embed it as a permanent fixture within RUPP (**Output 2** of the Post Project).

In addition to building capacity through the MSc curriculum, Cambodia urgently needs full-time scientists with the time, resources and some degree of political independence to pursue PhDs and major lines of research. Although in most countries, universities fulfil this scientific role, no RUPP staff conduct research. Under the Post Project, we therefore propose to create 5-10 Darwin Research Officer posts, as full-time scientists (**Output 3**). They will develop doctoral research programmes with our UK partner universities on subjects relevant to Cambodia's CBD and CITES commitments, e.g., evaluating the extent of illegal trade and the status of Appendix I species. The Darwin Research Officers will also teach some parts of the MSc curriculum, to reduce dependency on British trainers and enable more classes to operate in Khmer language.

Under the first project, the office soon became a focal point for staff from different organisations to come together to exchange ideas, knowledge and resources – many of whom had not previously been aware of one another's work. More than 30 national and international organisations had gravitated towards our project by 2008 (section 9a) and 20 joint research projects completed, to mutual advantage. Recognising the outstanding value of this networking role for advancing biodiversity research and conservation in Cambodia, we propose to develop the project offices into a permanent Centre for Biodiversity Conservation (**Output 1**). The Centre will actively facilitate information-sharing and collaboration, partly by running guest lectures (organised by the Darwin Research Officers) and MSc course, maintaining the open-access national zoological reference collection and herbarium, and publishing the peer reviewed *Cambodian Journal of Natural History* (**Output 4**).

All these elements combine to achieve the proposed Post Project purpose to '**Strengthen and consolidate Cambodia's conservation science capacity by developing the Centre for Biodiversity Conservation (CBC) as the national hub for original research, postgraduate education, information dissemination and inter-agency collaboration**'. Among the many advantages of establishing an official, permanent centre within RUPP is that it would receive an annual budget from RUPP to employ staff and be more autonomous in making decisions.

FFI will be responsible for overall project management and provide training and supervision, with collaborating British experts and institutions. Our duties include mentoring the Darwin Research Officers and assisting them to secure PhD scholarships with British universities. RUPP will provide the infrastructure for project offices, classrooms, reference collections and library, and handle the official processes for graduating students and formalizing the Centre. Additional equipment and support for student fieldwork will be provided by RUPP, other FFI projects and our collaborating stakeholders (see section 9a).

11. Are you aware of any other individuals/organisations/Darwin Initiative projects carrying out similar work? ☑ **Yes** ☐ **No**

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

Six Darwin-supported projects within, or involving, Cambodia ended in 2008. Only one remains active (16-013), a regional project to support implementation of the Ramsar Convention. Though not directly relevant to the Post Project, FFI is acquainted with the BirdLife leaders and will discuss whether any links could be made between the two in 2009, e.g., through guest lectures or deploying postgraduate researchers to the Ramsar sites in Cambodia.

There is potential for collaboration between the Post Project and a new FFI proposal to Darwin Initiative entitled '*Enabling developing country conservationists to publish to international standards*'. The latter would operate on several continents, but has proposed developing a new course to give more advanced training to our MSc candidates and Darwin Research Officers on preparing manuscripts for international scientific journals. If funded, this course could usefully be combined with the existing Scientific Report Writing module on the MSc curriculum.

The regional University Support to Environmental Planning and Management (USEPAM) project, described in our first proposal, ended in 2007 and it is not known whether or when it might resume. By focusing on improving the quality of teaching at undergraduate level at RUPP, USEPAM differs from, yet complements, the objectives of our postgraduate project.

Many other NGOs (e.g., WWF, WCS, CI) are endeavouring to support conservation and natural resources management in Cambodia. Although none provides such extensive training nor qualifications, they represent opportunities for postgraduates and Darwin Research Officers from our project to conduct research on real conservation issues in collaboration with their field teams - thereby subsidizing field costs and introducing our final-year postgraduates to prospective new employers. In return, our Post Project will add considerable value to their conservation projects by, for example, maintaining the national reference collections and publishing their findings through our journal. FFI has already established strong links with many of these organisations, most of which are listed under section 9a.

12. Please indicate which of the following biodiversity conventions your project will contribute to:

At least one must be selected.
- Only indicate the conventions that your project is directly contributing to.
- No additional significance will be ascribed for projects that report contributions to more than one convention

Convention on Biological Diversity (CBD)	☑ **Yes** ☐ **No**
CITES	☑ **Yes** ☐ **No**
Convention on Migratory Species (CMS)	☐ **Yes** ☑ **No**

What problem is this project addressing and how was it identified? (150 words)

Although a longstanding signatory to the CBD and CITES, Cambodia is failing to meet many of its commitments due to the lack of staff with adequate scientific training and experience, and, linked to this, insufficient biological data to base decisions upon. The incredible rate at which new species are being discovered by international scientists (section 10) signifies that Cambodia is still woefully short of even knowing which higher animals and plants it has, let alone their status, needs or how to manage them effectively. All recent priority-setting exercises have stressed the urgent need to build national scientific capacity (e.g., NBSAP, 2002): the core need that both our original project and Post Project address.

Our project design has been developed through extensive consultation with RUPP and many stakeholders (9a), building on lessons learned from the original Darwin project and FFI's 12 years of experience of successful applied conservation in Cambodia.

What will change as a result of this project? (150 words)

Although education is often considered a long-term investment, we anticipate quantifiable and lasting improvements in the documentation and management of Cambodian biodiversity even within the life of this Post Project. The immediate outcome will be significantly more Cambodian nationals with the skills, knowledge and qualifications to study and manage biodiversity. Because most of the c. 40 postgraduates are already employed by the national government or NGOs, they can apply their learning instantly to their daily work. The deployment of the country's first full-time university scientists will further boost national knowledge and capacity.

When this new generation of conservation scientists is combined with the innovative learning, networking and dissemination facilities that the Post Project will consolidate and enhance under the new Centre for Biodiversity Conservation, there is almost no limit to the species, habitats and issues that Cambodians can study and address. This outcome will last long into the future.

Why is the project important for the conservation of biodiversity? (150 words)

This project directly addresses the widely recognised need to boost Cambodia's scientific capacity to document and manage its biodiversity. This is important because Cambodia harbours some of the best remaining forests, wetlands and wildlife populations in Indochina, including a host of endemic and globally threatened species. Even though biological data are far from complete, international exercises have confirmed Cambodia to be an important part of the Indo-Burma Biodiversity Hotspot and contain a major Global 200 Ecoregion and 40 Important Bird Areas. As the human population of Cambodia increases and its economy develops, greater pressures are being placed on the country's natural resources, both inside and outside of the protected areas, with widespread evidence of, for example, illegal land clearance, logging, poaching, wildlife trade, and alien invasive species.

These mounting pressures necessitate a better-informed and more professional approach to biodiversity conservation, which this project will facilitate on a truly national scale.

How does this relate to one or more of the biodiversity conventions? (150 words)

CBD and CITES demand high levels of scientific proficiency from their Parties to document, manage, monitor and report on biodiversity at risk. CITES, for example, requires government officers to be able to identify Appendix-listed species accurately and monitor trade impacts.

The Post Project will teach more officers relevant skills to obtain, analyse and act on data, and introduce them to valuable resources e.g., the national reference collection. With regard to the CBD, this project will strengthen the ability of Cambodians, especially those from the government environmental agencies, to implement and report on Articles 5, 6, 8, 10, 12 and 13 (the MSc curriculum specifically covers the themes of Biodiversity and Tourism, Forest Biodiversity, Inland Waters Biodiversity, Protected Areas and Sustainable Use and Biodiversity). In addition, MSc candidates and Darwin Research Officers will conduct research on species or issues relevant to CBD and CITES as part of their training.

13. Explain how gains from the Post-project work will be distinct and <u>additional</u> to those of the existing project. Show where possible how these gains require limited resources and could not be achieved without the funding. (max 200 words)

The original project, from June 2005 to October 2008, was well received in Cambodia and exceeded its targets with lasting consequences, including >100 Cambodians trained (section 6).

The Post Project will add value to the original project by creating the Centre for Biodiversity Conservation as the vehicle for continuing to build capacity and advance conservation science in perpetuity. As a semi-autonomous body within RUPP, the Centre would gain an annual budget and greater decision-making powers to maintain and develop the popular MSc Biodiversity Conservation curriculum (thus training dozens more Cambodians every year), national reference collection, journal, and other assets developed under the original project. The Centre would also house the Darwin Research Officers – the university's first full-time scientists - who will work towards PhDs, and thus become more qualified to teach and sustain the MSc course.

Developing and staffing this Centre, and establishing the mechanisms to make it sustainable, should be straightforward, but will entail some development costs. While both FFI and RUPP are prepared to invest staff time and funds, DI funding will be pivotal to establishing the Centre and add further value by expanding the reference collection, journal, and other key outputs by 2011.

14. What will be the long-term benefits of the project in the host country or region and how will these help to strengthen the impact and legacy of your original Darwin project? Have you identified any potential problems to achieving these benefits? (max 250 words)

The ECTF reviewer of our last annual report wrote: "*The project was well-conceived initially and all the key building blocks are now in place for an excellent outcome and a strong legacy. Securing the bridging funds, which the project is already trying to do, will ensure that a seamless continuation into the future is achieved*."

The first project achieved lasting impacts in terms of the persons trained, new inter-organisational relationships forged and learning resources established. These are significant by themselves, but the Post Project will effectively put in place the mechanisms to allow Cambodia to continue to train more nationals, develop more collaborative partnerships, and expand the learning resources far into the future. This will mean that we will not have merely trained and equipped one generation of Cambodian scientists, but enabled many Cambodians to follow suit, with unprecedented and far-reaching impacts on the country's capacity to document, manage, monitor and report on its biodiversity. While it is difficult to predict exactly which species, areas or themes will benefit most, we will encourage our postgraduates and Darwin Research Officers to focus on the critical conservation issues that interest them.

Given the success of, and lessons learned from, the first project, we anticipate minimal problems or obstacles to achieving the Post Project outputs and purpose. A number of possible risks are indicated in the right hand column of the log frame below, but none are considered to be 'killer assumptions'.

15. 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)

While the first project focused mainly on establishing a rigorous training programme for over 100 postgraduates, the Post Project focuses on consolidating these achievements and leaving in place permanent staff and infrastructure to continue providing training, learning resources and networking opportunities for Cambodian students and scientists.

Our exit strategy is to create the Centre for Biodiversity Conservation as a dynamic, self-sustaining hub for original research, postgraduate education, information dissemination and inter-agency collaboration. The Centre will continue to develop key activities initiated under the project and Post Project, including the MSc curriculum, national zoological reference collection, herbarium, and *Journal of Cambodian Natural History*. The costs of maintaining the Khmer-staffed Centre will be relatively low and readily fundable through RUPP, student fees, small grants and, potentially, occasional EIA consultancies.

Most postgraduates trained by FFI and, soon, the Centre, will contribute to biodiversity conservation throughout their government and NGO careers. As some graduates are keen to become full-time scientists and pursue PhDs, however, they will be helped to achieve this as Darwin Research Scholars within the new Centre. (Part of the Post Project training they will receive from FFI will teach them how to apply for PhD scholarships and small grants).

16. How will the results of the project be disseminated; how will the project be advertised as a Darwin project and in what ways will the Darwin name and logo be used? (max 200 words)

While this project has become well known and respected within Cambodia, we intend to seek and develop more opportunities to document and promote this project internationally, and acknowledge Darwin Initiative's contribution accordingly. This project is, we believe, a very striking example of what the Darwin Initiative programme has been designed to do.

Press releases, compiled by project staff and disseminated through FFI's Cambodia and Cambridge offices, will be timed to coincide with the annual Masters graduation ceremonies, the official opening of the Centre for Biodiversity Conservation, important research findings by the Darwin Research Scholars, and all other key events and outputs.

The *Cambodian Journal of Natural History* will continue to show the Darwin logo and credit Darwin Initiative as a major contributor, as will all scientific papers published by project staff, Darwin Research Scholars and the many postgraduate students over the coming years. The project team are already in discussion with *Oryx – The International Conservation Journal* to publish a paper documenting this project's methods and lessons learned as part of their planned Darwin Initiative Twentieth Anniversary issue. The project team will also publicise the project, and Darwin's support, through the FFI magazine and website.

17. If your project includes training and development, please indicate how you will assess the training needs in relation to the overall purpose of the project. Who are the target groups? How will the training be delivered? What skills and knowledge to you expect the beneficiaries to obtain. How will you measure training effectiveness. (max 300 words)

You should address each of these points.

The entire Post Project focuses on training and development and will:

- Deliver the 8-week Bridging Course and 2-year MSc in Biodiversity Conservation, established by the first project, to at least 40 more postgraduates, and complete the mechanisms and trainers to continue this curriculum every year. The trainees will be c.40% government officers (Ministry of Environment and the Ministry of Agriculture, Fisheries and Forestry), c.25% NGO staff, c.25% recent graduates from environmental sciences, and c.10% private. The modules cover a wide range of topics relevant to applied natural resource management. To measure skills and knowledge gained, students will be formally evaluated with examinations at the end of every term and from course work completed (the most important being their thesis).
- 'Train trainers': FFI will identify and coach at least three Cambodian postgraduates to teach specific modules and replace international lecturers (these may include one or more Darwin Research Officers).
- Provide advanced training, mentoring and PhD scholarship opportunities for 5-10 Darwin Research Officers, selected from among the best MSc graduates to become full-time scientists at RUPP. With FFI's guidance, they will learn how to design and implement original research studies, apply for small grants, and publish their work. Effectiveness will be measured in the quality of their research and its applicability to either CBD or CITES.

Training effectiveness will also be measured in terms of course popularity (number of applicants) and continued willingness from our stakeholders to collaborate on teaching, hosting students, conducting joint research, etc. The Post Project is intended to make good use of the network of other projects and organisations in Cambodia to provide opportunities for the students and scientists to work and learn alongside experienced Cambodians and British experts, and to run a guest lecture series to expose students to real conservation scenarios.

LOGICAL FRAMEWORK

18. Please enter the details of your project onto the matrix using the note at Annex 3 of the Guidance Note for Main applications.

Project summary	**Measurable Indicators**	**Means of verification**	**Important Assumptions**
Goal: Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.			
Sub-Goal: Heightened capacity of Cambodian scientists to meet national requirements for the CBD and CMS.	Within 5 years of project end, scientists trained and equipped by this project inform and evaluate conservation decisions to a higher standard within Cambodia.	Country reports to CBD and CITES.	
Purpose Strengthen and consolidate Cambodia's conservation science capacity by developing the Centre for Biodiversity Conservation (CBC) as the national hub for original research, postgraduate education, information dissemination and inter-agency collaboration.	At least 20 original research projects on topics relevant to the conventions conducted by CBC scientists and postgraduate students in collaboration with at least 10 different institutions. MSc curriculum, reference collections and journal continue to be delivered and enhanced to benefit scientists and decision-makers in every province.	Papers, theses and other scientific publications produced by CBC scientists and alumni. Records of nationals enrolled on MSc curriculum, using the reference collections, and/or subscribing to the journal. Darwin Initiative final project report and ECTF evaluation.	Cambodian government continue to give national scientists free rein to conduct research, organise meetings and publicly disseminate their findings. Continued interest and cooperation from other NGOs in Cambodia.
Outputs 1. The formalization of the Centre for Biodiversity Conservation as an independent unit within the Royal University of Phnom Penh (RUPP).	Centre for Biodiversity Conservation fully functioning, with its own director, regulations, operational budget, and capacity to generate funding.	Regulations developed and officially endorsed. Annual reports and accounts. Site visit by Darwin Initiative.	Continued support from RUPP leaders and the wider conservation community.
2. Masters of Science in Biodiversity Conservation programme enhanced and continued as a permanent fixture at RUPP.	Courses and exams held every semester and at least 40 students trained during the project period. At least 3 international lecturers on the MSc course replaced by Cambodian trainers.	Attendance records and examination results. Theses produced by final-year students. Trainer records and contracts.	Continued high interest in the course from prospective students and employers. Sufficient postgraduates interested in teaching.

3. A permanent cadre of national scientists ('Darwin Research Officers') employed by the RUPP Centre for Biodiversity Conservation to advance biodiversity science in Cambodia.	5-10 full-time, postgraduate Cambodian scientists recruited to supervise students and pursue original lines of research on topics pertaining to the CBD and CITES.	Contracts, terms of reference, and work plans for each Darwin Research Officer. At least 5 scientific papers produced by Darwin Research Officers. Guest lecture series	Sufficient number of high-calibre postgraduates interested in career in science. Other donors willing to co-fund research studies through small grants.
4. Continued growth and improvement of the national zoological reference collection, herbarium and journal as resources for conservation scientists nationwide.	50% increase in the number of voucher specimens maintained in the national zoological reference collection and herbarium. At least two issues of the *Cambodian Journal of Natural History* published, with peer-reviewed manuscripts from scientists from at least 15 different institutions.	Reference museum holdings database. Journal, both in print and online.	The relevant government agencies continue to grant permits to collect specimens. Sufficient authors submitting manuscripts and continued support from peer-reviewers.

Activities (details in workplan)

1.1 Develop Centre for Biodiversity Conservation regulations and establish a management committee.
1.2 Recruit Director and develop Centre for Biodiversity Conservation operational plan and budget
1.3 Organise official opening ceremony and press release.

2.1 Run 8-week Bridging Course every year for 20-40 applicants to the MSc course.
2.2 Teach three terms of the MSc Biodiversity Conservation curriculum every year (12 modules and 40 students).
2.3 Identify and coach at least three Cambodian postgraduates to replace international lecturers.
2.4 Enable final-year students to conduct their research theses in collaboration with other projects and organisations in Cambodia.

3.1 Using a transparent selection process, recruit 5-10 Darwin Research Officers and finalise their terms of reference.
3.2 Darwin Research Scholars develop original research proposals and apply for PhD scholarships and small grants.
3.3 Darwin Research Scholars conduct original research in collaboration with other projects and organisations in Cambodia.
3.4 Darwin Research Scholars organise guest lecture series and disseminate their findings in conferences and various journals.

4.1 Organise expeditions to collect additional voucher specimens of plants and lower animals, ensuring they are correctly preserved, labelled and documented.
4.2 Issue call for papers and undertake rigorous peer review process for all eligible manuscripts received.
4.3 Peer-review manuscripts, publish and disseminate the *Cambodian Journal of Natural History*.

Monitoring activities:

Indicator 1: *Centre for Biodiversity Conservation fully functioning, with its own director, regulations, operational budget, and capacity to generate funding.*

1.a Weekly meetings of the FFI Project Manager, RUPP Coordinator and MoE biologist (and Director of the Centre, when recruited in Year 2).
1.b Monthly meetings of the FFI-RUPP Steering Committee.
1.c Monthly oversight of the Centre for Biodiversity Conservation budget and accounts by FFI project leaders and finance manager.
1.d Annual Reports by the Centre for Biodiversity Conservation.

Indicator 2: *Courses and exams held every semester and at least 40 students trained during the project period. At least 3 international lecturers on the MSc course replaced by Cambodian trainers*.

2.a Examination results compiled by the project team, verified by Steering Committee and stamped by the Dean.
2.b Theses reviewed and graded by Ministry of Youth, Education and Sports examiners and verified by the Steering Committee.
2.c Project office maintains records of trainers and student feedback (using questionnaires) on the quality of teaching.

Indicator 3: *5-10 full-time, postgraduate Cambodian scientists recruited to supervise students and pursue original lines of research on topics pertaining to biodiversity management.*

3.a Darwin Research Scholars submit work plans and monthly progress reports to project leaders.
3.b Copies of all research publications by Darwin Research Scholars deposited in project files and the university library.
3.c Records maintained by project office of the guest lecturers and titles.

Indicator 4: *50% increase in the number of voucher specimens maintained in the national zoological reference collection and herbarium. At least two issues of the Cambodian Journal of Natural History published, with peer-reviewed manuscripts from scientists from at least 15 different institutions.*

4.a Reference museum holdings database kept up to date by curators and subject to random checks by project leaders.
4.b Journal papers monitored using standard peer-review process, and layout reviewed by FFI Communications before going to press.

Other relevant project management monitoring activities:

- Project accounts compiled monthly by the FFI Cambodia office and reviewed by FFI Finance Department in Cambridge.
- Biannual reporting by the project leaders to Darwin Initiative.
- Quarterly and Annual reporting by project leaders to Fauna & Flora International against agreed milestones.
- Quarterly reports from Fauna & Flora International Cambodia Programme to the Ministry of Foreign Affairs (Royal Government of Cambodia).

19. 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 Post Project.

	Activity	Months	Year 1				Year 2				Year 3			
		(Total)	1	2	3	4	1	2	3	4	1	2	3	4
1.1	Develop Centre for Biodiversity Conservation regulations and establish a management committee.	c. 12	X	X	X	X	X							
1.2	Recruit Director and develop Centre for Biodiversity Conservation operational plan and budget	4					X	X						
1.3	Organise official opening ceremony and press release.	1							X					
2.1	Run 8-week Bridging Course every year for 20-40 applicants to the MSc course.	4			X				X					
2.2	Teach three terms of the MSc Biodiversity Conservation curriculum every year (12 modules and 40 students).	16	X		X	X	X		X	X				
2.3	Identify and coach at least three Cambodian postgraduates to replace international lecturers.	12			X	X	X	X						
2.4	Enable final-year students to conduct their research theses in collaboration with other projects and organisations in Cambodia.	c. 12		X	X			X	X					
3.1	Using a transparent selection process, recruit 5-10 Darwin Research Officers and finalise their terms of reference.	2	X	X										
3.2	Darwin Research Scholars develop original research proposals and apply for PhD scholarships and small grants.	c. 4		X	X									
3.3	Darwin Research Scholars conduct original research in collaboration with other projects and organisations in Cambodia.	c. 18				X	X	X	X	X				
3.4	Darwin Research Scholars organise guest lecture series and disseminate their findings in conferences and various journals.	2								X				
4.1	Organise expeditions to collect additional voucher specimens of plants and lower animals, ensuring they are correctly preserved, labelled and documented.	3				X	X							
4.2	Issue call for papers and undertake rigorous peer review process for all eligible manuscripts received.	6	X	X			X	X						
4.3	Publish and disseminate the *Cambodian Journal of Natural History.*	2			X				X					

20. Please indicate which of the following Standard Measures you are likely to report against. You will not necessarily plan to cover all these Standard Measures in your project.

Standard Measure No	Description	Tick if Relevant
1A	Number of people to submit thesis for PhD qualification (in host country)	
1B	Number of people to attain PhD qualification (in host country)	
2	Number of people to attain Masters qualification (MSc, MPhil etc)	✓
3	Number of people to attain other qualifications (ie. Not outputs 1 or 2 above)	
4A	Number of undergraduate students to receive training	
4B	Number of training weeks to be provided	
4C	Number of postgraduate students to receive training	✓
4D	Number of training weeks to be provided	✓
5	Number of people to receive at least one year of training (which does not fall into categories 1-4 above)	
6A	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above)	✓
6B	Number of training weeks to be provided	✓
7	Number of (ie different types - not volume - of material produced) training materials to be produced for use by host country	✓
8	Number of weeks to be spent by UK project staff on project work in the host country	✓
9	Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country	
10	Number of individual field guides/manuals to be produced to assist work related to species identification, classification and recording	
11A	Number of papers to be published in peer reviewed journals	✓
11B	Number of papers to be submitted to peer reviewed journals	✓
12A	Number of computer based databases to be **established** and handed over to host country	
12B	Number of computer based databases to be **enhanced** and handed over to host country	
13A	Number of species reference collections to be **established** and handed over to host country(ies)	
13B	Number of species reference collections to be **enhanced** and handed over to host country(ies)	✓
14A	Number of conferences/seminars/ workshops to be **organised** to present/disseminate findings	✓
14B	Number of conferences/seminars/ workshops **attended** at which findings from Darwin project work will be presented/ disseminated.	
15A	Number of national press releases in host country(ies)	✓
15B	Number of local press releases in host country(ies)	
15C	Number of national press releases in UK	✓
15D	Number of local press releases in UK	
16A	Number of newsletters to be produced	✓
16B	Estimated circulation of each newsletter in the host country(ies)	✓
16C	Estimated circulation of each newsletter in the UK	
17A	Number of dissemination networks to be **established**	
17B	Number of dissemination networks to be **enhanced/ extended**	✓
18A	Number of national TV programmes/features in host country(ies)	
18B	Number of national TV programmes/features in UK	
18C	Number of local TV programmes/features in host country(ies)	
18D	Number of local TV programmes/features in UK	
19A	Number of national radio interviews/features in host county(ies)	✓
19B	Number of national radio interviews/features in UK	
19C	Number of local radio interviews/features in host country(ies)	
19D	Number of local radio interviews/features in UK	
20	Estimated value (£'s) of physical assets to be handed over to host country(ies)	✓
21	Number of permanent educational/training/research facilities or organisations to be established and then continued after Darwin funding has ceased	✓
22	Number of permanent field plots to be established during the project and continued after Darwin funding has ceased	
23	Value of resources raised from other sources (ie in addition to Darwin funding) for project work	✓

PROJECT BASED MONITORING AND EVALUATION

21. Describe, referring to the Indicators in the Logical Framework, how the progress of the project will be monitored and evaluated, including towards delivery of its outputs and in terms of achieving its overall purpose. This should be during the lifetime of the project and at its conclusion. Please include information on how host country partners will be included in the monitoring and evaluation.

As the grantee, FFI will be responsible for overall project implementation and follow standard international project cycle management practises to monitor project activities, outputs, income and expenditure. FFI has a permanent presence in Cambodia, including an in-country financial administration unit, making it easy to keep close track of project developments on the ground.

Key measurable indicators to be evaluated during the Post Project period are as follows:

Indicator 1: Centre for Biodiversity Conservation fully functioning, with its own director, regulations, operational budget, and capacity to generate funding.

Indicator 2: Courses and exams held every semester and at least 40 students trained during the project period. At least 3 international lecturers on the MSc course replaced by Cambodian trainers.

Indicator 3: 5-10 full-time, postgraduate Cambodian scientists recruited to supervise students and pursue original lines of research on topics pertaining to biodiversity management.

Indicator 4: 50% increase in the number of voucher specimens maintained in the national zoological reference collection and herbarium. At least two issues of the *Cambodian Journal of Natural History* published, with peer-reviewed manuscripts from scientists from at least 15 different institutions.

The FFI Project Manager, RUPP Coordinator and Ministry of Environment biologist will meet at least once a week and also hold monthly meetings with the FFI Cambodia Programme Director and the RUPP Steering Committee to review progress against the agreed targets, resolve any problems and plan forthcoming activities.

In addition to DI reporting requirements, all FFI projects are required to produce rigorous annual reports and evaluate themselves against quarterly milestones. As the Centre for Biodiversity Conservation becomes formalized, the new Centre director will also become integral to these monitoring and evaluation meetings and required to produce regular reports. Further details of the monitoring activities linked to each indicator are shown in the Log Frame.

After the project ends, the permanent FFI staff in Cambodia will continue to liaise with RUPP to track the future progress of persons trained by the project (including MSc graduates and Darwin Research Officers) and assess the status of the MSc curriculum, zoological reference collection and herbarium, reference library, journal and other research facilities and equipment developed by this project.

FUNDING AND BUDGET

Please complete the separate Excel spreadsheet which will provide the Budget information for this application. Some of the questions below refer to the information in this spreadsheet.

NB: Please state all costs by financial year (April to March). Use current prices – and include anticipated inflation, as appropriate up to 3% per annum. The Darwin Initiative will not be able to agree increases in grants to cover inflation on UK costs once grants are awarded.

22. How is your organisation currently funded? (max 100 words)

In 2007, FFI had a total income of £9,631,000 from a range of sources:

- 38% from Statutory sources
- 27% from Trusts and Foundations
- 17% from Corporate Donors
- 17% from Individuals
- 1% from Membership

Donor relationships have been maintained over a prolonged period of activity, demonstrating both a strong conservation performance and technical credibility, combined with effective financial management and reporting. Furthermore, conservation expenditure accounted for 85% of overall expenditure in 2007, with just 10% being spent on Management and Administration and a further 5% on Fundraising.

23. Provide details of all <u>confirmed</u> funding sources identified in the Budget that will be put towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity. Please include any additional <u>unconfirmed</u> funding the project will attract to carry out addition work during or beyond the project lifetime. Indicate those funding sources which are confirmed.

Confirmed:

US Fish & Wildlife Service has awarded FFI a grant of US$ 51,717 (£32,941) for 2009-2010.

Several key personnel will be funded in part or full by the Ministry of Environment (including baseline government wages for Neang Thy and Sour Sethy and Dr Brad Pettitt (one month of his time given per year). The Royal University of Phnom Penh will also contribute staff time and utilities, conservatively valued at £ 5,618.

Additional support for the Darwin Research Officers and Masters candidates to conduct field research will be provided by other projects managed by FFI, and by other organisations with field programmes in Cambodia, to an estimated value of at least £9,713. (Current confirmed donors to FFI's other field projects include US Fish and Wildlife Service, Disney Worldwide Conservation Fund, McKnight Foundation, and BBC Wildlife Fund).

Unconfirmed:

A grant from Darwin Initiative would unquestionably help to lever additional funding. FFI has been invited to apply to the MacArthur Foundation for $400,000 (>£255,000) over three years (1 June 2009 to 31 May 2012), of which approximately £79,752 is directly relevant to achieving the outputs of the Darwin Post Project in Years 1 and 2. If that is unsuccessful, we will seek follow-up funding from US Fish & Wildlife Service and Zoos Victoria to meet the shortfall.

24. Please give details of any further funding resources (confirmed or unconfirmed) sought from the host country partner (s) or others for this project that are not already detailed in the Budget or Question 22. This will include donations in kind or un-costed support eg accommodation. (max 50 words per box)

Financial resources:

Funding in kind:

RUPP provides office facilities, specimen collection rooms, library, lecturing support, plus some research equipment (including all items purchased under the original project).

Many British/ other lecturers on the MSc curriculum are salaried by their universities and give time freely. All expert peer-reviewers for the journal also donate their time.

25. What was the amount of funding for the original Darwin Project?

	Total Project Costs £
Amount of original Darwin Initiative project funding	154,484
+ Funding/Income from other sources	240,166
= Total original project cost	394,650

FCO NOTIFICATION

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 details of the Darwin Post-project and the resultant work in the UK or in the host country. ☐

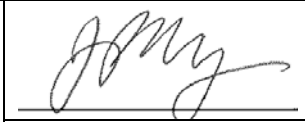
CERTIFICATION 2009/10

On behalf of the trustees of Fauna & Flora International

I apply for a grant of £68,925 in respect of expenditure to be incurred in the financial year ending 31 March 2010 on the activities 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 lead UK institution to submit applications and sign contracts on their behalf.)

I enclose a copy of the organisation's most recent audited accounts and annual report, CVs for project principals and letters of support.

Name (block capitals)	DR. JENNIFER DALTRY		
Position in the organisation	Senior Conservation Biologist		
Signed		**Date:**	1 December 2008

Post Project Application - Checklist for submission

	Check
Have you provided actual start and end dates for your project?	X
Have you provided your budget based on UK government financial years ie 1 April – 31 March?	X
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?	X
Is the concept note within 1,000 words?	X
Is the logframe no longer than 2 pages?	X
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 the Project Leader, any other UK staff working >50% on this project, and for a main individual in each overseas partner organisation?	X
Have you included a letter of support from the main overseas partner organisations?	X
Have you checked with the FCO in the project country/ies and have you included any evidence of this?	X
Have you included a copy of your most recent annual report and accounts? An electronic link to a website is acceptable.	X
Have you read the Guidance Notes for both Main projects and Post Projects ?	X

Once you have answered Yes to the questions above, please submit the application, not later than midnight GMT on **Monday 1 December 2008** to Darwin-Applications@ltsi.co.uk using the first few words of the project title as the subject of your email. However, 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). In addition, a hard copy of the application and any supporting documents not available electronically should be submitted to the Darwin Applications Management Unit, c/o ECTF, Pentlands Science Park, Bush Loan, Penicuik EH26 0PL postmarked **not later than Tuesday 2 December 2008.**

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.