



Submit by 21 January 2005

Revised version (new start date: Oct 05 instead of Apr 05)

DARWIN INITIATIVE APPLICATION FOR GRANT ROUND 13 COMPETITION:STAGE 2

Please read the Guidance Notes before completing this form. Applications will be considered on the basis of information submitted on this form and you should give a full answer to each question. Please do not cross-refer to information in separate documents except where invited on this form. The space provided indicates the level of detail required. Please do not reduce the font size below 11pt or alter the paragraph spacing. Keep within word limits.

1. Name and address of organisation

Name: William Darwall IUCN/SSC Freshwater Biodiversity Assessment Programme	Address: 219c Huntingdon Road Cambridge CB3 0DL
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2. Project title (not exceeding 10 words)

Strengthening pro-poor wetland conservation using integrated biodiversity and livelihood assessment

3. Project dates, duration and total Darwin Initiative Grant requested

Proposed start date: Oct 2005 Duration of project: 3.5 years (42 months)					
Darwin funding requested	Total	2005/06	2006/07	2007/08	2008/09
	£274,256	£40,727	£112,269	£76,948	£44,312

4. Define the purpose of the project in line with the logical framework

Pro-poor approaches to the conservation and sustainable use of threatened wetlands strengthened through improved capacity, awareness and information on the biodiversity and livelihood value of aquatic ecosystems in the Lower Mekong and East Africa

5. Principals in project. Please provide a one page CV for each of these named individuals

Details	Project Leader	Other UK personnel (working more than 50% of their time on project)	Main project partner or co-ordinator in host country
Surname	Darwall	Allison	Emerton
Forename (s)	William	Edward	Lucy
Post held	Head of Freshwater Biodiversity Programme	Senior Lecturer	Regional Group Head of Ecosystems and Livelihoods Group
Institution	IUCN — The World Conservation Union (UK)	University of East Anglia	IUCN — The World Conservation Union (Asia)
Department	Species Programme	School of Development Studies	Asia Programme
Telephone			
Fax			
Email			

6. Has your organisation received funding under the Darwin Initiative before? If so, give details

Yes, Darwin award to IUCN Wildlife Trade Programme (Cambridge, UK): "Training for conservation and sustainable use of reptiles in Togo". Ref 162/07/060. Awarded in 1998.

7. IF YOU ANSWERED NO TO QUESTION 6 describe briefly the aims, activities and achievements of your organisation. (Large institutions please note that this should describe your unit or department)

8. Please list the overseas partners that will be involved in their project and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. What steps have been taken to ensure the benefits of the project will continue despite any staff changes in these organisations? Please provide written evidence of partnerships.

The project will operate in Cambodia (Stoeng Treng Ramsar Site) and Tanzania (Rufiji Floodplain and Delta). These locations have been carefully chosen based on a number of selection criteria. A cross-regional focus, incorporating both Africa and Asia, provides the opportunity of facilitating and promoting horizontal learning and interchange. Both countries contain wetlands of high national and global importance which also play a critical role in livelihoods, and are also countries where the incidence of rural poverty is high. They share many common issues and problems regarding wetland management and sustainable livelihoods development, which in turn require similar methodologies, approaches and management responses. At the same time the two sites, which both represent areas of globally significant biodiversity which have already been prioritised by government, together cover a representative and varied range of socio-economic, ecological, biodiversity and threat circumstances, thereby providing a good opportunity for replicating and sharing the approaches and lessons learned during the course of the project with a wider audience.

The Ecosystems and Livelihoods Group (ELG) of IUCN — The World Conservation Union Asia Programme will act as the overall project co-ordinator of field activities in Asia and Africa, working through IUCN offices in Eastern Africa/Tanzania and Lower Mekong/Cambodia. Containing both Biodiversity and Species and Environmental Economics Programmes, ELG already coordinates a number of global and cross-regional projects dealing with wetlands conservation in Africa and Asia. It thus already has considerable knowledge and relationships with project partners, as well as having carried out substantial work on wetlands economics, livelihoods and biodiversity in the project sites and countries. ELG therefore provides an base which contains the technical and institutional expertise to effectively act as a link between the UK agencies and national partners, to coordinate project activities at a national and site level, and to facilitate the sharing and practical application of project lessons learned more widely in Africa and Asia. ELG, through a UK staff member, will also provide environmental economics technical support to the project.

In each of the countries and sites the project has two main sets of national partners:

- Principal research partners who will be engaged in carrying out the wetland assessment. These partners have been chosen as the institutes in each country who have the mandate and expertise to carry out research into wetland flora, fauna and socio-economic aspects. The responsibility of these agencies will be to assist in the formulation, implementation and analysis of field wetland assessments.
- Management partners will play a key role in acting on the conservation and development recommendations arising from the wetland assessments. These partners have been chosen from the agencies in each country who have national-level responsibilities for environmental coordination and wetlands management, and who are responsible at the local level for overseeing wetland conservation and development in each of the two field sites. The responsibility of these agencies will be to assist in formulating the management recommendations arising from the wetland assessments, and to take a lead in ensuring that these are shared with other government and non-government agencies whose activities impact on wetlands. Management partners are described below, Section 9.

In Cambodia, the principal research partner will be the Inland Fisheries Research and Development Institute (IFRDI) of the Ministry of Agriculture, Forests and Fisheries (MAFF). IFRDI has a mandate to carry out research on fisheries production, conservation and development in Cambodia in order to inform national and local policy and management practice. Additional assistance will be provided, if appropriate, from the Royal University of Agriculture. In Tanzania, the principal research partner will be the University of Dar es Salaam (UDSM). UDSM includes the Institute of Resource Assessment and Departments of Zoology, Botany and Aquatic Environment and Conservation, who play a primary role in carrying out research and policy analysis on wetland conservation and sustainable development. These role of these agencies will be to assist in the formulation, implementation and analysis of integrated wetland assessments.

This project has been developed in response to the stated priorities identified by the overseas partners in both countries. Project activities have been identified through processes of consultation carried out by IUCN over the last 2 years in the course of national-level collaboration with these agencies, and through village-level participatory planning associated with wetland assessment and conservation activities in Stoeng Treng

Ramsar Site and Rufiji Floodplain and Delta. In Cambodia, the need for project activities was defined during the planning and formulation of the IUCN-UNDP-MRC-Government of Cambodia Lower Mekong Wetlands Biodiversity Programme (LMWBP), which has Stoeng Treng Ramsar Site as a demonstration site in Cambodia. In Tanzania, the project has been formulated as a follow-up to the IUCN-Government of Tanzania Rufiji Environmental Management Project (REMP), in response to requests from the national partner agencies. In both instances, the Darwin project has been identified as a priority action to fill existing gaps in information on the links between wetland biodiversity, economy and livelihoods, and specifically to develop tools to link wetland conservation practice to sustainable livelihoods, poverty alleviation and development planning. These initiatives are described further below, Section 10.

The project has taken steps to ensure that its benefits will continue despite any staffing changes within the overseas partner agencies. The basic aim of the project is to build national and local capacity in integrated and pro-poor wetlands research and management. It is to be expected that the focus on developing capacity and awareness at the institutional level will act as a buffer against changes in staff members. The project also targets a diverse audience, in institutional terms, thereby ensuring a wide reach of project benefits beyond individuals. Especially the focus on using assessment to generate recommendations that will be incorporated into wetland management practice by a diverse range of agencies and stakeholders, both government and non-government, will enhance sustainability. Finally the fact that the project forms a component of already ongoing activities and collaboration between IUCN and the overseas counterpart agencies, at national and local levels, maximises the likelihood of benefits continuing.

9. What other consultation or co-operation will take place or has taken place already with other stakeholders such as local communities? Please include details of any contact with the government not already provided.

As described above in Section 8, the project will work with management partners in order to promote cross-sectoral integration in wetlands management and development planning, and to ensure that the recommendations and information arising from project activities are translated into on-the-ground conservation and development policy and management practice. These agencies have played a key role in project identification and development.

In Cambodia, the Ministry of Environment (MoE), will be the main management partner for the project. The Ministry of Environment is the administrative authority for both the Convention on Biological Diversity and the Ramsar Convention and has the mandate for the management of protected areas. The project will also work closely with the Department of Fisheries (DoF) of MAFF. The latter is responsible for fisheries concession areas, fish sanctuaries, as well as inundated forests, swamps and other fish production areas, and contains the Community Fisheries Development Office who oversee local engagement in fisheries and wetland management. Both MoE and DoF have a decentralised structure, with key staff operating at the Provincial level in Stoeng Treng Ramsar Site. UNDP, the implementing agency for the LMWBP, will also be a key partner for activities in Cambodia. In Tanzania, Rufiji District Council (RDC), working with Village Environmental Management Committees (VMCs), and the National Environmental Management Council (NEMC) will be the main management partners for the project. RDC has responsibility for overseeing development and conservation processes within Rufiji District, while NEMC has the responsibility for national-level environmental coordination in Tanzania.

As mentioned above, IUCN already has a close working relationship and history of collaboration, at national and site levels, with both the overseas partners, other agencies and the local communities in Stoeng Treng Ramsar Site and Rufiji Floodplain and Delta. In both countries and sites, these other partnerships will be critical to project implementation. These other agencies have also provided input into formulating the activities that form a part of this project, mainly through village and national-level consultation.

In Stoeng Treng Ramsar Site, key partners include Commune (Sangkat) Councils and Village Fisheries Committees. A national NGO, the Cultural and Environment Preservation Association (CEPA), and the Australian NGO Community Aid Abroad (CAA), have been working on developing and implementing community fisheries management activities in Stoeng Treng, and will also be important partners in the project. In Rufiji Floodplain and Delta, additional linkages will be formed with the Division of the Environment (the administrative authority for the CBD in Tanzania) and the Wildlife Division (the national authority for the Ramsar Convention). The Regional Natural Resources Department, the District Natural

Resources Officers and Village Environment Committees (VECs) have been collaborating for four years in Environmental Management Planning in Rufiji District. Subsequent to the development and implementation of Village Environment Management Plans, the VECs initiated a self-assessment to review experiences, learn lessons and improve the process. This project will benefit from these experiences

PROJECT DETAILS

10. Is this a new initiative or a development of existing work (funded through any source?) Are you aware of any other individuals/organisations carrying out similar work, or of any completed or existing Darwin Initiative projects relevant to your work? If so, please give details explaining similarities and differences and showing how results of your work will be additional to any similar work and what attempts have/will be made to co-operate with and learn lessons from such work for mutual benefits.

The use of economic valuation techniques has contributed greatly to strengthening the case for biodiversity conservation. When economic valuations are combined with biodiversity surveys, this allows informed decision-making on conservation priorities and needs. The main limitations of the bio-economic approaches are that they do not provide much information on the consequences of different conservation actions for peoples' livelihoods at the individual and household level, neither do they provide guidance on appropriate policy and institutional mechanisms for achieving conservation and development goals. Sustainable Livelihoods approaches used by development agencies to inform pro-poor policies, in turn, tend to oversimplify by reducing biodiversity to undifferentiated 'natural capital'. This project will develop an assessment framework that integrates biodiversity assessment and economic valuation method with the methods and processes of the 'Sustainable Livelihoods Approach', thereby aiding the integration of conservation and development goals.

It is widely accepted that biodiversity and poverty are linked but the linkage is seldom recognised and acted upon in the development planning process. This project will, for the first time develop the methodology to link together existing data sets from a number of existing projects on the status and distribution of freshwater biodiversity, the socio-economic value of wetland goods and services, and the links between wetlands and livelihoods. This will be achieved through building on existing outputs from a number of completed and ongoing projects within two pilot sites, Rufiji Delta in Tanzania and the Stoeng Treng Ramsar Site in Cambodia. The methodology will be directly transferable to other wetland sites nationally, regionally and globally. The most relevant of these projects, with which the project will work directly, are the ongoing Lower Mekong Wetlands Biodiversity Programme (LMWBP) in Cambodia, and the recently-completed Rufiji Environmental Management Programme (REMP) in Tanzania. These are being carried out by IUCN in partnership with the Governments of Cambodia and Tanzania respectively.

Since its preparatory phase and after its recent final approval in July 2004, the LMWBP (primarily funded by GEF, UNDP and the Netherlands Government) has been working at the regional (Lower Mekong Basin), national (Cambodia, Lao PDR, Thailand and Vietnam) and local (e.g. Stoeng Treng Ramsar Site) levels to conserve and sustainably use biological diversity in the wetlands of the Lower Mekong River Basin. The LMWBP will generate the key biodiversity, socio-economic, and livelihoods data sets that this Darwin Project will build on to develop and demonstrate the methodology for linking and integrating biodiversity, socio-economic and livelihoods considerations in the development process at the site level (Stoeng Treng). The LMWBP has an overall budget of \$30 million of which one third is provided by GEF, one third has been identified as co-finance, and an additional one third of co-finance is still required. This Darwin project would contribute towards this co-finance requirement. The overseas partners identified for the Darwin project are also the national counterpart agencies for the LMWBP project.

Between 1998-2003, REMP (funded by the Netherlands Government) had the goal of promoting the long-term conservation and sustainable use of wetland resources and to improve and secure local livelihoods at a selection of pilot studies within Rufiji catchment. It also generated field data on the economic value of wetland resources, floodplain and delta ecology and biodiversity, and local livelihood-environment links. Again, the data sets generated will be made available to the Darwin project so they may be integrated with and add value to the REMP outcomes. The overseas partners identified for the Darwin project were also the national counterpart agencies for this project.

Additional biodiversity information will be provided by the recently completed IUCN Freshwater Biodiversity Assessment in Eastern Africa (funded by the Netherlands Government), and the Biodiversity Assessment Training Workshops in East Africa and in the Lower Mekong (funded by IUCN/WANI) have prepared a core group of experts to assist in generating the biodiversity information for the two sites in Tanzania and Cambodia.

Economic valuation methods and information will be supported from the findings and activities being carried out under the DFID-funded IUCN project “Integrating Wetland Economic Values into River Basin Management”. With field sites in Stoeng Treng Ramsar Site and the Pangani Basin, Tanzania, this project has generated important baseline data which will feed into Darwin project activities (for further details see <http://iucn.org/themes/wani/value.html>).

ODG/UEA, in partnerships with Sokoine and Dar es Salaam Universities, has conducted a series of DFID rural livelihoods policy research projects in Tanzania (see www.uea.ac.uk/odg/ladder) that have included the livelihood contribution of fishing, wildlife hunting and irrigated agriculture at sites in Rufiji basin. This programme also connected local livelihood strategies with the impacts of national and global development policies such as structural adjustment and market liberalisation and political decentralisation. This work will provide useful data for the proposed project.

The Darwin project has been formulated in order to address remaining needs and issues identified by national partner agencies and local stakeholders. It complements and adds value to these existing activities by introducing a specific focus on pro-poor mechanisms for wetland conservation and on an integrated approach to wetland assessment, and aims to generate and analyse data on species and livelihoods that would not otherwise be made available. The wetland species and livelihood data it aims to generate, as well as maps and databases, will provide vital planning inputs and management recommendations for these other projects and wetland/river basin management processes. By undertaking training and building awareness on integrated and pro-poor wetland assessment techniques the Darwin project will make a tangible contribution to strengthening capacity within the national and local institutions participating in these projects. A key outcome will be the combination of existing data sets on the status of biodiversity and the value of that biodiversity to local livelihoods to enable prioritisation for site level actions to protect the most threatened biodiversity which also has the greatest importance in local livelihoods – a pro-poor conservation approach.

There are a number of clear benefits to the Darwin project of operating alongside these other initiatives, including the presence of co-finance for Darwin activities. By working within the context of institutional partnerships that have already been developed and cemented through an ongoing programme of work, there is a much greater likelihood of acceptance and uptake of the techniques and the tools that the Darwin project aims to promote — as well as a much clearer link between the Darwin project’s aims and activities to the priorities and current programmes and plans of counterpart agencies. These other projects also provide an important (and longer-term) mechanism for translating the findings of the Darwin project, and using its tools, to influence on-the-ground wetlands policy and management practice. Some of the information being generated as part of these other projects, as well as their activities in awareness, consultation and outreach, will also provide useful inputs (and mechanisms for dissemination) for the Darwin project.

11. How will the project assist the host country in its implementation of the Convention on Biological Diversity? Please make reference to the relevant article(s) of the CBD thematic programmes and/or cross-cutting themes (see Annex C for list and worked example) and rank the relevance of the project to these by indicating percentages. Is any liaison proposed with the CBD national focal point in the host country? Further information about the CBD can be found on the Darwin website or CBD website.

Both Cambodia and Tanzania have ratified the Convention on Biological Diversity (CBD) (February 1995 and March 1996 respectively), and have prepared National Biodiversity Strategies and Action Plans (NBSAPs) (2002 and 1999 respectively).

The project relates to the following thematic programmes and cross-cutting themes of the CBD: indicators (10%), inland waters biodiversity (50%), the ecosystem approach (10%), and sustainable use and biodiversity (30%). By strengthening the capacity of wetland conservation and development planners, policy-makers and managers to assess and act on the biodiversity, livelihood, and economic value of

wetlands, the project will support Governments' implementation of Articles 6b (general measures for conservation and sustainable use - 10%), 7 (identification and monitoring – 25%), 10 (sustainable use – 10%), 11 (incentive measures – 10%), 12 (research and training - 10%), 13 (public education and awareness - 10%), 17 (exchange of information - 10%), and 18 (technical and scientific co-operation - 15%) of the CBD.

The two main management partners for the project are also the CBD national administrative authorities namely, the MoE (see above Section 8) in Cambodia, and the Environment Division in Tanzania (see above Section 9). It is envisaged that CBD national focal points, through these line agencies, will be key participants and partners in dialogue, consultation and awareness workshops and in facilitating the uptake and implementation of the project's management recommendations among other sectors and in pursuit of the goals of the CBD and NBSAPs.

The project will also strengthen countries' capacity to meet their obligations under the Ramsar Convention, which both Cambodia and Tanzania have ratified, particularly focusing on the key themes of wetland wise use and incentives (see below Section 12).

12. How does the work meet a clearly identifiable biodiversity need or priority defined by the host country? Please indicate how this work will fit in with National Biodiversity Strategies or Environmental Action Plans, if applicable.

In both Cambodia and Tanzania, wetland species and ecosystems have been identified as priorities for biodiversity conservation planning and management practice. The project also meets other stated needs for biodiversity conservation including capacity building and training, awareness, information gathering and dissemination, and work to integrate biodiversity and sustainable development/poverty alleviation goals. A number of key national policies, strategies and plans highlight these priorities, and provide the context within which the project will operate:

- In Cambodia, these priorities are articulated in the 2002 NBSAP and the 1998 National Environmental Action Plan. Both highlight the conservation and development significance of wetlands, the threats they face and the need for building capacity to undertake biodiversity and socio-economic assessment, and to generate data on wetland species and ecosystems.
- The project meets key goals and priorities for the conservation of aquatic resources as articulated in Cambodia's National Wetland Action Plan (1997). In particular it aims to demonstrate the Ramsar wise use principle, and the need to develop sustainable management plans in Ramsar Sites. With its focus on generating wetland management recommendations that take both local livelihoods and environmental conservation goals into account, the project strongly supports the new Fisheries Policy and Law, and its sub-decree on community fisheries management.
- In Tanzania, the National Water Policy (2002) identifies water for the environment as the second priority (behind water for basic human needs) in allocating water.
- The draft multi-sector Wetland Strategy also recognizes the importance of maintaining wetlands for environmental goods and services.

13. If relevant, please explain how the work will contribute to sustainable livelihoods in the host country.

In both Africa and Asia, the poorest rural households typically lack access to land and are consequently reliant on common property resources such as wetlands and forests for their subsistence and income-generation. The conservation of wetland biodiversity and productive functions is thus a vital component of any poverty alleviation strategy: if wetlands are threatened then so are the livelihoods of the poor.

In Cambodia, over one third of the population lives in poverty, with much higher rates among the 84% of the population who live in rural areas. Wetlands are essential to the livelihoods of millions of people, the food security of the most vulnerable members of society, and the prospects for national development. For example more than 75% of household protein is obtained from fish in Cambodia. Approximately 12,000 people live in Stoeng Treng Ramsar Site, more than 95% of whom are farmers and fishers and the vast majority of whom are classified as poor. Wetland resources, including fish, cultivation of wetland crops, the harvesting of aquatic animals (fish, reptiles, amphibians, molluscs, etc.), as well as collection of a wide range of wild aquatic plants form the basis of local livelihoods.

In Tanzania, which is ranked 140th out of 162 countries in its Human Development Index in 1999 and where 67% of rural people live below 'basic needs' poverty levels, national poverty assessment data indicates that the districts containing major wetlands (Southern and Western Tanzania) have the highest incidence of poverty. More than 150,000 people inhabit the lower floodplain and delta of Rufiji Basin, and have a high dependence on wetland goods and services. Farmers have evolved a system of land use over time based on inter-planting and rotating of various food and cash crops, combined with the utilisation of available natural resources such as fishing in the rivers and lakes, harvesting of wood and non-wood forest produces. Wetland resources play a critical role in the lives of people living in Rufiji Basin, and numerous species are utilised and processed for subsistence and for income generation.

The biodiversity conservation needs of both Cambodia and Tanzania are thus framed within their commitments to poverty alleviation. These include the Poverty Reduction Strategy Programmes adopted under the Highly Indebted Poor Countries debt-relief scheme, and their commitments to meeting the Millenium Development Goals and 2002 World Summit on Sustainable Development targets.

The project has a strong focus on contributing to sustainable livelihoods in Stoeng Treng Ramsar Site and Rufiji Basin. Weak appreciation and lack of accessible information about the links between aquatic biodiversity, economic status and livelihood security, and especially of the importance of wetlands to the poorest, remains one of the most important factors underpinning wetland degradation and loss in Cambodia and Tanzania. Wetland-managing authorities have traditionally made few efforts to demonstrate or act on these links, or to factor poverty and livelihood concerns into on-the-ground conservation activities. There are currently few practical methodologies, little policy-relevant information and weak institutional capacity to overcome these constraints in facilitating the sustainable use and management of wetlands for both poverty alleviation and ecosystem conservation goals.

This project aims to strengthen pro-poor approaches to wetland conservation. This will yield detailed information, including GIS maps and electronic databases, on key values and overlaps between threatened species and high human dependence, and site-level action plans for pro-poor wetland conservation and sustainable use.

14. What will be the impact of the work, and how will this be achieved? Please include details of how the results of the project will be disseminated and put into effect to achieve this impact.

The project's intended results and impacts are:

- Integration of biodiversity, economics and livelihoods assessment methodologies, information and analysis is strengthened.
- Improved methods to assess biodiversity and livelihood status of wetlands are developed and tested.
- More accessible, practical and policy-relevant information on wetland livelihoods, biodiversity and management recommendations is made available.
- National and local capacity to undertake integrated wetland assessment, and generate wetland management recommendations, is strengthened.
- Awareness of wetland biodiversity and livelihood values is enhanced among both conservation and development planners and policy-makers.
- Management and policy recommendations are generated which support biodiversity conservation, sustain local livelihoods and alleviate poverty in threatened wetland sites.

These impacts will be achieved through linking existing and new data, integrating biodiversity, livelihoods and economics concerns, and filling the gaps that currently exist in methods, information and management/policy influence:

- The project will undertake integrated biodiversity, livelihood and economic assessments of Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania in order to develop and test methods.
- The findings of these assessments will generate practical information on the biodiversity and livelihood status of these threatened wetlands, and generate policy-relevant management recommendations which

focus on both species conservation and sustainable livelihood/poverty alleviation goals. Electronic maps and databases will also present the information collected in a form that can be used and applied for wetland management planning.

- Biodiversity and livelihood information will be presented through a series of technical and popular publications which, together with dialogues and workshops, will enhance both national and local awareness of biodiversity and livelihood values.
- Training courses, and the development of a best practice guide, as well as on-the-job training provided as the assessments are carried out, will provide the means to strengthen capacity in wetland assessment and management planning among overseas partner agencies.

Physical outputs of the project include:

- Technical reports on wetland biodiversity and livelihood status, and management recommendations.
- Local language summaries on wetland biodiversity and livelihood status.
- National policy briefs on wetland biodiversity and livelihoods.
- Best practice guide on pro-poor approaches to integrated wetland assessment.
- Electronic database and maps on biodiversity and livelihoods.
- Press releases.
- Peer reviewed articles.

These physical outputs will be disseminated through a variety of mechanisms, in order to ensure that they reach the widest possible audience and that they are received and taken up by the project's target beneficiaries. It should be noted that special effort has been made to ensure that the project uses a range of different presentation styles, and dissemination channels, in order to target different audiences.

Technical reports will contain detailed information and analysis of biodiversity and livelihood data and are aimed primarily at scientific and research audiences. Policy briefs which summarise key management issues and conclusions will be prepared and disseminated for national and provincial level policy-makers and planners, in both conservation and development sectors. Local language summaries will focus on issues and topics of local concern, and present information in a form that is accessible to the populations living in and around the project's field sites. The best practice guide, electronic database and maps are targeted at agencies and individuals who are actually responsible for planning and undertaking wetland assessments and management activities, and aim to present practical field and planning tools.

Technical reports, policy briefs, best practice guide, electronic database and maps will be disseminated both in hard copy form/CDs as well as through posting on the IUCN and SSC websites. Workshops, at both national and local levels, will also provide an important mechanism for disseminating the project's physical outputs as well as explaining, elaborating and verifying them. Wherever possible, existing expert networks and electronic listservers (both global and national) will be used to disseminate outputs. Additional mechanisms to publicise and disseminate the project's findings include press releases in UK, national and local newspapers as well as the submission of articles to a peer-reviewed journal.

15. How will the work leave a lasting legacy in the host country or region?

Project activities and outputs are geared towards leaving a lasting legacy in the countries and sites involved, including:

- Developing and promoting new approaches to integrated wetland biodiversity-economics-livelihood assessment which can be further adapted and replicated in the future in other sites;
- Generating information and establishing long-term frameworks for data collection and analysis for wetland conservation and development planning through developing methods, maps and databases;
- Building capacity among wetland managers and researchers, and training a cadre of scientists and researchers to undertake and use integrated wetland assessment and to better recognise and act on the links between poverty and wetland status;
- Enhancing awareness among decision-makers in both conservation and development sectors of the importance of integrated and pro-poor approaches to wetland management;

- Influencing wetland development and conservation research, policy and management practice to mainstream biodiversity, livelihood and economic concerns within a pro-poor framework;
- For specific sites (Stoeng Treng Ramsar Site and Rufiji Floodplain and Delta), developing management recommendations that can be applied, maintained and updated in the future;
- Publishing a best practices guide that can continue to be used for wetland assessment and development planning.

16. Please give details of a clear exit strategy and state what steps have been taken to identify and address potential problems in achieving impact and legacy.

The project has a clearly-defined time frame and series of outputs that it aims to generate, and thus has a built-in exit strategy. Although the project aims at building long-term capacity to undertake integrated wetland assessment, and intends that the methods and tools it promotes will be continued over the long-term, it does not aim to set in place stand-alone activities that will continue after the project's end. Rather its major focus is on strengthening existing institutions and management approaches, and on providing training, awareness and improved tools and information to enable this. The project explicitly takes place within the context of ongoing national activities and institutions that are concerned with wetlands management and sustainable use, and that will continue after the project's end.

Potential problems and risks that may hinder the project in achieving impact and legacy have been identified, and relate to:

- Whether appropriate staff from partner institutions are available and willing to participate in the project.
- Whether trained staff remain in the institutions responsible for wetland assessment and management, and are willing and able to continue to use the skills developed and methodologies learned during the course of the project.
- Whether natural and security conditions in the demonstration sites remain supportive of fieldwork.
- Whether the physical outputs of the project reach and positively influence key wetland planners, decision-makers and stakeholders.
- Whether regional, national and local stakeholders are willing to participate in dialogues and are receptive to the project's approach and findings.

All of these identified risks and potential problems depend at least partly on external factors that are beyond the project's control. However certain mechanisms have been built into the project to address, minimise or mitigate them wherever possible. In an attempt to ensure the availability and willingness of project partners and appropriate staff to participate in project activities and to continue to use the methods they have been trained in, the project has been formulated in close consultation with project partners who have expressed a willingness and interest to collaborate, according to their stated goals and priorities. It is anticipated that these processes will also minimise any risk that key stakeholders fail to be receptive to project findings and approach or to be positively influenced by its outputs. Strategies to maximise the likelihood that trained staff remain in institutions are dealt with above (Section 8) and include a focus on building institutional capacity, targeting a diverse audience and working within the context of already-ongoing activities and institutions. Natural and security conditions are entirely beyond the project's control. However the field sites which have been selected represent safe areas in countries that are currently politically stable, and in which there is considered a high probability of continued security and political stability.

17. How will the project be advertised as a Darwin project and in what ways would the Darwin name and logo be used?

The project will be advertised through:

- Attaching the Darwin Logo to all project outputs
- Launching and profiling the project at the American Natural History Museum April 2005 Symposium dedicated to the Conservation of Freshwater Ecosystems
- Posting project updates and technical outputs, along side the Darwin logo, on the websites of IUCN in the UK, Switzerland, Eastern Africa and Asia, and on the UEA website.

- Profiling the project at the internationally important Ramsar COP in Uganda Nov 2005.
- Publication of project findings in African and Asia journals and in selected high impact international journals
- Presentation of project outputs at key global, regional and national workshops and conferences
- Press releases and articles in the UK, Switzerland, Tanzania and Cambodia
- Progress reports circulated world-wide each month in the IUCN/SSC electronic bulletin to its network of more than 8,000 biodiversity experts, and through regular updates in the IUCN /SSC “Species” Journal.
- Posting of the Darwin Logo alongside the logos of other key donors in Cambodia and Tanzania, and at the global level.

18. Will the project include training and development? Please indicate who the trainees will be and criteria for selection and that the level and content of training will be. How many will be involved, and from which countries? How will you measure the effectiveness of the training and will those trained then be able to train others? Where appropriate give the length and dates (if known) of any training course. How will trainee outcomes be monitored after the end of the training?

The project will carry out two formal training courses: one on methods for integrated wetlands assessment, and one on data analysis. Each of these one-week training courses will involve at least 15 participants from each of Cambodia and Tanzania. It should also be emphasised that the project is also designed to give longer-term capacity support and on-the-job training to the national teams of biodiversity, economics and livelihoods experts who are directly involved in field assessments and other work over a 1.5 year period.

The effectiveness of the training will be measured through participant follow-up as well as through participant evaluation of the training. Due to the long-standing relationship of IUCN with project partner institutions, including ongoing work in wetlands conservation, it is also envisaged that long-term monitoring and tracking of training effectiveness through continued interactions and collaboration with participants will be possible.

Participants for training courses will include mid-level research scientists in biodiversity, economics and livelihoods disciplines, to be selected from a range of agencies involved in wetland research, conservation and development in Cambodia and Tanzania. Although some level of priority will be given to national partner agencies, it is envisaged that participants from other relevant institutions will also be welcomed. Participants will be selected according to a number of criteria, including national partner recommendation, direct identification by UK agencies, and open competition.

Integrated wetland assessment training courses will include modules dealing with:

- Overview of biodiversity, livelihoods and economic assessment techniques for wetlands
- Identifying management threats and data needs in wetland sites
- Assessing existing data and identifying data gaps
- Field techniques for the collection of biodiversity and socio-economic data
- Steps in designing and implementing integrated wetland assessments
- Preliminary data analysis and management techniques

Integrated wetland analysis training courses will include modules dealing with:

- Statistical techniques in data analysis
- Integrating biodiversity, livelihoods and economics data and conclusions
- Interpreting data
- Drawing conclusions about conservation threats and management status
- Developing policy and management conclusions and recommendations
- Presentation and communication skills for information dissemination and policy impact

It should be emphasised that both training courses will be based on practical tools and approaches, and will involve a considerable level of learning from fieldwork exercises and application and analysis of real-world cases, examples and data. The emphasis of both courses is also on an integrated approach, bringing together natural and social scientists in order to develop collaborative efforts and mutual learning.

LOGICAL FRAMEWORK

19. Please enter the details of your project onto the matrix using the note at Annex B of the Guidance Note. This should not have substantially changed from the Logical Framework submitted with your Stage 1 application. Please highlight any changes.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Goal:			
To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve <ul style="list-style-type: none"> the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising out of the utilisation of genetic resources. 			
Purpose:			
Pro-poor approaches to the conservation and sustainable use of threatened wetlands strengthened through improved capacity, awareness and information on the biodiversity and livelihood value of aquatic ecosystems in the Lower Mekong and East Africa	Innovative methodologies developed and used for wetland assessment by Yr 2 New knowledge and learning on wetland biodiversity, livelihoods, economics and poverty linkages by Yr 4 Integration of pro-poor approaches and measures into wetland conservation and development plans by Yr 4 Strengthened capacity and awareness to understand and act on wetland biodiversity, livelihoods, economics and poverty linkages by Yr 4	Project technical and awareness publications Project progress and workshop reports Partner institutions' national strategies, policies and plans Site-level development and conservation strategies and management plans	Pro-poor and environmentally sustainable development approaches remain a priority for governments at national and sub-national levels in Tanzania and Cambodia Non-governmental and community-based organisations remain supportive of wetland conservation and sustainable use
Outputs:			
Wetland biologists, economists and rural development planners trained in integrated biodiversity, livelihood and economic assessment field techniques	At least 30 local and national-level staff from at least 4 partner institutions from Tanzania and the Cambodia trained by end Yr 1	Training materials Course materials and participants lists Participants' evaluations of training course	Trained staff remain in institutions, and are willing and able to continue to use the skills developed and methodologies learned
Wetland sites in Tanzania and Cambodia with threatened biodiversity and high livelihood values identified and prioritised for further assessment	Scoping exercise carried out in Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania by end Yr 1 Demonstration sites for field assessment subjected to stakeholder dialogues by end Yr 1	Field scoping data Reports on workshops and dialogues	Relevant stakeholders able to agree on priority sites for integrated wetland assessment
Integrated	Baseline assessments	Field assessment data	Natural and security

biodiversity, livelihoods and economic assessments carried out	carried out in the Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania by end Yr 2	Field assessment reports	conditions in demonstration sites remain supportive of fieldwork Appropriate staff from partner institutions available and willing to participate in fieldwork
Best practice guide for assessing and integrating biodiversity within development planning processes produced	Draft best practice guide developed and peer reviewed by end Yr 1 At least 500 copies of best practice guide published and distributed by end Yr 4	Peer reviews on best practice guide Published best practice guide Reviews and other feedback on best practice guide Requests received for best practice guide Downloads of best practice guide from website	Best practice guide reaches and positively influence key wetland planners, decision-makers and stakeholders
Electronic databases and maps identifying key sites of overlap between threatened species and high livelihood dependence produced	Electronic database and maps for the Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania by end Yr 4	Electronic database Electronic maps Downloads of maps from website Requests for copies of maps Use of database and maps in wetland management planning by partners	Database and maps reach and positively influence key wetland planners, decision-makers and stakeholders
Lessons learned for wetland and development policy and planning documented and disseminated to local, national and regional decision-makers in Tanzania and Cambodia	At least two site-specific technical status reports for Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania published and disseminated by end Yr 4 At least four local language summaries published and disseminated through site-level awareness workshops by end Yr 1 and end Yr 4 At least four sets of policy briefs on biodiversity, livelihood and economic linkages, and management implications, published and disseminated through national dialogues by end Yr 2 and end Yr 4	Published documents Reviews and other feedback on documents Requests received for documents Downloads of documents from website Reports on workshops and dialogues Workshops and dialogues participants' evaluations	Documentation reaches and positively influences key wetland planners, decision-makers and stakeholders Regional, national and local stakeholders agree to participate in dialogues and are receptive to project lessons and findings
Activities			
Workshops	Conduct training courses in integrated wetland assessment techniques for partner institutions (Yr 1)		

	<p>Hold site level awareness workshops on integrated wetland assessment and conservation (Yr 2)</p> <p>Hold site level awareness workshops on assessment findings (Yr 4)</p> <p>Facilitate national dialogues on site selection and project aims (Yr 2)</p> <p>Facilitate national dialogues on assessment findings (Yr 4)</p>
Field Assessment	<p>Carry out scoping missions to elaborate field sites (Yr 2)</p> <p>Implement field assessments of Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 2)</p>
Database and Maps	<p>Develop database and maps identifying key areas of overlap between threatened species and high livelihood dependence in Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 3)</p> <p>Integrate of field data into database and maps (Yr 3)</p>
Technical and Awareness Publications	<p>Produce and disseminate technical status reports on biodiversity and livelihood status and management recommendations at Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 4)</p> <p>Produce and disseminate local language summaries on wetland assessment and conservation in the Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 2)</p> <p>Produce and disseminate local language summaries on biodiversity and livelihood status of Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 4)</p> <p>Produce and disseminate national policy briefs on wetland biodiversity and livelihoods linkages and management issues (Yr 2)</p> <p>Produce and disseminate national policy briefs on biodiversity and livelihood status and management recommendations for Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 4)</p>
Best practice guide Development	<p>Produce and disseminate draft best practice guide on pro-poor approaches to wetland assessment (Yr 2)</p> <p>Undertake peer review of best practice guide (Yr 4)</p> <p>Publish and disseminate final best practice guide on using pro-poor approaches to wetland assessment for conservation and development planning (Yr 3)</p>

20. Provide a project implementation timetable that shows the key milestones in project activities.

Project implementation timetable		
Date	Financial year	Key milestones
Q3	2005/06	Inception meeting has been held, and project publicised at “New Currents in Conserving Freshwater Systems”, 2005 Biodiversity Symposium, Centre for Biodiversity and Conservation, American Museum of Natural History
Q4		Draft best practice guide has been disseminated to key users and stakeholders
		Draft best practice guide has been produced
Q5	2006/07	National partners have signed agreement to participate in project activities, and have identified key staff to participate
		Scoping missions have been completed in Tanzania and Cambodia
		Training courses on integrated wetland assessment have been carried out in Tanzania and Cambodia
Q7		Existing biodiversity, livelihood and economic data sets for project sites have been identified and collated
		First local language summaries have been produced, translated and disseminated to key users and stakeholders in Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
Q8		First national policy briefs have been produced and disseminated to key users and stakeholders in Cambodia and Tanzania
		Field assessments have commenced in Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania

Project implementation timetable		
Date	Financial year	Key milestones
		Design of database and map base has been finalised
		First national dialogues have been held in Tanzania and Cambodia
		First site awareness workshops have been held in Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
		Project aims and process have been endorsed at the local level at Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
		Project aims, process and demonstration site selection have been endorsed at the national level in Cambodia and Tanzania
Q11		Training courses on integrated wetland analysis have been carried out in Tanzania and Cambodia
Q8		Field assessments have been carried out in Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
		Final database and map base has been prepared and is ready for field data entry
Q11	2007-08	Article prepared and submitted to peer-reviewed journal
		Field data has undergone preliminary analysis and is ready for integration into database and maps
Q12		Draft best practice guide has been circulated to reviewers
		Draft best practice guide has been updated with information from field assessments and dialogues
Q13		Draft technical status reports Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania have been prepared and shared with reviewers
		Reviewers' comments have been received
		Best practice guide has been finalised, incorporating reviewers' comments
		Database and maps have been produced for Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
		Second local language summaries have been produced, translated and disseminated to key users and stakeholders in Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
		Second national policy briefs have been produced and disseminated to key users and stakeholders in Tanzania and Cambodia
	2008/09	Technical status reports for Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania have been finalised, incorporating reviewers' comments
		Article published in peer-reviewed journal
Q14		Project findings and management recommendations have been verified and endorsed at the national level in Tanzania and Cambodia
		Project findings have been verified and endorsed at the local level in Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
		Second national dialogues have been held in Tanzania and Cambodia
		Second site awareness workshops have been held in Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
		Best practice guide has been disseminated to key users and stakeholders

21. Set out the project's measurable outputs using the separate list of output measures.

PROJECT OUTPUTS		
Year/ Month	Standard output number	Description (include numbers of people involved, publications produced, days/weeks etc.)
By end June 06	6A, 6B	At least 30 people from Tanzania and Cambodia partner institutions provided with 0.5 weeks of training in integrated wetland assessment techniques
	7	Existing data has been identified and collated for at least 2 threatened wetland sites in Cambodia and Tanzania

PROJECT OUTPUTS		
Year/ Month	Standard output number	Description (include numbers of people involved, publications produced, days/weeks etc.)
By end Dec 06	15B	At least 2 local press releases on wetland assessment and conservation for at least 2 threatened wetland sites in Cambodia and Tanzania
	15A	At least 2 national press releases on wetland biodiversity and livelihood linkages and management issues in Cambodia and Tanzania
	7	At least 200 copies of local language awareness and training materials on wetland assessment and conservation for Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
	7	At least 200 national policy briefs on wetland biodiversity and livelihoods linkages and management issues produced and disseminated in Cambodia and Tanzania
By end Mar 07	14A	Two 1-day awareness workshops on integrated wetland assessment and conservation held for at least 25 local stakeholders in each of Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
	14A	Two 2-day dialogue and consultation workshops on site selection and project aims held for at least 20 national conservation and development planners and policy-makers in each of Tanzania and Cambodia
By end Dec 07	6A, 6B	At least 30 people from Tanzania and Cambodia partner institutions provided with 0.5 weeks of training in integrated wetland analysis techniques
By end Mar 08	5	At least 10 biologists and socio-economists from each of Tanzania and Cambodia partner institutions provided with on-the-job training and guidance in integrated wetland assessment and data analysis over a period of 1.5 years
By end Jun 08	11B	At least one article co-authored by UK and national partners on wetland biodiversity and livelihoods linkages and management issues in threatened wetland sites in Cambodia and Tanzania submitted to peer-reviewed journal(s)
	15B	At least 2 local press releases on biodiversity and livelihood status for Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
	15A	At least 2 national press releases on biodiversity and livelihood status and management recommendations for Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
	7	At least 200 copies of local language awareness and training materials on biodiversity and livelihood status in Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
	7	At least 200 national policy briefs on biodiversity and livelihood status and management recommendations for Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania produced and disseminated
	9	At least 500 copies of technical status reports on biodiversity and livelihood status and management recommendations for Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania produced and disseminated
	17B	At least two local wetland education and awareness dissemination networks enhanced in Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
	17B	At least two national wetland information dissemination networks enhanced in Cambodia and Tanzania
	12A	Two electronic databases and maps on threatened species and livelihoods established and handed over to partner institutions in Cambodia and Tanzania
By end Sep 08	15A	At least 1 UK national press release on biodiversity and livelihood assessment techniques and findings from Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
	10	At least 500 copies of a best practice guide on using pro-poor approaches to wetland assessment for conservation and development planning produced and disseminated
	11A	At least one article co-authored by UK and national partners on wetland biodiversity and livelihoods linkages and management issues in threatened wetland sites in Cambodia and Tanzania published in at least peer-reviewed journal

PROJECT OUTPUTS		
Year/ Month	Standard output number	Description (include numbers of people involved, publications produced, days/weeks etc.)
	23	Co-financing raised from other sources and used to support project activities and their continuation after the project's end
	20	Field equipment worth at least £2,900 handed over to partner institutions in Cambodia and Tanzania countries
	14A	Two 1-day awareness on assessment findings and management implications held for at least 25 local stakeholders in each of Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania
	14A	Two 2-day dialogues and consultation workshops on assessment findings and management implications held for at least 20 national conservation and development planners and policy-makers in each of Tanzania and Cambodia
	8	At least 348 weeks of technical assistance and capacity building provided by at least 5 individuals in 2 UK institutions and by 2 individuals in IUCN Economics programmes

MONITORING AND EVALUATION

22. 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.

Project monitoring and evaluation (M&E) will ensure accountability, informed decision-making, and learning. It will conform to IUCN requirements and procedures. M&E will include regular monitoring of progress, using detailed indicators for field level monitoring covering both quantitative and qualitative information. It is anticipated that self-evaluation will be ongoing throughout the project and that internal IUCN M&E review of progress will be carried out on a 6-monthly basis. In addition, a more substantial mid-term review and end of project evaluation will be carried out. It is planned that continuous learning will be conducted throughout the project, feeding into the design and implementation of activities on an on-going basis.

In line with the participatory approach to planning and implementation, all key stakeholders will play a critical role in the monitoring and evaluation of the project. This participatory approach to M&E is designed to foster local ownership in the entire project cycle and to strengthen the accuracy and use of the monitoring information. Communities in the demonstration sites will be involved in revising indicators and determining the monitoring process for both biodiversity and socio-economic monitoring. They will also participate in the ongoing analysis of project progress, and in particular, those related to the community initiatives, in order to build local capacity for reflection and action. Strengthening local capacity for planning, monitoring and reflection is also important for modelling transparent and accountable governance systems. Moreover, it contributes to capacity building of community management and sustainable use of wetland resources.

The project will be evaluated on the basis of execution performance, output delivery, and project impact.

- Execution performance. Execution monitoring will assess whether the management and supervision of project activities is efficient and seek to improve efficiencies when needed so as to improve overall effectiveness of project implementation. It is a continuous process, which will collect information about the execution of activities programmed in the annual workplans, advise on improvements in method and performance, and compare accomplished with programmed tasks. This activity will be the direct responsibility of the overseas project coordinator, working closely with the UK agencies and national partner agencies who will assist in tracking and reporting back on these indicators.
- Delivered outputs. Ongoing monitoring will assess the project's success in producing each of the programmed outputs (see logframe outputs, indicators and means of verification, above), both in quantity and quality. Internal assessment will be continuously facilitated and managed by the overseas project coordinator, and mid-term and final evaluations of outputs will be carried out in direct partnership with national partner agencies.
- Project impact. Evaluation of the project's success in achieving its outcomes will be monitored

continuously throughout the project through semi-annual progress reports, annual summary progress reports, a mid-term and final evaluation all of which will be based on the project logframe (see above).