



Submit by 13 January 2006

DARWIN INITIATIVE APPLICATION FOR GRANT ROUND 14 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: Wildfowl & Wetlands Trust	Address: Slimbridge, Glos, GL2 7BT
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2. Project title (not exceeding 10 words)

Managing wetlands for sustainable livelihoods at Koshi Tappu, Nepal

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

Proposed start date: 1 st October 2006		Duration of project: 3 years		End date: 30 th September 2009	
Darwin funding requested	Total	2006/07	2007/08	2008/09	2009/2010
	£198,835.27	£40,301.02	£68,463.00	£64,024.10	£26,047.15

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

<p>To assist local communities around Koshi Tappu Wildlife Reserve in managing buffer zone wetlands for sustainable livelihoods, whilst enhancing wetland biodiversity.</p> <p>A participatory wetland economic valuation and learning needs analysis will identify barriers to local natural resource users obtaining sustainable livelihoods from buffer zone wetlands. Informed by a combination of participatory biodiversity and other ecological surveys, fisheries, invasive species and water quality and quantity surveys, these barriers will be overcome through production of the following project outputs:</p> <ul style="list-style-type: none"> • Trained personnel and built capacity in local organisations and community groups • Guidelines for wetland management for sustainable livelihoods • A sustainable fisheries management plan • The Darwin Centre for Wetland Management for Sustainable Livelihoods

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	Buckton		Thapa
Forename (s)	Sebastian		Ishana
Post held	Principal Project Officer, Habitats and Ecosystems		Conservation Officer
Institution	Wildfowl & Wetlands Trust		Bird Conservation Nepal
Department	Conservation Programmes		

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

Yes, 2 main awards. In Round 11 we received funding for a project in East Africa entitled “Monitoring Biodiversity for Site Management Planning in Eastern African Wetlands”. In Round 12 we received funding with Royal Holloway University of London, for a project entitled “Sustainable Management of the Rupununi, Guyana”. Additionally, Pre-project funding was awarded for the development of this project in Nepal in 2004.

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)

Aims (50 words)

Activities (50 words)

Achievements (50 words)

8. Please list the UK (where there are partners in addition to the applicant organisation) and host country partners that will be involved in the 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.

UK:

Stirling University Institute of Aquaculture is the leading international centre in its field and is the largest of its kind in the world. Research focuses on fundamental questions relating to strategies for sustainable aquaculture, whether in modern commercial markets or in feeding poor communities in developing countries. It will produce guidelines for sustainable fishpond management and develop a fisheries management plan. This will involve working directly with local communities to identify appropriate species for cultivation, through Participatory Community Appraisal techniques. Subsequently, strategies will be developed whereby communities can increase fish availability within their own ponds.

CABI Bioscience has 90 years experience of Invasive Species Management, identifying and managing pest species the world over. It is lead partner in the Global Invasive Species Programme, and advises government policy makers across the globe. It has advised on initial planning for invasive species management in Nepal. CABI will carry out an assessment of the invasive non-native plants found at Koshi Tappu, and formulate invasive plant species management guidelines. This will involve assessments of the invasive plant species issues, and how they impact local livelihoods and biodiversity, in terms of threats, awareness, information needs and priorities. This information will be used to formulate the guidelines, through consultation with all stakeholders, which will identify immediate needs and longer term measures.

Discussions were held with senior managers of both UK partners during the development of the Stage 1 proposal when roles and responsibilities were agreed.

Nepal:

Bird Conservation Nepal (BCN) is the biggest and oldest NGO dedicated to bird conservation in Nepal. It is the main host country partner and has a long association with Koshi Tappu Wildlife Reserve (KTWR) and buffer zone, where it has carried out a variety of education and awareness-raising activities. BCN facilitated a project development visit by WWT (funded by Darwin), and is committed to facilitating the project within Nepal. BCN will coordinate the project within Nepal, and identify staff to participate in training and capacity-building.

IUCN-Nepal works to enhance ecosystem conditions and the well-being of people. Its aim is to influence people’s attitudes and behaviours on how they interact with the natural environment. Its Ecosystem and Sustainable Livelihoods Programme aims to create social and economic incentives for local people to conserve and sustainably use their land, water and living resources and promote equitable sharing of costs and benefits. IUCN-Nepal participated in the pre-project visit and will play a key role in the sustainable livelihoods aspects of the project, particularly through linkages between the forthcoming UNDP-GEF project “Conservation and Sustainable Use of Wetlands in Nepal” and community-led activities (participatory wetland valuation and biodiversity surveys). IUCN-Nepal will help facilitate these and other training activities.

Koshi Camp is a small ecotourism business which operates a tourist camp in the KTWR buffer zone. It hosted WWT staff during the project development field visit. It will host training activities and meetings; identify staff to receive training; and house the “Darwin Centre for Wetland Management for Sustainable

Livelihoods” to be launched under the project.

Tribhuvan University (TU) Institute of Agriculture and Animal Science (IAAS) designs and implements educational programmes balancing established and emerging needs in the agricultural sector of Nepal. It aims to bring excellence in instruction, research and technology dissemination, and to encourage research catering to the needs of people engaged in the agriculture sector. IAAS has existing links with Stirling University Institute of Aquaculture, and will provide on-the-ground guidance for the fisheries elements of the project. IAAS will also be involved directly with surveys, planning and training, with the Institute of Aquaculture providing technical backstopping. Some of this work will be supported through the Institute of Aquaculture’s formal Asia Link project entitled "Improving Master's Degree level education in Aquaculture and Aquatic Resources Management in Cambodia, Nepal and Vietnam" to be coordinated by the Asian Institute of Technology.

The Participatory Conservation Programme of the Department of National Parks and Wildlife Conservation (DNPWC) aims to improve socio-economic conditions for communities in buffer zones of protected areas, and to reduce dependence on natural resources of protected areas. A meeting was held with the National Programme Manager during the pre-project visit, when the biodiversity needs of KTWR were discussed. PCP will assist in the selection of candidates for training, and will sit on a project steering group. To ensure the benefits of the project continue despite any staff changes, the aim has been to develop links with on-going programmes of work in all (UK and Nepal) partners, that will continue in the event of staff changes, rather than linking to individual staff whose role would move with them. Thus many of the linkages are with senior managers of the organisations concerned, who have identified the appropriate staff member, and can re-assign the role should staff change. To ensure suitably qualified people exist to continue the work should staff leave, training will be targeted at a sufficient number of people to enhance the likelihood of trained staff remaining in post long enough to pass on their skills to others by training

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.

A pre-project visit was funded by the Darwin Initiative in October 2004. In addition to discussions with partners, senior officers in the Department of National Parks and Wildlife Conservation (DNPWC) were consulted over the proposed project. DNPWC manages KTWR and a meeting was held with the Reserve Warden, during which the problems facing the reserve were discussed. DNPWC will identify staff to receive training, both locally and nationally, and will sit on a project steering group. All expressed their enthusiasm and support, and were keen to be involved in the project. They also offered advice on the relevant partners to involve.

Additional consultation has also taken place at a local level, with Village Development Committees and the Buffer Zone Management Committee (BZMC) for Koshi Tappu. These organisations are key players in identifying training and capacity building needs in the vicinity of KTWR, and will be the primary means through which benefits from the improved management will be realised by buffer zone communities. The BZMC has provided written support to the project as a result of this consultation.

Advice has also been sought and received from the head of the UK’s Department for International Development (DFID) in Nepal, on the practicalities of working in Nepal, particularly regarding the current security situation.

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.

This is a new initiative. However, it builds on previous and existing work carried out in the buffer zone of KTWR by IUCN-Nepal and the UNDP-supported Participatory Conservation Programme of the DNPWC. IUCN-Nepal have previously supported the construction of fishponds in the buffer zone, funded by the Development Market Place of the World Bank. Whilst this has been successful in providing additional sites for aquaculture, it has suffered from a lack of resources and understanding of appropriate fishpond management techniques. The lack of a local, on-the-ground resource for information has been identified as a

major need to ensure the benefits of such work are realised. One major finding, for example, has been that although fish hatcheries exist within 50 km of the site, restocking of ponds is made difficult due to transport costs and time incurred.

More recently, IUCN-Nepal jointly with the Ministry of Forest and Soil Conservation has received approval for a UNDP-GEF project entitled 'Conservation and Sustainable Use of Wetlands in Nepal', which is expected to begin in spring 2006. The aim of this project is to ensure the maintenance and enhancement of wetland biodiversity and environmental goods and services for improved local livelihoods in Nepal. The immediate objective is to strengthen national and local capacity in ecosystem management and sustainable use of wetland biodiversity in Nepal. As well as building policy and capacity at the national level, the project will demonstrate wetland wise use and conservation at two Ramsar sites, one of which is Koshi Tappu. The DNPWC Participatory Conservation Programme (PCP) works closely with DNPWC protected area officers, including at Koshi Tappu, where it is helping to strengthen the local community by providing training, women empowerment, and institutional capacity building through the Buffer Zone Management Committee. PCP also aims to encourage local families dependent on fish farming to maintain fish ponds. They have successfully started forest user groups around the edge of Koshi Tappu which are already showing positive results.

Both IUCN-Nepal and PCP have been consulted over the proposed WWT-led project, and complementarities have been identified and discussed. The aim of these discussions has been to avoid any duplication of effort, and to build on the existing work by providing additional resources where a need has been identified as a result of this work. Both are partners in this proposed project.

The proposed Darwin Initiative project complements the aforementioned projects in two main areas. Firstly, Darwin funding would add significantly by providing the opportunity for UK expertise to be used to enhance the understanding of the problems that need to be addressed at Koshi Tappu, particularly regarding the management of wetlands for sustainable livelihoods in the buffer zone, fisheries management, community learning needs, and invasive species management. Both IUCN-Nepal and PCP acknowledge the need for additional resources at site level, particularly to enable research and Communication, Education and Public Awareness (CEPA) activities. Secondly, Darwin funding would provide a significantly enhanced opportunity for training of local natural resource managers and users, and for information to be disseminated to the local community through the Darwin Centre for Wetland Management and Sustainable Livelihoods. The proposed Darwin project therefore provides an excellent added-value opportunity, building on some of the community work already being carried out (e.g. using co-funding through UNDP-GEF for a participatory wetland valuation) to enhance community involvement in wetland management, and providing a platform from which information can be disseminated to local communities. Additionally, the Centre will provide a location for training of wetland managers from elsewhere in Nepal, and beyond. The construction of a fish hatchery will provide a tangible benefit to local people that will enhance the potential for obtaining sustainable livelihoods from wetland management. The Darwin project will result in Koshi Tappu joining Wetland Link International (WLI), a global network of wetland education centres that has recently agreed a Memorandum of Co-operation with the Ramsar Convention Secretariat, to establish a mechanism for developing a collaborative structure in furtherance of the Ramsar CEPA Programme. WLI is coordinated by WWT. This will provide the opportunity for Koshi Tappu to share information with wetland centres around the world, and to gain from on-going training and networking opportunities.

Although elements of this project are comparable to those of various previous Darwin Initiative projects, there are no known similar projects based in Nepal, and as far as we are aware, no single project has taken such a multidisciplinary approach, with the aim of combining an enhanced understanding of ecological needs with sustainable livelihood needs, and disseminating the resulting knowledge through an information/education centre.

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.

By working with local communities, reserve managers and a local tourism business, this project will gather information to provide guidelines for managing wetlands to enhance sustainable livelihoods and wetland biodiversity. In this way the project will enhance the Nepalese government's implementation of Articles 7 (Identification and Monitoring, 5%), 8 (In-situ Conservation 15%), and 10 (Sustainable Use of Components

10%), and especially Articles 12 (Research and Training, 25%), 13 (Public Education and Awareness, 25%) and 17 (Exchange of Information, 20%) of the CBD. The project will have particular emphasis on Alien Species (15%), Biodiversity and Tourism (15%), Public Education and Awareness (40%), Sustainable Use and Biodiversity (20%) and Traditional Knowledge Innovations and Practices (10%) Themes. The Participatory Conservation Programme of DNPWC is a partner on the project, and other DNPWC staff will sit on a project steering group. DNPWC is part of the Ministry of Forest and Soil Conservation, which is the CBD National Focal Point for Nepal.

12. How does this project 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.

Biodiversity conservation has a long history in Nepal. Early conservation measures involved creating strict protection areas, resulting in a strong protected area network. However, sudden restrictions imposed on people living around protected areas gave rise to discord between park management and local communities. As a result, it was recognised that conservation could not be balanced and sustainable without reducing the dependency of local people on protected area resources, and that effective conservation would not be possible without the goodwill and support of local people.

National CBD reports recognise that wetlands have received less attention than other ecosystems, despite their rich biodiversity and critical contribution to the livelihood and life support systems of Nepalese people. Unsustainable exploitation of resources and loss and degradation of habitat are the main threats to wetlands in Nepal. Root causes include inadequate capacity and awareness of wetland biodiversity conservation, and high local community dependence on wetland resources but low involvement in their management.

These issues are exemplified nowhere better than at Koshi Tappu Wildlife Reserve, in the lowlands of eastern Nepal. The reserve, on the floodplain of the Sapta Koshi River, comprises 175 km², and was gazetted in 1976 to conserve the last remaining wild Nepalese population of the globally threatened Asiatic Water Buffalo. It was declared a Ramsar Site in 1987, and is the most important wetland for migratory waterbirds in Nepal, and one of the most important in Asia. The site is surrounded by a buffer zone of 173 km², in which 80,000 people live, most of whom are dependent on the natural resource base for their livelihoods. As a consequence, there is unsustainable exploitation of the reserve, with significant and demonstrable negative impacts on wetland biodiversity. Several invasive non-native plant species are an additional major threat.

The Nepalese government has acknowledged in CBD reports the need to establish buffer zones to minimise pressure on protected areas, while motivating local communities to sustainably manage natural resources. CBD reports also acknowledge that tourism needs to promote poverty alleviation and protection of indigenous knowledge and culture (Article 10); that there is little management-related research and training (Article 12); that, despite good momentum with CEPA, it has been difficult for programmes to reach remote areas where the real stakeholders are (Article 13); and that there is a growing need to study issues related to invasive alien species (Article 8). This project addresses each of these issues as follows: by working with a local ecotourism business to disseminate information that will directly improve local people's livelihoods (Article 10); by providing research and training in managing wetlands for sustainable livelihoods (Article 12); by raising awareness of wetland conservation at a local site level by establishing an information dissemination and education centre (Article 13); and by producing invasive species management guidelines (Article 8).

Nepal has recently (2003) established its first National Wetlands Policy, the major objective of which is to 'involve local people in the management of Nepal's wetlands and conserve wetlands with wise use of wetland resources'. To enhance the conservation and wise use of wetlands in Nepal, the policy explicitly establishes the need for participatory management of buffer zones; benefit sharing; the development of sustainable wetland eco-tourism; the promotion of wetland conservation awareness, including through the establishment of small information centres; the development of income generating activities; and the control of invasive species. These needs are addressed by the following aspects of this project, respectively: a participatory wetland socio-economic valuation, participatory biodiversity surveys, and community learning needs analysis; the dissemination of wetland management guidelines for sustainable livelihoods to buffer zone communities; the enhancement of a sustainable ecotourism business closely linked to local livelihoods and wetland conservation; the establishment of a centre aimed at raising awareness of wetland conservation and wetland management for sustainable livelihoods; the enhancement of the income-generating potential of

buffer zone wetlands; and production of invasive species management guidelines.

In the late 1990s, the DNPWC, with support from IUCN-Nepal and UNDP, developed a Management Plan for KTWR for 2002-2007. The root causes of threats to KTWR were identified as ineffective conservation education and awareness, and a lack of scientific information for management. Community cooperation in conservation was identified as key. One aim is to develop an alternative natural resource base in the buffer zone to minimise dependency on the Reserve's resources, but limitations in skills and resources have hampered progress. This project will address two General Objectives of the management plan, by 1) building capacity in local institutions in biodiversity conservation and sustainable use, and 2) enhancing livelihoods and ownership of local people to maintain support for conservation and wise-use.

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

The high economic value of Nepal's wetlands provides the basic rationale for their conservation and wise-use. Enhancing sustainable livelihoods is therefore a key element of wetland conservation, and a fundamental aspect of this project. A mixture of participatory and formal approaches will be used, to facilitate community-led research in the possibilities and potential of livelihoods that use biodiversity sustainably and enhance socio-economic and cultural quality of life at the same time.

A socio-economic wetland valuation will be carried out with local communities, resulting in the identification of practical economic and financial instruments that will generate finance and incentives for wetland management. A toolkit being developed under IUCN's UNDP-GEF wetland project will help guide the methodology to be used.

The fisheries management plan will promote sustainable management of the fishery both within the reserve and within buffer zone wetlands, to enhance the sustainability of the economic benefits from fishery products. These benefits will include direct production for home consumption, market and pond-side sales, provision of labour opportunities, and benefits for traders and others involved in the marketing chain. The invasive species management guidelines will enhance sustainable livelihoods by providing local people with the skills to control invasive species that hamper their ability to obtain full economic benefits from wetlands. The ability of local people to recognise these benefits will be ensured through providing wetland management guidelines and training, based on the ecological and hydrological surveys carried out. The Darwin centre will further add to the enhancement of sustainable livelihoods by providing a centre from which information can be disseminated and training can be provided.

Linking the centre to an existing eco-tourism business that employs local people as guides and other staff, and therefore raising the profile of this business, will provide additional opportunities for local people to obtain sustainable livelihoods.

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 main impact of the work will be through enhancing the opportunities for local people to secure their livelihoods through sustainable management of wetlands. This will be achieved through providing needs-based training in relevant wetland management techniques, resulting in increased wetland-related income and employment opportunities in the buffer zone. The impact will be further enhanced through training local natural resource managers and users to a level where they can train others, ensuring dissemination of the project outputs.

An additional impact of the project will be the enhancement of wetland biodiversity in the Koshi Tappu area, through raising awareness of the values and conservation of wetlands, and providing information to enable local people to use wetlands wisely.

The strategy for disseminating project outputs and achieving the impacts of each is set out as follows:

Output 1: Personnel trained and capacity built in local organisations and community groups

Trained staff within local partner organisations, and local community members will be ideally placed to implement outputs of the project through working directly with the communities that they work with on a day-to-day basis, sharing the skills they have acquired through the training programme. The participatory nature of the learning programme will ensure the training is relevant to the needs of the local community.

Output 2: Wetlands managed sustainably

Management guidelines will be produced with a Nepali translation and widely distributed to local communities. Trainers from local institutions and key members of local communities will assist in training to disseminate techniques more widely throughout the 12 local Village Development Committees (VDCs). This will enhance the impact by helping to overcome the invasive species problem and by enhancing the management of wetlands for sustainable livelihoods.

Output 3: Sustainable fisheries management plan developed and promoted

The fisheries management plan will be disseminated widely to reserve managers and local communities. 1,000 copies will be printed and distributed, with a Nepali translation. Promotion through training in methods of sustainable management will be undertaken by trainers, through collaboration with KTWR staff. As part of the plan, a fish hatchery will be constructed, which will have a real and tangible impact on the ability of local people to obtain a sustainable livelihood from wetland management.

Output 4: Darwin Centre for Wetland Management for Sustainable Livelihoods established

The Darwin Centre will be the principal centre from which outputs will be disseminated. Staff trained to operate and manage the centre will provide information to visitors, and act as a nucleus from which information can be pro-actively disseminated to local communities through working with VDCs, the Buffer Zone Management Committee and KTWR staff.

Capacity will be built in partner organisations to ensure sustainability and legacy of the project beyond the term of the project funding.

A project evaluation and dissemination workshop will be held towards the end of the project to further enhance the dissemination of the project outputs to the local community, but also to protected area managers from elsewhere in Nepal.

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

The improved understanding of the ecology, fisheries potential and invasive species of buffer zone wetlands around KTWR, coupled with the understanding gained of the value of these wetlands to local communities, will leave a lasting legacy through improved wetland management for both sustainable livelihoods and for enhanced wetland biodiversity. This legacy will be ensured through a number of project activities, as follows.

The 'Darwin Centre for Wetland Management for Sustainable Livelihoods' will be established within Koshi Camp (with a commitment from Koshi Camp to support the facility from its tourism profits beyond the end of the project). The centre will join Wetland Link International (WLI), and use resources available through the WLI web-site. A community learning plan will be developed and linked to local school curricula. Existing staff from Koshi Camp and the KTWR will be trained to provide advice and information to visitors and will carry out outreach work in local communities. They will also be trained as trainers, to ensure capacity exists after the project ends for this training to continue and spread through local communities. The centre will be used as a resource for managers from other protected areas in lowland Nepal. Previous visitors to the Camp have contributed funds for habitat management and education, the potential for which will be enhanced by this project. A revolving fund will be established to provide low-cost loans to local people for fishpond construction, and a fish hatchery will be constructed. By working with local communities to develop appropriate best-practice advice and information materials, the project will be designed to maximise sustainability. A legacy will be left by ensuring all outputs require minimal maintenance using only resources available to local people.

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.

Throughout the development of the project the aim has been to ensure the sustainability of outputs that will be produced. Thus, the project has an exit strategy built into its core.

There are three main elements to this exit strategy:

1. Developing a centre operation plan
2. Developing an income generation plan
3. Training and development plan

As is common to many projects that attempt to encourage more sustainability in use of natural resources, the main potential problem in achieving impact and legacy is that local people will continue to carry out unsustainable exploitation of natural resources for short term gain. The solution to this lies in the involvement of local communities, empowering key groups within local communities so that they feel ownership of the project and its outcomes.

Several aspects of the project will ensure communities continue to feel ownership of the project and its aims.

Local communities will be involved throughout, via the participatory socio-economic wetland valuation, participatory biodiversity surveys, community learning plan development, and consultation over the wetland management guidelines to be drawn up using UK expertise. Some key deliverables that will last well beyond the end of the project include: the Darwin Centre for Managing Wetlands for Sustainable Livelihoods, which will continue to provide information and advice beyond the end of the project through local, trained staff based at Koshi Camp and KTWR. These staff will also continue outreach work in local communities.

Incentives and disincentives will be determined with local community involvement.

Financial security for the project will be maximised through three principal routes:

1. Wherever possible, physical outputs of the project (e.g. Darwin Centre, fish hatchery) will be delivered using materials and resources already available to local people. These will be deliberately low-tech, to ensure that they can be maintained at minimal cost.

2. Techniques in managing wetlands for sustainable livelihoods will aim to enhance economic returns, providing local people with the means to increase their income from using local resources sustainably.

3. The Darwin Centre will be integrated with Koshi Camp, an established ecotourism business, that already receives support from previous visitors. The potential for this income stream will be developed by building capacity in supporter development in Bird Conservation Nepal.

As part of their UNDP-GEF funded project, IUCN Nepal will be developing a national-level financing mechanism for wetland management. A sustainable financing strategy for Koshi Tappu will be linked to this national-level mechanism, and will demonstrate how sustainable financing principles and innovative funding sources can be identified, raised and allocated to specific wetland sites.

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

The project will be badged as a 'Darwin' project with the UK and Nepalese partners. The project will result in the opening of the Darwin Centre for Wetland Management for Sustainable Livelihoods, the opening of which will be advertised through WWT and partner publications as well as through a series of press releases in the UK and Nepal. Sign boards at the centre will use the Darwin logo to enhance recognition.

In Years 2 and 3, a suitable international conference will be selected, at which the results of the project will be disseminated through either oral or poster presentations, which will use the Darwin logo and acknowledge Darwin's financial contribution.

Annual articles will appear in the WWT member magazine, *Wildfowl & Wetlands*, circulated to all 140,000 WWT members in the UK and abroad. The project will also receive frequent coverage in the BCN newsletter *Danphe*, and its Nepali language version, *Munal*. The Koshi Camp newsletter *Garuda* will also be a key means of advertising the project to previous and future visitors to Koshi Camp. Two newsletters bearing the Darwin logo will be produced under this project and distributed to local households. Web-sites of Bird Conservation Nepal and Koshi Camp, as well as that of WWT, will carry substantial information about the project and be used to disseminate relevant outputs. All items appearing in these dissemination outlets relating to the project will bear the Darwin logo and acknowledge Darwin's financial contribution.

All physical project outputs will also bear the Darwin logo.

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?

Training is a key element of this project. There will be two levels of training, both involving trainees all from Nepal.

- Staff from local institutions, principally Bird Conservation Nepal, Koshi Camp and DNPWC
- Local community members

The first step will be a learning needs assessment. This will be participatory, so local communities will develop the content, using role play, group work, interviews and other techniques. This will result in a training programme that is needs-based, demand-driven and informs a dynamic and diagnostic planning process. The learning needs assessment will also draw upon the wetland valuation assessment, to highlight areas where increased knowledge will enhance the economic value local people gain from wetlands.

Training will be given over a series of short courses, at the 'training-the-trainers' level. The main areas where training will be given include community learning, ecological surveys, wetland management for sustainable livelihoods and Centre operation and development. Training will include training for trainers,

communication skills and designing for local context, and using culturally appropriate channels. These training-the-trainers sessions will set off a pyramid of training that can be quantified and measured. This will include school children, local people, and protected area managers both locally and from elsewhere in Nepal, who will receive training either at the centre, or through training activities in the local community during and beyond the course of the project.

The training programme will build on WWTs, CABI's and Stirling's Institute of Aquaculture expertise in ecological and hydrological surveys, invasive species management and sustainable fisheries management. It will also draw on WWTs expertise in community learning, and operating wetland centres both through management of its own UK centres, but also through its co-ordination of Wetland Link International.

Specific training courses have been provisionally timetabled as follows:

- Mar 07: Two local institution staff and 10 local people trained in participatory biodiversity surveys methods – 3 days
- Jan 08: Four local institution staff trained in relevant ecological and hydrological surveys methods – 5 days
- Mar 08: Five local institution staff and 20 local people trained as trainers in relevant wetland management techniques for sustainable livelihoods – 8 days
- Oct 08: Two local institution staff trained in centre development – 5 days

Staff for training from local institutions will be selected according to the relevance of the training to their roles and responsibilities in the respective organisations. The criteria for assessing this relevance will be determined through consultation with partners. People from local communities to receive training will be selected with guidance from community groups, i.e. Village Development Committees, and the Buffer Zone Management Committee.

Evaluation of training will be built in to the whole planning process, using criteria that are worked up by the training participants and facilitators themselves, using both self and group evaluation throughout the course. This will enable trainees to assess the extent to which their learning needs have been met by the training delivered to them.

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 To assist local communities around Koshi Tappu Wildlife Reserve (KTWR) in managing buffer zone wetlands for sustainable livelihoods, whilst enhancing wetland biodiversity	Increased wetland-related income and employment opportunities in the buffer zone Enhanced biodiversity of buffer zone wetlands Reduced encroachment and illegal use of KTWR	KTWR reports Buffer Zone Management Committee reports Village Development Committee (VDC) reports Socio-economic indicators	Local communities remain involved in and supportive of the project Partner NGOs remain committed and viable
Outputs			
Personnel trained and capacity built in local organisations and community groups	A minimum of 25 people (5 from 2 partner institutions, 20 from local communities) trained by end Yr 2 in participatory biodiversity surveys, sustainable wetland management, and community learning and education	Attendance records Training assessment forms	Trained staff remain in institutions or local communities and use skills provided
Sustainable wetland management promoted using wetland management guidelines for sustainable livelihoods	Through local NGOs and VDCs 2000 families informed of improved wetland management practice	Field survey reports Desk survey reports Reviews/feedback on guidelines	Local stakeholders willing to participate in development process
Sustainable fisheries management plan developed and promoted	Management plan peer reviewed, published, disseminated and interpreted for local use; 1000 copies produced and distributed by Yr 3; fish hatchery opened Yr 3.	KTWR reserve reports Reviews/feedback on manual	Management authority remains supportive
Darwin Centre for Wetland Management for Sustainable Livelihoods established	On-site training and education facility providing information and advice on wetland management designed with local people and UK partner advice, opened Yr 3	Operation plan for 5 years Visitor records	Information reaches local communities and schools, and has a positive impact
Activities	Activity milestones (summary of project implementation timetable)		Assumptions
Workshops	Yr 1: Project planning (3 days Oct 06); participatory wetland socio-economic valuation (1 wk Jan 07); participatory biodiversity surveys (1 wk Mar 07) Yr 2: wetland management for sustainable livelihoods and community learning (2 wk Mar 08) Yr 3: centre development (1 wk Oct 08); project evaluation (2 days Apr 09).		Sufficient participants interest

Field surveys	Yr 1: Establishment of field sites (Jan 07); wetland tenure (Mar 07). Learning needs, invasive species, fisheries management, fish-wildlife conflicts and water quality and quantity surveys completed between Mar 07 (Yr 1) and Jan 08 (Yr 2).	Field sites accessible
Wetland management guidelines development	Collation of information from surveys, workshop outputs and community consultation, with desk reviews. Draft guidelines by Mar 08 (Yr 2). Final versions produced after workshop consultation (Mar 08) by July 08 (Yr 2).	Effective survey data collection
Fisheries Management Plan development	Collation of data from field and desk surveys, and workshop outputs. Draft plan produced by Mar 08 (Yr 2). Final versions produced by Oct 08 (Yr 3).	Continued livelihood importance
Community Learning assessment and plan development	Learning needs assessment in collaboration with local schools and community groups completed Yr 1. Community learning plan for up to 12 VDCs and local schools, Yr 2.	Full stakeholder support maintained
Development of demonstration facility	Improve existing infrastructure (Yr 2). Develop interpretative material using information from workshops and wetland management guidelines (Yr 2-3). Opening of facility by Oct 08 (Yr 3).	Full stakeholder support maintained
Publicity material	2 radio broadcasts Yr 1 and 3. information provided to Wetland Link International web-site (Yr 3); 2 newsletters for local communities Yrs 2 and 3. Posters, info sheets Yr 3; WWT magazine articles Yrs 1, 2 and 3; 2 peer-reviewed papers Yr 3.	Sufficient media interest in project

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

Project implementation timetable		
Date	Financial year	Key milestones
Year 1		
Oct 06	2006/7	Project planning workshop completed
Jan 07	2006/7	Participatory wetland socio-economic valuation workshop completed
Jan 07	2006/7	Field sites established
Mar 07	2006/7	Participatory biodiversity surveys training complete
Mar 07	2006/7	Wetland tenure surveys completed
Mar 07	2006/7	Learning needs assessment completed
Year 2		
Jan 08	2007/8	Completion of learning needs assessment, invasive species, fisheries management, fish-wildlife conflict surveys, and water quality and quantity surveys
Mar 08	2007/8	Development of draft guidelines for sustainable wetland management completed in consultation with local communities
Mar 08	2007/8	Wetland management for sustainable livelihoods training workshop carried out
Mar 08	2007/8	Draft fisheries management plan produced
Mar 08	2007/8	Community learning plan complete
Year 3		
July 08	2008/9	Finalised sustainable wetland management guidelines

Oct 08	2008/9	Centre development workshop complete
Oct 08	2008/9	Final version of fisheries management plan complete
Oct 08	2008/9	Opening of Darwin Centre for Wetland Management for Sustainable Livelihoods; opening of fish hatchery
Apr 09	2009/2010	Project evaluation workshop complete

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

PROJECT OUTPUTS		
Year/Month	Standard output number (see standard output list)	Description (include numbers of people involved, publications produced, days/weeks etc.)
Year 1		
Oct 06	5	Appointment of one full-time Nepalese project officer at BCN to receive in-job training on all aspects of the project.
Oct 06	8	Project planning – 1 staff week
Oct 06	15A	Press release in Nepal
Oct 06	15B	Local press release in Nepal
Oct 06	15C	Press release in UK; article in WWT members magazine
Oct 06	19A	National radio item in Nepal
Oct 06	19C	Local radio item in Nepal
Jan 07	8	Participatory wetland valuation, establish field sites – 1 staff week
Jan 07	18A	National TV item in Nepal
Jan 07	22	Permanent field plots established for participatory biodiversity surveys, water quality monitoring
Mar 07	6A, 6B	2 local officers and 10 local people (all Nepalese) trained in participatory biodiversity surveys, 3 days
Mar 07	8	Wetland tenure surveys, participatory biodiversity surveys training, learning needs assessment, invasive species management surveys, fisheries management surveys part 1 – 6 staff weeks
Mar 07	15B	Local press release in Nepal
Mar 07	19C	Local radio item in Nepal
Jul 07	6A,6B	One Nepalese project officer to receive 2 weeks training in UK in CEPA
Yr 1	20	Value of physical assets: £4,200.00
Yr 1	23	Value of in-kind contributions: £16,094.25

Year 2		
Oct 07	8	Fisheries management surveys part 2 – 1 staff week
Oct 07	15C	Article in WWT members magazine
Jan 08	6A, 6B	4 local officers (all Nepalese) trained as trainers in wildlife surveys, water quality and quantity sampling methodologies, total 1 week.
Jan 08	8	Wildlife-fishery conflict surveys, water quality/quantity surveys – 3 staff weeks
Jan 08	16A,B	Newsletter produced for local communities: circulation 2000
Mar 08	6A, 6B	25 Nepalese people (5 from 2 partner institutions, 20 from local community bodies) receive training as trainers in wetland management for sustainable livelihoods, 1 week.
Mar 08	7	Wetland values training materials (information leaflets, posters)
Mar 08	8	Wetland management for sustainable livelihoods training, community learning workshop – 4 staff for 1 week
Mar 08	9	Invasive species management plan
Mar 08	15B	Local press release in Nepal
Mar 08	19C	Local radio item in Nepal
Jul 08	7	Sustainable wetland management guidelines
Jul 08	14B	Attendance at conference
Yr 2	20	Value of physical assets: £4,000
Yr 2	23	Value of in-kind contributions: £10,944.25
Year 3		
Oct 08	6A, 6B	2 local Nepalese staff trained as trainers in centre development and management, 1 week
Oct 08	8	Centre opening, centre development workshop – 2 staff weeks
Oct 08	9	Community learning plan
Oct 08	11A	Paper published in peer-reviewed journal on wetland valuation
Oct 08	11B	Paper submitted to peer-reviewed journal on results of biological surveys and water quality/quantity
Oct 08	15A	Local press release in Nepal
Oct 08	15B	Press release in UK; article in WWT members magazine
Oct 08	15C	Three web-site dissemination networks to be enhanced: Wetland
Oct 08	17B	Link International web-site to be enhanced by joining Koshi Camp centre to WLI; BCN and Koshi Camp web-sites to be enhanced to provide opportunities for exchange of information
Oct 08	18A	National TV item in Nepal
Oct 08	16A,B	Newsletter produced for local communities: circulation 2000
Oct 08	19C	Local radio item in Nepal
Oct 08	21	Establishment of Darwin Centre for Wetland Management for Sustainable Livelihoods; opening of fish hatchery
Jan 09	14B	Attendance at conference
Jan 09	19A	National radio item in Nepal
Apr 09	8	Project evaluation and dissemination workshop – 1 staff week
Apr 09	9	Fisheries management plan
Apr 09	14A	Project evaluation and dissemination workshop to be attended by local community groups and Nepalese protected area managers
Yr 3	20	Value of physical assets: £9,500
Yr 3	23	Value of in-kind contributions: £8,690.26

PROJECT BASED 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.

The aim of the project is for monitoring and evaluation to be built in to the whole project delivery process, using criteria that are worked up by the partners themselves, using both self and group evaluation. The participatory approach that will be employed allows for these measures to be discussed at the outset of the project with local natural resource users and managers, both within and beyond the host country partners. The relevant indicators will also be identified through this approach.

However, we recognise the need for subjective ways of evaluating the success of the project, and have defined a series of indicators that can be used to measure the success of the project.

The overall purpose of the project, to assist in managing buffer zone wetlands for sustainable livelihoods, can be measured through assessing income and employment opportunities in the buffer zone. Village Development Committee reports will provide socio-economic indicator data that will be used to verify this.

An additional indicator of this will be the reduced pressure on the KTWR itself, which can be assessed by KTWR reporting mechanisms. The project also aims to enhance biodiversity value of wetlands in the Koshi Tappu area, which can be measured using bioassessment criteria that will be developed during the course of the project, and assessed via participatory biodiversity surveys, as well as through on-going monitoring activities carried out with the involvement of BCN (e.g. waterbird population monitoring activities).

At the end of the project, individual outputs are to be evaluated using the objectively measurable indicators given in the logical framework, as follows:

1. Trained personnel and built capacity: numbers of trained people, which can be verified via training attendance records.
2. Sustainable wetland management: the objective indicator of the output is the quantity of dissemination of wetland management guidelines (e.g. number of copies of guidelines distributed).
3. Sustainable fisheries management plan: publication and dissemination of the plan, verified by feed back on the plan from stakeholders.
4. Darwin Centre: opening of centre, with a operation plan complete, and visitor records indicating its use.

Continuous monitoring and evaluation will be carried out throughout the course of the project using the key milestones and measurable outputs identified in sections 20 and 21. This will be carried out by:

- ongoing informal communication between local communities and project partners (local NGOs, KTWR, Buffer Zone Management Committee, VDCs etc.)
- formal communication between all project partners and local natural resource users during the project planning workshop, participatory wetland valuation, participatory biodiversity surveys, learning needs assessment, wetland management training and the final evaluation workshop.