



Submit by 5 January 2007

DARWIN INITIATIVE APPLICATION FOR GRANT ROUND 15 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 (NB: Notification of results will be by post)

Name: Dr Richard Kock	Address: Conservation Programmes, Zoological Society of London, Regent's Park, London NW1 4RY
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2. Project title (not exceeding 10 words)

Crisis to biological management: rhinoceros, grassland and public engagement - Nepal.

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

Proposed start date: 1 May 2007		Duration of project: 3 years			End date: 31 April 2010
Darwin funding requested	2007/08 £116,023	2008/09 £80,602	2009/10 £36,462	2010/11 £	Total £233,087

4. Define the purpose of the project (extracted from logframe)

The central aim of this project is to re-establish effective capacity, systems and motivation for the conservation of the endangered one-horned Asian rhinoceros and associated *Terai* grassland habitat in Nepal. The project focuses on three protected areas, one of which is a world heritage site, with the following main objectives: 1) strengthening and increasing the capacity of Nepal's existing wildlife department officials, patrol scouts and communities particularly in monitoring and surveillance of rhino and in anti-poaching; 2) strengthening metapopulation approach to ensure viable populations as soon as possible in all sites which includes a feasibility study on a Sanctuary Approach in SWR and/or community areas, and institutionalising standardised status reporting on each rhino population; 3) developing a *Terai* grassland invasive species management programme with focus on training of field scientists in habitat assessment and control; 4) implementing more effective human-wildlife conflict resolution approaches and 5) improving public engagement and integration of local communities, politicians and other stakeholders in conservation efforts and facilitating improved governance of rhino conservation. Delivering these objectives coincides with key objectives of the Ministry of Forests and Soil Conservation of the Government of Nepal, under the auspices of the Rhino Conservation Action Plan.

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 and co-ordinator in host country/ies
Surname	KOCK	AMIN	THAPA
Forename (s)	Richard	Rajan	Ganga Jang
Post held	Programme Manager - Desert and Rangelands	Field Programme Coordinator	Executive Officer
Institution	Zoological Society of London	Zoological Society of London	National Trust for Nature Conservation
Department	Conservation	Conservation	

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

The following are the most recent projects:

Reference No	Project Leader	Title
162/12/004	Dr Rajan Amin	Building capacity for conservation of a critically endangered flagship species (Kenya).
162/13/034	Sarah Christie	Wildlife health monitoring and capacity-building for leopard conservation in Russia.
14/060	Alison Shaw	Sustainable management of ornamental fish species in Mamiraua, Brazil.
15/002	Dr Richard Pettifor	Integrating crane conservation with sustainable habitat utilisation.
162/11/013	Dr Stephan Funk	Conserving the critically endangered Darwin fox on Chiloe Island, Chile.
162/11/007	Dr Sarah Durant	A national plan for carnivore conservation in Tanzania.
14/055	Dr Sarah Durant	Developing a National Conservation Action Plan for the mammals of Tanzania.
EIDPO 5	Andrew Cunningham	Building capacity for the recovery of critically endangered <i>Gyps</i> spp. vultures in India.
162/13/032	Andrew Cunningham	Addressing a threat to Caribbean amphibians: capacity building in Dominica.
14/024	Dr Belinda Stewart-Cox	Afro-Asian elephant community conservation network.
162/13/034	Dr Nigel Barton	The Steppe Forward Programme: Training conservationists for Mongolia's future.

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/collaborative (where there are partners in addition to the applicant organisation) and host country partners that will be involved, and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. This section should illustrate the capacity of host country partners to be involved in the project. Please provide written evidence of partnerships.

Partner	Details (including roles and responsibilities and capacity to engage with the project):
National Trust for Nature Conservation (NTNC).	The major Nepalese NGO for conservation (formerly known as the King Mahendra Trust for Nature Conservation). ZSL is a long-term partner through an MOU and are responding to an appeal for support to rhino conservation at a critical time. NTNC provided the platform for the development of the proposal putting considerable effort into providing information, office space and overall facilitation of the scoping mission both in Kathmandu and in the 3 focal areas of Chitwan National Park (CNP), Bardia National Park (BNP) and Suklaphanta Wildlife Reserve (SWR) and associated Community areas. NTNC will be involved in field implementation of the project activities along with the Department of National Parks and Wildlife Conservation.

<p>Partner</p> <p>Department of National Parks and Wildlife Conservation (DNPWC).</p>	<p>Details (including roles and responsibilities and capacity to engage with the project):</p> <p>The DNPWC under the Ministry of Forest and Soil Conservation is responsible for the conservation and management of the country's wildlife and ecosystems. It is a major beneficiary of the project and provided guidance and facilitated the visits and meetings with its key staff and with the Nepalese Army, which is responsible for wildlife security in certain parks and reserves of the country. If DNPWC can be empowered and trained to monitor and protect the rhino and work more effectively with the local communities this will be core to restoring the population not only of rhino but also other species such as the Bengal tiger also suffering from a collapse in effective management of the protected areas. The DNPWC along with NTNC will be involved in field implementation of the project.</p>
<p>Partner</p> <p>International Union for the Conservation of Natural Resources (IUCN).</p>	<p>Details (including roles and responsibilities and capacity to engage with the project):</p> <p>IUCN has been active in Nepal since late 1960s assisting early government efforts to protect environmentally-sensitive areas and wildlife. Currently, IUCN Nepal programme's strategic interventions are to promote biodiversity conservation, environmental justice and sustainable livelihoods in Nepal. IUCN is very keen to support the policy, community and trans-boundary communication and dialogue initiatives within the project, through its considerable neutral and convening power. IUCN Nepal will be involved in generating conservation education and awareness at all levels through advocacy and outreach initiatives, material development and "Save Rhino" campaigns.</p>
<p>Partner</p> <p>WWF</p>	<p>Details (including roles and responsibilities and capacity to engage with the project):</p> <p>WWF Nepal is one of the most experienced and credible conservation organizations in Nepal. Association of WWF with the conservation history of Nepal dates back to 1967 when it supported the government for the conservation of a severely depleted population of Greater One-horned Rhinos and Bengal Tiger. WWF Nepal is concerned by the current situation and would like to continue to be involved in supporting anti-poaching activities and preparation of national management plans, action plans and guidelines. WWF recognise that the Darwin Initiative project can be catalytic in the recovery of the rhino and significantly improve the potentials for success given the history and changing political system in Nepal. It is not just a question of money and ZSL is a respected institution at the community and capacity building level which will be synergistic to the other investments being made by WWF.</p>

Partner CABI International Europe - UK	Details (including roles and responsibilities and capacity to engage with the project): CABI is a global leader in invasive species prevention and management. It runs projects across the globe and also advises government policy makers. It has advised on initial planning for invasive species management in Nepal. With partners, CABI will advise on the assessment of the invasive non-native plants in the protected areas and studies to quantify impact. CABI will also advise on the development of a strategy for invasive plant species management. The strategy will include biodiversity and socioeconomic dimensions (issues related to protected areas and local livelihoods) and will also use experience on invasive species management gathered from other projects. The final plan will also be fully integrated with other project components and park management plans.
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9a. Have you consulted stakeholders not already mentioned above? If yes, please give details: During the scoping exercise several community groups actively involved in the buffer zones of the protected areas were consulted. These included women groups, tourism beneficiaries, farmers or land holders and indigenous marginalised communities (including forest resource users and community members at risk from wildlife depredation or attack).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
9b. Do you intend to consult other stakeholders? If yes, please give details: There have been dramatic political events in Nepal in recent months with the settlement of a decade or more of rebellion within the country, which had been conducted by the Maoist political force. This has led to significant changes in government and these new structures and leaders are being consulted at all levels. This presents an important opportunity to help the new leadership centrally and locally to address the threats to wildlife and rhino in particular. This development will enable the project to engage more fully with the communities and hopefully develop a major deterrent to the external threats posed by rhino horn traders and poachers.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
9c. Have you had any (other) contact with the government not already stated? If yes, please give details:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

PROJECT DETAILS

10. Please provide a Concept note (Max 800 words) (repeat from Stage 1, with changes highlighted)

<p>Greater one-horned rhinoceros are restricted to small protected areas primarily in north-eastern India and Nepal (Chitwan National Park-CNP, Bardia National Park-BNP and Suklaphanta Wildlife Reserve-SWR). These rhinos are highly vulnerable due to intensification of agriculture and habitat loss, a burgeoning human population and poaching. Furthermore, Nepal has been facing dramatic socio-economic and political challenges over the last decade that negatively impacted the recovery of rhino; which had previously shown considerable progress. Numbers in CNP increased from 100 animals in the early 1980s to 544 in 2000 allowing establishment of founder groups in BNP and SWR (83 and 4 rhinos were translocated between 1986 and 2003 to BNP and SWR respectively). However, there has been a significant decline since then to probably less than 370 today in CNP and less than 40 in BNP, with only SWR sustaining growth to 7 individuals. CNP still holds the second highest population in the world and for this and its other endangered species, such as the Bengal tiger (also in decline) and Asian wild elephant, has been designated a World Heritage Site.</p> <p>ZSL undertook a scoping exercise for a rhino project in September 2006, following an earlier mission in February. These visits coincided with Nepal's transition from political autocracy to the return of a representative government. Poaching (both opportunistic and organised) during this time of considerable insecurity is considered the main cause of the recent decline. Mortality and recruitment are poorly understood due to a relatively inadequate monitoring system and infrequent census; this raises serious concerns. Underlying causes for the decline include weakening anti-poaching and law enforcement, marginalised communities as well as poor integration and coordination of stakeholders. There is an urgent need to address these problems and this is now</p>

possible as the National security situation has eased and stakeholders are willing to participate in a project of this sort. Given the potential for a concerted effort from multiple stakeholders, without the corruption and centrally-dominated policies that previously hindered staff on the ground, much progress could be made with relatively small investment. In addition, sanctuary approaches (or intensively managed rhino conservation areas), proven so successful in Africa, may be the only way of conserving the species in the short term, given the continuing demand for rhino horn in neighbouring East Asia. The training and actions on the ground will result in increased patrol effort, anti-poaching and monitoring capability and will improve knowledge on rhino numbers, distributions and poaching threats. Improved metapopulation management will also increase the resilience in the system and ensure the rhino population is protected across a wider community base, which was such an important element in the recovery of rhinoceros in Africa. Much of our experience in capacity building gained during DI project (162/12/004) will be of direct relevance in Nepal and much of it transferable.

In addition, NTNC and DNPWC have highlighted the need for resolving invasive species encroachment on the rhino's *Terai* grassland habitat which itself is a highly threatened ecosystem and now reduced to isolated pockets within a chiefly human-dominated landscape. This project will complement ongoing activities on habitat management by focussing on research on the impact and on management methods for invasive alien species. Some chronic invaders include *Mikania micrantha* (an unpalatable creeping vine, rapidly spreading over the riverine forest habitats in CNP and buffer zone community forests) and *Lantana camara* (encroaching on BNP's *Acacia-Dalbergia* forest association, tall floodplain grasses and riverine forest). But the project will assess all invasive species threatening the *Terai*.

Finally, in the long run, no conservation project is successful without the support of the local community and this initiative sets a new agenda based on improved governance, integration and opportunities for a wider set of stakeholders than hitherto. This project will support multi-stakeholder monitoring and anti-poaching systems, practical solutions towards reducing crop and physical damage by wildlife (using unpalatable medicinal plants and electric fencing), development of a longer-term buffer zone community development strategy based on socio-economic studies, and sustainable livelihood skills development focusing on the most marginalised and disillusioned communities. The earlier work by ZSL on establishing veterinary clinics around Chitwan is still regarded by the communities as a highly successful and welcome contribution to their livelihoods and this will enable the project to start from a position of trust. The project will promote public engagement targeting all levels from Government, media (local radio and press) and the local communities. Community theatre, as part of a mobile education and awareness unit, will provide a dynamic and popular approach particularly suited to the very poor and disadvantaged illiterate communities from which commercialised gangs source poachers, but will also be beneficial in the bureaucratic environment of the politicians, managers and city based conservationists. At a time of great division in the Nepalese society, this will also encourage cohesiveness in society using the strong symbolism of the rhino, which is now severely threatened.

In summary; this project will: 1) strengthen and increase the capacity (particularly monitoring and surveillance of rhino and in anti-poaching) of Nepal's existing wildlife department officials, rangers and communities across the network of protected areas (CNP, BNP, SWR); 2) strengthen metapopulation approach (including a feasibility study on sanctuary approach in SWR and/or community areas); and 3) facilitate improved governance of rhino conservation, improved public engagement and integration of politicians, stakeholders and local communities in conservation efforts and decision-making.

11a. Is this a new initiative or a development of existing work (funded through any source)?

Please give details:

This is a new initiative. However, this project builds on more than 20 years experience of field research and management of rhinos (Black and Asian greater one-horned rhinos) and related biodiversity and community-based conservation undertaken by ZSL with its partners.

11b. Are you aware of any other individuals/organisations/Darwin Initiative projects carrying out similar work?

Yes No

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

lessons from such work for mutual benefits:

A previous Darwin Initiative project (ref: 3023; 1997) carried out studies on tall grass management in southern Nepal. This project focussed on the impact of fire and grazing on the grasslands. The habitat research and management capacity building component of our project will compliment this and ongoing work by concentrating on the spread, impact and control of invasive alien species which are threatening the grasslands both inside and outside protected areas. This proposed work is based on the recommendations of a workshop facilitated by our project partners IUCN and DNPWC on the threat of invasive weed species in 2005.

Knowledge and experience about invasive species management from other projects will also be utilized. In 2005, IUCN Nepal published a report "An Inventory and Assessment of Invasive Alien Plant Species of Nepal". This report covered 166 IAS including *Mikania micrantha* and *Lantana camara*. Also, the UK Department for International Development (DFID) has supported work for development of management techniques for Mikania in India. Australia (with CABI) has done much work on Lantana. Also a current Darwin project (Managing wetlands for sustainable livelihoods, Nepal – Ref 15/014) has a component on invasive species management in buffer zones. The proposed project will utilize and build on this. Other experience from across the globe will also be utilized (e.g. from the Global Invasive Species Programme – www.gisp.org).

This project will also apply knowledge gained in one part of the world to another, by transferring experience and expertise in implementing monitoring systems, training and metapopulation management from a different Darwin Initiative funded project - conservation of the black rhino in Kenya. The project (ref: 12004) was led by one of this project's UK team member and has already proved successful in delivering training and developing expertise for ensuring viable populations of this species and the protection of natural habitat in Kenya.

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.

Nepal has placed significant emphasis over the years on conserving its unique natural and cultural heritage. Over 18% of its area is designated as protected areas and two of its national parks (Chitwan and Sagarmatha) are world heritage sites. However, Nepal has faced social, economic and political problems and these have negatively impacted upon conservation efforts. It has been only weeks since a long running civil war was finally settled and this provides a window of opportunity to engage and resolve the many problems with rhino conservation. This is the time when help is needed by Nepalese Institutions, both governmental and NGO that have been weakened by the recent history and are asking for help. Nepal had over a quarter of the world's Greater one-horned rhinos in 2000 and these have now fallen by about a third. The tall and wet grassland habitat on which the survival of many other endangered species such as the Bengal tiger (*Panthera tigris*), Asian wild elephant (*Elephas maximus*), spotted deer (*Cervus axis*) and Gaur (*Bos gaurus*) also depend, is itself a highly threatened ecosystem. These *Terai* grasslands already severely restricted in range are now under significant risk from invasive alien species.

This project will contribute to achieving key objectives of the National Biodiversity Strategy, namely: 1) developing newer strategies (e.g. more integrated monitoring, anti-poaching and decision-making process for rhino conservation) and the expertise within Nepal to promote the protection of natural habitats for the maintenance of viable populations (e.g. of rhino and other tall grassland species) in their natural surroundings; 2) providing a scientific and technical training programme to facilitate the conservation and sustainable management of key components of Nepal's biodiversity (tall grassland ecosystem); 3) establishing a range of field-based tools and infrastructure supporting Nepal's capacity for protected area management and 4) building local knowledge, awareness and support for the protection of unique biodiversity of the region through public engagement and community assistance programmes (community education, awareness and dialogue, socio economic surveys and sustainable livelihood development, human-wildlife (rhino) conflict management).

13a. How will the project assist the host country in its implementation of the Convention on Biological Diversity? Please rank the relevance of the project to the relevant article(s) of the CBD thematic programmes and/or cross-cutting themes by indicating percentages.

	%		%

Articles	Relevance	Themes	Relevance
5. Co-operation	10	Access and Benefit Sharing	15
6. General measures for Conservation and Sustainable Use	5	Agricultural Biodiversity	
7. Identification and Monitoring	10	Alien Species	10
8. <i>In-situ</i> Conservation	10	Biodiversity and Tourism	10
8h. Alien Species	5	Biosafety	
8j. Traditional Knowledge	0	Climate Change and Biodiversity	
9. <i>Ex-situ</i> Conservation	0	Economics, Trade and Incentives	
10. Sustainable use of components of Biological Diversity	0	Ecosystems approach	5
11. Incentive measures	3	Forest Biodiversity	5
12. Research and Training	15	Global Strategy for Plant Conservation	
13. Public education and awareness	10	Global Taxonomy Initiative	
14. Impact assessment and minimizing adverse impacts	5	Impact Assessment, Liability and Redress	5
15. Access to genetic resources	0	Indicators	
16. Access to and transfer of technology	5	Inland Waters Biodiversity	
17. Exchange of information	5	Marine and Coastal Biodiversity	
18. Technical and scientific co-operation	5	Mountain Biodiversity	
19. Handling of biotechnology and distribution of its benefits	0	Protected Areas	20
20. Financial resources	0	Public Education and Awareness	20
21. Financial mechanism	0	Sustainable Use and Biodiversity	5
22. Relationship with other international conventions	0	Traditional Knowledge, Innovations and Practices	5
23. Conference of the Parties	2		
24. Secretariat	0		
25. Subsidiary Body on Scientific, Technical and Technological advice	5 (IUCN)		
26. Reports	5		

13b. Is any liaison proposed with the CBD national focal point in the host country? Yes No
If yes, please give details:

Since the rhino is an indicator species in the *Terai-Duar* ecosystem and is declining, and there are worrying trends in these grassland habitats from alien species and poor management, it will be important to discuss this aspect with the focal point to foster support on policy change and awareness initiatives arising from the project and thereby ensure success and progress in Nepal's stated commitment to supporting CBD. This will involve re-examining the rhino management plan from who is responsible on the ground e.g. the Army or the Conservation department, to a sanctuary or other metapopulation management approach.

14. If relevant, please explain how the work will contribute to sustainable livelihoods in the host country. (Max 200 words)

Our work will address the livelihood concerns of the various stakeholders. During our Darwin scoping visit, a particular concern raised by farmers around the buffer zones was the considerable loss of money through crop damage. Rhinos and other animals damage a variety of crops mostly through eating and trampling, with injuries or loss of human lives. We will initiate studies into the most effective methods for minimising this conflict (pilot electric fence study and expansion of non-palatable mentha cash crops which has proved successful in the past). We will then develop a strategy and assist DNPWC, NGOs and the Buffer Zone management committees to implement this. We will also use our socio-economic studies to develop a longer-term development plan with the Government and conservation NGOs for reducing park-community conflict and improving livelihoods. 30%-50% of the income generated by the parks is provided to the Buffer Zone Committee but the poorer marginalised communities do not receive adequate benefit from this. Our education, awareness, advocacy and skills development programme will particularly focus on these landless marginalised communities (lower caste non-farmers - caste is an important factor in gaining access to various social services such as education and employment). Many of the communities were totally dependent on the park land (e.g. for fish, a variety of fruits and vegetables, building material, fuel wood, medicine) and do not have other livelihood alternatives. They are therefore most prone to engage in poaching activities (almost all the convicted poachers

are from this social group). We will provide them with training in various income-generating programs (such as mushroom farming, bee keeping, hand-loom weaving). We will also help DNPWC and NTNC initiate more community participatory activities in order to slowly reduce dependence on the parks (the majority of the people around the park buffer zones directly depend on natural resources for their livelihoods). For example effective management of community forests can sustainably provide fodder, thatch, fuel wood and also job creation/revenue through tourism. The rhinos are critical in developing ecotourism and their effective conservation will also result in increased tourism employment opportunities through hotels, lodges and guided elephant tours.

15. 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. (max 200 words)

The primary aim of the project is to develop a sustainable long-term conservation program for rhinos in Nepal. In order to gain political, national and local support, we propose to target all the key stakeholders in the region to educate, train and empower them with their specific roles in assisting rhino conservation (and associated *Terai* grassland habitat). Through serious engagement and the sharing of experience, tools and methodologies the likely impacts are:

- Improved morale and capacity of the rangers and scientific staff to effectively develop a program for rhino and grassland management;
- Regular monitoring, status reporting and protection of rhino from threats (whether poaching or human-wildlife conflict);
- Better trained staff for rapid engagement on poaching or killing events and identification of agents;
- Better trained staff in newer translocation methods, veterinary practices & health (rhino, other wildlife, livestock, camp elephants);
- Greater affinity towards the rhino and sharing of responsibilities across a wider community than hitherto;
- Better governance and policy at central and local levels;
- More information on the invasive species threats, impacts and their effective control;
- New strategies for rhino conservation in Nepal including reassessment of the role of the military, Parks staff and community in anti-poaching and establishment of viable rhino populations at all sites including the feasibility of a sanctuary approach;
- Reduced human-wildlife (rhino) conflict;
- More effective buffer zone community awareness and livelihood development programmes in order to increase community support for conservation.

We will also work in conjunction with IUCN and other organisations in order to widely publicise the problems, possible solutions and results of the project using a variety of traditional tools including reporting, popular media, key scientific meetings and workshops in addition to innovative engagements with the communities such as the use of dramatic arts to enhance their involvement.

16. How will the work leave a lasting legacy in the host country or region? (max 200 words)

Even after tenure of the project, it's legacy will remain through: 1) a cadre of well trained DNPWC, community forest and NTNC staff in wildlife monitoring and management; 2) a critical mass of instructors, able to train staff in CNP, BNP, SRW and buffer zone community forests; 3) established practical data-handling and decision-support tools; 4) improved quality and reliability of data monitoring systems which aid the management of rhino and sympatric mammals; 5) outputs being disseminated and put into practice through follow-up training and on-going mentorship; 6) ongoing development of an effective habitat restoration programme including research on the spread, impact and control of invasive species (especially *Mikania micrantha* and *Lantana camara*), production of habitat sensitivity maps and development of longer-term plan; 7) standardised annual status reports being used to make appropriate metapopulation management decisions; 8) established viable rhino populations in all areas and a strategy on sanctuaries both in PA and community forests which can be implemented if other approaches fail; 9) increased research capacity of the park departments through various studies; 10) on-going implementation of effective human-rhino conflict mitigation measures in CNP and BNP through a developed Action Plan; 11) better public engagement through developed community-based participatory

programmes in the buffer zone under the responsibility of community officers; 12) a revised National Rhino Conservation Action Plan.

17. 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. For example, what steps have been taken to ensure the benefits of the project will continue despite any staff changes in these organisations? (max 200 words)

We will ensure that the strategies (including longer-term management plans) and systems are in place and stakeholders have enough expertise to implement and transfer skills. The project will build confidence and capacity in DNPWC, buffer zone community forest and NTNC staff in driving rhino conservation, through active skills development, support and guidance, to run the training (through multiple trained instructors), monitoring, habitat assessment/restoration, status reporting and management activities into the future. We are confident that if successful, this project will have a clear catalytic effect on rhino conservation in Nepal, shifting the focus from centrally controlled to locally driven, practical conservation.

ZSL has worked closely with NTNC and DNPWC for over 15 years both in wildlife conservation (rhino, vultures, Gharial, and fishes) and communities (livestock management programme in CNP buffer zone) and have an existing MoU. In addition, two of the proposed Darwin Fellows (R Kock and R Amin) have significant (25+15 years) practical experience in wildlife conservation and are therefore, at both institutional and personal levels, exceptionally well-placed to identify and resolve potential problem areas which could affect project impact and legacy.

The **potential problems** and proposed steps/approaches to mitigate them are: 1) **Lack of uptake of training:** Our proposed training will follow problem-based learning and an outcomes-based approach and include formalised testing procedures to assess the degree of understanding/competence of trainees. Formal accreditation, and the pride and recognition it will bring, should act as motivator and promote uptake of training. 2) **Staff turnover:** By training multiple trainers and using on-going on-site modular teaching approach, training should continue into the future despite staff turnover. Furthermore, DNPWC are fully committed to retaining well-trained and highly motivated staff in the field at this crucial period (see letter of support). 3) **Lack of proper implementation:** i) Support in the development of an enabling policy environment (e.g. responsibilities and authority for rhino protection firmly placed in the department of wildlife and their staff supported by other agencies and the Army if necessary). ii) Staff will be clearly instructed about what is expected of them (DNPWC and NTNC will draw up Terms of Reference for each relevant project staff member providing clear guidance on their responsibilities. iii) The process of accreditation and mentoring, support and encouragement by Darwin fellows and experienced NTNC and DNPWC staff should help provide staff with the necessary confidence to implement what they have learned. iv) Use of reporting, evaluation and monthly assessment procedures in conjunction with necessary remedial action/training. v) After this Darwin project has ended, NTNC and DNPWC senior staff and committees will be able to monitor the levels of implementation of ongoing programme activities introduced/enhanced by the project. 4) **Potential lack of public engagement and support:** This will occur if there is 'more of the same' approach to rhino conservation in Nepal, involving centralised control, aggressive protection policies and the exclusion of certain sections of stakeholders. On completion of our buffer zone community socio-economic surveys, we will hold a workshop inviting all community groups and develop an effective community development/participation action plan which is agreed by all groups. We will work closely with the Buffer Zone Development Committee, Government and local NGOs, including IUCN, to implement this.

18. How will the project be advertised as a Darwin project and in what ways will the Darwin name and logo be used? (max 100 words)

The Darwin Initiative will be fully acknowledged in all reports and scientific papers, and the logo will be displayed on the cover of all reports. The logo will also be advertised on: 1) course notes, presentations, and manuals; 2) formal presentations in scientific meetings; 3) resulting databases; and 5) community education and awareness material. ZSL press office will publicise the major project outputs. Reference to Darwin Initiative will also be made in local and UK radio broadcasts and newspaper articles, in NTNC, IUCN, WWF newsletters, SSC/WCPA bulletins, Protected Area

Learning Network (PALNET) e-portal, and ZSL Lifewatch magazine and other relevant publications; and publicised on the ZSL, DNPWC, NTNC, IUCN and WWF websites.

19. If your project includes training and development, please indicate a) who the trainees will be, b) the criteria for selection, c) what the level and content of training will be, d) how many people will be involved, e) which countries will they be from, f) how will you measure the effectiveness of the training, g) will those trained then be able to train others and h) how will trainee outcomes be monitored after the end of the training? (max 300 words)

Training and development are considered pivotal to the success of the project. All trainees will be Nepalese, namely DNPWC (CNP, BNP and SWR) and NTNC staff, buffer zone community forest programme staff and relevant members of the park buffer zone communities and students. From within DNPWC, we will select staff directly linked to wildlife management within the park for training. The training will include: 1) at least 10 staff trained as instructors in monitoring, anti-poaching and surveying techniques (5-day instructor's course and on-site training and support as needed); 2) a minimum of 30 park and community patrol and monitoring staff trained in monitoring, anti-poaching and surveying techniques, data collection and reporting protocols by new local instructors, with mentoring and support from Darwin Fellows (intensive 4 week on-site training in each area followed by regular training); 3) minimum of 9 park officers trained in: a) data quality control, entry and basic data processing using customised GIS database systems (three 5-day hands-on training with follow-up training as needed); b) GIS map interpretation; 4) at least 9 park officers and NTNC scientists trained in the production and interpretation of standardised annual status reports (2 weeks in the first year with additional support, training and mentoring in subsequent years); 5) at least 4 veterinary staff trained in newer translocation and veterinary practices (livestock and wildlife); 6) at least 25 Mahoots trained in camp elephant health care; 7) at least 5 NTNC ecologists and DNPWC staff supervised and mentored in habitat invasive species assessment and control (extensive on-site training); 8) at least 4 DNPWC and NTNC staff trained in sanctuary approach and metapopulation management (2-week field visit and on-going support); 9) minimum of 30 farmers trained in mentha crop processing; 10) 2 local community liaison officers provided further training; a mobile public engagement unit including a theatre troupe also developed and trained to provide engaging community education and awareness events around the protected areas and in key events associated with the project and the plight of the rhino; 11) community livelihood skills development programme initiated with the DNPWC, NTNC and NGOs with particular focus on the poor marginalised communities; 12) NTNC and DNPWC staff extensively involved in studies on rhino distribution, abundance and movement patterns; local university B.Sc. and M.Sc. students trained in wildlife conservation (field projects).

Outcomes will be measured by 1) accreditation tests within training courses; 2) field visits by Darwin fellows to evaluate progress; 3) quality checks on monthly monitoring reports submitted by field staff; 4) monthly project progress meetings; 5) Feedback questionnaires evaluating the reception, satisfaction and impact of all the training courses and community programmes undertaken. The ultimate success of this training will be indicated by the degree of improvement in monitoring and quality of field data, the production of status reports, the assessment of habitats and control of invasive species, improvement in the status of rhinos, reduction in human-rhino conflict and greater community engagement in the conservation of protected areas and management of reserve/community forests. For details of approximate course dates see section 21 – actual dates will depend on staff and venue availability.

LOGICAL FRAMEWORK

20. Please enter the details of your project onto the matrix using the note at Annex C 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 re-establish effective capacity, systems, management and motivation for the conservation of the endangered Greater one-horned rhinoceros and the <i>Terai</i> grassland habitat in Nepal.	<ul style="list-style-type: none"> • Cessation of the rhino population decline. • Take up of recommendations by DNPWC and NTNC for <i>Terai</i> grassland habitat invasive species management both in protected areas and community forests. • Take up of recommendations by DNPWC, NTNC and NGOs for buffer zone community livelihood, human wildlife (rhino) conflict and support programmes. 	<ul style="list-style-type: none"> • Census, reports and strategies. 	<ul style="list-style-type: none"> • Continuing improvements in the political process towards democracy and inclusive government.
Outputs a) Improved capacity and systems to monitor rhinos and for anti-poaching.	<ul style="list-style-type: none"> • DNPWC, NTNC and community forest programme staff trained and accredited in standardised monitoring and anti-poaching; minimum of 10 staff also trained as instructors (Y1). • Monitoring block systems established in CNP, BNP, SWR (Y1) • New standardised security, monitoring database and GIS systems established in CNP, BNP and SWR; minimum of 9 staff trained (Y1). • Restoration of community support/networks (Y1 and Y2). • DNPWC scouts and officers trained in wildlife management. 	<ul style="list-style-type: none"> • Adopted monitoring/anti-poaching system. • No of trained and accredited staff including instructors; quality of training material. • No of monitoring equipment bought and used regularly. • Extensive wildlife monitoring data in system database. • No of poaching reports. • No of staff trained in wildlife management. • Monitoring reports. 	<ul style="list-style-type: none"> • Trained staff retained and stimulated instructors • Support for equipment maintenance and repairs • Well motivated field monitoring and anti-poaching staff
b) Improved biological management of rhino populations and habitat.	<ul style="list-style-type: none"> • Total rhino census in CNP, BNP (Y1). • Systematic block monitoring in CNP, BNP, SWR (Y1-3). • Minimum of 9 DNPWC and NTNC trained in data quality control, analysis and status reporting (Y1). 	<ul style="list-style-type: none"> • Newly defined rhino management units. • No of staff trained. • No of annual status reports. • Rhino census 	<ul style="list-style-type: none"> • Retention of staff with specialised training skills and experience, and high motivation. • Open data policy to enable

	<ul style="list-style-type: none"> ● CNP and BNP Rhino population structure and demographics; 3 park and national status reports produced (Y1-3); report template developed (Y1). ● Viable populations established and intensively monitored; minimum of 4 staff trained in newer translocation and veterinary practices; 25 mahoots trained in elephant health care (Y1-2). ● Invasive Species (IS) trends, impacts and solutions: Research studies (e.g. MSc); workshop held, plan developed; 2 scientific papers submitted (Y1-Y2); Awareness activities undertaken. ● 4 DNPWC and NTNC staff trained in metapopulation management; Kenyan Darwin program visit (Y1). ● Strengthen cross border links with Indian protected areas. ● Study on sanctuary approach undertaken and national Rhino Conservation Action Plan reviewed (Y2-3). 	<p>reports.</p> <ul style="list-style-type: none"> ● Reports on invasive species trends, impacts and control solutions; plan. ● No of rhinos intensively monitored and protected in SWR. ● Scientific reports and papers. ● Report on cross-border initiative. ● Report on sanctuary study and revised national Rhino Conservation Action Plan. ● No of IS awareness activities. 	<p>verification.</p> <ul style="list-style-type: none"> ● Trained elephants available to carry out systematic monitoring and census. ● Strategy adopted. ● Partner support.
<p>c) Community support and improved benefits. Less human-rhino conflict.</p>	<ul style="list-style-type: none"> ● A social and economic assessment of CNP, BNP, SWR buffer zone communities undertaken; workshop held, strategy developed; outputs used to support DNPWC, NTNC and NGOs in livelihood skills development, especially for the poorest marginalised communities (Y1-3). ● Pilot electric fence, non-palatable mentha crops established for minimising crop damage; minimum 30 farmers benefiting through mentha processing plants; strategy developed for all areas (Y1-3). ● Dialogue and awareness programme established with focus on the most vulnerable and poorest buffer zone communities (Y1-3). ● Public engagement campaign undertaken (local radio, press, community theatres). 	<p>reports, Recommendations and strategy.</p> <ul style="list-style-type: none"> ● No of conflict reports; no of farmers benefiting. ● Quality of community awareness material. ● No of community dialogue and awareness initiatives. ● No of public engagement programmes. ● No of community skills development activities initiated / supported. ● Human-rhino conflict resolution strategy. 	<ul style="list-style-type: none"> ● Mentha processing plants well maintained. ● Electric fence well maintained. ● Highly motivated park education and community awareness officers. ● Strategies adopted.

d) Better governance, science based conservation, stakeholder integration.	<ul style="list-style-type: none"> • Strategy/governance change, financial and human resource commitment. 	<ul style="list-style-type: none"> • Integration audit. • Rhino “awareness” days for politicians and other stakeholders (Kathmandu and PAs) 	<ul style="list-style-type: none"> • Supporting and properly integrated governance structure.
e) Publications and publicity.	3 papers submitted for publication; radio and press coverage, information on partner websites.	No of papers submitted, radio and press items; quality of information on websites.	None.

Activities	Activity Milestones	Assumptions
<u>Monitoring</u> Field work Training instructors Training field staff	Completed training & rhino census CNP, BNP (Jun 07) Completed manuals and field instructor training (Sept 2007) Completed initial intensive field staff training (Oct 07). On-going field staff training (07-10) Block monitoring system developed in CNP, BNP, SWR; On-going monthly monitoring of rhino (07-10)	No major political security issues
<u>Anti-poaching</u> "Scene of crime" training Feasibility of tracker dogs GIS security information database	Training completed (Oct 07) Feasibility study completed, strategy recommended (08) GIS security information database in each PA, staff trained (Oct 07).	None
<u>Metapopulation Management</u> Training translocation, veterinary and field officers Rhino information system + GIS maps Park and national status reports Viable populations National Action Plan	Completed training in data analysis, standardised status reporting and metapopulation management (inc. Kenyan Darwin programme training visit) (Dec 07) Annual park and national status reports produced and reviewed (Mar 08,09,10) Completed translocation and veterinary (including rhino and captive elephant health) training and tested new methods (08-09) Computerised information system and GIS capability in each PA (Oct 07) Viable populations established; feasibility study for fenced sanctuary approach; revised national Rhino Conservation Action Plan (Mar 10)	Partner support
<u>Habitat restoration</u> Invasive species studies Plan	Completed 2 research projects (09), workshop held and plan developed (09), Awareness activities on invasive species threat initiated	Plan adopted
<u>Community assistance</u> Crop protection Socioeconomic studies Strategy and livelihood development	30 farmers in critical conflict zone in BNP growing mentha and processing (Jan 08), pilot electric fence study completed; Human-rhino conflict resolution strategy developed and implementation support (Jan 09) 3 socioeconomic studies completed; workshops held, strategy developed; Support in development of suitable community livelihood skills development started (Mar 08);	Strategy adopted
<u>Public engagement</u> Communication of information Awareness, Dialogue, Media and Community Theatre Rhino campaign	Community awareness programme initiated (Sep 07) <i>Rhino Days</i> in Kathmandu, CNP, BNP and SWR communities completed. (Including public engagement meetings to present theatre, science, policy initiatives and strategy) (07-10). Local radio broadcasts and newspaper articles (07-10)	None
<u>Project management</u>	Steering committee established (May 07); 3-monthly project meetings; assessment reports; 6 monthly and annual Darwin progress reports; Final Darwin project (Years 1-2)	None

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

Project implementation timetable

Date	Financial year	Key milestones
	Apr-Mar 2007/08 Apr-Mar 2008/09 Apr-Mar 2009/10 Apr-Mar 2010/11	
May 2007	Apr-Mar 2007/08	Steering committee established; Project management reporting procedures and ToRs setup; Project meeting held in Kathmandu – attended by all partners and relevant NGOs, groups; working groups for each project area established and detailed implementation plans drawn up.
May 2007	Apr-Mar 2007/08	Training material developed and at least 30 staff trained in large mammal census techniques.
Jun 2007	Apr-Mar 2007/08	Rhino total census completed in CNP and BNP.
Sep 2007	Apr-Mar 2007/08	Training materials (manuals, posters etc) for instructors and park staff in monitoring, anti-poaching and surveillance techniques developed; Formal theoretical examinations and practical tests for accreditation of instructors and monitoring staff produced.
Sep 2007	Apr-Mar 2007/08	Training workshop completed – Training of at least 10 CNP, BNP, SWR, buffer zone community forest and NTNC staff as instructors in monitoring, anti-poaching and surveillance techniques; Field standardised data collection forms, data quality control procedures and protocols produced. (2 weeks).
Oct 2007	Apr-Mar 2007/08	Half yearly report submitted to Darwin Initiative.
Oct 2007	Apr-Mar 2007/08	Development of GIS Monitoring database system with user manual completed.
Oct 2007	Apr-Mar 2007/08	Local community liaison officers appointed and provided further training; Community education & awareness programme initiated.
Oct - Dec 2007	Apr-Mar 2007/08	Block monitoring system developed and implemented in CNP, BNP and SWR; Park monthly monitoring reports initiated.
Oct - Dec 2007	Apr-Mar 2007/08	Intensive on-site training of CNP, BNP, SWR and buffer zone community forest patrol and monitoring staff by local instructors and Darwin fellows completed; Field tools including GIS monitoring database system and procedures implemented; Hands-on training of 9 park officers and NTNC in GIS, data quality control, entry and basic data processing using a customised system and field protocols completed. (12 weeks).
Dec 2007	Apr-Mar 2007/08	Development of “scene of crime” training manual completed.
Dec 2007	Apr-Mar 2007/08	Additional training to community liaison officers provided; Initial set of community education & awareness material/activities developed; Community education & awareness programmes initiated, mobile unit setup, local theatre troupe trained, first Rhino Day held (others to be held at convenient times).
Dec 2007	Apr-Mar 2007/08	Field training of DNPWC officers in metapopulation management completed (2 weeks).

Jan 2008	Apr-Mar 2007/08	Training workshop completed – at least 10 DNPWC (inc. CNP, BNP, SWR), community forest and NTNC staff trained in Scene of the Crime; GIS Security database system developed and implemented in CNP, BNP and SWR; Staff trained; Feasibility study of trackers dogs completed and strategy recommended.
Jan 2008	Apr-Mar 2007/08	2 Research studies started (Invasive species spread, impact and control studies).
Mar 2008	Apr-Mar 2007/08	Annual status report template produced; Training workshop completed - at least 9 park officers and NTNC scientists trained in data analysis and the production of annual status reports; First annual park status report produced and reviewed.
Apr 2008	Apr-Mar 2007/08	Annual report submitted to Darwin Initiative.
May 2008	Apr-Mar 2008/09	Basic guide lines (with illustrative cards, visual aids) in camp elephant healthcare produced; 5 day training programme for DNPWC vets and Mahoots in each protected area completed, post monitoring undertaken.
May 2008	Apr-Mar 2008/09	Surveys and reports on Social, cultural and economic assessment in CNP, BNP and SWR buffer zone communities completed; Stakeholder workshop held to discuss findings; Strategy developed with recommendations for community development; Strategy document sent to all relevant NGOs, 1 scientific paper prepared from data.
Jun 2008	Apr-Mar 2008/09	Feasibility study on tracker dogs completed; Report produced.
Jun 2008	Apr-Mar 2008/09	Development of suitable community livelihood skills development initiatives started with park authorities, local government organizations, NGOs and community leaders.
Sep 2008	Apr-Mar 2008/09	Training workshop completed – Training of at least 9 DNPWC, NTNC staff and field placement students in GIS, map interpretation.
Oct 2008	Apr-Mar 2008/09	Half yearly report submitted to Darwin Initiative.
Dec 2008	Apr-Mar 2008/09	Mentha processing equipment purchased; At least 30 farmers in critical conflict zone in BNP trained in growing and processing mentha; Pilot electric fence study completed; HRC strategy developed and implementation plan agreed.
Jan 2009	Apr-Mar 2008/09	Feasibility study for fenced sanctuary approach (including potential community ones) completed; Detailed report produced; Strategy meeting with DNPWC, community leaders and NGOs held.
Jan 2009	Apr-Mar 2008/09	Guidelines in newer translocation and veterinary practices produced (wildlife and livestock); 2 week on-site training programme for DNPWC veterinary staff completed; Ongoing support provided.
Jan 2009	Apr-Mar 2008/09	If the strategic planning allows there would be translocation of some rhinos (for viable population establishment) to SWR; Further guidance / field support provided to DNPWC vets and capture team; Rhino population monitored.

Mar 2009	Apr-Mar 2008/09	Field assessment of training, data quality, entry and reporting procedures completed by Darwin Fellows; Second standardised annual status reports completed; Meeting held with DNPWC officers and NTNC scientists to discuss findings.
Mar 2009	Apr-Mar 2008/09	2 Research studies completed; Detailed habitat assessment undertaken, extent of invasive species quantified, habitat sensitivity maps produced for protected areas and buffer zone community forests; Suitable control methods for invasive species determined; Awareness activities undertaken.
Mar 2009	Apr-Mar 2008/09	B.Sc., M.Sc. student field placement studies completed; Reports produced.
Apr 2009	Apr-Mar 2009/10	Annual report submitted to Darwin Initiative.
Apr 2009	Apr-Mar 2009/10	Workshop held; Invasive species control plan developed and implementation plan agreed; Field control methods initiated; 1 scientific paper submitted for publication.
Apr 2009	Apr-Mar 2009/10	Workshop held: Human-wildlife (rhino) conflict management/ resolution strategy developed and implementation agreed & implemented; 1 scientific paper submitted for publication.
Sep 2009	Apr-Mar 2009/10	At least 2 DNPWC and NTNC staff trained in GIS database systems future support and development.
Oct 2009	Apr-Mar 2009/10	Half yearly report submitted to Darwin Initiative.
Mar 2010	Apr-Mar 2009/10	B.Sc., M.Sc. student field placement studies completed; Reports produced.
Mar 2010	Apr-Mar 2009/10	Field assessment of training, data quality, entry and reporting procedures completed by Darwin Fellows; Third standardised annual status reports completed; Meeting held with DNPWC officers and NTNC scientists to discuss findings.
Mar 2010	Apr-Mar 2009/10	Workshop held: Review of the 5-year national rhino action plan undertaken.
Apr 2010	Apr-Mar 2009/10	Final project report submitted to Darwin Initiative.

22. 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.)

<u>07/04 – 07/09</u>		<u>Reporting Period 1</u>
07/05	30 x (6A) 3 x (6B) 1 x (7)	At least 30 trained staff in large mammal census techniques.
07/09	3 X (7)	Training manuals, posters, guidance notes and accreditation tests (in monitoring, anti-poaching and surveillance techniques)
07/09	10 x (6A) 1 x (6B)	At least 10 DNPWC, community forest and NTNC trained instructors (in monitoring, anti-poaching and surveillance techniques) (5-day trainer's course + regular on-site training and support as required)
07/09	2 x (7)	Data collection forms and data quality control procedures
<u>07/10 – 08/04</u>		<u>Reporting Period 2</u>
07/10	2 x (12A) 2 x (7)	Fully operational GIS-based monitoring and security systems with user manuals and tutorials (in 3 protected areas).
07/10 – 07/12	30 x (6A) 12 x (6B)	At least 30 trained park and community patrol and monitoring staff (initial intensive 4 week on-site training in each area + regular on-site training and support)
07/10 – 07/12	9 x (6A) 3 x (6B)	At least 9 trained staff in field tools and procedures, data processing and reporting.
07/12	3 x (6A) 3 x (6B)	2 Darwin local community liaison officers trained further in public education, awareness / engagement activities (+ regular on-site training and support as required)
07/12	1 x (7)	Public education, awareness / outreach material (initial set and then further developments on an ongoing basis)
07/12	4 x (6A) 2 x (6B)	At least 4 trained DNPWC and NTNC staff (in sanctuary approach and metapopulation management). (2-week field visit)
07/12	1 x (7)	"Scene of crime" training manual
08/01	12 x (6A) 2 x (6B)	Minimum of 12 trained staff in Scene of the Crime and security system
08/03	8 x (6A) 2 x (6B)	At least 8 park officers and NTNC scientists trained in the production and interpretation of standardised annual status reports (2 weeks in the first year).
08/03	4 x (9)	Standardised annual status reports for CNP, BNP, SWR; National annual status report.
<u>08/04 – 08/09</u>		<u>Reporting Period 3</u>
08/05	1 x (7)	Basic guide lines (with illustrative cards, visual aids) - captive elephant healthcare
08/05	25 x (6A)	At least 25 trained park Mahoots (in captive elephant

	3 x (6B)	health) (1 week on-site training in each PA + on-going support as needed)
08/05	4 x (9) 1 x (14A) 1 x (11B)	3 Social, cultural and economic assessment reports (summary in local languages); 1 strategy document (1 workshop); 1 paper submitted.
08/06	1 x (9)	Feasibility study report - tracker dogs.
<u>08/10 – 09/03</u>		<u>Reporting Period 4</u>
08/09	9 x (6A) 1 x (6B) 1 x (7)	At least 9 trained staff and students in GIS, map interpretation and analysis.
08/10	30 x (6A)	Minimum of 30 trained farmers (in mentha crop processing)
09/01	1 x (7)	Guide lines - translocation, wildlife veterinary practices (wildlife and livestock)
09/01	4 x (6A) 2 x (6B)	At least 4 trained veterinary staff (newer translocation and veterinary practices – wildlife, livestock & captive elephant health) (2 week on-site training + ongoing support as needed)
09/01	1 x (9)	Sanctuary feasibility study report and strategy document
09/03	2 x (2)	2 staff trained in conservation research
09/03	5 x (6A)	At least 5 NTNC and park staff trained (in habitat invasive species assessment and control).
09/03	4 x (9)	Standardised annual status reports for CNP, BNP, SWR; National annual status report.
<u>09/04 – 09/10</u>		<u>Reporting Period 5</u>
09/04	4 x (9) 1 x (14A) 1 x (11B)	Invasive species assessment & control reports for protected areas and buffer zone community forests; Habitat sensitivity maps, Plan document (1 workshop), 1 scientific paper submitted
09/04	1 x (9) 1 x (14A) 1 x (11B)	1 strategy document on HRC resolution (1 workshop); 1 scientific paper submitted
<u>09/10 – 10/03</u>		<u>Reporting Period 6</u>
09/09	2 x (6A) 2 x (6B)	At least 2 trained DNPWC & NTNC staff (in GIS database systems future support and development)
10/03	4 x (9)	Standardised annual status reports for CNP, BNP, SWR; National annual status report.
10/03	1 x (9) 1 x (14A)	Revised national Rhino Conservation Action Plan (1 workshop).
<u>07/04 – 10/03</u>		
07/09 – 10/03	1 x (21), 6A, 6B	Community education & awareness outreach

07/06 – 10/03	15A, 15B, 15C, 18C, 19A, 19C	programme National and local press releases, radio broadcasts.
07/04 – 10/03	14B	Presentations at conferences, seminars, workshops (IUCN AfRSG, AsRSG, Rhino Mayday, SCB, etc)
08/01 – 10/03	4A, 4B, 4C, 4D, 1 x (11B)	Study reports on rhino distribution, abundance and movement patterns; BSc and MSc student placement project reports, 1 scientific paper submitted
07/04 – 10/03	125 x (8)	RK = 40 weeks; RA = 73 weeks; TW = 12 weeks
10/03	£57790 x (20) £139963 x (23)	Value of physical assets handed over Funding from all other sources
<u>Other outputs</u>		
07/06		Rhino census reports for CNP and BNP.
07/10		Block monitoring system implementation documents for CNP, BNP, SWR.

PROJECT BASED MONITORING AND EVALUATION

23. 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.

UK Darwin fellows, the host project coordinator and NTNC field scientist (assigned to each of the 3 protected areas), will be responsible for overseeing the field activities and will be in daily contact with park and project staff. The project steering committee (represented by all the key host stakeholders and partners) will meet every 6 months to evaluate progress and also allow practical difficulties to be aired, discussed and resolved. In addition, quarterly reports will be submitted by project staff. These along with monthly park monitoring reports (submitted according to standardised protocols), field study reports and annual status reports will be assessed by Darwin fellows and coordinators, park senior staff and project steering committee members. Updates of our progress will also be highlighted in the ZSL and NTNC newsletters and magazines, and detailed in six-monthly interval reports to the Darwin Initiative. Each training session and community programmes will have feedback assessment forms evaluating the reception, satisfaction and impact. We will also have workshops for each of our major field assessment studies where we (including all relevant participants and partners) will also review our outputs in detail, discuss the conservation implications of our work and develop strategies with all relevant partners and stakeholders. A final workshop will be held before closure of the project to which all participants and partners will be invited where we will review the Darwin work and also revise the national Rhino Conservation Action Plan. Counterparts from India will also be invited.

We will use the following project indicators to monitor progress and resolve potential problems: 1) evaluating the reception, satisfaction and impact of all the training courses and community outreach programmes undertaken; 2) the quality of training manuals and posters and their effective use; 3) the number of DNPWC, community forest and NTNC trainers and trainees passing the accreditation tests in patrol based monitoring and anti-poaching; 4) the number of staff passing the accreditation tests in "scene of crime" training; 5) the number of DNPWC veterinary staff successfully trained in translocation methods and specific wildlife health (rhino, elephant), the number of DNPWC Mahoots trained and passing accreditation tests in camp elephant health care; 6) the completion and installation of the GIS Monitoring and Security databases in CNP, BNP, SWR, and users trained; 7) the number of CNP, BNP and SWR park officers and NTNC staff trained in GIS, data entry and management, data quality control, and basic data processing; 8) the successful completion of total rhino censuses in CNP and BNP with numbers; 9) monthly monitoring reports based on the developed block monitoring systems; 10) accumulation of

monitoring data on patrols, illegal activities, poaching, sightings, numbers, distributions of rhino and other important wildlife species in CNP, BNP and SWR; 11) the completion of feasibility study on sanctuary approach and quality of report following workshop; 12) cessation in decline of rhino population; 13) the number of park officers trained in metapopulation management, the production of standardised annual reports and the number of status reports produced and used for decision making; 14) detailed reports on feasibility study on tracker dogs; 15) the number of farmers trained in growing and processing mentha, report on pilot electric fence study, workshop held and quality of strategy; 16) detailed reports on the spread, impact and control of invasive species in CNP, BNP and buffer zone community forests, plan implemented, number of DNPWC and NTNC staff trained and number of awareness activities on the threat undertaken; 17) the quality of the social, cultural and economic assessment of the CNP, BNP and SWR buffer zone communities, workshop held and quality of strategy; 18) the number of community livelihood skills development initiatives developed/supported; 19) number of community education and awareness programmes conducted (public engagement meetings, theatres, community forums, radio broadcasts) and livelihood initiatives developed/supported and level of community involvement; 20) the number and quality of biodiversity and environmental community awareness material produced and used; 21) the number of successfully completed M.Sc. studies and B.Sc. field studies; 22) the quality of annual site-specific work plans and their reviews, the quality of the revised Rhino Conservation Action Plan; 23) the number of scientific papers produced and sent for publication in peer-review journals; 24) details of newspaper articles disseminating the work undertaken by the project; 25) number of presentations and lectures given by the Darwin fellows in India and the UK; 26) adequate reporting to Darwin Initiative.