

## ***Darwin Initiative Annual Report***

### **Important note:**

To be completed with reference to the Reporting Guidance Notes for Project Leaders – it is expected that this report will be about 10 pages in length, excluding annexes

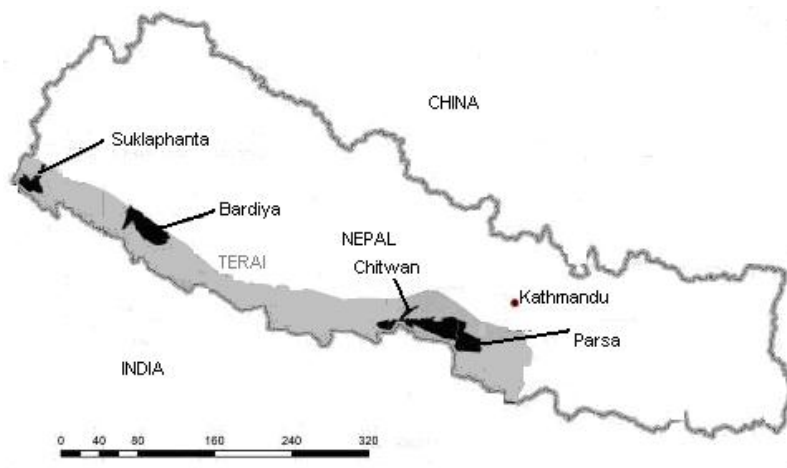
**Submission deadline 30 April 2008**

### **Darwin Project Information**

Project Ref Number	Di 16-009
Project Title	Crisis to Biological Management: Rhinoceros, Grassland and Public Engagement – Nepal
Country(ies)	Nepal
UK Contract Holder Institution	Zoological Society London
UK Partner Institution(s)	CABI International Europe UK
Host country Partner Institution(s)	National Trust for Nature Conservation (NTNC), Department of National Parks and Wildlife Conservation (DNPWC), World Wide Fund for Nature Nepal, International Union for the Conservation of Nature Nepal (IUCN)
Darwin Grant Value	£233,087
Start/End dates of Project	April 2007 to March 2010
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	1 <sup>st</sup> April 2007 to 31 <sup>ST</sup> March 2008 Annual Report No. 1
Project Leader Name	Richard Kock
Project website	www.zsl.org
Author(s), date	Richard Kock 29 <sup>th</sup> April 2008

### **1. Project Background**

Greater one-horned rhinoceros are restricted to small protected areas primarily in north-eastern India and Nepal (Chitwan National Park-CNP, Bardiya 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 occurred during the latter half of the 20<sup>th</sup> Century after near extinction previously. 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, these declined by 2005 to less than 370 in CNP and less than 40 in BNP, with only 7 in SWR. Nepal still holds the second largest population in the world and for this and its other endangered species, such as the Ganges dolphin (also apparently in decline), Bengal tiger (also in decline) and Asian wild elephant, and CNP has been designated a World Heritage Site.



The project was launched at a time of opportunity, the armed conflict was coming to an end and a political process towards democratic government was initiated. The proximate causes for rhino declines were poaching, human disturbance and loss of grassland habitat from encroachment and invasive species reducing available forage and causing risky migration of rhino outside of the protected areas and reduced health and productivity. The underlying causes were inadequate biological management of the rhino, weak anti-poaching systems and law enforcement, ineffective security and ineffective general park/land use management especially in relation to habitat and encroachment from people and invasive alien species. There was also a failure of the buffer zone community initiatives to provide an effective buffer and inadequate awareness of the rapid deterioration of the situation with a lack of transparency at many levels. The uncertain political situation was also reducing the effectiveness of government agencies and public engagement was lacking spark. New policy and/or innovative strategies were also lacking.

In summary; the project was set up to 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.

## 2. Project Partnerships

**Project partnerships:** The main implementing partner in Nepal is NTNC which is a National Nepalese NGO. Although once closely aligned to the Royal Family (previously the King Mahendra Trust for Nature Conservation) the transition to new political masters has been relatively smooth. Whatever the leadership it has had, a strong, scientifically competent set of HQ and field staff persisted throughout the troubles, working quite effectively despite the constraints. The relationship of NTNC with the DNPWC has been close, especially in the field with the latter being the main beneficiary of any investment through NTNC. ZSL has also engaged through its project staff with DNPWC at all levels and this engagement will only strengthen over coming months. ZSL's relationship with NTNC has strengthened over the year with increasing, mutual respect and despite a change in the Member Secretary, Chairman (Minister for Environment & Soil Conservation and new board members. The engagement seems to be improving all the time in favour of more efficiency and the project is fulfilling a role as independent facilitator. The current integration of ZSL staff into NTNC activities and the dialogue and financial support could not be better. The project is providing considerable input

into a range of subject areas supporting the CBD (articles 5,6,7,8,12,16,17,18 in this first year, others are coming on line in year 2) and this will become clear in the report.

WWF and NTNC collaboration over the years has been both positive and negative as Institutional changes have taken effect. This has led to a wait-and-see policy and cautious optimism. Over the first year of the project the relationship with WWF on rhino was relatively passive and in some ways WWF passed-the-ball but this should improve after a turning point negotiation recently in UK with the head of WWF Nepal facilitated by WWF UK. The project hopes this will result in a meaningful active partnership into the next couple of years on a number of key areas. WWF have been a main player in financing and guiding rhino policy in Nepal over many years and the appearance of the DI project with personnel with mainly African experience was probably perceived negatively to some extent. The DI can only be catalytic in getting key policy changes and action on the ground which have been lacking over the years. WWF will remain a major player in this field and ZSL-NTNC recognise this, even though ZSL is looking at continuing a longer term engagement in Nepal and NTNC will take an increasingly important role particularly in conservation research and as a technical advisor to Government and DNPWC. The IUCN partnership never took off beyond discussions on the contributions that each partner would make. It turned out the IUCN Nepal office was in severe financial difficulties, the Director left and now is virtually non-functional on this partnership so we have simply agreed on the status quo but this has meant we have had to pick up and run aggressively with the Public Engagement component. This we have done. The CABI relationship is working well and there is little to comment on. Much of the work on that area is still to blossom but I am expecting excellent outputs on alien invasive species. Regarding our own capacity internally at ZSL we are committing time staff wise as per the agreement and more. In addition, the embedding of the UK NTNC in the Conservation Programme department at ZSL has helped to leverage funds from elsewhere. It has to be said though that ZSL administrative capacity has weakened of late which is putting burden on the project management. In this respect the loss of our finance administrator some months ago without replacement to date has been challenging. He handled all Darwin submissions and much of the accounting.

**Other Collaboration:** The project has made considerable efforts to help in strengthening the rhino networks in conservation globally and from an Asian focus. We are engaged on other projects with the new IUCN Asian Rhino Specialist Group chair and we are encouraging his leadership in pulling the South Asia region together, particularly in the Terai and get consistency and standardisation on all things *rhino*. The links with the more technically advanced rhino community in Africa has also been possible through the project study tour and this was very successful especially at the departmental level.

The project staff and main implementing partner in Nepal NTNC have had constructive meetings with the CBD focal point Mr. Ananta V. Parajuli. The Darwin reports will be sent to Ananta in due course.

### **3. Project progress**

Annex 1 allows you to provide a condensed version of this narrative against the logframe. In this section and in Annex 1 please report against the latest version of the logframe. Please also include your full project logical framework in Annex 2. If changes in the logframe have not been approved, indicate proposed changes from the earlier version.

Some changes at Activity level are an expected part of project delivery and will normally be readily approved, provided a case is made. Changes at Output level will need detailed justification. The Project Purpose defines the contractual obligation and should not normally be changed; however, reviewers may suggest rephrasing to improve clarity and understanding.

**Please note:** major changes in the logframe must be approved by ECTF/Defra and they must be approached separately. Submission of change to the project design in the annual report does not constitute notification. Any changes to the following areas of your project should be referred directly to ECTF/Defra: delay in project implementation causing underspends and carry forwards; staff changes; changes in activity; project termination etc.

### 3.1 Progress in carrying out project activities

Please report on the progress in implementing the projects activities for this year. **Please report the progress of activities under the outputs** to which they relate. Have the activities been carried out in the manner and time planned?

- a) Improved capacity and systems to monitor rhinos and for anti-poaching
- b) Improved biological management of rhino populations and habitats

There has been considerable progress on these aspects, with activities contributing to the outputs initiated in a number of areas, largely on time and as planned. Activities in Monitoring and Census have been achieved or are ongoing and this can be verified from the Block Monitoring and Census reports from Bardia, Chitwan and Suklaphanta protected areas **Annex – 3 (1,2,3,4)** Chitwan report is still pending Bardia 2<sup>nd</sup> census report is in draft but a summary on the rhino count prepared for the website is included. The over month census was successfully completed in CNP and BNP. This was a massive exercise involving over 45 domestic elephants and 200 staff in the field. The information now provides the base line data to compare performance and make informed decisions. A detailed report and paper on the census are being produced for publication.

The block monitoring has been adopted fully in Bardia, Shuklaphanta and in a sector of Chitwan and it is likely this will eventually be adopted across the whole rhino range with support from partners. The initial field staff training in monitoring and surveillance, has been the main focus in each area both within NTNC and DNPWC. Intensive three-day training programmes were conducted on site prior to the Bardia and Chitwan NP rhino censuses. A total of twenty six and twenty four park staff and community observers were trained in Chitwan NP and Bardia NP respectively. The trainees were formally tested (both practical and written tests) and those that passed were presented with course certificates. The trainees were able to apply this knowledge straight away in the field during the rhino count exercise. DI staff project evaluated the progress through the validation of completed data collection forms and observations in the field at the end of each day and further training/support was provided where needed. A four day hands-on workshop was organised for the training of Greater One-Horned Rhino (and wildlife) monitoring instructors - held at Kathmandu Central Zoo.- 1<sup>st</sup> May 08 – 04<sup>th</sup> May 08. Thirteen park and army field officers were trained as instructors and tested (theoretical and practical exams) with accreditation 9/13 passed and a workshop report was produced Annex 3 (5). Monitoring course material has been developed, disseminated and officially included as an Asian Rhino Specialist Group training course to be used both in Nepal and India as a standard **Annex 3 (6)**. A few elements of the material developed during the previous ZSL DI Kenyan project and AfRSG (162/12/004) have been adopted here.

Field tools and procedural mechanisms have been developed as follows:

- Rhino sighting booklet Annex 3 (7)
- Patrol wildlife data recording booklet Annex 3 (8)
- Rhino master ID files Annex 3 (9)
  - Monthly field progress report template Annex 3 (10)

- Patrol based GIS database wildlife management system Annex 3 (11)

The development of a standardised patrol based GIS database wildlife management system was completed in April and is being implemented. The aim is make this a standard in patrol based monitoring and the system will also be implemented in Assam (India AsRSG and also DI Pygmy Hog project) and in Kenya. The wildlife monitoring data: standardised, quality controlled and collected according to a protocol is now being prepared for entry into the system in each location and the NTNC/DNPWC staff are being trained in its use.

A 5 day hands-on GIS training course is being developed (adopted from the ZSL MSc GIS course taught by the Darwin staff).

Status reporting training has been deferred to the next reporting period of the project but the nuts and bolts for this are now in place and the analysed data from the Parks available by October will make this less theoretical.

Monitoring equipment including; GPS (40), binoculars (26), radios (10), computers (2 desk top 2 laptop) and camping equipment were provided in sufficient numbers to ensure efficient implementation and further supplies including 3 river boats with outboard engines and pedal rubber boat are in process. A grant leveraged from the European Association of Zoos and Aquaria has helped to boost the equipment in response to the ongoing poaching pressure being experienced in Nepal.

What inevitably occurs, with a more vigorous monitoring programme, is that poaching incidents and other events are brought to light and this has been particularly true in BNP and SNP and to some extent in CNP. This can be gloomy news (and media has been quick to detect and report this) but it is an excellent indicator that the project is effective. Earlier where the little data collected over long time gaps simply inferred poaching was taking place, now regular monitoring is filling the blanks. This is extremely valuable and is providing indications of who is actually carrying out the poaching and when. These data are extremely important so that some dogma on poaching can be challenged and innovative solutions explored.

Our focus on establishing facts and figures is one reason for deferral on the subject of security and now the project is much better informed. There are fundamental problems with the A-P policy and significant constraints on implementation of anti-poaching in Nepal e.g. the political settlement has resulted in difficulties in deployment of the Military. As a result there has been considerable advocacy on this subject over the year including with the Minister responsible and senior Military Generals with new proposals for APU on the table Annex 3 (12). The timing of implementation of A-P inputs is appropriate for the next phase. The scene of the crime training was deferred for this reason to October 2008 along with sniffer dog feasibility studies and training. The materials for the training have been drafted and will be finalised Annex 3 (13). Also a lot of the policy documents were in Nepali and these needed translation before effective material could be developed and the training conducted.

Further to metapopulation management, the feasibility study on a fenced sanctuary approach has moved rapidly Annex 3 (14) and there is (or close to) agreement on establishment of one sanctuary in SWR to secure this small population and establish the principle and management tool that might still be critical to rhino survival in Nepal in the future.

The study tour to Kenya went ahead, as planned and was very effective, bringing together African and South East Asian experts. This was possible as coincidentally the study tour benefited from exposure on another project under IUCN SSC umbrella facilitated by ZSL on development of rhino reintroduction and translocation guidelines. The staff members from NTNC and DNPWC who participated are now highly motivated from this exposure.

On the question of alien invasive plant species, the partner from CABI has been very active visiting the sites and discussing the issues with local and other parks management staff and

scientists. It was decided before initiating any specific research activities to get a handle on the extent of the invasion in BNP and CNP and some idea of distribution according to habitat types, levels of disturbance etc. Research activities are therefore deferred to the next period. The census provided the opportunity for this necessary baseline data to be recorded. These data will be analysed over the next few months and then it will be possible to focus the next phase of targeted research, where necessary and start the evaluation of impacts and defining of potential solutions Annex 3 (15).

Although not scheduled there were considerable inputs on the veterinary side with support to ongoing initiatives on elephant health provided by WWF through another NGO (Elephant Conservation International) and to the DNPWC veterinarian. This was mainly advisory and advocacy for improved policy on the Tuberculosis situation (~ 20% + infection rate in the CNP domestic working elephant owned by DNPWC, NTNC and private sector) which threatens to undermine the capacity to undertake regular field monitoring into the longer term. This dialogue including with the Minister led to the necessary isolation of positively infected animals after a 2 year hiatus since the information became known. Further support to training and standardised health management for elephant will be undertaken in phase 2. Supporting projects to improve ecosystem, human and animal health are being developed and finance sought to cover areas that this project and other NGO inputs are not currently covering.

### **c. Community support and improved benefits. Less human-rhino conflict.**

During the early period of the project it became clear that sufficient socioeconomic data was available for preliminary assessment and this is being examined and compared to the current situation, using the BNP area as a pilot. A report on this will be submitted in 6 months for further development of this aspect. It was also obvious, given the general deterioration in effective government, that although many of the structures put in place under the Buffer Zone Community initiatives existed, the practice of buffer zone management was weak. Neither government nor the local committees were strongly preventing illegal settlement (SNP), regular incursion (all areas) for illegal resource extraction and poaching, this was in turn leading to excessive disturbance of animals and vegetation (from illegal and legal extraction), and in many less visible buffer zone sectors there had been complete deforestation and agricultural encroachment to the Park boundary (e.g. Madi Valley southern CNP). The indicator for this within the plant realm is most likely the alien invasions, which are largely in disturbed areas adjacent to and within the Park boundaries. Rather than being a focus of poverty the human population on the boundary was in many instances benefiting from the extra livelihood opportunities, albeit unsustainably and the marginalised groups were often in more disadvantaged locations distant to the Park but carrying out a proportion of the illegal activity. The adjacent farmers were suffering disproportionate crop raiding events and threats to human life which is of concern. Some of these incidents were reported at the six month marker and these events have continued with e.g. a rhino from SWR killing an Indian farmer whilst moving out of the Reserve in Nepal across the border. These observations still need to be tested and quantified and the Bardia case studies will contribute to this. The project is now compiling human-wildlife-conflict data and this will be analysed in the socioeconomic reporting before developing an effective strategy.

To facilitate the community work liaison officers from NTNC were appointed and are in place with a focus at BNP. A ZSL (volunteer) staff member was placed in BNP in February (this was unplanned but considered necessary and is an extra ZSL contribution) to help in getting the education and community initiatives moving, provide ideas and training inputs. This was necessary after a slow start and already the benefits are clearly evident Annex 3 (16) Where progress was made prior to her appointment included; with farmers, in identification of crop raiding mitigation measures including the ratification of agreements with the communities on a fencing project in CNP and agreements on provision of a large scale Mentha processing plant



in BNP Annex 3 (17). From an initial few participating farmers, the number signed up to the pilot land use is numbering over 60 and accounts for a large proportion of the Eastern boundary of the BNP where agriculture is practiced. A 2000 litre mentha plant has now been purchased and installation will be completed by the end of May in time for the harvesting of the mentha crops. In CNP, the 7-km electric fencing project in the Kathar community forest is going well with all stakeholders engaged and providing support Annex 3 (18). Timber for the fence posts is being provided by the park and the posts are being prepared by the local communities. This is manually hard work in the heat and has taken time with 960 posts out the required 1150 posts completed. More effort is being put on this to complete the work before the monsoons arrive.



Fence post construction – manual work by the community people is back breaking!

In BNP the Park authority initiated a small fencing project adjacent to the communities around the HQ and this was partially effective but the project has advised on improvements that can be made and some investment from the Project is planned for the next phase to extend the length to the South. One drawback has been the shifting of crop raiding especially by elephant which seem the main culprits to communities now unprotected emphasising the need for comprehensive solutions.

Some of the planned community education and awareness materials were developed including the poster which is a large A0 size and are placed in a variety of settings. The content is providing considerable educational opportunities and encourages discussion and debate on a wide range of inter-connected issues for all age groups Annex 3 (19) and the rhino booklet that has now been adopted by the DNPWC under their name for further development and distribution Annex 3 (20). Further materials and events (including presentations, activity material, video shows, enhancing visitor centre) has/are being developed jointly by the ZSL – NTNC team with close liaison with the Park warden in BNP. Engagement with different societal structures from schools to buffer zone community organs (woman's groups, farmers) has been initiated and the mobile education truck has been active especially with school groups visiting the Park and will increasingly be used for outreach to more marginal communities, which have benefited little from any investment. The relatively well off community around the main tourism and administrative centres of BNP and CNP are generally aware and cooperative but may well have benefited more than others from available Park Revenues and this needs to be addressed. Reconnection with these marginalised communities will be an indicator of success

for this process which has now been initiated. Materials for supporting this engagement have been developed or are in process.

The public awareness tools chosen to be most effective and efficient to address the urgency of the situation around the Parks and with endangered species were theatre and radio. A major objective that this is addressing is the reestablishment of community support networks for the Parks. Considerable focus has been given on the production of a play which will be promoted locally, in urban centres and internationally. It is expected to attract large audiences and publicity and should stimulate and engage local theatre groups to further develop the theme through street activities. To get this off the ground an experienced community theatre company working in conservation and the environmental field from South Africa (Theatre for Africa) was engaged and the playwright and producer are now working in Nepal with a highly innovative company called Gurukul in developing the play. This will be produced in Nepali and English with the main focus outputs in Nepal (both in Kathmandu and the protected areas) but also will be brought to Europe to be performed at Zoological Collections from London onwards and finally at the World Conservation Congress in Barcelona. The main theme will be the endangered species and habitat with the rhino as an iconic feature but woven into the social and political climate and challenges of the present day. The first rhino day will be held on the 30<sup>th</sup> May in Kathmandu. The aim is to make all levels of society aware of the critical situation in the Terai and the dangers of their losing this precious heritage in the next few years. The radio production has involved dialogue with key people in Nepal and proposals are in an advanced state of preparation. The idea that the radio team will use an adapted script from the play to construct "a soap" for communication of the same ideas and issues through mainly FM radio. Discussions on integrating this with WWF activities in radio are being held to avoid duplication, increase efficiencies and enhance current efforts.

Various reports of progress along given activity lines are annexed and the half yearly report was produced on time.

A steering committee was established and is working efficiently in the ZSL-NTNC-DNPWC axis but one aim of the project is for this body to become the main National steering committee for rhino conservation in the country. The recommendation is for a National Executive Committee to be advised by a formally constituted technical committee with clear linkages and responsibilities to and from site specific committees and management. The principles are accepted and with a more settled government, now that the elections have taken place peacefully this should be possible. This will lead to progress on the sub-output on governance being achieved and the process which NTNC is taking to be more engaged scientifically (effective research arm of the DNPWC) is exactly what was envisaged. Stakeholder integration is an inevitable consequence of all these developments. Although there undoubtedly will be hurdles Annex 3 (21)

## **3.2 Project Outputs**

### **a) Improved capacity and systems to monitor rhinos and for anti-poaching**

Innovative and standard systems and databases are now in place and the trained human resource capacity is reaching the level necessary to consolidate the process with accreditation and some instructor training to be completed. There will be refresher training in light of outcomes and analysis to further improve the capacity so that this project output will be achieved. The anti-poaching area has shown the least progress but it is a sensitive area politically and more difficult for an external NGO led project to influence. This said, considerable progress has been made through advocacy, far beyond expectations which looks likely to lead to the necessary policy change which will in turn ensure technical innovations and inputs will be sustained and more effective. The settling social political climate should ensure the important area of community support and informer networks can be consolidated but this area has



remained largely opaque to the project in the first year. On current progress overall expectations in this project output area will be exceeded. The annexed material provides ample evidence of progress.

Assumptions remain as stated and to date the possible negative aspects inherent in these assumptions have not been experienced.

#### **b) Improved biological management of rhino populations and habitats**

Census targets have been reached and given the considerable logistic challenge of doing this and limited resources it has been a considerable success with the best-possible counts completed using the planned methods and tools. Despite some scepticism initially, the block monitoring has taken off with highly effective results from BNP and a good start in CNP. SWR is a small population and the effectiveness of block monitoring under these conditions is questionable especially with the apparent large movements of rhino seasonally. Status reporting has been delayed only because the census work was in the latter half of the period. This will be completed by the next report.

This has now set the standard which if maintained will ensure the less than satisfactory results of previous census and monitoring will not be repeated and gathering of factual evidence for decline or growth of the population will be done routinely.

Invasive species work is making good progress and planned research activities have been purposively delayed to enable more rationale selection of targets from baseline data analysis that is now ongoing from the census work.

The Sanctuary feasibility for SWR has been done with more detailed work planned for later and this expectation might well be exceeded. Cross border links are already being established and activated and this output will be achieved. Discussions have already been held on implementing a standardised monitoring and reporting system on the Indian side – Katarniaghat Wildlife Reserve and this has been agreed. A meeting in October is being planned with the Indian counterparts to move this forward.

Annexes provide ample evidence of progress and achievement in this output.

Report on how overall progress has been made towards the project outputs and how likely the project is to achieve them by its close. Please comment on the measuring of output indicators and whether the output level assumptions still hold true. If there have been changes in assumptions in what ways is the project meeting or managing these? Please ensure that you provide relevant evidence to support progress towards outputs.

#### **c. Community support and improved benefits. Less human-rhino conflict.**

The main activities towards this output were achieved during this period despite the effective loss of the partner identified to help drive the public engagement aspect. The community and education officers with extra support are in place, materials produced and education and awareness programmes initiated including a highly innovative theatre production and progress on the radio outputs. Socioeconomic studies are being absorbed into the general public engagement activities and the original sub-output on this aspect is determined to require less academic input than earlier envisaged. Outputs on this will still be reached at least on a pilot basis in BNP. The wildlife-human mitigation measures are moving ahead with one 10 km fence in place in BNP and its effectiveness was monitored with improvements for a planned extension funded under the project advised. Another fence of 7 km in a community forest in CNP is being implemented and this will be completed by end of June. Non palatable crop implementation is advanced with planting ongoing on 60 farms and the processing plant from India has been delivered and will be installed in the coming weeks.. The major progress to date is on governance with a close relationship established with the NTNC and DNPWC leading to rapid acceptance of new ideas, and science based approaches to conservation. Discussion on new policy could fundamentally change (for the better) the situation for rhino and other endangered

species in the country. There have been media outputs mostly generated about the activities of the project within Nepal rather than instigated by the project. The sensitive nature of the subject is discouraging our partners from being proactive on this and ZSL respects the position. The fact some rhino might be poached for political reasons underlies this concern and rather than using conventional media outlets a more sober and targeted approach will benefit the rhino. Efforts to publicise the project in UK are slow in taking off but recent progress in discussions with BBC for in depth analysis online should bear fruit. ZSL is maintaining a website and creating awareness in UK through its collection at Whispsnade which has recently improved its rhino exhibits with new graphics and interpretation which feed off the project.

### 3.3 Standard Measures

**Table 1 Project Standard Output Measures**

Code No.	Description	Year 1 Total	Total to date	Total planned from application
30 x (6A) 3 x (6B) 1 x (7)	At least 30 trained staff in large mammal census techniques	50 staff trained in census techniques for the rhino total count and invasive species, training material produced 50 x (6A) 2 x (6B) plus on job training 1 x (7)		
3 X (7)	Training manuals, posters, guidance notes and accreditation tests (in monitoring, anti-poaching and surveillance techniques)	Comprehensive training manual, posters and tests produced – developed as an IUCN AsRSG accredited course to standardise across the region 3 x (7)		
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)	4-day workshop - 14 staff trained as instructors 14 x (6A) 1 x (6B)		
2 x (7)	Data collection forms and data quality control procedures	Patrol data recording booklet, Rhino sighting booklet produced and being used		
2 x (12A)	Fully operational GIS-			

2 x (7)	based monitoring and security systems with user manuals and tutorials (in 3 protected areas).	Standardised patrol based GIS monitoring and security system (combined)		
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)	Instructors have been trained and this programme is now being planned with a proper monitoring structure ground; situation is still unstable on the ground		
9 x (6A) 3 x (6B)	At least 9 trained staff in field tools and procedures, data processing and reporting.	At least 15 staff in CNP, BNP, SWR and KTM trained in use of the various tools (sightings forms,  At least 60 staff trained in field data recording forms.  At least 5 staff trained in data analysis and producing monthly status reports,  14 staff trained in basic GIS  4 staff trained in patrol based GIS monitoring		
2 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)	2 education staff provided on the job training 2 x (6A)  8 x (6B)		
1 x (7)	Public education, awareness / outreach material (initial set and then further developments on an ongoing basis)	Range of material developed  1 x (7)		
4 X (6A) 2 X (6B)	At least 4 trained DNPWC and NTNC staff (in sanctuary approach/metapopulation management). (2-week field visit)	3 NTNC and DNPWC staff members undertook Kenyan field visit. The director general of DNPWC could not attend at the last minute due to the political situation. 10 relevant South Asian regional rhino managers also attended the workshop and tour		

		3 x (6A); 10 x (6A) 2 x (6B).		
1 X (7)	"Scene of crime" training manual	Draft completed; training workshop in october 1 x (7)		
12 x (6A) 2 x (6B)	Minimum of 12 trained staff in Scene of the Crime and security system	Training workshop to be conducted in October – see report		
8 x (6A) 2 x (6B)	At least 8 park officers and NTNC scientists trained in production and interpretation/of standardised annual status reports (2 weeks in the first year).	Training workshop to be conducted in October – see report		
4 x (9)	Standardised annual status reports for CNP, BNP, SWR; National annual status report.	Bardia status monitoring report, Chitwan block monitoring reports, Bardia draft total count technical report, Chitwan total count report being produced 5 x (9)		
New - Project specific measures Code not listed 14-19?	Extension of outreach on public engagement programme with theatre production in Europe and at World Conservation Congress			

### 3.4 Publications

**Table 2 Publications**

Type *	Detail	Publishers	Available from	Cost £
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(eg journals, manual, CDs)	(title, author, year)	(name, city)	(eg contact address, website)	
Manual*	Greater One-Horned Rhino monitoring instructors training manual, ZSL/NTNC/AsRSG , 2008	ZSL, NTNC, DNPWC, ZSL		Printing & postage costs
Posters*	Greater One Horned Rhino monitoring training posters, ZSL/NTNC/AsRSG , 2008	ZSL, NTNC, DNPWC, ZSL		Printing & postage costs
Booklet*	Field scout GOH rhino monitoring booklet, ZSL/NTNC/AfRSG, 2008	ZSL, NTNC, DNPWC, ZSL		Printing & postage costs
Booklet*	GOH rhino sighting booklet	ZSL, NTNC, DNPWC, ZSL		Printing & postage costs
Booklet*	Patrol wildlife data recording booklet	ZSL, NTNC, DNPWC, ZSL		Printing & postage costs
Database*	Patrol based GIS database wildlife management system	ZSL, NTNC, DNPWC, ZSL		Postage costs
Sheets*	GOH rhino Master ID file	ZSL, NTNC, DNPWC, ZSL		Postage costs
Manual*	GOH rhino monitoring and management protocol document	ZSL, NTNC, DNPWC, ZSL		Postage costs
Electronic maps	Electronic arcview maps (Chitwan, Bardia, Shuklaphanta)	ZSL, NTNC, DNPWC, ZSL		Postage costs

Poster*	Education grassland poster	ZSL, NTNC, DNPWC, ZSL		Postage costs
Booklet*	Rhino education booklet	ZSL, NTNC, DNPWC, ZSL		Postage costs
Report*	Nepal GOH rhino census 2008	ZSL, NTNC, DNPWC, ZSL		Postage costs

### 3.5 Progress towards the project purpose and outcomes

Rapid progress has been made towards re-establishing the capacity, systems, management and motivation for the conservation of the rhino. The progress towards reversing the decline is mixed with CNP showing stability but this population has more resilience anyway at ~400 numbers actually poached has most probably exceeded the other parks. BNP is still suffering a decline. SWR is stable. Habitat issues are being defined but there is still along way to the point of achieving this outcome and community activities are well advanced with active engagement especially at BNP on conflict, livelihood, support programmes. The main assumption remains true but the signs to date are positive in this respect with steady progress towards democratic government and positive commitment from the main party in power towards the NTNC, wildlife and the environment. The indicators remain adequate for measuring outcomes of the project.

### 3.6 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

The impact of the project towards achieving the final goals of the project is difficult to measure at the current stage. The apparent stabilising of the CNP rhino population since 2005 may not be accurate as the earlier baselines were suspect. The presence of new fencing is reducing human-rhino conflict already where implemented but it is too early to see positive benefits on biodiversity. It may be the use of biodiversity benefits currently is unsustainable and this is being addressed but the aspect of equitable sharing is being explored but it is too early to determine outcomes here although the political process is likely to support this. The invasive plant species work is in the early stages and effective control measures will have a significant positive impact on biodiversity. Already the impact of invasive species is being seen. For example in the buffer community forests of Bagmara and Kumrose in CNP (which depend on tourists), number of rhinos utilising the areas have declined on average by 50% in the last 10 years. The area is being heavily affected by *Mikania micrantha*. Community's livelihood depends on this.



#### **4. Monitoring, evaluation and lessons**

Our strategy on M&E has been to have a biannual table review of progress by the PI whilst on mission to Nepal according to the logframe, involving all the partners followed by extended tours of the project sites. The main outputs of the project are facilitated by 3-4 other UK personnel deployed on more extended missions for up to 4 months at a time. Ongoing evaluation is undertaken through examination and discussion of reports with colleagues in country or in UK and regular communication on issues and problems. On specific topics we engage with the global rhino network and regional colleagues particularly in India.

If this project has its desired effect by the end there will be clear indications of its impact if not in actual numbers of rhino increasing but at least stability in the populations, reduced poaching accurately measured (actual numbers) and overall changes in or introduction of new policies (on security, monitoring, public aspects), new or re-established management systems and scientific methods (block monitoring, metapopulation management), strategies formulated and being implemented on invasives (solutions identified and eradication project development in process) and more generally on rhino (National strategy modified and updated), improved attitudes and engagement between the community, authorities and other stakeholders at home and abroad (strengthened public support, informer networks working, reduced conflict, increased income in buffer zone communities with sustainable resource use, cross border joint patrols and monitoring and law enforcement) and with strong political support (National steering committee and technical committee and site committees functioning). All these aspects will be measure quantitatively where possible and through end-of-project review, workshops and consultations.

There are lessons from the year's work which show the advantages of taking some risk in implementation at a politically uncertain time. This has opened up doors and enabled interaction and integration into the core of rhino management activities, decision and policy making which would have never been possible with a settled system. The policy of minimising central planning and workshops with direct field support and training-on-the-job has paid off with product helping to drive the process rather than promises. We have not been proactive enough on blowing our trumpets and there is already some indication of others taking the credit but we would rather be judged locally on the progress than globally through the media although our responsibilities to Darwin and our partners will be addressed in this respect. We would rather have measured rather than sensational output to the media and useful publication that can be applied here and elsewhere.

#### **5. Actions taken in response to previous reviews (if applicable)**

Not applicable year 1.

#### **6. Other comments on progress not covered elsewhere**

The only major adaptive management of the project activities has been in the public engagement aspect with the intense focus on the theatre production and radio to raise awareness in a powerful and dramatic way both locally, nationally and internationally. The years of a lack of transparency about the negative trends with endangered species and habitats in the Nepal Terai make this an imperative, as few appreciate the critical point that conservation has reached in this zone. This will give a voice to those silenced for years by fear of retribution. This has been possible through subtle shifting in emphasis and leveraged funding.

A number of the NTNC staff which have been working in the field diligently have approached ZSL for help on further education, PhDs and the like which we are happy to provide inputs on mainly through guidance, criticism and advice. This is ongoing for principles in BNP and CNP.

## 7. Sustainability

This project is not being implemented remotely or through a few isolated activities by disconnected actors. The project is embedded into the main NGO responsible nationally for much of the intellectual and scientific inputs into conservation action supported by the largest donor and non-National NGO active with rhinos and the main beneficiary is the organisation, the DNPWC which will continue with responsibility after the project is history. The focus of the UK staff is to be catalytic and provocative to an extent to stimulate and encourage the Nepalese to not give up and be proactive despite the many constraints and difficulties which have been and will be felt in Nepal. The project has high status in NTNC and within the country at large (perhaps too high) and is likely to be used as a model for future activities after the years of civil war and strife. The fact the decision making bodies are reacting positively and rapidly to evidence based arguments is a clear sign of increasing interest, confidence and capacity resulting from the projects impact. If it can work for rhino then tiger, dolphin, elephant, nilgai, all have a chance. The exit strategy is based on sound ideas and techniques taking root and being further developed by a very intelligent and dynamic community that Nepal is blessed with. The outputs, outcomes and impacts will likely be felt for some years and this will be shown by sustained populations of wildlife, habitat improvements and livelihood benefits whether it be in agriculture, livestock, tourism or continued use of natural resources that are recovering but time will be the judge.

## 8. Dissemination

Besides the reports and media outputs the main product under development is a play which will be used in many different contexts of performance and in radio. The theme is around the massive and rapid changes taking place in these remnant ecosystems of the Terai due to numerous factors and the need to mobilise public opinion, achieve wide political support for necessary measures and action. The target audiences will be both local National and international. If successful the capacity will then exist within Nepal to further develop these approaches and refine them with both commercial and perhaps donor support. The products are envisaged as material for both radio and in the future television to reach as wide an audience as possible. Progress and outcomes will also be disseminated through the conservation community through publications, meetings, seminars and symposia towards the end of the project cycle to ensure lessons learned are passed on as rapidly as possible to encourage other initiatives.

All relevant materials relating to the project will be placed on a webpage of the NTNC in Nepal and summaries on the ZSL website.

## 9. Project Expenditure

**Table 3** Project expenditure during the reporting period (Defra Financial Year 01 April to 31 March)

ITEM	Total Budget	Budget 07/08	Expenditure claimed (2007/8)	Balance on 07/08 budget
Rent, rates, heating, overheads etc				
Office costs (eg postage, telephone, stationery)				
Travel and subsistence				
Printing				
Conferences, seminars, etc				
Capital items/equipment				
Others				
Salaries (specify)				
<b>TOTAL</b>				

Notes :

- 1) A carry forward was agreed of £37,200 based on guesstimates of expenditure at the required time (for advising DEFRA of this necessity) but as there was a significant amount of expense in March this proved problematic. In the end the carry forward was more than required and DI administration is deciding whether to readjust the carry forward or allow claim for the now unaccounted expenditure 07/08 in the next submission. The item *other* (mainly census) accounted for this discrepancy estimated at 24724 leaving a surplus of 20800.
- 2) The travel overspend will be adjusted as one expenditure was misapplied for the study tour which was in fact budgeted out of another project account and this will be corrected.
- 3) Salary carry forward relates to delayed consultancy.
- 4) Capital items carry forward is a result of other monies leveraged for equipment and there will be a request to shift this amount to another budget line – others/conferences/Travel.
- 5) Conferences seminars and printing costs are carried forward due to savings and delays in the status reporting and scene of crime training.

**10. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes**

[I agree for ECTF and the Darwin Secretariat to publish the content of this section](#)

The acceptance by the Nepalese authorities and other stakeholders of the catalytic role and value of the DI project in rhino conservation and habitat restoration has been heartening. All levels of stakeholders have been highly cooperative and helpful in ensuring the project has become active in a remarkably short space of time. Rapid introduction and application of new scientific methods and systems to improve rhino census and monitoring was a considerable achievement. The reported results on rhino numbers speak for themselves in this respect and they can now be assessed and communicated with confidence. This was undertaken against the background of socio-political uncertainties in the country, fuel shortages, power cuts, sporadic rioting and blockades of roads and with heavy poaching pressure ongoing. It has enabled a more rationale analysis of the situation and identified key areas for security and management to focus on, particularly in BNP and SWR. The acceptance of the need to address the security and viability of the small population of rhino in SWR is another significant achievement and the sanctuary proposal is far further advanced than expected. There was considerable scepticism about this approach during the scoping and launch of the project. Advocacy has also achieved considerable progress in getting discussion going regarding the suitability of the current anti-poaching policies, security infrastructure and strategy for the future which will be critical for successful biological management and the recovery of rhino populations in Nepal. Public engagement is now being tackled aggressively with an active community liaison on the sites and development of a highly innovative theatre production for wide dissemination and radio soap implementation.

## Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2007/08

Project summary	Measurable Indicators	Progress and Achievements April 2007 - March 2008	Actions required/planned for next period
<p><b>Goal:</b> <i>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</i></p> <p><i>The conservation of biological diversity,</i></p> <p><i>The sustainable use of its components, and</i></p> <p><i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>		<p><i>The first steps to stabilising the population of rhino in 3 protected areas have been made. This platform provides the information necessary for new conservation policy and action. The communities are being engaged and educated whilst improvements in their livelihoods are occurring through reduced conflict and improved economic opportunities.</i></p>	<p><i>(do not fill not applicable)</i></p>
<p><b>Purpose</b> 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.</p>	<ul style="list-style-type: none"> <li>● Cessation of the rhino population decline.</li> <li>● Take up of recommendations by DNPWC and NTNC for <i>Terai</i> grassland habitat invasive species management both in protected areas and community forests.</li> <li>● Take up of recommendations by DNPWC, NTNC and NGOs for buffer zone community</li> </ul>	<p>Evidence for stabilising of the Chitwan rhino population.</p> <p>Evaluation stage on invasives approaching completion.</p> <p>Progress on fencing and use of non-palatable crops (Mentha processing)</p>	<p>Focus on technically improving Anti poaching activities and facilitating necessary policy change</p> <p>Analyse data and advocate solutions</p> <p>Implement fencing projects in Chitwan and BNP</p>

	livelihood, human wildlife (rhino) conflict and support programmes.)		
<b>Output 1.</b> Improved capacity and systems to monitor rhinos and for anti-poaching.	Systems in place and training completed or planned for next phase	Indicators appropriate.	
Activity 1.1 <u>Monitoring</u> Training instructors Training field staff		Instructors and field staff trained and tested, standardised materials developed and produced for AsRSG	
Activity 1.2 <u>Anti-poaching</u> “Scene of crime” training Feasibility of tracker dogs GIS security information database		Considerable progress in improving awareness about necessary policy change with engagement on the issue at Ministerial and Senior Military levels. Scene of crime manual prepared and field work deferred to October 2008 when work can start on training an effective efficient APU cadre in National Parks which will be more likely to achieve results and be retained.  GIS systems in place and staff trained.	
<b>Output 2.</b> Improved biological			



management of rhino populations and habitat.	Major progress in this aspect	Indicators appropriate
<p>Activity 2.1. <u>Metapopulation Management</u></p> <p>Training translocation, veterinary and field officers</p> <p>Rhino information system + GIS maps</p> <p>Park and national status reports</p> <p>Viable populations</p> <p>National Action Plan</p>		<ul style="list-style-type: none"> <li>• Total rhino census in Completed 1XCNP 2X BNP. Field tools developed and implemented (data recording forms etc0</li> <li>• Rhino information system in place and GIS system ready for use.</li> <li>• Systematic monthly block monitoring established in BNP, and NTNC sector of CNP. Negotiations started over funding (WWF) to complete all of CNP.</li> <li>• DNPWC and NTNC training in data quality control, analysis and status reporting to be completed in next phase.</li> <li>• CNP and BNP Rhino population structure and demographics; now being analysed and this will enable national status reports be produced in year 2, report template developed.</li> <li>• Health training and translocation planned for next phase mainly but important contacts made on elephant health and proposals discussed.</li> <li>• Kenya Darwin program study tour completed including attending All rhino translocation guidelines workshop. Contacts made with Indian counterparts and visit completed to Wildlife Institute of India to start collaborative work with Terai scientists and authorities on transboundary issues.</li> <li>• 4 DNPWC and NTNC staff trained in metapopulation management.</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• Draft Feasibility study completed and considerable progress on acceptance of principle amongst wildlife managers.</li> <li>• Translocation and Status reporting training to be done in next phase.</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• Revised National Strategy and Action plans will follow</li> </ul> <hr/>

<p>Activity 2.2.</p> <p><u>Habitat restoration</u></p> <p>Invasive species studies</p> <p>Plan</p>		<ul style="list-style-type: none"> <li>• Preliminary work completed on mapping distribution in CNP and BNP of Mikania and Lantana during census Invasive Species (IS) analysis will follow.</li> <li>• Targeted research studies pending analysis.</li> <li>• Discussions with voluntary groups on raising awareness about invasive aliens.</li> </ul>
<p>Output 3. <b>Community support and improved benefits. Less human-rhino conflict.</b></p>	<p>Engagement on education activities slow to start but now moving rapidly. Livelihood activities ongoing and conflict issues being addressed. Public engagement initiatives planned and started.</p>	<p>Some adjustment in indicators necessary with greater emphasis on public engagement through theatre production and radio and less formal research in the socioeconomics.</p>
<p>Activity 3.1</p> <p><u>Community assistance</u></p> <p>Crop protection</p> <p>Socioeconomic studies</p> <p>Strategy and livelihood development</p> <p><u>Public engagement</u></p> <p>Communication of information Awareness, Dialogue, Media and Community Theatre</p> <p>Rhino campaign</p>		<ul style="list-style-type: none"> <li>• Education and community officers using mainly educational opportunities to engage with communities especially those marginalised and which have not received many benefits hitherto. Strategy on socioeconomic studies revised. Available data being collated but more direct engagement with buffer zone communities advised as socioeconomics well described but little action taken.</li> <li>• Pilot electric fence, non-palatable mentha crops initiatives passed formal agreement phase and purchasing has started. Potential engagement of farmers (&gt;60) exceeds expectations.</li> <li>• Dialogue and awareness with focus on the most vulnerable and poorest buffer zone communities is starting to take effect.</li> <li>• Public engagement is starting in a formal way with the production of theatre and radio in the first phase.</li> </ul>

Output 4 <b>Project management</b>	Very positive particularly in country with considerable engagement from the main partner. The acceptance of the need for a National Executive Committee with technical and site specific committees is important. The project steering committee provides a transition phase which will ensure the final product is inclusive and effective.	Indicators are the establishment of appropriate governance structures for rhino conservation
Activity 4.1. Project management	Steering committee established (May 07); annual Partnership project meetings; regular internal NTNC project meetings; 6 monthly and annual Darwin progress reports; Final Darwin project.	