



An aerial view of Parsa-Bara forest complex

Securing the future of Nepal's tigers

Building a tiger stronghold in Parsa Wildlife Reserve and its buffer zone

Progress report submitted to 21st Century Tiger

Reporting Period: 1 January 2015- 31 May 2015



21ST CENTURY TIGER

giving wild tigers a future

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Project Background

Globally, tiger numbers have declined by 95% compared to the beginning of the 20th century and their habitat is restricted to only 7% of its original extent. To ensure the survival of tigers in the wild, ZSL supports the government of Nepal's commitment to double tiger numbers by 2022 (i.e. to reach 250 tigers, based on 2012 national estimates of 125 tigers). Nepal is currently on track to meet this goal, with current population estimates of around 198 tigers.

In Nepal tigers are only found in the lowland districts within the Terai Arc Landscape (TAL). The majority of Nepal's tigers are found in Chitwan National Park, which represents a success story for wildlife conservation. The tiger population in the park grew from 91 in 2009 to 120 in 2013, primarily due to the large amount of resources to improve the habitat and stop poaching invested by the Government of Nepal, conservation agencies, and local communities. Generally however, protected areas that can support viable tiger populations are limited. Most of Nepal's protected areas, including Chitwan National Park, are nearing the limits of their carrying capacity. It is therefore crucial to improve and protect the entirety of the Chitwan-Parsa tiger complex by increasing conservation attention towards Parsa Wildlife Reserve and Bara Forest.

At present, Parsa Wildlife Reserve only supports 10 adult tigers, compared to Chitwan National Park's 120. There are no scientific estimates for Bara Forest, although there is unlikely to be more than a handful at the present time. The huge difference in density between Chitwan National Park and its adjacent forests is likely due to slight differences in habitats resulting lower prey density as well as occasional poaching of animals. Additionally, while Chitwan National Park and Parsa Wildlife Reserve are fully protected under the National Parks and Wildlife Conservation Act 2029 (1973), Bara Forest is given only a medium level of protection – this is not sufficient for adequate tiger protection. It is heavily exploited, with illegal cattle grazing and human disturbance regularly occurring in core areas of the forest. Tigers in Bara Forest are an easy target for poachers as the protection measures in place at Chitwan and core area of Parsa do not extend to this area.

This project aims to support Department of National Parks and Wildlife Conservation (DNPWC) to tackle these issues and secure a long-term stronghold for tigers, through ecological monitoring of the tiger and its prey base in Bara as well as by establishing Community Based Anti-Poaching Units around Bara to prevent poaching. In its current state Bara Forest, and to a lesser extent Parsa Wildlife Reserve, may act as a sink for the tigers that disperse from Chitwan National Park, instead of allowing them to colonise and breed. However, connectivity between all three areas is excellent and with the proposed interventions, Parsa and Bara combined can support an additional 30-40 tigers, providing a quantifiable contribution to tiger conservation in Nepal and globally.



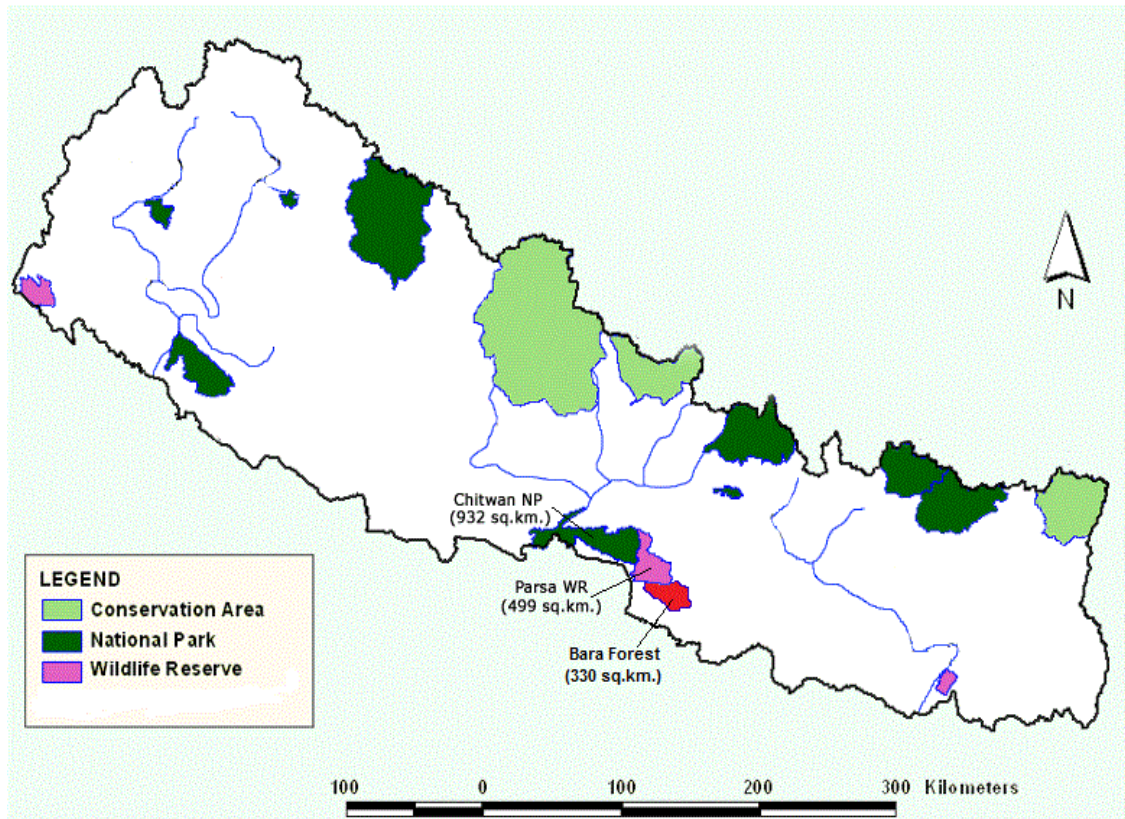


Figure 1: Map of Nepal showing the project area.

B. Objectives:

1. Reduce poaching threats to tigers by establishing two Community Based Anti-Poaching Units (CBAPU) in Bara Forest.
2. Monitor the status of tigers and their prey in Bara Forest through yearly systematic camera trapping and transect surveys.

Activities

1. Reducing poaching threats to tigers by supporting Community Based Anti-Poaching Units (CBAPUs)

ZSL field team visited Bara Forest several times in February and March for supporting the DNPWC in delineating the boundaries for proposed extension. During the visit local people were seen collecting grass, fodder, firewood, fishing and logging even in the core areas of the forest. Major areas of human disturbance were identified. Proposal for formation of CBAPU's has been proposed in such areas of high disturbance to check the inflow of people.









Figs: People often go to the forested areas for logging (A), firewood and fodder collection (B, C), fishing in the Halkhoriya Daha (D). People also make temporary camps/shelter inside the forest certain times of a year eg for fishing and logging (E).

Progress has been made towards establishment of Community Based Anti-poaching Units (CBAPUs) in Bara-Parsa Complex. These CBAPUs will comprise several community level anti-poaching units. A total of 13 community anti-poaching units is identified. On the wake of recent earthquake in Nepal, the proposed activities for mobilisation of CBAPUs in Bara-Parsa Complex has been delayed. Prior to the earthquake, meetings were held with the Department of National Parks and Wildlife Conservation in Kathmandu and as well with the Chief Warden and protection unit in Parsa Wildlife Reserve regarding the formation and mobilisation of CBAPUs. During the meetings, Chief Warden had requested to support 13 units in the Bara-Parsa complex. These units need resource support and technical assistance for continuing their operation. Request has been filed to the DNPWC for the formation of new CBAPUs in close community of Bara forest.

Training has been proposed in the latter half of July for CBAPU members. Equipment and other gears will be provided to the trained CBAPU members in July.



Figs: Meetings of the CBAPU members with the Chief Warden of Parsa Wildlife Reserve at the Reserve Headquarter.

2. Monitor the status of tigers and their prey in Bara Forest through yearly systematic camera trapping and transect surveys.

Several reconnaissance trips were made in Bara forest including taking the members of the technical team (of which ZSL was a part) for delineating the boundary of the forests to propose as extension of Parsa Wildlife Reserve. Wildlife presence with a focus on tigers was also conducted in the area. Sign surveys indicated presence of at least two tigers in the area. At this stage it's not confirmed whether these form as part of the Parsa tigers already camera-trapped or separate individuals. An extensive camera-trapping work planned in October-November should provide a clearer picture.





Figs: Professor Jonathan Bailie, Director ZSL Conservation Programme met with Hon'ble Minister for Forest and Soil Conservation (in the centre with black traditional Nepali cap) re conservation initiatives in Bara Forest (A). Technical team from PWR, ZSL and NTNC for survey of Bara forest (B) for proposing the same as extension of PWR.



In addition to this, there is also a possibility of presence of Fishing Cat *Prionailurus viverrinus* in Halkhoriya Daha, a natural wetland in the proposed extension area of Parsa Wildlife Reserve, within Bara forests. So far tracks have been noted along the edges of the lake and coming winter ZSL will work towards confirming its presence. Other possible animals include the threatened Smooth-coated Otter *Lutrogale perspicillata*.



Fig: A tiger footprint recorded during the field visit (Pad Width > 7cm, Index coin diameter 2.5cm) (A), footprint of possible fishing cat recorded near Halkhoriya Daha (B).



The proposal to conduct the camera trapping in the Bara forest was submitted to the Department of National Parks and Wildlife Conservation. Meetings were conducted with the Chief Warden of PWR, Director General and Deputy Director Generals of DNPWC and Planning Section of DNPWC regarding the camera trapping. Tiger monitoring in PWR has been proposed from October to December 2015. Therefore, Department of National Parks have suggested to postpone the current activity of camera trapping in Bara forests to coincide with October- December camera trapping in PWR. In this way the data between these sites becomes comparable and a larger area can be covered at the same period. Therefore, we would like to request approval from the 21st Century tigers for conducting the camera trap based tiger monitoring and prey base survey in Bara forest starting from October 2015.

Approved Timeline and progress

Activities	Jan- March	April-June
Reducing poaching threats to tigers by supporting Community Based Anti-Poaching Units in Bara		
Identify and select CBAPU members	13 CBAPU's have been identified.	
Provide training and equipment to CBAPU members		Training to be held in July
CBAPU regular patrolling		Patrolling will start after the training
Monitor the status of tigers and their prey in Bara Forest through yearly systematic camera trapping.		
Develop camera trap and transect survey protocol and receive DNPWC approval	Proposal submitted to DNPWC	Proposal reviewed by the technical committee and suggestions to postpone the species monitoring activity till October.
Deploy camera traps		
Conduct transect surveys (prey base monitoring)		
Data analysis and report writing		

We are planning to work continuously with the CBAPU in the coming months. Some of the activities eg illegal timber collection, grazing, and fire are expected to reduce in the coming months. This will mean overall disturbance and poaching will come down in the tiger habitat. We aim to start the camera trapping from October onwards as that is the time when monsoon rains subside. We have been also able to give following outputs in addition to the work on CBAPU formation and support.

1. Support provided for the proposed Parsa Wildlife Reserve extension by providing transport and field staff, and ZSL featuring as a permanent member of the technical team as formed by the DNPWC,



2. Support provided by supplying information on tiger, birds and other wildlife in the supporting document to declare the area as protected,
3. Actively working with policy makers at the decision making level eg held discussion with the Honourable Minister for Forests and Soil Conservation, Secretary and Chiefs of various divisions within the MoFSC as well as the Director General and Deputy Director General of the DNPWC. During the meeting with the Minister, we were able to raise concerns categorically re Bara forests. These discussions are important to secure Bara forests as habitats for tigers.



Additional Photographs from the field



Wetlands and grasslands of the Bara forest support prey base for the tigers and other carnivores.





Loggers use buffalo cart to transport the timber.

