

Balancing a growing tiger population with human-tiger coexistence

[Interim Report]

August 2024



Submitted to

WildCats Conservation Alliance

Reporting Period

1 February 2024 – 31 July 2024

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This report will be made public. If it contains confidential or sensitive information, please also provide a revised report for sharing with the public.

Section I. Project Information	
Project Title: Balancing a growing tiger population with human-tiger coexistence	
Grantee Organisation: Zoological Society of London	
Location of project: Southern and eastern part of Parsa National Park (PNP) and its buffer zone, adjoining national, collaborative and community forests (27.250N, 84.850E)	
Size of project area (if appropriate): 535 Sq. Km (approx.)	No of tigers and / or Amur leopards in project area, giving evidence & source: 41 (95% CI = 38-50) estimated tigers in PNP and adjoining forest (DNPWC and DFSC, 2022)
Partners: <i>(Please give details of partners, including communities, academic institutions etc. for this project and permissions that have been received for this project.)</i> The Department for National Parks and Wildlife Conservation (DNPWC) DNPWC is the government authority responsible for conserving wildlife and landscapes of ecological importance. It is responsible for the overall management of Nepal's protected areas (PA), including the buffer zones. ZSL signed a MoU with DNPWC in 2014 and has a close working relationship with the PA manager and DNPWC staff in PNP. DNPWC will facilitate project implementation and will be responsible for overall monitoring and evaluation of the project. This will be based on a monitoring mechanism established under the MoU between DNPWC and ZSL through Project Coordination Committee (PCC) (detailed in monitoring and evaluation section). The project will help DNPWC improve prey abundance and water supply across the park area, helping to sustain a healthy tiger population. In turn, this will reduce the probability of human-tiger conflict (HTC), as large carnivores will have less reason to stray outside of the PA. Valuable knowledge will be gained from this project which will be applied to other tiger-inhabited PAs of Nepal, helping to mitigate HTC in the known conflict hotspots of Banke, Bardia and Shuklaphanta NP's	

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buffer zones. The proposed project has been prepared under the guidance of DNPWC and the required permission has already been obtained.

Parsa National Park (PNP)

The Chitwan-Parsa-Valmiki Complex, a vast expanse of protected forested land, spans approximately 100 km along the Terai Arc landscape and has been designated as a crucial and prominent territory for tiger conservation efforts. Chitwan National Park in Nepal boasts a thriving tiger population which serves as a source for both Valmiki Tiger Reserve in India and Parsa National Park in Nepal, demonstrating the transboundary nature of this landscape. ZSL and partners work to establish a stable population of tigers by strengthening transboundary cooperation, mitigating human-tiger conflict, restoring and managing critical habitats, and strengthening the engagement of local communities.

In 1984 PNP was gazetted as a wildlife reserve, primarily aiming to preserve the wild Asian elephant and their remaining habitat. The 2015 expansion of PNP was significant, extending PNP's area to 627.39 sq.km from 499 sq. km, and in 2017 its status was upgraded to a National Park, ensuring additional protections.

The previously established Project Management Unit (PMU) at PNP, chaired by the Senior Conservation Officer of PNP and members of ZSL, will continue to facilitate and implement project activities. The PMU is responsible for coordination, facilitating project activities, monitoring progress, and reporting to the Project Coordination Committee (PCC).

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Actual start date of project: 1 February 2024

Reporting period: 1 February 2024 to 31 July 2024

Section II. Project Progress

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Summary of progress for the first 6 months: *(please provide a summary for use in our communication materials)*

Two project inception meetings were held with key stakeholders at different levels to define the project's scope, focusing on habitat management and human-tiger coexistence in Parsa National Park (PNP) and its buffer zone. A preliminary timeline highlighted key milestones, such as habitat management areas, waterhole construction, awareness events, and beneficiary targets, while also addressing potential risks and mitigation strategies. In the reporting period, 12.5 hectares of grassland were managed, including 9.5 hectares in Rambhori and 3 hectares in Sahajnath, to enhance ecological health and biodiversity. The management plan, based on recommendations from a May 2024 meeting, includes biannual activities and regular monitoring. In line with the discussions with key stakeholders and DNPWC's wildlife habitat management procedure 2080, the waterhole management activities have been postponed to after the monsoon, with all the required planning in place. Pre-management data collection on vegetation and wildlife will be used to evaluate the impact of interventions.

Similarly, a tiger conservation awareness program was held in schools, focusing on biodiversity, human-tiger coexistence, and conflict mitigation, with 272 participants from engaging in presentations by ZSL Nepal and PNP. The awareness program featured presentation by ZSL staff on conservation strategies and camera trapping. Pre- and post-session tests showed a 56% improvement in participants' understanding, with scores rising from 46% to over 70%. These initiatives effectively educated diverse groups on tiger conservation, highlighting the importance of ongoing outreach for better human-wildlife coexistence.

Details of activities and results to date: *(Please give details of progress made towards the objectives & outputs of your Logframe, and activities included in your Workplan. Please add any relevant charts, maps and images).*

Output 1: Maintaining habitat matrix through maintenance of water pond and grassland will support the sustenance of growing tiger populations and tiger movement (dispersal) within and between populations.

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Activity 1.1: Conduct inception meeting workshops with key stakeholders and project team

As part of project sharing with important stakeholders, two project inception meetings were conducted, one PCC level at the Department of National Parks and Wildlife Conservation (DNPWC) and the other PMU level at Parsa National Park. The meetings were focused on establishing the project's scope and key deliverables, with particular emphasis on habitat management and human tiger coexistence promotion in the PNP and its buffer zone. A preliminary timeline was also shared, highlighting critical milestones such as area of habitat to be managed, number of waterholes to be constructed, number of awareness events to be conducted and number of beneficiaries to be reached. The roles and responsibilities of key stakeholders were also discussed, and an overview of available resources and budget constraints was also shared. Additionally, potential risks identified during the project development, including limited accessibility to the project sites during the monsoon and lack of active involvement of important stakeholders, and risk management strategies were also discussed. At the end of the meeting, follow up meetings were scheduled to review progress.

Activity 1.2: Maintain 10 hectares of grassland twice a year

Based on the meeting held on 12 May 2024 between project team and park authorities, the Rambhori and Sahajnatn areas were selected for grassland management. The meeting established that management activities will occur twice a year, followed by regular monitoring to assess the effectiveness of these interventions. This structured approach ensures that the management efforts are both strategic and responsive to the evolving needs of the grassland ecosystems.

As agreed in the meeting, 12.5 hectares of grassland was managed in this reporting period as the first phase of management. The team has successfully managed 9.5 hectares of grassland in the Rambhori area. This management included a range of activities designed to enhance the ecological health of the region, such as controlling invasive species, improving soil quality, and optimizing the use by wildlife including tiger prey base. These measures are aimed at restoring and maintaining the ecological balance, ensuring the long-term sustainability of the grassland and reducing the movement of tiger outside in search of prey.

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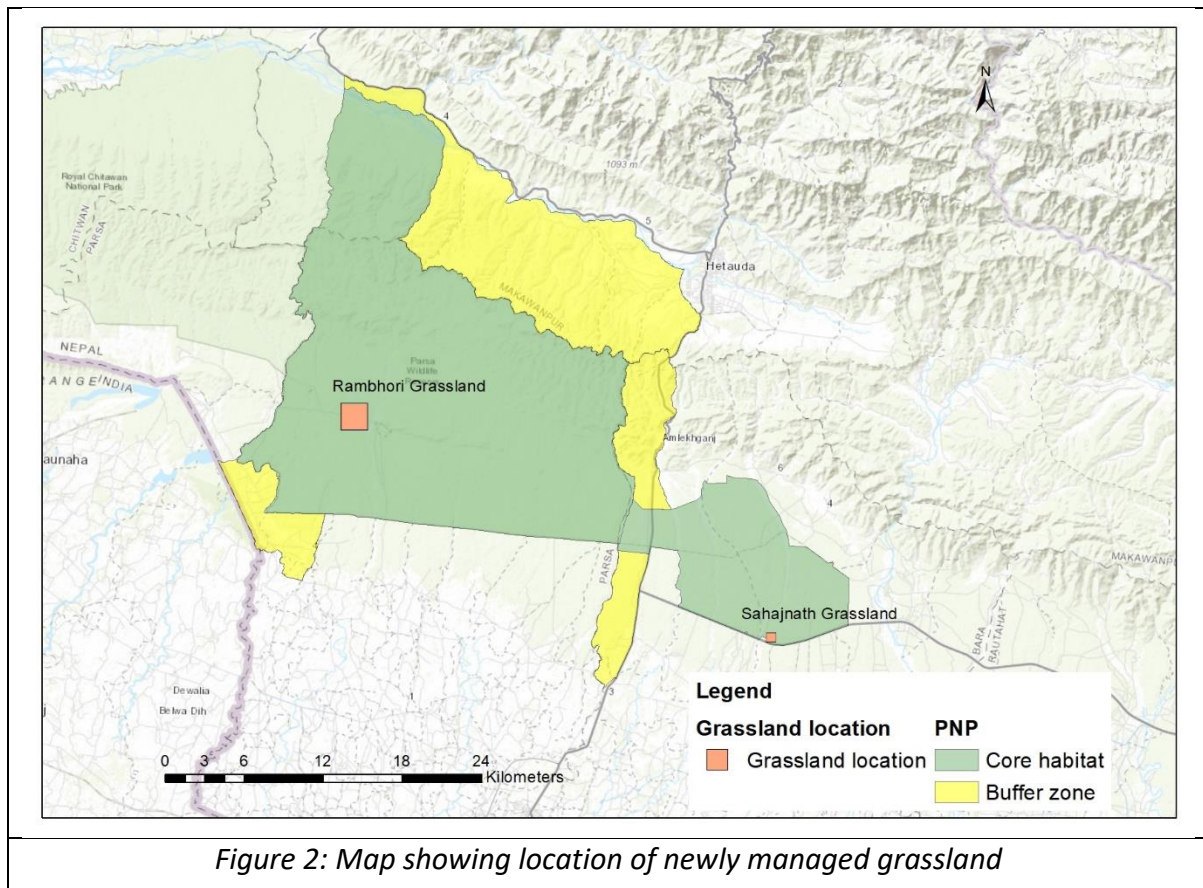


Additionally, 3 hectares of grassland in the Sahajnath area was also managed, which falls within the extension area of the PNP. The focus here was on monitoring vegetation health and habitat matrix and promoting biodiversity. The efforts in Sahajnath are intended to support the broader goals of the project by enhancing the resilience and productivity of this specific grassland area.



Figure 1: Grassland management activities underway

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Activity 1.3: Maintain a water retention pond downstream from spring water source to facilitate water especially during dry season for tiger and prey species

This activity has been postponed so as to comply with the standards of Wildlife Habitat Management Procedure 2080, which stipulates that waterhole management in wildlife habitats should occur either between September and December or January and April. Given that our project commenced in February, the implementation team has only managed to hold coordination meetings with the park authorities regarding waterhole management during this reporting period.

Activity 1.4: Biological Monitoring of restored and managed habitats in addition to previously managed and unmanaged sites

Regular wildlife monitoring in Parsa National Park is being carried out at strategic locations both within and around the park. These sites have been selected based on recommendations from park authorities to evaluate animal abundance and behaviour. As part of our project, we have also planned to install cameras at the designated habitat

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management intervention sites within the park. The grid design for camera trap deployment has been completed for the managed grassland, deployment has been planned soon after the monsoon season in Rambhori area while in Sahajnath cameras have been deployed for monitoring. The preliminary results from cameras deployed in Sahajnath shows that the area is being used by tiger prey base such as spotted deer, wild boars, tiger, etc.

Prior to management of the grassland, pre-management data were collected from the field. The data collected includes area of the total grassland, distance from the waterhole, fireline, watchtower, security post, etc. Vegetation assessment data on species composition, mean height, presence of major trees, shrub and invasive species were also collected. Similarly, signs of wildlife were also recorded to assess the habitat use. These data will be used to compare effect of management intervention.



Figure 3: Staff conducting pre management assessments

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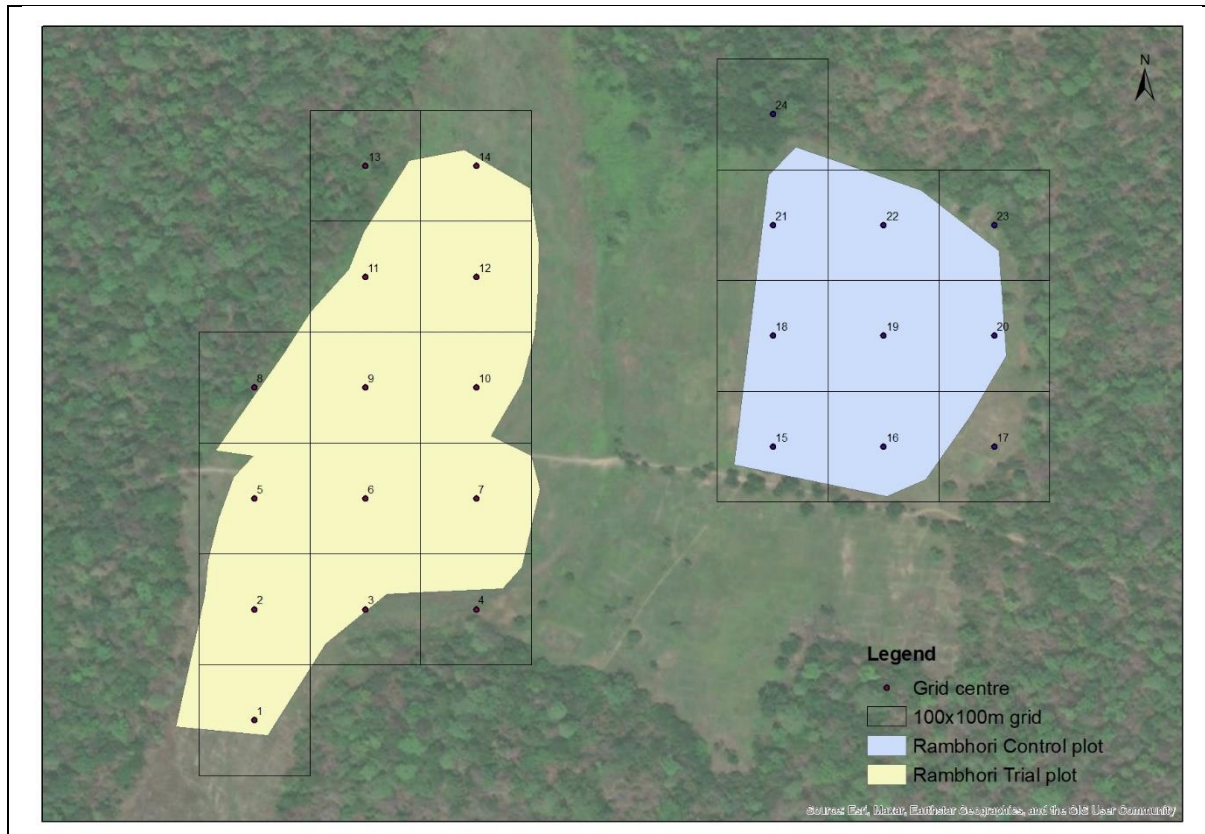


Figure 4: Map showing location of newly managed Rambhori grassland and grid layout

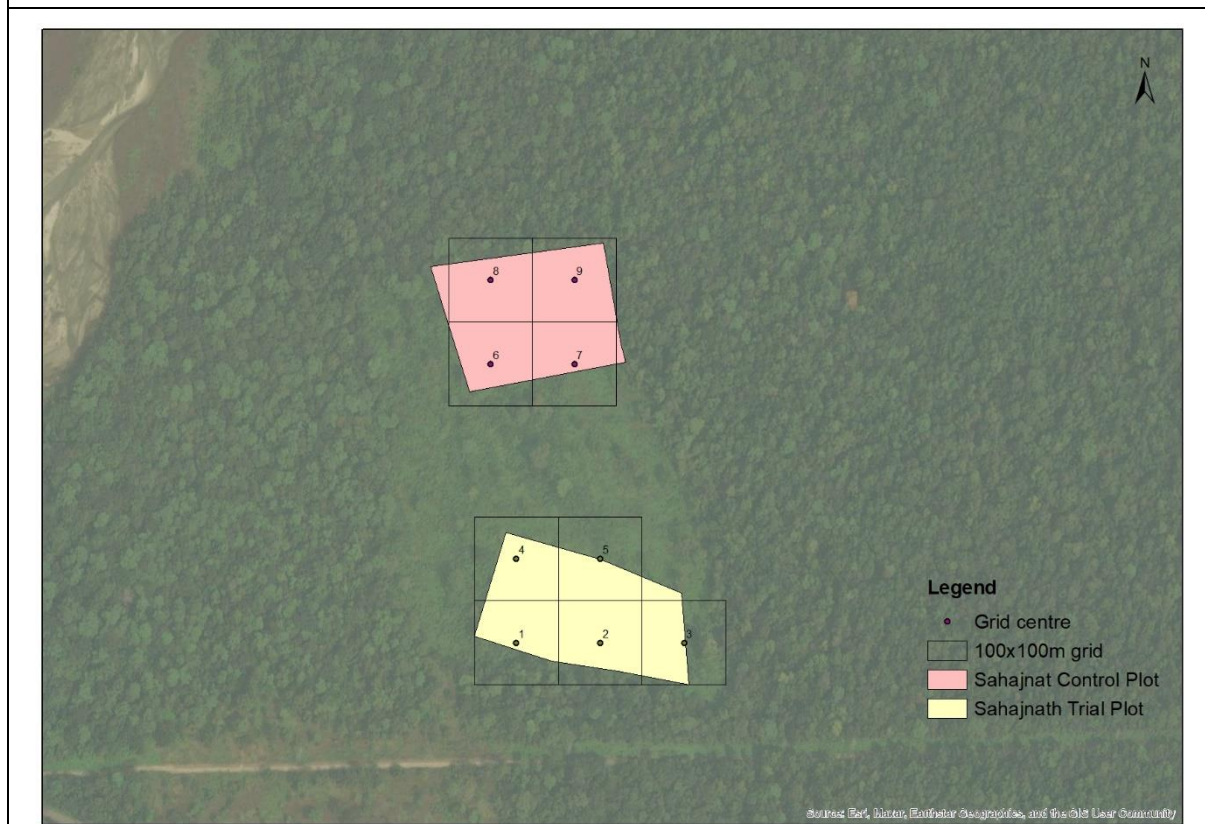


Figure 5: Map showing location of newly managed Sahajath grassland and grid layout

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Activity 1.5: Collect results from monitoring of habitat management sites and other sites and compile a scientific data on grassland management producing a comprehensive report

The activity is scheduled to be carried out in November.

Output 2: Young community members living on the fringes of PNP will have greater awareness of the importance of tiger conservation, along with the causes, consequences, and mitigation strategies of human-wildlife conflict in their region, leading to improved human wildlife coexistence in the longer term.

Activity 2.1 Awareness activity on conservation focusing on government schools

In March, tiger conservation awareness program was conducted in the schools in conflict-prone areas of Amlekhgunj and Pathlaiya, focusing on raising awareness about biodiversity conservation, human-tiger coexistence, and mitigating human-wildlife conflicts. The program featured presentations by ZSL Nepal and PNP. School principals, teachers, and students participated, emphasizing the importance of such programs in educating students about biodiversity. The event engaged 152 participants from two schools. Similarly, on February 17, 2024, a tiger awareness program at the Hetauda Forestry Campus targeted university students, with ZSL staff presenting on conservation strategies and camera trapping. The session included 120 participants from the Institute of Forestry, Tribhuvan University, and the Agriculture and Forestry University. For the assessment of participant knowledge, pre and post session tests were conducted. It was found that the programme achieved a 56% increase in the understanding of the subject matter amongst participants. In the pre-test average score was around 46% which was increase to more than 70% in the post-test.

These programs successfully engaged diverse audiences in understanding and addressing conservation issues related to tigers and their habitats. Moving forward, continued education and outreach will be critical in fostering better human-wildlife coexistence.

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Figure 6: Staff delivering presentation on tiger conservation

Activity 2.2: Promote HWCx in PNP by actively engaging local Nature Guide and CBAPU members

This activity was delayed due to the ongoing CBAPU election process and will be reported in the final report. There is a provision that the members of steering committee follow the election process.

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Give details of any obstacles to success that the project has encountered over the last 6 months. *(Please provide detailed examples, explain what impact these will have on the project results and the changes to the budget and timetable of project activities)*

Overall, the activities are in track except for wetland management and training to Nature guides and CBAPU member. With postponing of these activities in line with the recommendations from PMU and CBAPU elections. As all arrangements for these activities has been done, it will be accommodated into the next period alongside other planned activities.

Budget: Is the spend on target? If not, please give details and provide an updated budget sheet.

Yes

Media: Please provide a list of recent publications and media both local and national which mentions the work funded by this project and/or mentions WildCats Conservation Alliance

WildCats Conservation Alliance asks for at least 5 relevant high-resolution jpeg files of images of the project activities during this time period.