

Final Evaluation Report

Your Details	
Full Name	Nischal Shrestha
Project Title	Integrating science and local communities for Chinese Pangolin conservation in Kavrepalanchok, Nepal
Application ID	36168-1
Date of this Report	30th May, 2023

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Occupancy Modelling				Occupancy of Chinese pangolin was estimated which provided crucial insights for developing effective conservation strategies, supporting decisions about policies, and protecting the associated habitat and ecosystems.
Photographic Verification				Photographic evidence of the presence of Chinese pangolins along with the behaviour of the species was obtained. Apart from this, presence of other nine mammalian species was also recorded.
Habitat Modelling				Chinese pangolin habitat distribution was determined which has helped to identify crucial and understudied areas for species survival where scientific and conservation efforts are required.
Awareness and Capacity Building sessions				The project placed significant importance on community involvement, conducting a workshop for university students who later organised awareness programmes in local communities and schools. Capacity building sessions benefited over 30 individuals, and stakeholder meetings emphasised the need for a land use action plan to prioritise forest and biodiversity conservation within the municipality. Overall, the project successfully engaged the community and raised awareness about conservation efforts.

2. Describe the three most important outcomes of your project.

The outcomes of this project were significant and far-reaching. Some potential outcomes included:

a). Enhanced understanding of pangolin ecology: By conducting camera trap-based occupancy modelling and studying the ecological requirements of Chinese pangolins, the project contributed to a better understanding of their behaviour, habitat preferences, and population dynamics. The project has also provided valuable insights into the effectiveness of camera traps as a monitoring tool for

pangolins. This has led to the advancement of camera trap techniques and methodologies, benefiting future research and monitoring projects focused on pangolins and other elusive species.

b). Capacity building and training: Through the project, over 30 local communities and 10 university students were trained and equipped with skills in pangolin research and biodiversity conservation. Apart from that, over 800 individuals were involved in awareness programmes. This engagement has empowered communities and students to participate in conservation efforts, build their capacity in wildlife monitoring, and create a sense of ownership and stewardship towards pangolins and their habitats. This outcome also addresses the issue of limited skilled manpower in the field and ensures that there are individuals capable of contributing to pangolin conservation efforts and biodiversity management in Nepal.

c). Improved conservation strategies: The project findings as well as the recommendation provided critical information for the development and implementation of effective site-specific conservation strategies for Chinese pangolins in the municipality. The outcome of this project has facilitated the formulation of land use policies that integrate forest and biodiversity considerations, aiming to support targeted conservation efforts and promote sustainable development.

One of the most significant achievements of this work is the successful implementation of the first ever camera trap-based occupancy modelling for Chinese pangolins in Nepal. This ground breaking approach has provided valuable insights into the behaviour and habitat preferences of this elusive species, contributing to the understanding of pangolin ecology in the country. The use of modern monitoring tools, such as camera traps, has proven effective in capturing data and producing reliable results, which can be replicated in other regions within Nepal and potentially beyond.

Moreover, an important accomplishment of this project is the training provided to over 30 local communities and 10 university students. By equipping them with the necessary skills and knowledge, this initiative addresses the scarcity of skilled manpower in the field of Chinese pangolin and biodiversity conservation. These trained individuals can play a pivotal role in future conservation efforts, fostering sustainable practices and contributing to the protection of pangolins and their habitats.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

During the project, there were very minimal difficulties encountered. However, one unforeseen challenge that arose was the loss of camera traps. To address this issue, a metal security box was created to protect the camera traps from theft or damage. Despite this preventive measure, one camera trap was still lost. Efforts were made to mitigate the impact of the loss by implementing stricter monitoring protocols and reinforcing security measures for the remaining camera traps.

Additionally, lessons learned from this experience will be incorporated into future deployments to minimise the risk of further losses.

4. Describe the involvement of local communities and how they have benefited from the project.

The project has actively involved local communities in various ways, leading to significant benefits for the community members. Firstly, the project has conducted capacity building training involving more than 30 local individuals. This training has played a crucial role in raising awareness and empowering the community to gain valuable knowledge and skills related to the project's objectives and implementation. This increased awareness has helped community members make informed decisions and actively contribute to the project's success. Secondly, the project has trained 10 university students in using camera traps and analysing camera trap data. These students have been equipped with the necessary skills to conduct wildlife monitoring and data analysis. Additionally, they have also been trained in conducting community interaction programmes and have been engaged in organising school awareness programmes. By involving these students, the project has created a pool of skilled manpower within the local community, fostering sustainable conservation efforts.

Furthermore, the project has organised community awareness and stakeholder meetings. These meetings have served as a platform for governmental representatives, school officials, local leaders, and other stakeholders to come together and discuss important matters. One of the key topics discussed during these meetings was the preparation of a land use policy that incorporates forests and wildlife. By involving various stakeholders in these discussions, the project has facilitated collaborative decision-making and policy development that considers the interests and perspectives of the local community.

Overall, the involvement of local communities in capacity building, training, and decision making processes has resulted in increased awareness, skill development, and empowerment. These benefits have not only contributed to the success of the project but have also fostered a sense of ownership and sustainability within the local community.

5. Are there any plans to continue this work?

Yes. The project's success in establishing a baseline understanding of the species and identifying potential habitats in a few small forest patches within the district (Panauti Municipality) has paved the way for future endeavours. Recognising the need for further investigation and targeted conservation interventions in underserved areas, there is a strong commitment to continue this work. Expanding the project's scope to encompass these unexplored regions will enable me to assess and document the presence of Chinese pangolins, their distribution, and habitat characteristics more comprehensively. This expansion will provide invaluable data and insights crucial for shaping effective and evidence-based conservation strategies. By undertaking this research, it will not only fill critical knowledge gaps but

also contribute significantly to the long-term conservation of Chinese pangolins in the district.

6. How do you plan to share the results of your work with others?

I have developed a comprehensive plan to share the results of my work with others and ensure broad dissemination of the findings. Here are the key strategies I have adopted.

- **Video Publication:** I have prepared videos highlighting the findings and outcomes of my work. These videos serve as an engaging and accessible medium to communicate the research findings. I have shared these videos on various social media platforms to reach a wider audience, including local communities, conservation organisations, and interested individuals.
- **Report Distribution:** I have compiled a detailed report summarising the work conducted, the methodology employed, and the results obtained. This report includes recommendations for conservation and management actions based on the findings. I have shared this report with relevant stakeholders, such as the Division Forest Office, Panauti Municipality, ward offices within the municipality, and community forest user groups. By disseminating the report to these key stakeholders, I aim to ensure that the findings reach the appropriate authorities and community representatives who can contribute to the implementation of the recommendations.
- **Scientific Publications:** To contribute to the scientific community and facilitate knowledge sharing, I am in the process of preparing two scientific articles based on the project's results. This will enable researchers, academics, and conservation practitioners to access the detailed research findings and contribute to further discussions and advancements in the field.

By employing this multi-faceted approach, I aim to maximise the visibility and impact of my work by reaching a diverse audience, including local communities, policymakers, conservation organisations, and the scientific community, fostering collaboration, knowledge exchange, and informed decision making for the benefit of Chinese pangolin conservation and sustainable management.

7. Looking ahead, what do you feel are the important next steps?

Looking ahead, an important next step that I feel is to conduct research in the underserved areas within the district on a larger scale. This expansion of the project's scope will focus on assessing and documenting the presence of Chinese pangolins, their distribution, and habitat characteristics in these regions. By gathering comprehensive data and insights, the project will contribute to a deeper understanding of the status and conservation needs of Chinese pangolins in these areas. This information will be invaluable in informing future conservation efforts. Additionally, building collaborations and partnerships with local communities, conservation organisations, and stakeholders will be crucial for success. By working together, resources can be leveraged, expertise can be shared, and effective

conservation strategies can be implemented. Furthermore, continuing to raise awareness and educating stakeholders about the importance of conserving Chinese pangolins and their habitats will play a vital role in garnering support and fostering a sense of stewardship among the community. Through these next steps, the project can make significant contributions to the long-term conservation of Chinese pangolins and their habitats in the district.

8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

Yes, I have used the Rufford Foundation logo in the materials produced in relation to the project. I used the logo in the reports, educational brochures, flex, t-shirts and even on the certificate that was provided to the participants during the capacity building workshop. These materials have not only provided information about the project but has also serve as a platform to promote the Foundation and its mission. With all these highlights, the Foundation has received publicity during my work.

9. Provide a full list of all the members of your team and their role in the project.

Nischal Shrestha (Project Lead)

I took the lead in overseeing the complete execution of the project, including the field work, data analysis and execution, various activities such as awareness campaigns, capacity building workshops and report writing.

Sandeep Shrestha

He co-lead on the overall design and execution of the project.

Ashish Bashyal

He co-lead in overseeing the complete execution of the project. He was very instrumental in terms of overall design, methodology development and data analysis of the project.

Saneer Lamichhane

He was crucial in terms of overall design and data execution of the project.

Sadip Raj Pandey

He was very influential during the execution of the field work, data handling as well as during the capacity building workshops and awareness programs.

University Students

They were very instrumental for the execution of awareness campaigns in various schools and communities.

Local Field Support

They assisted during the execution of field works in various forests within the municipality.

10. Any other comments?

It is essential to continue implementing similar projects in other regions of the district, as well as in different parts of the country, to ensure the effective awareness and involvement of local communities in conservation efforts. By extending the scope of such initiatives, we can engage more individuals and communities in understanding the importance of pangolin conservation and actively participating in safeguarding the overall biodiversity.

Lastly, I would like to express my sincere gratitude to The Rufford Foundation for their invaluable support throughout the entire project. Their kind assistance has been instrumental in enabling the successful implementation of this project and its positive impact on pangolin conservation. Their commitment to environmental conservation and their partnership has been truly appreciated.

