

The Rufford Foundation Final Report

Congratulations on the completion of your project that was supported by The Rufford Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details					
Your name	Seejan Gyawali				
Project title	Temporal and spatial fluctuations in occurrence of the Vulnerable Sarus Crane (<i>Grus antigone antigone</i>) and their conservation in the Western Nepal				
RSG reference	20946-2				
Reporting period	12 months				
Amount of grant	£4,565				
Your email address	sgyawali83@gmail.com				
Date of this report	23/03/2018				



1. Please 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
Scientific Research and monitoring				I used line transects and direct observation methods in both the monsoon and winter season in all areas. (Bardiya Banke Kailali and Kanchanpur)
Capacity building and workshop				I organised capacity building workshops in many communities to inform local people of the value to them of the need to protect Sarus crane.
Awareness and Promotion				Conservation awareness programmes were arranged where promotional materials were made available. The venues were in schools and local community groups. Occasional awareness days were also arranged in all focus areas of the survey.
Recommendation.				Efforts should be made after awareness training to inform people of the law in Nepal that protects all endangered species. Strict local laws for the protection of Sarus crane should then be implemented. Small payments could be considered to suitable individuals to carry out surveillance of sites. Sensitive promotion of bird tourism needs to be encouraged.

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

In one of study areas, we faced a challenge to convince some of the local people. Not to collect the eggs of Sarus crane laid on the wetlands and farmland, especially children who used the eggs to play with. Some of the eggs were laid on private farmland and it was initially difficult to get the message across However, with the help of a local team member, the difficulties were largely tackled through educating people about the fragile status of Sarus crane. Workshops and field visits to actual sites were conducted along with poster distribution. I witnessed an overall change of attitude over the study period.



3. Briefly describe the three most important outcomes of your project.

The outcomes of my project are:

A. Determining the distribution of Sarus crane, nests and threats

This was the first time research into the status of Sarus crane has been conducted in areas outside of lumbini. Over the survey period in Banke, Bardiya, Kailali and Kanchanpur districts I was able to establish the exact breeding population and nesting sites found in these districts. During the winter and monsoon seasons. Using line transects and direct observation methods. Population size was found to vary between seasons, with maximum numbers of individuals observed during the monsoon, which is also the breeding season for Sarus crane. The numbers of Sarus Crane detected in 2017 in the monsoon in B, B, K and K districts were 23, two, six and eight respectively and in the winter 11, two, two and five respectively. Two breeding pairs were observed in Banke (with two and one chicks), one pair in Kailali (with one chick) and two pairs in Kanchanpur district (with two and one chicks).

I provided a semi-structured questionnaire survey in the Banke district; the findings are as follows. 49% of people knew of Sarus crane. Of these 39% had seen nests, and 21% reported seeing eggs. Respondents identified the major threats to Sarus crane as illegal collection of eggs, harassment, construction activities, eucalyptus tree plantation and free ranging dogs. The historical distribution of Sarus crane was outlined. In addition, a checklist of birds accounting 209 species was prepared from the project site (farmland, wetland, patchy forest and grassland of Banke-district-Nepalgunj).



Figure 1 Sarus Crane Detected in two seasons





Figure 2: Nests and Chicks of Sarus Crane in study area



Figure 3: Hatching success rate in Banke district





B. Conservation awareness and poster distribution:

Activities were successfully organised in all of the study areas of the four districts. The activities included power point presentation, poster distribution and field visit programmes for Sarus crane observation. These were conducted in schools, communities, Community forest user groups and farmers.

Programs:

Badhaya Lake Visit: In June 2017, on the occasion of World Environment Day, a field visit programme for school students and teachers and local people was carried out at Badhaya Lake, a frequently visited site for Sarus crane in the Bardiya district. During the programme, posters and some brochures from Bird Conservation Nepal were distributed to the local people and participants.150 posters that I had designed were distributed to the local people and participants. During the visit a birdwatching programme was also organised and identifying techniques were discussed.



School Visit Programme: A total of 16 schools were visited in the study area. A general quiz on birds was organised prior to a poster and oral conservation speech. Diaries were distributed to the top three performers. The conservation speech (oral and poster presentation) was given to the students of various grades 3 (age7) to 10 (age 16). Two types of posters were also distributed to the students laying out the need to protect Sarus crane in the various areas.

Farmland visits and poster distribution: The farmland areas close to Sarus crane detection and nesting sites were visited, local farmers were made aware and posters were distributed. Informal questions were asked of them regarding any threats to the Sarus crane. The major threats identified by them were free-ranging dogs and the collection of the eggs mainly by children.

Community Workshops: Community workshops were organised with the participants such as farmers, local clubs, media and community forest users groups. The focal discussion for the long-term conservation of Sarus crane was discussed. The outcome was very satisfactory. After the workshops some of the participants were informing us about the Sarus crane sighting areas, nesting areas and potential threats.

C. Capacity building training workshop:

Workshops focused on monitoring Sarus crane and other indicator birds, identification techniques, emerging threats and solutions. Workshops were organised with support from Bird Conservation Nepal (BCN), The National and Department of National Park and Wildlife Conservation (DNPWC). After the capacity building workshop, a local team member was chosen who would provide feedback about Sarus crane in the study area. Capacity building workshops were done in Banke and Kanchanpur district only.

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

During my project, the support from local people was outstanding. The tourist flow in the Badhaya lake area is increasing specially to watch the wetland birds. The participants were interested to listen about Sarus crane ecology and their conservation needs. Some of the local people who were interested to help the project are doing local guide jobs which is a positive hope for further sensitive tourism to the regions.

5. Are there any plans to continue this work?

Yes I am looking for the next step to continue my work as I feel it is vitally important to develop and nurture these areas so as they can become a lot more established as safe havens for Sarus crane. During my field visits, I have been advised by many participants in conservation workshops of the necessity to spread the word over a larger area. Farmland of Banke, Bardiya, Kailali and Kanchanpur hold not only a small and fragile population of Sarus crane, but also many threatened species of birds and mammals. I



want to regularly monitor the project site and to extend it to areas not yet covered. Since my study area lies adjacent to the Nepal-India border there is also a need to carry out trans-boundary monitoring to enable me to keep accurate records.

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

The outcomes of my survey have already been published in the "Munal" a Nepalese ornithological magazine published by Bird Conservation Nepal. I also gave talks to local FM stations from the study area. I am currently writing a piece that I hope will get published in a national daily in Nepal. I also want to set up a blog page in the future which will concentrate on the broader issues affecting birdlife in Nepal which will include the problems faced by Sarus crane.

7. Timescale: Over what period was the Foundation grant used? How does this compare to the anticipated or actual length of the project?

The grant was used from March and ended in December 2018. The time frame was followed as planned in the proposal of the project.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Travel cost during running the events and survey:	£267	£283	£16	Capacity building workshop was organized in Kanchanpur district also 3 more days added.
Travel cost during running the events and survey:	£267	£290	£23	Capacity building workshop was organized in Kanchanpur district also 3 more days added.
Food and accommodation cost: @£9 X 135 days X 2	£1950	£1800	£150	Accommodation in Kailali and Kanchanpur was cheaper
Communication and Reporting: @	£50	£50		
Organizing major events: £10/ day X 30 days X 2 people	£510	£510		



Developing awareness	£300	£393	£93	Two kinds of poster were
and promotional materials:				developed
Capacity Building	£200	£250	£50	
Workshops: £10/ day X 15				
days X 2 people				
Scientific Research and	£1,288	£1,288		
Monitoring:@£10/ day X 90				
days X 2 People				
Total	£4,565	£4,581	£16	Personnel

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

The monitoring of Sarus crane and its conservation approach is the first time this has happened in the study area. There is a real need for awareness programmes to spread beyond the areas we have already done. There are still many places of Banke, Bardiya, Kailali and Kanchanpur district we need to reach. We also need to monitor occasionally the areas we have already covered.

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

The logo of The Rufford Foundation was used in the 1000 posters and flexes and presentation I designed. The publicity reached around 30,000 people. We also spoke at workshops about the function and aims of the Rufford Foundation and the foundations involvement with this particular project.

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

Ashok Kumar Chaudhary: Ashok is local from Bardiya district. His role as a team member was to conduct the field work, organize local meetings with local people and to consuct awareness activities in the schools and communities

Kailash Bogati: Kailash Bogati is local from Banke and Bardiya district. His role was to enter the field data and assist with the Sarus Crane Survey.

Dinesh Raj Joshi: Dinesh is from Kailali district. His role was to conduct Conservation awareness activities in schools and communities and spread the conservation message on Local F.M.

Parsuram Rana: Parsuram is local from Kanchanpur district. His role was to inform local people of the conservation awareness meetings, organize capacity building training and conduct an informal questionnaire to obtain information about Sarus Crane, its nesting sites and threats.



12. Any other comments?

There is a need for awareness programmes to continue and spread to areas I was unable to cover. On the ground in particular there are some small lakes where Sarus crane breed every year. The habitat destruction and collection of the eggs is the major issue to be solved here. Once solved the area could be developed to encourage sensitive tourism which in turn would benefit the local community. There are still areas to explore where nest identification need to be done and a conservation outreach approach will also be necessary.



Left: Sarus Crane Preparing Nest at Badhaya Lake, Bardiya. Right: Pair of Sarus Crane.



Left: Eggs laid by Sarus Crane with Chick at Banke district. Right: Sarus Crane.





Left: Sarus Crane with 2 chicks at Banke district. Right: Flock of Sarus Crane Observed at Nepalgunj.



Left: Sarus Crane with chicks from Kanchanpur. Right: Sarus Crane with Chick from Puraina tal, Kailali.





Left: Sarus Crane at Tallo Jhilmilla, Kanchanpur district. Photo by Parsuram Rana. Right: Field Visit with students.



Left: Sarus Crane Conservation message from local F.M. Right: Presentation





Posters







School visit, presentation and poster distribution.



Poster Presentation-RSG Nepal Conference, 2018