

Final Project Evaluation Report

Your Details	
Full Name	Samjhana Kawan
Project Title	Community Based Solid Waste Management for Conservation of Lesser Adjutant in Bardia, Western Nepal.
Application ID	24122-2
Grant Amount	£5000
Email Address	samjhana.kawan@gmail.com
Date of this Report	6/12/2019

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
Social survey				
Scientific survey of Lesser Adjutant				
Vegetation analysis				
Training and workshops				
Stork station				

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

Many local communities of Bardia are involved in the ecotourism business, promoting their Tharu culture and homestay to reduce pressure in natural resources. But these rural communities are beyond the solid waste management services of local government. Waste burning and dumping has been considered the easiest way to get rid of waste in Bardia. Project had educated the community of Govindapur village about the consequences of burning plastic and waste in health and environment and trained them to manage waste.

Many storks and other water birds were recorded in the field visits of post-monsoon and winter however there was not any water in agricultural land except in lakes, ponds and rivers of Bardia. But in the field visit of pre-monsoon, Badhaiya Lake as one of important wetland of Bardia was completely dried up due extreme hot weather in Bardia.

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

Outcome 1: Monitoring the status of lesser adjutant and its habitat in Bardia.

An Intensive spatial and temporal survey of lesser adjutant were conducted in post-monsoon (October, 2018) and pre-monsoon (May, 2019). The survey were conducted in previously recorded sites and lakes of Bardia. Besides that, the status of habitat including vegetation of lake, type and density of prey in lake were also studied.

The status of nesting tree was studied in project area by laying 15 line transects (1km). In that transect, 314 (R=10m) meter square circular quadrat was positioned in each 200 m distance. During that, survey, parameters like tree diversity, tree density, height and DBH (diameter in breast height) were recorded by the help of two local nature guides Mr. Anuram Chaudhari and Mr. Rajesh Tharu.

Outcome 2: Assessment of threats and conservation status of lesser adjutant in Bardia.

To understand the local issues related about lesser adjutant and their habitat, a social survey (household survey and key informant interview) was conducted with the help of six local citizen scientists (Ms. Shristi Chaudhari, Ms. Neema Chaudhari, Ms. Sitarani Chaudhari, Ms. Sumtia Tharu, Ms. Rabina Tharu and Ms. Ganga Chaudhari). We used semi-structured questionnaires to investigate the perception of local people of Bardia about the lesser adjutant. We held household surveys (n=320) in November 2019. Among the respondents of household survey, seven well educated local people were selected and interviewed about overall status of storks in Bardia, including lesser adjutant and their habitat.

We collected data, based on the following topics: the presence or absence of lesser adjutant and other storks in their vicinity; if so, most frequent location; their rate of occurrences; agriculture practices; prey type of storks and status; threats: type of fishing technique, frequency of fishing, time, fishing purpose (for family or business); poaching: purpose (meat, medicine); conservation status: local cultures and activities.

Outcome 3: Generation of interest towards lesser adjutant and other storks' conservation.

During the social survey (household survey and key informants' interview), and community workshop and waste management training in Bardia; project carried out the fact to the local people of Bardia about the importance of lesser adjutant in environment and in their eco-tourism business. We encouraged them to conserve them and motivated to discourage killing of lesser adjutant and other storks.

The findings of project were presented and discussed in Resources Himalaya Foundation (RHF) in the presences of environmental graduates. They were encouraged to conduct research on lesser adjutant and other storks. It was also discussed in organisations' monthly programme "Guffgaff", in which people having same interest were participated. Besides that, two graduates and 9 local citizen scientists were mentored to conduct research activities about the storks and their habitat, on the path to becoming dedicated conservationists.

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

In a capacity building training, 22 local women participated. They were educated and trained about general methods of composting and vermicomposting of degradable waste. They were also trained to transfer the non-degradable waste in to new forms of goods for reuse. During that training, the red earthworm (*Eisenia foetida*) were distributed to the participants to initiate the vermicomposting in their local area. Besides that, eco-friendly shopping bag (a bag/participant) with conservation message was also distributed to the participants of training.

In the series of field visits, three local nature guides were hire to monitor the lesser adjutant and its habitat in Bardia. Besides that, six local volunteers were involved in

social survey (household survey and key informants interview). All these local participants were provided with daily allowances during the field research. During these series of field visits we stayed in Samudaik Homestay of Thakurbaba, Bardia.

5. Are there any plans to continue this work?

Yes, we will continue the activities on research and conservation of lesser adjutant in Nepal.

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

We have already shared our results with environment graduates in Resources Himalaya Foundation and encouraged them to conduct research and conservation activities about lesser adjutant and other storks of Nepal. Working to publish a booklet about the storks of Nepal to share with the general public. Besides that, we plan to share the outcomes to the scientific community through publication of journal article for which we expect to collect more data from the field.

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

The grant was used for a year from June 2018 to June 2019.

8. Budget: 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. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Travel form Kathmandu to Nepalganj, Nepal	414	414		
Local travel (bike and jeep)	446	460	+14	
Batteries for GPS and camera	50	50		
Data sheets (print and copy)	25	20	-5	
Communication, print banner, and stationery	40	40		
Presence/ absence survey, nest monitoring and vegetation analysis	1440	1550	+110	
Social survey and preliminary survey	900	850	-50	
Assistantship	550	550		
Mapping, data analysis and report writing	190	190		

Training	400	400		
Stork station	545	400	-145	
Booklets		300	+300	
Shopping bags to distribute		100	+100	
Total	5000	5059	+324	

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

The following are the important next steps:

1. A detail study on lesser adjutant in low lands of Nepal.
2. A study about the impacts of pesticides and heavy metal in lesser adjutant.
3. Enforcement of effective management of wetlands in Bardia.

10. 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, we used it along with the logo of Resources Himalaya Foundation.

The Rufford Foundation logo appeared in the banners of training.

It was also used in the shopping bags, which was distributed in training.

It will be used in booklets about the storks of Nepal.



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

Local citizen scientists for the social survey

Ms. Shristi Chaudhari,
Ms. Neema Chaudhari,
Ms. Sitarani Chaudhari,
Ms. Sumtia Tharu,
Ms. Rabina Tharu and
Ms. Ganga Chaudhari

Nature guides for field survey

Mr. Anuram Chaudhari
Mr. Rajesh Chaudhari

Field Assistants

Ms. Geeta Bakhadhyo
Mr. Sarjan Gwachha

Data entry

Ms. Dipa Shahukhal

12. Any other comments?

We are thankful to The Rufford Foundation for funding this project. We look forward for receiving similar support in the future as well.