

## The Rufford Small Grants Foundation

### Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants 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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

Grant Recipient Details	
<b>Your name</b>	Samya Basu
<b>Project title</b>	Ecological Restoration of Elephant Corridors and Community Awareness to Reduce Human-Elephant Conflict around <i>Mayurjharna Elephant Reserve</i> , West Bengal, India
<b>RSG reference</b>	RSG 41.09.07
<b>Reporting period</b>	16 months
<b>Amount of grant</b>	£ 4988
<b>Your email address</b>	<a href="mailto:samyabasu@hotmail.com">samyabasu@hotmail.com</a>
<b>Date of this report</b>	05 <sup>th</sup> July 2009

**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
Survey of ecological and vegetation condition of elephant corridors		?		The one-year study was not enough. Long-term field survey will help to get a more accurate result.
Survey of natural fodder, saltlicks and water availability of elephant corridors			?	The list of natural fodder mentioning parts eaten by wild elephants has been prepared and sent to West Bengal Forest Department.
Study of threats to elephant corridors (e.g. anthropogenic activities, disturbances due to sponge iron factories and crusher)			?	The threats we observed were documented and used for during community awareness.
Documentation of nature & frequency of human-elephant conflict during crop season and another season			?	These study shows that the elephants have crop preferences. We discussed this observation with local farmers and requested them to change the crop patterns.
Community capacity building, interaction and awareness to reduce human-elephant conflict			?	More intensive community awareness and capacity building programme is needed. Another problem we faced is that large number of villages in the study area have no electricity. It caused problem during AV shows and we overcame it by hiring mini-power generators.
Study on possible ways for ecological restoration of elephant corridors		?		All ideas are not verified in the field. Field verification of all options should be is required to reduce human-elephant conflict.
Networking with West Bengal Forest Department, NGOs and institutions in study area			?	West Bengal Forest Department gave permission and extend their kind help for the project. The networking with government, NGOs and institutions is always a continuous process.

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

The activities of extremists (ultimately declared as a Banned Terrorist Organization in June 2008 by The Govt. of India) increased in the study area since middle of 2008 and there was a frequent indefinite strike since November 2008. To tackle this problem, we slightly modified the work calendar to complete

the work. Due to these unavoidable circumstances the duration of the project was extended by two months (i.e. instead of 14 months, it took 16 months) and completed in May 2009 instead of March 2009. We have also established a good relationship with forest fringe villagers and they always accompanied us with forest department staffs during fieldwork.

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

The three most important outcomes of this project are:

01. Present status (diversity and quantification) and distribution of natural fodder of elephants in elephant corridors of Mayurjharna Elephant Reserve is recorded during this project and also the present conditions of the natural saltlicks, earthen dam in the study area has been documented. These earthen dams and some natural streams are the main sources of water for migratory elephant population. We also identified two natural saltlicks in Mayurjharna Elephant Reserve. We have found that there is lack of sufficient fodder in the forest and old earthen dams near elephant corridors are not well maintained to store water. In some places we observed that the fodder species were planted within 100 m of village and less than 20 m near the crop fields which may be fatal in near future.

02. The community interaction and awareness to reduce human-elephant conflict was one of the most important activities of the project. The project team has arranged several awareness programmes like interactive discussion, wildlife film show, PowerPoint show in assistance with West Bengal Forest Department to minimize communication gaps between West Bengal Forest Department and the villagers (mostly tribal), farmers. During this interaction activity they have asked several questions on elephants, told their problems of human-elephant conflict and reason of agitation during ex-gratia payments made by government. Interestingly they have also advised some traditional methods to mitigate human-elephant conflict there. This is an important part of the project because before that the villagers never expressed their views and problems and we played role of a bridge between the government and these villagers.

03. The nature and intensity of human-elephant conflict in Mayurjharna Elephant Reserve was identified during this project. After analysing the data, we found that there is a pattern and specific reason behind every incident or accident of human-elephant conflict. We also developed a plan to mitigate the human-elephant conflict problem in discussion with the forest department officials, ground level staffs of forest department and the local villagers.

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

01. We have interacted with the villagers (especially with the farmers) to document their views on crop damage by elephants and compensation paid by the government. They have also expressed their views and ideas on different topics like ex-gratia payment due to crop damage, hut damage, injuries and loss of life. They also showed us the difference of actual loss by crop damage and ex-gratia payment received from government. We played the role of facilitator among them and government.

02. The ex-gratia payment made by the West Bengal Forest Department for human-elephant conflict was not sufficient and during project work it was increased. As the study area is an underdeveloped region in West Bengal and lack of communication and awareness of their right, the villagers were not

aware about the increased rate of ex-gratia payment due to human-elephant conflict. During interactive sessions they were informed about the increased rate.

03. Intensive community capacity building programme and awareness programme through interaction, PowerPoint show, wildlife film show, leaflet and poster distribution were carried out in the villages and village schools to sensitize them on the importance of Mayurjharna Elephant Reserve as elephant habitat.

## **5. Are there any plans to continue this work?**

The continuation of the work is very much essential for ecological restoration of elephant habitat by restoring the silted earthen dam and monitoring the status (i.e. survival rate, growth rate etc.) of planted fodder plant species in the forests. There is also needed to plant rapid growing elephant fodder species in strategic locations identified within forests through community involvement and with the help of West Bengal Forest Department. We intend to study the fodder (both natural in forests and planted by West Bengal Forest Department) utilization pattern of wild elephants in Mayurjharna Elephant Reserve and anthropogenic pressure and resource dependency of villages on this elephant habitat. Implementation of scientific as well as traditional methods to mitigate human-elephant conflict in sample villages of Mayurjharna Elephant Reserve is very much essential. Capacity building programme is required to minimize the tendency of people to obstruct the route of elephant herd during driving operations and establish a volunteer team to reduce human-elephant conflict.

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

The target group to share the results of the study are West Bengal Forest Department for cooperation as implementing agency of recommendation of the project and NGOs, institutions. We are already in contact with the eminent naturalists who are pioneers and interested in elephant study. The report will be sent to them. In future the result will be sent to leading journals for publication.

The project report (mainly findings and recommendations) will be presented in the meeting of State Wildlife Advisory Board, West Bengal for discussion and implementation.

A PowerPoint show on objectives, methods, results and recommendation has been prepared for circulation and an illustrative project report publication is on progress. This report will be sent to Principal Chief Conservator of Forests, Directorate of Forests, West Bengal and all offices of forest department engaged in Mayurjharna Elephant Reserve conservation.

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

The RSG was used from February 2008 to May 2009.

The approximate timescale for project activities was 14 months but it practically took 16 months due to unavoidable circumstances in the study area since middle of 2008. There was frequent indefinite strike since November 2008 and to tackle this problem we slightly modified the work calendar to complete the work and extended the project duration by two months and completed in May 2009 instead of March 2009.

**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.**

**Local exchange rate used: £1=Rs.77.61 approx. (during receive of grant)**

Item	Budgeted Amount	Actual Amount	Difference	Comments
Project personnel	£ 2075	£ 2075	Nil	
Consultant Hire	£ 360	£ 360	Nil	
Food and lodging	£ 720	£ 695	(+) £ 25	Directorate of Forests, Government of West Bengal helped us by providing accommodation with a concession.
Travel	£ 591	£ 615	(-) £ 24	During the project the fuel price increased.
Equipment purchase and hire for field work and public awareness	£ 825	£ 820	(+) £ 5	GPS was purchased from supplier of Indian Defence supplier and the cost was less than open market in Kolkata (Calcutta).
Books and journals	£ 45	£ 45	Nil	
Awareness materials	£ 250	£ 232	(+) £ 18	The awareness materials (posters, leaflets) were designed voluntarily by the designer.
Contingency (including consumables, postage, telephones and special needs)	£ 122	£ 105	(+) £ 17	An illustrative report publication is on progress. The excess amount will be used to send the report by post.
<b>TOTAL</b>	<b>£ 4988</b>	<b>£ 4947</b>	<b>(+) £41</b>	We are utilizing the remaining £41 to publish an illustrative project report.

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

The important next steps are:

A) Restoration of silted earthen dam and monitoring the status (i.e. survival rate, growth rate etc.) of planted fodder plant species in the forests as elephant fodder by the West Bengal Forest Department. Apart from these we will plant elephant fodder species in strategic locations within forests through community involvement.

B) Population survey of wild (both migratory and residential) elephants and study of fodder utilization pattern of them in Mayurjharna Elephant Reserve.

C) Study of anthropogenic pressure and resource dependency of villages on Mayurjharna Elephant Reserve.

D) Implementation of scientific as well as traditional methods to mitigate human-elephant conflict in sample villages within Mayurjharna Elephant Reserve.

E) Capacity building programme is required to minimize the tendency of people to obstruct the route of elephant herd during driving operations and establish a volunteer team to reduce human-elephant conflict.

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

Yes, I used the RSGF logo and name in introductory 1<sup>st</sup> slide and RSGF logo in each slide of the PowerPoint presentation prepared for community awareness among villagers, forest staffs and students. The RSGF logo was used in all awareness leaflets and posters made for public distribution. We also used RSGF logo in banners, which was used during meetings. Apart from all these the RSGF logo was used in all communication materials like Business Cards, Letterheads etc.

**11. Any other comments?**

We are presently preparing an illustrative study report of the project as the findings of this project are very important for conservation of Mayurjharna Elephant Reserve. The West Bengal Forest Department also interested to know the findings and recommendations of the project as this is the first study on ecological restoration of elephant corridors of Mayurjharna Elephant Reserve.