

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.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details

Your name	Shijo Joseph
Project title	Conservation of isolated populations of lion-tailed macaque in Anamalai hills of Western Ghats, India
RSG reference	30.08.09
Reporting period	February, 2010 – January, 2011
Amount of grant	£5400
Your email address	shijonrsa@gmail.com
Date of this report	31 st May 2011

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
Mapping of the rainforest fragments in the Valparai plateau of Western Ghats Biodiversity Hotspot			Yes	Satellite datasets like IRS P6 LISS III and IV were used to delineate the rain forest fragments in Valparai plateau. A total of 51 rain forest fragments with different size ranges were delineated which ranges from small fragments of less than 10 ha size (27), medium fragments of 10 – 100 ha (17) and large fragments of greater than 100 ha (7).
Identification of the isolated populations of Lion Tailed Macaque (LTM) in the scattered rainforests in Valparai plateau			Yes	Field survey, literature review and geospatial analysis indicated that Lion Tailed Macaque inhabits four rainforest fragments in Puthuthottam Estate (123 ha), Korangumudi Estate (238 ha), Tata Estate (78 ha) and Surulickal Estate (406 ha) which are owned by private companies. Out of these, Surulickal Estate is contiguous with the Indira Gandhi Wildlife Sanctuary, while the rest in the middle of tea plantations.
Delineation of potential wildlife corridors between LTM inhabited fragments and the adjacent main forest land			Yes	The potential wildlife corridors were delineated with an average width of 100 m along the stream beds. The criteria for the delineation include the minimal impact on existing human settlements, agricultural areas and other infrastructures, least cost, and provision of additional ecosystem services. The result shows that a minimum area of 156 ha is required to connect three isolated populations of LTM to the adjacent main forest area.
Assessment of stakeholders response on LTM and rainforest fragments			Yes	Informal meetings were conducted with stakeholders such as local villagers, plantation owners, conservation researchers and forest department officials. Local villagers and plantation owners have shown mixed interests while the conservation researchers and forest department officials were optimistic about the conservation programs on LTM and rainforest fragments.

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

None.

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

1. The project could develop a geospatial database for the scattered rainforest fragments in the Valparai plateau of Western Ghats biodiversity hotspot. Though there were many ecological studies on these fragments, a proper idea about the extent and distribution of the fragments were missing in the literature. So the present work is a contribution to the conservation efforts in the plateau in general.
2. The project had a specific focus on the conservation of lion-tailed macaque (LTM) in the isolated rainforest fragments. The wildlife corridors were devised for LTM inhabited rainforest fragments in the Puthuthottam Estate, Korangumudi Estate and Tata Estate with a minimal impact on existing human settlements, agricultural areas and other infrastructures. Reforestation of 50 m buffer along the banks of stream bed will be cost effective, and will also provide additional ecosystem services such as improvement in ecohydrology, water purification, biodiversity conservation (specifically fresh water biodiversity) and enhancement of carbon stock.
3. The study developed a cost effective methodology to devise wildlife corridors in highly fragmented landscapes of Western Ghats biodiversity hotspot. We assume that the present study can act as a model and replicable in other human dominated landscapes in the Western Ghats biodiversity hotspot.

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

Ground truthing and field survey were assisted by local people.

5. Are there any plans to continue this work?

Yes, the project team looks forward to continue this work. Implementation of wildlife corridors have to be discussed in detail with implementation agencies, and the financing should be explored from the CDM (Clean Development Mechanisms) and REDD+ (Reducing Emission from Deforestation and Degradation) projects. Also, the team plan to take up such studies in other fragmented landscapes of Western Ghats biodiversity hotspot.

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

The major findings of the study will be submitted to the peer reviewed journals such as *Journal of Nature Conservation* or *Primate Conservation*. Also a concise technical report will be submitted to various NGOs and forest department officials.

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

February 2010 – May 2011. The project was scheduled to start in February 2010 and end in January 2011 (12 months as mentioned in the proposal). However there was a delay of 4 months (May 2011) before the project could actually be completed.

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	1800	1700	-100	
Permanent Equipment	1600	1750	+150	
Honoraria for field assistants	700	650	-50	
Food and accommodation	900	800	-100	
Project documentation, project report and dissemination	300	350	+50	
Miscellaneous (Stationery, Printing and photocopying)	100	200	+100	
Total	5400	5450	50	GBP=INR transfer rate anticipated in the proposal (1 GBP = 80 INR) was decreased (1 GBP = 72.5 INR) while the project is being approved. So budget is slightly rearranged to cover fluctuation

1 GBP = 72.5 INR

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

We feel the study have to extend to other fragmented parts of Western Ghats biodiversity hotspot. Efforts have to be taken for the possible implementation of the results. Further, the results of study have to be published in well accepted journals and conferences.

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?

The RSG Logo will be used during the presentation of the results in conferences, technical reports and other publications.

11. Any other comments?

It was a great experience for me as a project leader to plan and implement the research programme. This was a significant step in my professional career and I am thankful to Rufford Small Grants Foundation for funding. This work was not possible without support from my colleagues and other fellow researchers specifically Aneesh A, Arun Kanagavel, Anitha K, Toms Augustine and Rajeev Raghavan. Thanks are also due to Josin Tharian, Mohit Kalra, Sudhakar Reddy and K. Krishnakumar for the beneficial discussions in the initial stages of the project.