

## 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>	H.S.Sushma
<b>Project title</b>	Population survey of the endangered lion-tailed macaque <i>Macaca silenus</i> in Kalakad Mundanthurai Tiger Reserve, Tamilnadu, India.
<b>RSG reference</b>	38.04.08
<b>Reporting period</b>	August 2008 – December 2009
<b>Amount of grant</b>	£ 5992
<b>Your email address</b>	<a href="mailto:Sush61@gmail.com">Sush61@gmail.com</a>
<b>Date of this report</b>	13 January 2010

**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
To systematically assess the status and distribution of lion-tailed macaque population in Kalakad Mundanthurai Tiger Reserve			√	We based our survey on occupancy modelling framework. This is the first ever attempt to adopt a systematic sampling protocol to survey lion-tailed macaque population. We have established baseline data for this population which will allow future comparisons. Data on habitat covariates are currently being analysed. We also collected data on number of groups, their group size and structure. We sighted 30 groups of lion-tailed macaque during our survey.
To develop a regular population monitoring programme involving the local forest department		√		We conducted a training workshop for the field staff in order to disseminate the survey results and sensitise them about lion-tailed macaque conservation. We also brought out a manual in Tamil (vernacular language) on field protocol of monitoring primates. However, regular surveys of lion-tailed macaque based on the present survey protocol are expected to be implemented from this year onwards. We are keen to follow up on this with the Forest Department.

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

a. Although fieldwork was schedule to last for 10 months, it had to be extended owing to heavy rains. Work fieldwork was completed in September 2009.

b. Most areas in the Reserve are inaccessible by road. These sites could only be reached after long treks. We had to hire additional field assistants and volunteers in order to complete the survey. However, some grids could not be surveyed owing to logistic constraints such as lack of trails to access, very rough terrain and impenetrable reed thickets.

c. We overshot our budget for manpower since we had to hire extra field assistants and had to retain the technical assistant till September 2009. However, we adjusted this money from other heads of the budget without affecting quality of work and ensured that the work continued.

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

a. Kalakad Mundanthurai Tiger Reserve (KMTR) was believed to harbour a large population of the lion-tailed macaque. But the last survey of the lion-tailed macaque (LTM) in KMTR was conducted nearly 25 years ago. Moreover, previous surveys reported about 14 groups in all. Lack of proper survey method targeting a rare species such as the lion-tailed macaque led to underestimation of the population. These earlier reports lacked details of sighting location and methods. Proper documentation of status and distribution of the species in KMTR was clearly lacking. In the present survey we employed occupancy based surveys. We also collected ancillary data on number of groups (based on difference in sighting distance and time), group size and demography. A total of 30 groups (with a mean group size of 15.4 monkeys per group) were sighted. The present survey has thus established reliable baseline data for this population which can be used for population monitoring and help in management related initiatives in the region.

b. The present survey is also the first attempt in adopting a reliable method of assessing status of the lion-tailed macaque in a large forest complex. This can be replicated in other LTM habitats.

c. We conducted training workshop for the Field Staff of KMTR on surveying primates. We disseminated the results of the survey during the workshop. Two well known primatologists (Dr. Ajith Kumar and Dr. Mewa Singh) were invited for the workshop to give talks on primates and interact with the staff. The next day was hands-on training for the workshop participants. They were taken to the field and were given training about survey protocol. A Powerpoint presentation of the survey findings was also made to the Principal Chief Conservator of Forests of the Tamilnadu Forest Department. The Forest Department is keen on implementing regular surveys of the lion-tailed macaque in the park. We will be following this up shortly. We brought out a manual in Tamil language for the staff of KMTR. This manual provides them with complete information about the lion-tailed macaque population in the park along with Range-wise maps with sampled tracks and sighting locations of LTM groups. It also has information about basic primate biology and four other primates of south India.

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

Throughout the length of the project, we employed people from the local *Kaani* tribe. They were trained in field techniques and sensitised about the lion-tailed macaque. On several occasions, we also involved the anti-poaching watchers from the Forest Department in the survey so that these people in turn can impart their knowledge to other staff in the Department.

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

Yes. KMTR along with other Reserved Forests and Sanctuaries form the Agasthyamalai region. There is no comprehensive information about status and distribution of LTM in other areas in this region. We plan to undertake surveys of the lion-tailed macaque in the rest of the areas and also address conservation related issues such as connectivity for the lion-tailed macaque in this landscape. We are also keen on long – term monitoring of the LTM population in KMTR.

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

A detailed final technical report is under preparation which will be submitted shortly to RSGF, Tamilnadu Forest Department and will be shared with the scientific community. We also plan to share the results in the form of scientific publications in peer reviewed journals.

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

The grant was used from September 2008 to December 2009. We had expected to complete the work by May 2009 but had to extend till September 2009. The workshop could not be held at the end of May 2009 as proposed due to administrative reasons. It was held from December 21 to 22.

**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 at the time of receipt of grant: 1£ = INR 83

Item	Budgeted Amount	Actual Amount	Difference	Comments
Travel	845	856	-11	Money was used mainly for hire of vehicle, fuel expenditure, other travel.
Salaries/stipend/per diem	3145	3478	-333	Since the field work was extended for an additional period of 4 months, we supported the technical assistant throughout this period. Although we budgeted for two field assistants, we had to employ one more field assistant. All field assistants were paid higher salaries than what was proposed. They had to be paid according to the existing pay scale at the time. In many areas we had to camp inside the forest and we required additional man power. We hired local people as porters and field assistants on daily wage basis. All these factors overshoot our initial budget. However, we adjusted the amount from other heads of the budget without compromising on the quality of work and made sure the survey continued uninterrupted. Sustenance for PI was utilised as proposed in the budget.
Contingency	181	157	24	We received partial grant from the Department of Science and Technology, Government of India for

				the workshop. This grant took care of printing charges of the manual and travel expenditure of the invitees. Honorarium for Tamil translation was used from this head.
Consumables	241	107	134	Expenditure mainly on batteries, stationery and field shoes.
Accommodation / food expenses	500	321	179	There are very few forest rest houses in KMTR. Most of time we were camping out. On a few occasions when stayed at the rest house, accommodation was charged at nominal rates. Food expenses during camps and during the workshop were charged from this head.
Equipment	810	803	7	Used as proposed
Report	270	0	270	Detailed final technical report is under preparation and will be submitted in a month's time. This money will be used for layout, design and printing charges of the report.
<b>Total</b>	5992	<b>5723</b>	270	

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

- a. Establishing baseline data for the lion-tailed macaque population in the entire Agasthyamalai region using a reliable scientific method.
- b. To put in place a regular LTM population monitoring programme in the Management Plan.
- c. Outside KMTR there are Reserved Forests and private lands which are potential LTM habitats. These areas are vulnerable to disturbances from the surrounding human habitations. At the landscape level, long term conservation planning in these areas by involving the local community and sensitising them towards conservation of the lion-tailed macaque is imperative.

**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. We have used the RSGF logo on the manual. RSGF was used on the banner for the workshop. We acknowledged RSGF support in our presentations during the workshop. RSGF support was also acknowledged in our interim progress report to the Forest Department.