

The Rufford 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. 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. 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 | Arun Kanagavel |
| Project title | Saplings, stoves and monitoring: A multipronged approach to conserve the Critically Endangered Toad skinned frog <i>Indirana phrynoderma</i> in Western Ghats, India |
| RSG reference | 17771-2 |
| Reporting period | June 2016 |
| Amount of grant | £5000 |
| Your email address | arun.kanagavel@gmail.com |
| Date of this report | 08-10-2016 |

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 |
|--------------------------------|--------------|--------------------|----------------|--|
| Habitat Restoration | | Yes | | a) Pre- and post-restoration habitat characterisation and amphibian abundance survey completed. b) Planting native vegetation saplings (1500) and maintenance completed. This was undertaken across 10 acres instead of 20 acres due to under-estimation of costs incurred during restoration. |
| Reduced fuelwood utilisation | | Yes | | a) Questionnaire survey with local communities of three settlements instead of six settlements. b) In-depth survey with 15 individual's pre- and post-stove installation instead of 30 individuals. c) Piloting energy efficient stoves at five households. Due to the failure of pilot, this initiative was discontinued. |
| Amphibian monitoring programme | | | Yes | a) Workshops with Forest Departments at Munnar and Mankulam were completed. b) Toad-skinned frog monitoring programme was initiated at Munnar. c) Pre- and post-workshop questionnaire surveys with the two forest departments were completed. |

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

The permissions to undertake the project from the Kerala Forest Department were received much later than expected due to which the restoration component of the

project had to be postponed to May-June 2016 instead of July-August 2015. Permissions to undertake the project in Valparai were not received from the Tamil Nadu Forest Department due to which the project activities were focussed on a larger area in Kerala that included the Mankulam Forest Department other than Munnar. Initially, local communities expressed exceptional interest in the energy-efficient stoves and on a pilot basis, these were installed at five households. However, the communities were not satisfied since these stoves required a greater maintenance effort, their cooking pans were getting burnt and they also wanted the stoves to be tiled and painted. This initiative was therefore discontinued after the pilot exercise and a greater effort was focussed on the restoration initiative. The per acre costs that were estimated for the habitat restoration were grossly underestimated and 10 acres were effectively restored instead of the proposed 20 acres.

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

- a. Restoration of 10 acres of degraded habitat to support sustained and long-term habitat improvement of the Critically Endangered *Indirana phrynoderma*.
- b. An annual amphibian monitoring programme in collaboration with the Forest Department was initiated in 2015 to collect long-term data on amphibian populations in Munnar.
- c. The local Forest Departments in Munnar have improved knowledge in identifying and monitoring amphibians.

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

Local communities were involved in the energy efficient stove initiative which was however discontinued after the pilot phase as they were not satisfied with the model for multiple reasons. Local communities were benefitted economically from the restoration component of this project as their support was required to carry the saplings to the site, prepare the site for planting and plant the saplings.

5. Are there any plans to continue this work?

The project plans to build up on the success of the restoration initiative and the amphibian identification workshops and continue to expand the scale of these initiatives on an annual basis including supporting the local Forest Departments in the annual amphibian monitoring programme.

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

The project's results will be shared through a technical report that will be provided to the Kerala State Forest Department. A press release to the local English and Malayalam newspapers was made while launching the amphibian monitoring program in Munnar. Two research manuscripts have been prepared for submission to journals.

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 for the project activities from July 2015 – September 2016. This was three months beyond the anticipated project period.

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 |
|---|---------------------|-------------------|----------------|---|
| Reconnaissance survey | 33 | 79 | +46 | Two additional visits were made to Trivandrum towards acquiring project permits |
| Research permits from Tamil Nadu and Kerala Forest Department | 66 | 0 | -66 | The research permits did not require any payment as it did not involve specimen collections |
| Insurance and medical supplies | 33 | 20 | -13 | |
| Scientific & field equipment | 450 | 0 | -450 | VIE tags were not purchased since permits did not allow for it |
| Field guide books | 33 | 0 | -33 | Books were received from project collaborators |
| Jeep rent | 330 | 455 | +125 | Additional vehicle rent for 2 months |
| Local travel and fuel | 660 | 846 | +186 | Additional travel for 3 months |
| Food expenses | 660 | 702 | +42 | Additional food requirements for 3 months |

| | | | | |
|--|------|-------------|------|---|
| 700 tree and shrub saplings | 298 | 710 | +412 | 800 saplings were additionally procured and, costs for transportation of saplings to the restoration sites, labour costs for preparing site and planting were also incurred |
| 300 energy efficient stoves | 362 | 154 | -208 | The pilot phase of this initiative failed and it was discontinued |
| Amphibian identification and monitoring workshops at Valparai and Munnar | 66 | 70 | +4 | |
| Designing outreach material in Tamil & Malayalam | 66 | 60 | -6 | |
| Printing outreach material | 99 | 45 | -54 | The protocol material was not printed |
| Stipend for 3 team members-12months | 1613 | 1650 | +37 | Costs incurred to support 1 team member's additional work |
| Telephone, internet & postage | 132 | 164 | +32 | Additional communication costs for 3 months |
| Accounting and auditing | 99 | 45 | -44 | |
| TOTAL | 5000 | 5000 | | |

1£ = INR 100

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

In my opinion, my team and I have been able to bring about grassroots level conservation for amphibians through this project. We have however noticed a growing disconnect among local communities and the urban public towards not only amphibians but biodiversity as a whole. I think the next important step would be to grapple directly with this issue at hand and undertake issue-based campaigns that undermine amphibian conservation.

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?

RSGF has been acknowledged in the research papers that have been prepared detailing the project's results. These articles will be provided to RSGF once they are formally published.