

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. 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 | Nirmala Pradhan |
| Droiget title | Approach to Determine the Diversity and Conservation Status |
| Project title | of Bryophytes in Northern Sindhupalchok District of Nepal |
| RSG reference | Application ID: 10111-2 |
| Reporting period | July 16, 2012 |
| Amount of grant | £5800 |
| Your email address | bryonep@yahoo.com; nir.pradhan1@gmail.com |
| Date of this report | July 16, 2012 |



1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

| | Not | Partially | Fully | |
|---------------------|----------|-----------|-----------|-------------------------------------|
| Objective | achieved | achieved | achieved | Comments |
| Enumeration of | | | Perfectly | Total of141 species of bryophytes |
| bryophytes at | | | done | have been documented besides |
| Northern | | | | new records of 11 species to the |
| Sindhupalchok | | | | country. |
| Threats and | | | Assessed | This assessment was done during |
| conservation issues | | | fully | the course of field study. |
| Faunal Association | | | Document | Faunal association to bryophyte |
| | | | ed fully. | habitats was documented and |
| | | | | identified. |
| Distribution Map | | | Achieved | Distribution map of bryophyte |
| | | | fully. | species at different altitudinal |
| | | | | levels in Northern Sindhupalchok |
| | | | | was developed. |
| Traditional Uses | | | Achieved | Information was collected with |
| | | | fully | local inhabitants at different |
| | | | | village communities regarding uses |
| | | | | of bryophytes in their society. |
| Door to Door | | | Achieved | Door to door awareness |
| Awareness | | | fully | programme was launched at |
| Programme | | | | different village wards in order to |
| | | | | bring local peoples' role in |
| | | | | conservation of bryophytes of |
| | | | | their respective areas. |

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

This project ran smoothly for the entire duration without any foreseen difficulties. This work was started on right time under planned way. All essential help and cooperation were obtained from all the sectors.

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

- a. Documentation of bryophyte species of the Northern Sindhupalchok district is the significant outcome besides record of 11 new species to the country. Additionally, five species were also made new record to the country in the First Rufford Grant implemented in Panch Pokhari of the Northern Sindhupalchok District. So a total of 16 new records of bryofloral species both in the first and second Rufford Grants were the significant outcomes.
- **b.** Conservation status and distributional range of every recorded species has been determined. Findings of many faunal components were made which were associated to bryophyte habitats.



c. Door to door awareness programme and interacting with local peoples at different areas of northern SIndhupalchok district made them familiarised with conservation issues and uses of bryophytes for their benefits.

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

The local communities at different visited sites were benefitted mostly with the knowledge gain on the uses of bryophytes and details of mosses and liverworts which are found in their areas including their conservation status. These peoples were also employed in this project as porters (two individuals) which made them benefitted financially. Likewise, local shopkeepers were also benefitted financially during our stay in their areas.

5. Are there any plans to continue this work?

The northern part within the elevation range of 900 m to 4300 m has been explored completely for bryophytes under the First and Second Rufford Grants. The southern part of this district which also touches Chinese border still remains to explore and has been planned to continue under the next or third Grant program of Rufford Foundation.

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

- **a.** The result of this work has been shared with community peoples to make them aware in order to bring their participatory role in bryophyte conservation in their areas.
- **b.** Lecture program has been planned at the Central Department of Botany of Tribhuvan University, Kathmandu in order to share the result of this work to the Master's student and researchers.
- **c.** A presentation program on Bryophytes of the Northern Sindhupalchok will be organised at Kathmandu based Natural History Museum.
- **d.** Community leaders and Conservation Authorities will be shared with the results of this work so to implement effective conservation policy.
- **e.** Research articles will be published on this work for wide circulation among biologists, conservationists and researchers.

7. Time scale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project? The timetable of this work is as follows.

PHASE I

| Field study of bryophyte | 20 days | August-September, 2011 |
|--------------------------------|---------|------------------------|
| diversity, threats, Inter- | | |
| relationships with animals and | | |
| information on uses | | |
| Lab work for identification | 60 days | October-November, 2011 |
| Assessment of threats and | 30 days | December, 2011 |
| conservation | | |
| Mid-term report submitted | | February 10, 2012 |



PHASE II

| Field visit to study seasonal diversity of bryophytes | 20 days | February-March, 2012 |
|---|---------|------------------------|
| Lab work for identification of field specimens | 30 days | April, 2012 |
| Awareness programmes at study sites (2) | 7 days | May (first half), 2012 |
| Preparation of the final report | 30 days | June-July, 2012 |
| Submission of final report to | | July 16, 2012 |
| RSG | | |

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 |
|---|----------------------|------------------|------------|--|
| Bryophyte specialist @ £ 30/day for 40 days | £ 1200 | £1200 | | Bryophyte Researcher |
| Plant taxonomist @ £ 30/day for 40 days | £ 1200 | £1200 | | Higher Plant Taxonomist |
| Fauna specialist (Zoologist) @ £ 30/day for 40 days | £ 1200 | £1200 | | Faunal specialist |
| Assistants -2 (MSc level) @ £ 20/day for 40 days | £ 800 x2 = £ 1600 | £1600 | | Field Assistants |
| Transportation | £ 200 (for 4 times) | £300 | £100 | Field visit was made for 6 times, so extra £100 was contributed by Nepal Bioheritage Forum for Resources Conservation. |
| Awareness programme in two places (Doring and Timbu Villages) at £75 each place | £ 75 x2 = £ 150 | £150 | | Conservation awareness programmes in villages |
| Photocopy/ photography | £ 70 | £70 | | Relevant documents and field photography |
| Stationary | £ 30 | £30 | | Notebooks, data sheets, markers, pens, computer paper etc. |
| Field equipment | £ 50 | £50 | | Field requirements for study |
| Permission and consultation fee | £ 50 | £50 | | Collection permits and consultation for identification at research institutes |
| Final report preparation | £ 50 | £50 | | Typing and preparation into final form. |
| Total | £5800 | £5900 | | Difference of £100 was contributed by Nepal Bioheritage Forum for Resources Conservation at Kathmandu. |



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

The important steps are associated to familiarisation on the significant values of bryophytes and to bring participatory role of local communities in conservation. Uses of bryophytes for benefits of local communities need to be done under sustainable way. This project will cover all these issues.

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. RSG Logo was used in every activity related to this project. Wide publicity was made of RSG from community to the university and official levels during the course of this project work.

11. Any other comments?

First and Second Rufford Small Grants made high contribution to explore diverse bryophyte species in Northern Sindhupalchok district which was completely unknown before this grant was implemented. Besides documentation of diverse bryophyte species these two grants also brought 16 new records to the country (Five species in First RSG and 11 species in II RSG). So RSG was highly successful to come up with excellent data on bryophytes of Northern Sindhupalchok District and this helps to update country's overall list.