

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	Pranav Trivedi
Project title	Children and snow leopards: strengthening conservation education and awareness in rural Himalayan schools to aid community-based wildlife conservation
RSG reference	8391-2
Reporting period	November - December 2011
Amount of grant	£6,000
Your email address	pranav@ncf-india.org
Date of this report	3 rd January, 2012

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
Conduct 10 nature education camps in which about 300 children and 20-25 teachers will participate			√	Very well achieved in both qualitative and quantitative sense. We successfully conducted all the camps (seven in Spiti and three in Ladakh) during 2010-11. In fact, we managed to conduct 12 camps in all, going beyond our committed number. In all, 370 children from classes VI to IX, 25 teachers from 15 schools participated in these 12 camps. We also raised the necessary financial support for these additional camps.
Complement the above with three around-the-campus activities in each of the 30 schools with HNCs targeting 1,500 children and 50-100 teachers.		√	√	It was partly achieved in terms of the number of activities per school for Ladakh and to a lesser extent for Spiti. However, for the second part of the objective; we did more than what was expected qualitatively and even quantitatively as we reached a much higher numbers of students and teachers. Together, about 1,900 students and more than 125 teachers participated in these activities. In Spiti, all 20 schools were covered with "High Altitude Food Factories" activity – about 400 children participated in it. Nearly 300 students from 15 schools were targeted for the activity "Snow leopard on the trail" which deals with improved sensory perception. Third activity was conducted by teachers on their own - "The Earth is Heating up" in about 10 schools involving 300 children. The common activity included a Painting Competition in which five students were invited from each school. In all, 12 schools participated with nearly 60 children accompanied by their art teachers (numbering 13). So, in Spiti we had about 1,000 children and 70 teachers go through various activities. In Ladakh, during years 2010 and 2011, a total of 10 schools were targeted for conducting two activities viz. "Mother Earth" and High-Altitude Food Factories". Nearly 900 children and 50

				teachers participated. The third - common activity included a Workshop on Nature Painting by renowned wildlife artist Ms Maya Ramaswamy. It was attended by all the schools with HNCs in Leh (six schools) and hosted by one of the participating schools (Moravian Mission school). The workshop was attended by 23 students and five teachers. Children's written feedback and drawings can be seen in their workbooks.
Facilitate at least one meeting of all the coordinating HNC teachers each in Spiti and Ladakh			√	Fully achieved here too. For Spiti we organised two meetings (one each in 2010 and 2011) which were attended by about 45 teachers. For Ladakh, we did it once in 2011 and had individual meetings with teachers from all schools i.e. 12 schools targeting about 20 teachers.
Help bring a change in attitudes and behaviour of school children and teachers			√	Since the three objectives listed are interlinked, here I provide general comments addressing all. The nature education camps were the most effective means to create awareness and help foster positive feelings, values and attitudes towards wildlife and the landscape. Pre-post feedback consisted of rating 15 statements on a scale of 'agree-partially agree-disagree' at the onset and end of the camps. Analysis of pre-post feedback of 329 children who attended camps during 2010 and 2011 showed that there was statistically significant difference in their responses to over 80 % of the statements (McNemar's test). This shows that the camps were effective in bringing about a change within the three days that children spent. We are in the process of analysing these responses in more detail and document the patterns in a report which may be ready by early 2012. We shall share this report with you then. Oral and descriptive written feedback indicated that children learnt several aspects of nature and responded positively to the exposure. The activities carried out under the HNC programme in and around school campuses included aspects of care for earth at a personal level, understanding global warming and high-altitude food chains, and improving sensory perception. Oral and written
Foster positive feelings and values towards local wildlife and the Trans-Himalayan landscape			√	
Create/increase awareness and better understanding of high-altitude ecology and local as well as global conservation issues			√	

				feedback of children and teachers shows positive learning.
Help enhance the skills of HNC coordinators (teachers) and ensure better participation from schools		√	√	The second part of the objective was fully achieved, while the first part was partly achieved and needs more inputs. The HNC coordinators in more than half of the schools at both locations conducted one activity on their own and participated in all the activities conducted by our field staff. Some of them also participated in the Nature Education Camps along with children. In a few instances, the teachers requested our staff members whether they can conduct more activities and insisted on doing the activity when the field staff had gone to their school. The teachers who have attended our training workshops, meetings and camps on a regular basis are clearly different and motivated now. We were surprised when several teachers turned out to be leading proponents or supporters of activities carried out under the aegis of Project Snow Leopard, which is being implemented by the Government of India and facilitated by us in Spiti at present. The school administrators/principals have been very positive and helpful. There has been excellent support from all schools for each and every activity that we have offered for schools. The local administration has facilitated our work by bringing out circulars and making it official for schools to participate. We have observed that principals also want to participate on their own and some have visited our campsite for part or full duration of their school's nature education camps.
Improve coordination between teachers and our field staff through sustained interactions and meetings			√	Our field staff visit all the 30 schools each year at least twice. HNC coordinators and other teachers participate in our nature education camps and regular annual meetings once/twice a year. So, now there are ample opportunities for us and teachers to interact and discuss conservation education. The meetings help facilitate an annual calendar in which we finalise dates for in-school activities as well as nature education camps. The programme now has a supporting and positive atmosphere in all

				schools. Face-to-face contact has also helped develop mutual respect and our camps as well as other activities are eagerly awaited. Participation of teachers in annual meetings is another indicator of this strengthened relationship.
Facilitate participation and learning among other interested teachers in respective schools through joining this programme, especially nature education camps			√	We found that many teachers other than coordinators also joined the activities and gained knowledge voluntarily. In some instances, they even coordinated and helped in conducting activities in respective schools. This was especially true of nature education camps. We have managed to convey to the school administration that any interested teacher is welcome in our activities, and this has met with a favourable response. So, teachers involved in art and humanities are also actively participating transcending the conditioning that only science or sports teachers should go for such activities.
Build the capacity of our field staff			√	There has been excellent progress on this front. The three members of our field team are conducting most activities independently now. All meetings and activities in 2011 and most activities in 2010 were entirely conducted by our field staff or mid-level staff recently hired. This was a very important step in their confidence boosting and in improving their communication and nature interpretation skills. The planning of dates, interacting with teachers, visiting the schools, conducting activities, documenting the same and taking feedback helped them go through the entire spectrum of actions involved in successful implementation of CE activities. We were not affected by relieving of one of our key field members as others who had learnt the process were ready to move forward to take responsibility for the same.
Provide a model to be replicated in other regions of the Indian Himalaya and adapted suitably in other snow leopard range countries			√	We believe that our conservation education programme for schools (children and teachers) is a successful model for creating awareness and fostering positive values, emotions, understanding and attitudes towards wildlife and landscape. We are actively sharing the learning and success stories whenever opportunities arise. This project provided us a few avenues to do this

			<p>actively. The most significant contribution to this objective was made in the form of one of our colleagues working for Snow Leopard Trust (SLT -our partner) in Mongolia (Ms Nadia) visited Spiti and spent a week to learn from our programme. There, she got an opportunity to see the programme and participate as both a learner and educator. She had just completed her MSc in Wildlife Science and got to be a part of this module too. With the confidence and better understanding that she gained here, she is now all set to start a conservation education programme. She is also considering translating/adapting a storybook brought out by us (<i>Nono, the snow leopard</i>) on the snow leopard. Several volunteers participated in the camps and helped with various aspects of camps. Some of them were students of IISER (Indian Institute of Science Education and Research). They not only learnt more about nature, but also built their capacity in organising such activities. One of the volunteers Ms. Neha wrote an article on her experience that was published by a leading daily "Deccan Herald". One of our newly hired mid-level staff member (Ms Ranjini Murali) who joined us in April 2011, got an opportunity to learn from attending the camps. She also conducted some of the activities and this motivated her to take lead in conducting HNC activities in six schools of Ladakh. While we are aware that it will need sustained efforts to spread the word about this model further, the above examples show that we are moving in the right direction.</p>
<p>Help incorporate such models in the larger framework for snow leopard conservation in Indian Himalaya through Project Snow Leopard</p>		<p>✓</p>	<p>We have been receiving partial support for our CE programme from the state Forest and Education departments as well as local administration in both Spiti and Ladakh. This year, we are awaiting the release of grants for support to our conservation work under Project Snow Leopard in Spiti Valley.</p>

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

We had three major difficulties during the project period of which two were related to natural causes and one due to human dimensions. These did influence the scheduled activities in Ladakh; however, we were able to deal with all three in a manner to finish most of the committed work in time.

- One of our major challenges came in the form of a cloud burst in Leh (Ladakh) during August 2010, which saw lot of damage to life and property. In Ladakh, we have only one field employee and with his involvement in rescue and rehabilitation work which was partly supported by us through a consortium of NGOs; we missed out on the work from August to December 2010. Damage to roads also influenced our work and the worst hit was our plan to conduct in-school activities under the HNC initiative. We managed to conduct a workshop in March despite this and also held activities for seven schools during both 2010 and 2011.
- The other challenge which had a natural cause was heavy and unprecedented snowfall in June 2010 in Spiti. This affected the schedule of our nature education camps (including the emergency evacuation of one batch), but we managed to hold on and finish the desirable number of camps. The schools also supported us in this, and we could hold two batches in nearly winter-like conditions (temperatures dipping to -10° C.).
- One of our key field staff – Sushil Dorje was unavailable due to health reasons. Since he was the coordinator for field programmes, we found ourselves in a difficult situation. This influenced the HNC activity calendar of 2010 in Spiti where we could reach 15 instead of 20 schools. However, two other staff members in Spiti took the additional responsibility and rose to the challenge, so we could satisfactorily finish the required activities in time in 2011. Teachers meetings were also successfully conducted by them and we found that they had also managed to motivate the teachers.

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

Strengthening conservation by creating awareness among children and teachers in over 10,000 km² of snow leopard habitat: In our pilot project (partly funded by a Rufford Small Grant), we created local institutions for sustained environmental awareness generation in the form of 20 Himalayan Nature Clubs (HNCs) in rural schools of Spiti Valley. Later, we expanded this to Ladakh by forming 13 more HNCs. The present project was built on this foundation and enabled us to cover about 7,500 sq km of snow leopard habitat reaching most of the school-going children in the age group 10 to 14 years and many teachers in more than half the villages of Spiti Valley. We also covered about 2,500 sq km of snow leopard habitat in Ladakh targeting children and teachers from Leh town and two major valleys (Upshi and Rong) as well as a part of the Changthang region. Together, we reached over 2,000 children and 150 teachers through this project. In extremely low-density population regions of the Indian Himalaya, this is a state-of-the-art initiative in spreading conservation education and awareness. This is creating a new generation of citizens who are likely to take stewardship of their natural environment and get involved in wildlife conservation. This message is slowly permeating in the community at large through their parents, teachers and other rural youth and has the potential to motivate the communities to participate actively in wildlife conservation.

Building stewardship among local children through fostering positive values, emotions, knowledge and attitudes about high altitude wildlife: Twelve nature education camps conducted by us saw participation of nearly 370 children (age 10 to 14) and 25 teachers. The written feedback shows a high degree of assimilation of positive values, emotions and knowledge indicating a change in their overall awareness levels about local wildlife, landscape and their conservation. Most students showed movement towards desired response on most statements in the feedback. Some motivated students who have attended previous camps have been offering help in our camps through volunteering. We have also received casual, informal feedback from a number of parents (mostly village youth and elders) about the camps and how excited and interested children have been for this activity. Members of the Youth Council, Kibber actively volunteered for the camps. We also had several volunteers stay with us and help with various aspects of conducting camps. School principals also stayed at the campsite watching the proceedings with interest and even participating. The state Forest Department has already extended its support for this activity and we are likely to receive more support in 2012. This hands-on activity has also generated lot of goodwill and support among schools, teachers, villagers and visitors and we wish to build further on this for the coming years so that these very children turn out to be the stewards and guardians of the unique and threatened wildlife of the Indian Himalaya.

Capacity enhancement of local field staff and teachers: Through various education and awareness activities, the capacities of our field staff and other youth in the villages have been enhanced in conducting environmental education activities. Such activities, especially camps and HNC activities also helped us in identification of motivated teachers from local schools. The three members of our field team are conducting most activities independently now. All meetings and activities in 2011 and most activities in 2010 were entirely conducted by our field staff or mid-level staff recently hired. This was a very important step in their confidence boosting and in improving their communication and nature interpretation skills. The planning of dates, interacting with teachers, visiting the schools, conducting activities, documenting the same and taking feedback helped them go through the entire spectrum of actions involved in successful implementation of CE activities. We were not affected by relieving of one of our key field members as others who had learnt the process were ready to move forward to take responsibility for the same. Our field co coordinator from Ladakh who visited the camp-site at Spiti in 2008 (during the first phase of the project), interacted with our Spiti field staff and started implementing a similar programme in Ladakh graduated to establishing a camp-site and helped organise the first Nature Education Camps in Ladakh. This phase of the project has thus not only helped us expand our reach and strengthen our conservation education interventions in Spiti Valley and parts of Ladakh, it has also equipped out field staff with enhanced capacities and confidence in conducting, documenting and assessing various interventions of this programme.

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

Direct beneficiaries: Two generations of local community viz. youth and children have already been targeted directly by our interventions. A third group i.e. parents are also partly involved as children share their experiences home and many parents know about our interventions now. So, in essence we have been able to reach nearly 1,500 families – a sizable part of the local community. These learners and indirect beneficiaries are already involved or going to be involved in our community-based conservation programmes such as livestock insurance schemes and better herding practices. Several of the youth are going to be involved in documentation and monitoring of wildlife populations.

Livelihood and voluntary involvement of local community: As shown earlier, all our outdoor activities required involvement of at least 10 people on site. Apart from our field staff, few youngsters who worked during these activities were paid honoraria for this work, while some just gave their time (one or two days) voluntarily. In general, most of our education activities received a lot of help (voluntary and otherwise) from local people everywhere and we felt that they were partly able to perceive the importance of such activities. Our local field staff have earned a new identity within their community that is linked with their wildlife-related knowledge and skills. Some of the children who have attended camps in the past visit us each year to volunteer for one to three days.

Capacity enhancement: The capacity of our field staff, other rural youth and school teachers in planning and implementing environmental education and awareness activities was enhanced through this project. Their knowledge, skills and confidence all have increased in this area as borne by their oral and written feedback as well as increasing important role in our work. This would be very helpful in sustaining these initiatives in the region and also empower the local communities with appropriate human resource.

5. Are there any plans to continue this work?

This project was conceived with a view to strengthen and facilitate our ongoing work in conservation education in the Indian high altitudes. Nature education camps, nature trails, in-school activities and teacher/youth workshops are now part of our annual activity calendars. We now have three good conservation educators (two in Spiti and one in Ladakh), who will take this programme forward in these areas. We also have a newly recruited mid-level staff member who has grasped the essence and elements of this programme well. This work needs long-term inputs as we are interested in building a generation of citizens that takes stewardship for their natural environment. So, we are committed to carry on from here with more engagement and better outcomes with schools, teachers and youth as well as improve and expand on it.

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

We intend to share the results in two major ways: through direct sharing by presentation of papers in conferences/workshops and through articles in popular fora (print media) and peer-reviewed journals. Some of the initiatives already taken in this regard are given below:

- Have shared the learning and experiences in various formal and routine presentations to inspire young researchers to include and implement conservation education components in their respective studies.
- I conducted a workshop on conservation education based on the current project in the Students Conference on Conservation Science (SCCS) held at Bangalore from 14-16 September 2011. 35 post-graduate and PhD students involved in conservation participated in the session and found it very useful.
- Gave a talk on conservation and education activities of NCF/SLT on television through a higher education channel of the Government of Gujarat which was telecast live to several thousand undergraduate college students and lecturers across the state. Conservation education programme was an important component of this talk.
- Informal sharing and presentation of the outcomes and interventions during several meetings and discussions with NGOs, Government and individuals.

- An article focused on the conservation education programme was published (PDF attached) by a national magazine – *TeacherPlus* in their special issue on biodiversity.
- One of the volunteers who spent a few days at the campsite helping with nature education camps wrote about her experience and learning in a leading daily Deccan herald. Here's the link to this article: <http://www.deccanherald.com/content/204772/exploring-himachalspiti-valley.html>
- As said earlier, we are analysing and writing the results of our conservation education work from 2007 to 2011. We wish to publish this as a report in 2012 and share it with people/institutions in the field.
- At least one paper will be published in a peer-reviewed journal based on the project's learning and impact.

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

We used the funds for the prescribed period of 18 months. The actual work was completed by 16 months and we took some time to put together the data on participation and analysis of feedback of camp and HNC activity participants.

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
Nature Education Camps (three-day outdoor experience, 10 nos.)	3000	2,999.96	+ 0.04	We have been able to stick to our budget and timelines in this second Rufford Grant, improving substantially from the first one and developing our team's strengths and capacities. We would like to take this further...
Local Travel	750	749.99	+ 0.01	
Travel (HQ to field for PI – four/five trips)	500	500.01	- 0.01	
Honoraria	750	750.01	- 0.01	
Per Diems	250	250.04	- 0.04	
Equipment (digital camera, two pairs of binoculars)	500	500.00	0	
Stationery & Communication	250	249.99	+ 0.01	
Total	6000	6,000.00	0	

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

1. Publish the results of the last 5-year's work (2007-11) and disseminate the success and learning.
2. Consolidating the programme in both regions to involve the target groups actively and maintaining this momentum. Sustained activities and use of resource material through HNC Annual Plans would be a key component of this.
3. Explore opportunities for expansion, especially in Ladakh where several areas remain uncovered.
4. Solicit active involvement of children, teachers and youth in addressing local environmental issues and organising one event each year that is common for all schools.
5. Better documentation of our programme to disseminate this successful model.

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, the certificates given to all participants of nature camps and training workshops had the RSGF logo and all products prepared so far also carry it. We have also acknowledged it in all presentations and publications so far. The products have been distributed far and wide and the logo has travelled to all these institutions/individuals. This phase of the project did not involve creation of any new resource material/educational tool.

11. Any other comments?

I am thankful to Rufford Small Grants Foundation personally and on behalf of the entire team of NCF/SLT for once again extending support to this crucial part of our conservation work in the Indian Himalaya. It has enabled us to engage with children – the future custodians and teachers – the torch bearers of the society to spread awareness about wildlife conservation in these remote and challenging mountain environs. The children come from moderate or poor economic backgrounds and paying a camp fee of INR 800 to 1,000 would be too difficult for the parents. So, this support has helped so many children re-connect with their landscape and wildlife creating positive values, emotions and experiential knowledge about it. Our field team has immensely benefited through this grant in terms of capacity building. Since this work is a core component of our activities, it is helping us expand our reach and strengthen our work with communities. In the process we have learnt a lot and gained better understanding of operationalizing on-ground conservation in Spiti and Ladakh. We gratefully acknowledge your support and contribution.