

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	Jugal Kishor Tiwari
Project title	Halophyte a forestation, nature education camps and publication of awareness materials for nature conservation in schools and villages of Kutch district , Gujarat , India
RSG reference	29-09-08
Reporting period	1 year
Amount of grant	£5000
Your email address	cedoindia@yahoo.com and jugalt2000@yahoo.com
Date of this report	2nd Sept 2009

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
Tree plantation		<p>70 % success in schools.</p> <p>50 % success in desert wastelands or denuded areas.</p>		<p>Plantation carried out in 20 villages and schools (7000 plants). Survival of plants in schools is very encouraging (up to 70 % success). Students and teachers take care of the plants in schools. Plant survival in the wild (5000 plants) is 50%. In spite of all the pressures on the area e.g. grazing and firewood collection, plants are surviving. We checked the plants after the good rains in July 2009 and found plants which looked withered were also showing new leaves and regeneration. Plantation carried out in Saran nath Patio area have established roots and showing growth. Our learning from the two years work is that <i>Cordia rothii</i> is the most suitable plant for stony and gravel country of Kutch. 5 kg seeds of <i>Salvadora persica</i> and <i>Cordia rothii</i> were sown in the field over 20 ha of wasteland of Saran nath Patio. Seeds in 1 kg of <i>Salvadora</i> and <i>Cordia</i> counts 3000/kg. We found this method is very successful, as the in situ germination of seeds and plant growth has more chances of survival. We will follow this</p>

				<p>method in future for large scale in situ germination and propagation of native species of plants. 12,000 plants planted.</p> <p>5 kg seeds of <i>Salvadora persica</i> and <i>Cordia rothii</i> sown in situ after the first shower of monsoon in July 2009. Seed sowing concept tried by us for the first time and results are encouraging.</p>
<p>Nature camps 10 nature education camps for 10 schools of 9 villages of Kutch</p>			x	<p>A total 10 nature camps were organized for 9 villages and all schools. For example, Moti Virani Boys and Girls Primary School, Mangavana Hr. Secondary School, Vareseda Gandhi Ashram School, Devisar, Rameshwar, Nana Nakhtrana, Nani Virani, Aral and Sukhpure Schools. Most learning part of the project were the nature education camps for all the students as the rural school kids enjoyed the visits to nature reserves, wetlands, coastal belts, mangroves and thorn forests and did birdwatching, planted trees, collected fossils and took part in nature painting. The teachers were very happy to have such programme for their schools. Every student had described the experience of nature camp in their own way, after returning back from the camp and submitted the write up to their teachers. In these descriptions they mentioned the flora and fauna seen and identified,</p>

				general importance of the wilderness areas they had visited etc.
Educational material 100 copies of laminated Poster of flora and fauna of Kutch and importance of tree plantation and nature education for school students 4th and 5th April 2009 Wildlife and nature photo exhibition in Bhuj (district headquarters)			x	One educational poster on birds and wildlife and role of school students in nature education and tree plantation was prepared and distributed to all the schools. One wildlife photo exhibition on 4th and 5th April 2009 in Bhuj (district headquarters). Some 3000 people had visited the wildlife and nature awareness photo exhibition. In each school, slide shows on awareness programmes related to nature conservation were organized successfully. Students' and teachers' response was very good.

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

Many times when we completed the tree plantation in nature some goat herders came and grazed the area. We tackled this problem by making a fence in those parts using the exotic weed *Prosopis juliflora*. We met those grazers and tried to convince them the importance of the work.

Even in some schools some kids (non-school going) came after school hours and damaged the plantation carried out by the students, We replaced the plants and school teachers took initiative by erecting barbed wire fence in the boundaries of the schools.

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

Young kids aged 10-14 took part in tree plantation and raised saplings in their schools taking care of the plants right from plantation to watering, providing manure, checking the growth and the same kids coming to CEDO for asking more plants for planting in their home was very exciting experience.

Involvement of girls in tree plantation and nature education was very good experience, we found more care of the plants was taken by girls than boys.

Students took part in removal of plastic pollutants and planting native trees in nature camp site was good feeling for all of us.

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

The local communities from 20 villages like Moti Virani, Nani Virani, Sukhpur, Jadotar, Kotada, Bhimsar, Vang, Dador, Kharadia, Beeta, Mangvana, Paya, Godiar, Gachdo, Fulay, Jathavera, etc, took part in planting saplings of Neem, Gulmohar, *Cordia*, *Tecomela*, *Cassia*, and *Amla* species in the compounds of their houses and farms. The plants received right in their villages were a feeling of joy for them and there was a very good response from villagers; every house member came forward to receive plants from us. Upon checking the growth of the plants after a few months we found most of the plants were doing fine and had taken roots and growing well. Many locals asked us to give replacement of plants when they complained their plants were either grazed by cattle or died due to some reason, we provided replacement plants to such people.

5. Are there any plans to continue this work?

Yes we are very keen and serious to continue the work for long term. This time learning from our experience, success and failures we would like to make some improvement in our strategies.

We want to do more in situ seed sowing of native species but involving the students and local people. We want to cover 10 more village schools and repeat the exercise with the same village schools. More nature camps for students and publication of nature education materials in local language is planned.

We want to develop a native flora nursery in CEDO where a seed bank and a nursery capacity of 50,000 saplings/year is planned. A 100,000 litre capacity rainwater harvesting storage tank is planned to be built for the work. CEDO buildings have a large catchments area and the rain water flows unused can be stored for nursery plants.

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

We are publishing the results in the form of a report, sending it to NGO's, interested people, groups and schools through the "Kutch Mitra" a very popular news paper in local language. We

are displaying the educational materials in all the 10 schools of 9 villages plus in the local Government offices and Panchayat offices. At the CEDO office all the detailed photos and albums are there and we display these materials in our nature hall.

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

The project was planned for one year and we had successfully completed our aims and objectives in the given time frame.

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
Tree plantation	1559.77	1500	Nil	
Seed sowing		60		Seed cost, labor cost for seed sowing.
Nature camps	2108.80	2100 @210 per camp	8.80	All camps organized very successfully. Remaining amount will be used in future nature camps.
Educational materials	1179.94	500	29.94	100 posters distributed in good lamination format which will last for 30 years.
Wildlife and nature photo exhibition 2 days in Bhuj		650		3000 people, mostly school students, parents and local people visited the 2 days awareness exhibition organized in Bhuj (district head quarters of Kutch).
Report, communication etc	262.53	250	12.53	Final report is being prepared in hard copy format and is going to be distributed to schools and NGO's.
TOTAL	5114.04	5060	51.27 Will be used this season	



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

Our next steps are to work toward more native tree plantation, awareness programmes (more photo exhibitions for schools and Local people) and publication of educational materials for more schools.

We plan to cover in all 20 schools this year for tree plantation work, nature camping and publication of wildlife and nature related awareness materials.

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 posters on nature education materials. These posters, 100 in number, are displayed in the schools, classrooms, libraries, Panchayat buildings and village community halls. RSG Logo was used for Wildlife and Nature photo exhibition in Bhuj on 4th and 5th April 2009.

In all the nature camps and tree plantation work – students and teachers were briefed about the work sponsored by the RSG.

11. Any other comments?

Native flora nursery capacity 50000 plants/year with rain-water harvest tank at CEDO is the need for the follow up work.