

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	Someshwar Kumar Das
Project title	Community Based Natural Waterholes Conservation Project; Pilot Project in Community Forest of Eastern Churia Landscape of Nepal
RSG reference	7924-1
Reporting period	October 2012 to March 2014
Amount of grant	£5977
Your email address	somesh_das@forestrynepal.org
Date of this report	28 March 2014

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
Formation of activity management committee (AMC)			✓	As target waterholes were spatially distributed in five community forests (CFs) covering three village development committees (VDCs), two AMCs have been formed at VDC level instead of Community Forest User Groups (CFUGs) level. One AMC has been formed in Kamalpur VDC and another AMC merging two VDCs namely Sitapur and Jandaul.
Formation of youth conservation group (YCGs)			✓	Two youth conservation groups (YCGs) have been formed in each of five CFs. Thus 100 youths are organized in 10 YCG, each comprising 10 members. Five events of 1-day orientation workshop were organized for YCGs to explore their roles and responsibilities in waterhole conservation. Twenty members from two YCGs were given the class in a single event. They were also familiarised with project objectives, activities, outcomes and long-term impacts.
Formation of waterhole conservation club (WCC)			✓	Ten secondary schools have been selected in the periphery of selected community forests. Meetings were organized with the school management committee and schoolteachers about the project. Two-hour lectures about the project were organized for students of grade five, seven and nine. Fifteen interested students have been selected in each school and waterhole conservation club has been formed. Thus 150 students are organized in 10 WCCs, each comprising 15 students.
Waterholes survey and distribution maps preparation			✓	The criteria for defining the waterholes were developed first and then criteria for selection of waterhole for restoration were finalized with participation of community forest user groups. With the help of topographic maps (1:25000 scale) of the area and the consultation with local people, the waterholes were located on the topographic map to facilitate ground truthing of waterholes. After waterholes survey with the help of CFUG members and YCG member, spatial distribution map has been prepared and included in waterhole conservation action plan.
Conservation awareness		✓		Field visit to all of the waterholes could not be carried out because of Asian elephant movement

program			<p>inside the forest. However, each group visited one nearby waterhole. Each group was provided an event of 2 days conservation awareness coaching.</p> <p>Two hundred and fifty members of YCG and WCC (100 YCG members and 150 WCC members) were grouped in 10 groups comprising 25 members for conservation awareness coaching and field visit.</p> <p>Top three drawing and essays were selected through drawing and essay competition among school students. Among the three essays, the first essay has been submitted to local newspaper and it will be published soon.</p> <p>Ten events of street drama designed in local language were organised by local youths.</p>
Waterhole restoration campaign		✓	<p>Only eight waterholes instead of 10 have been restored. Due to variability in their sizes, resources became scarce to restore all the waterholes as per plan. Four large waterholes are completely restored while two large and two small waterholes are partially restored. Kamal (<i>Nelumbo nucifera</i>), Jal kumbhi (<i>Eichhornia crassipes</i>), Nilo Jaluke (<i>Monochoria hastata</i>), Thechar (<i>Ipomoea fistulosa</i>), Panni methe (<i>Schenoplectus mucronatus</i>), Maldero (<i>Isachme milliace</i>), <i>Chrysopogon acicaltus</i>, <i>Paspalidium</i>, <i>Alternanthera philoxeroides</i>, and two unidentified aquatic weeds were the dominant species destroying the waterholes.</p> <p>Furthermore, local people were reluctant to contribute labour donation because of no taste of outcomes of waterhole restoration earlier. Therefore, paid labours were used to restoration activities.</p>
Waterhole conservation action plan preparation		✓	<p>Eight participatory waterhole conservation action plans have been prepared in local language (Nepali) and handed over to respective community forestry user groups. Roles and responsibilities of stakeholders, monitoring plan, restoration schedule, fishery management and outsourcing are some headings of the plan.</p>
Dissemination of community conservation efforts		✓	<p>Community conservation efforts of waterhole restoration have been disseminated through FM radio broadcasting twice a month in a designed programme" Save waterholes for wildlife". Only eight hoarding boards have been prepared and installed in waterhole location and local community to flow message of waterhole and wildlife conservation. The surplus budget of the hoarding board preparation was transferred in restoration works.</p>

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

- **Difficulties to locate target 10 waterholes in two CF**

It was unable to choose the target 10 waterholes in two community forests because some of the surveyed community forests have no natural waterholes while some had unevenly distributed waterholes. Therefore, three village development committees (VDCs) were selected and five community forest user groups within these VDCs were selected as project sight. The selected three VDCs are Kamalpur, Sitapur and Jandaul. Similarly, CFs are Masardarni CF, Kamalpur-8, Patharudaha CF, Sitapur-6, Belahadevi CF, Kamalpur-6, Harinachure CF, Jandaul-6, Grameen Bikash CF, Kamalpur-7.

- **Budget lacking to restore ten waterholes completely**

Initially, programme budget was planned assuming partial labour contribution of local communities, but during the restoration local people showed hesitation to contribute labour. In order to overcome this problem, a meeting was organised with respective VDCs and AMCs and the issues were discussed. The AMCs and VDCs representative decided to use local community member as labour and to provide them a subsistence local level wage for their contribution. Furthermore, waterholes such as Kamal Daha and Pathru Daha requires diesel tractor during the restoration. After manual cutting of invasive species in pieces, it was pulled with the help of rope near the bank and then with the help of tractor it was dumped to another site.

Due to the variability in sizes of the waterholes, large waterholes occupied large budget in comparison to small sized waterholes. The budget proposed for calendar publication was also incorporated in the waterhole restoration activities. Out of proposed 10 waterholes, only eight have been restored in this pilot project. Four large waterholes are completely restored while two large and two small waterholes are partially restored.

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

- **Increased presence of birds and wildlife in and around restored waterholes**

Sarus crane, intermediate egret, lesser whistling-duck, white-throated kingfisher, white breasted waterhen and Asian pied sterling are the birds came back in flock after restoration of large lakes such as Kamal Daha, Balar Daha and Pathru Daha. Wild ungulates including spotted deer (*Axis axis*) and sambar deer (*Cervus unicolor*) are observed by local community after restoration of the waterholes. Fishing cat (*Prionailurus viverrinus*) and golden monitor lizard (*Varanus flavescens*) are also seen in the waterholes after restoration.

- **150 school students made aware and 100 youths sensitized**

School students of waterhole conservation clubs started to unite once in a month for wildlife related extracurricular activities such as quiz competition, essay writing and drawing competition with the help of schoolteachers. Similarly, youths of youth conservation groups are regularly united to monitor the waterholes to observe the presence of scat and pugmarks of wild animals. After the coaching, members of YCGs have rescued one golden monitor lizard from nearby road to CF. Community forest members surprised with an observation when local youths of Kamalpur VDC, where Kamal Daha waterhole situated, were clearing *Eichhornia crassipes* on the bank of the waterholes in the morning time. When community forest members were visited, they expressed

their views that local youths were really motivated to conserve the waterholes after coming back of wild animals. Local peoples of target community forests came to realise the importance of natural waterholes for wildlife and local peoples' livelihood. Furthermore, local youths came to know why the wild animals enter into village and role of waterholes for their habitat development. Local peoples are also motivated to conserve the existing waterholes after observing the return back of residential birds and wild animals.

- **Community based waterhole conservation action plan prepared**

After rigorous discussion community-based waterhole conservation action plan have been prepared and handed over to respective community forest to incorporate the plan into their approved community forest operational plan. In the action plan, fishery management has also been included to link local peoples' livelihood to conservation.

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

The local communities were actively participated in each of the planned activities. Their efforts during waterhole survey, waterhole restoration campaign and waterholes restoration plan preparation was commendable. Similarly, representatives of community forest user groups, village development committees, activity management committees, youth conservation groups and local schoolteachers were very much cooperative during the project activities planning, implementation and monitoring. Some benefits that are channelled by project activities in a short time are

- Established coordination between local community and government line agencies
During the project implementation period, coordination meetings were organised with District Soil Conservation Office, Saptari and District Forest Office, Saptari and Koshi Tappu Wildlife Reserve in order to establish coordination between them and the local level stakeholders such as the representatives of activity management committee and community forest user groups. It helps them to have access on the government offices so that that they could have access on additional funding for the waterhole's maintenance after the project.
- Reduced movement of wild animals in village
After restoration of waterholes, local people have reported that there is less movement of wild animals especially Asian elephant and deer species in and around community ponds and paddy field as compared to earlier. Thus, crop damage by wild animals is less as compared to earlier. It is due to the waterholes that supply water for the wild animals.
- Waterhole conservation action plans have guided local community to maintain the waterholes periodically with community level resources.
- Members of community forest user groups started to use water for drinking purpose during firewood and fodder collection inside the forest. Local peoples irrigate rice field through the restored waterholes, and it has increased crop production.

On the other hand, it is expected that after 2 years of the project, community members will be benefited by:

- Livelihood enhancement through fish farming in large waterholes
The fish farming activities in large waterholes like Kamal Daha and Patharu Daha seems to contribute in livelihood of local people after 2 years. However, the fishing activities are prohibited for coming 2 years as per waterhole conservation action plan. Also controlled fishing activities were planned and use of poison for fishing has been completely prohibited.

5. Are there any plans to continue this work?

Yes, the complete restoration of the partially restored waterholes and maintenance of the fully restored waterholes is necessary for at least 2 years because target people are convinced and empowered now for waterhole conservation after feeling short term benefits. However, large portion of local people are still unaware about waterhole conservation. Similarly, within 2 days, the coverage of complete conservation awareness package could not be channelled to school students and youths. Therefore, there is need of additional follow up financial support both for its maintenance and to cover wide range of community people for awareness. In this regard, the project team has been continuously visiting district level government line agencies and trying for outsourcing for the follow up support. The project team has been regularly visiting the community and we found that the youth groups are active in monitoring the waterholes condition and wild animal's movement.

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

The project team is now planning to make an audio-visual documentary of local efforts of waterholes restoration and conservation. The documentary will be broadcasted through national level media. Furthermore, field trip of district level politician, high class forest officers, and journalists has been planned so that after the trip they could raise the issues of waterhole conservation at district, regional and national level forum. The findings of the project will be compiled into the form of a brief report and will be distributed to the relevant stakeholders in district, region and national. The findings of the project will be developed into the form of article and an effort will be made to publish in one of the relevant national/international journals.

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

Being a graduate student of Forestry at Tribhuvan University, Institute of Forestry, Pokhara, Nepal, myself as the team leader have to manage both the study and the project. And it was really a tough and tight schedule. Furthermore, just after approval of the grant the national festival holidays started.

Similarly, local people's involvement in agriculture also altered the proposed time schedule. These are some factors which altered and delayed the project completion date. On the other hand due the busy schedule of the government officials, it took longer than the expected time to arrange meetings with community forest user groups in presence of them.

Activities	Proposed schedule (Time in	Actual time it took (in month)	Comments
Selection of Community forest and waterholes	Not mentioned in proposed schedule	October 2012- November 2012	It was really time consuming to adjust 10 waterholes in two community forests due to its unevenly spatial distribution. Therefore, five community forests of three village development committees are selected for project site

Activities	Proposed schedule (Time in)	Actual time it took (in month)	Comments
Activity management committee (AMC) formation	August 2012	December 2013	
Youth conservation group (YCG)	Sept – Nov 2012	January 2013 – February 2013	
Waterholes conservation club (WCCs) formation	Sep 2010 – Nov 2011	March 2013 – May 2013	
Waterholes survey and distribution maps preparation	Dec 2012	June – July 2013	Due to wide spatial location of waterholes it took longer than expected time.
Conservation awareness program: January-March, 2013	Mar 2013	August–October 2013	
Waterhole restoration	February-April 2013	November-December	
Waterhole conservation action plan preparation	February-April, 2013	January 2014	
Dissemination of community conservation efforts	January 2012- July, 2013	August 2013 - February 2014	
Report preparation and submission	June-July 2013	February - March 2014	

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
Tea and snacks for AMCs, YCGs and WCCs	140	140	0	
Tea and snacks for coordination and consultation meetings	150	150	0	
Daily Subsistence Allowance (DSA) for Team Leader	1055	1172	-117	DSA was paid for 30 extra working days
DSA for field level assistants	188	282	-94	DSA was paid for 35 extra working days
Waterholes survey and restoration	813	1945	-1132	Due to less labour contribution from local people, full paid labour was used for restoration. Also, diesel tractor was used to transport the invasive species

Item	Budgeted Amount	Actual Amount	Difference	Comments
				of the waterholes from bank to damping site.
Seedling purchase and plantation around degraded waterholes	391	0	391	As all the waterholes are in the premise of community forest, no plantation was needed. This budget was transferred in restoration works.
Hoarding Board (colour) preparation and installation	879	470	409	Only eight hoarding boards were prepared and installed in the community where waterholes were restored. The surplus budget was transferred in restoration works.
Radio program broadcasting	563	563	0	
Project's progress activities publication in news paper	125	125	0	
Calendar (colour) preparation and printing	600	0	600	Due to lack of sufficient budget in restoration works, this budget was transferred to restoration and DSA heading. It was agreed by activity management committee.
Support to WCCs for extension and reading material	195	195	0	
Support to YCGs for street drama about conservation issues	273	273	0	
Prize for winner of drawing and essay competition	117	117	0	
Printing, photographs and communication	78	78	0	
Expenses for YCGs and WCCs field visit to waterholes	293	350	-57	Due to extension of project activities in the community, extra students except WCCs from school and other local elites of the community were shown their interest to visit the restored waterholes.
Local transportation for team leader and field assistants	117	117	0	
Total	5977	5977		£sterling: Nepalese rupees = 1:138 (According to project application)

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

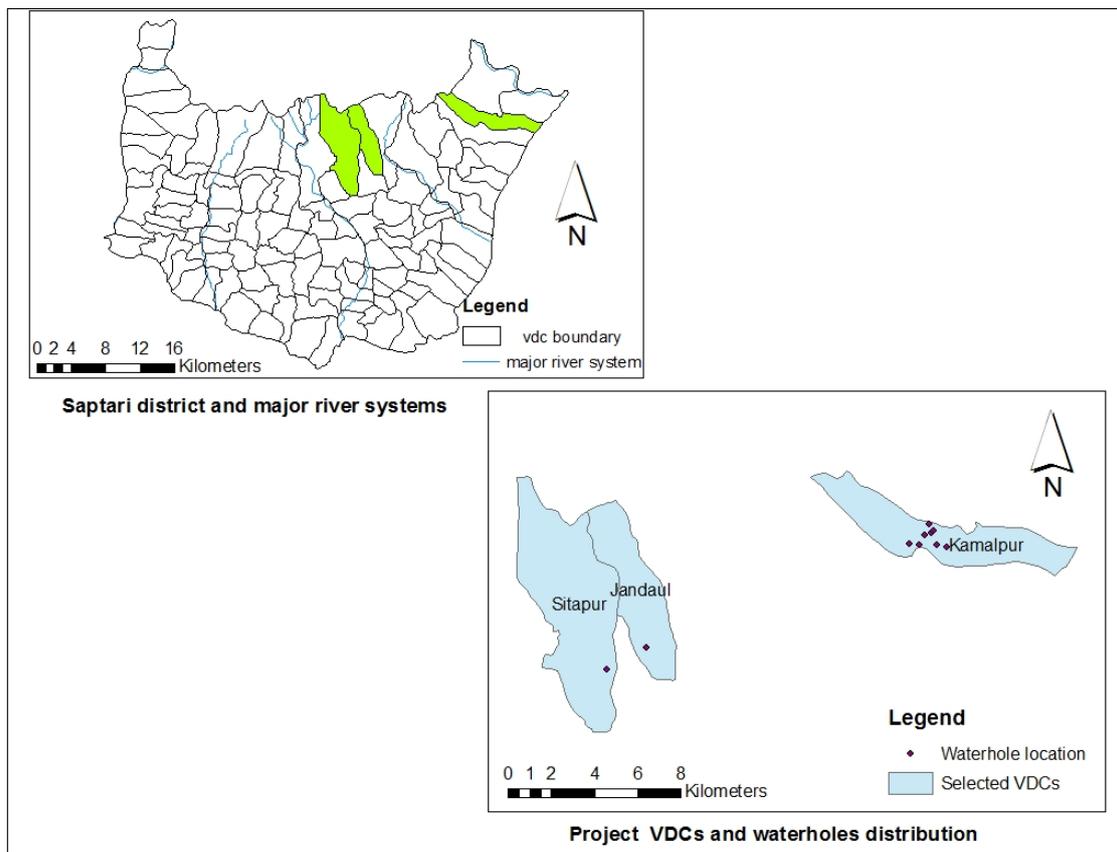
- Complete restoration of partially restored waterholes.
- Follow up support to the youth conservation groups and waterhole conservation clubs
- Awareness raising of wide range of community people
- Survey and restoration of waterholes in other community forests
- Long term monitoring of wildlife in and around waterholes

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?

The RSGF logo was used in banner during awareness coaching and field trip to waterholes. Besides, it was used in street drama.

11. Any other comments?

Such type of project should be appreciated and promoted by organisation like RSGF in coming days as well because natural waterholes in community manage forests are vanishing day by day and local people are unaware about this. The stakeholders have taken it as a result of climate change and do not initiate a concrete long-term solution.



Project location and waterhole distribution