

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	Mohan Raj Kafle
Project title	Sustainable Lakes Conservation through Participatory Management of Invasive Water hyacinth and Watershed Management in Pokhara Valley Lakes, Nepal
RSG reference	96522
Reporting period	April 2011 – July 2012
Amount of grant	£6000
Your email address	mkafle@gmail.com
Date of this report	30th July 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
Enhance knowledge and skills of farmers around lakes on wise use of invasive water hyacinth through trainings and demonstrations of water hyacinth composting and show the effects of this compost in crop productivity				Farmers around two lakes and the about 300 students of three secondary schools enhanced their knowledge and skills on compost preparation and application technologies using invasive water hyacinth. The farmers applied the compost in their crop field and the experimental showed that the production of the cereal crops like maize, rice and other vegetables got increased.
Build conservation awareness among farmers, local stakeholders and students for wise use and sustainable management of lakes and watershed resources				Conservation education and on-site observation events targeted to the school students and local farmers, fishermen and boaters contributed to conserve the lakes and their resources. Watershed rehabilitation activities, mainly plantation and local bio-engineering technologies further assisted to the conservation, protection and purification of the lake and water resources.
Mainstream compost production from invasive water hyacinth and associated conservation activities in annual work-plan of local farmer groups around the lakes for sustainability of project outputs				Out of the six farmer groups around the lakes within the project area, four farmer groups formulated their work plan with incorporation of the water hyacinth utilization schemes for next five years. Two farmer groups are in the process of formation of their work plan.
Assess effect of water hyacinth removal to avifaunal diversity and fishery				We achieved the effect of the water hyacinth removal to avifaunal diversity but unable to find out the effect on fish diversity and population. But the effect on the fishery is found out.

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

The farming practice in the project area is not commercial and the households are engaged in different profession for their livelihood. Livestock husbandry is the main activity of the farmers for dairy products and manure/fertilisers. Target farmers of the project area partially adopted the water hyacinth compost application in their crops. Full adoption of the new technology is really the difficult task in the rural communities. For the extension of the new composting and application of water hyacinth as major source of fertiliser in the watershed areas, we selected six leader farmers in six groups and carried out composting and field application of the compost with full risk of the project. The work showed the positive result in production enhancement which assisted for the easy adoption of the practice in more farmers' households. Furthermore, our trainings, on-site observation visits and other conservation oriented field activities motivated them in the project activities.

Another unforeseen difficulty aroused during the project is to find out the trends of the fish population and diversity in the lakes. We couldn't get information on the fish species found in the lakes, extinct species and the endangered species. We, therefore, couldn't find out the effect of the water hyacinth on the diversity and population of the fish in the lakes. But we could roughly find out the trends of population change and the status of fish in water hyacinth-covered and water hyacinth removed areas of the lakes. The questionnaire and direct interviews with the fishermen and the local farmers helped us to find out the relationship between the water hyacinth coverage and the fish population and diversity.

Another problem is the technology of the removal of the water hyacinth from the deep and distant parts of the lakes from the boarder. We used the boats and local boaters for the removal of water hyacinth.

There is the felt problem of the gap in the linkage between the lake conservation and the economic activities in the local areas. The motivation of the people towards the lake conservation depends on the economic gains because of their conservation efforts. So, we discussed with them about eco-tourism promotion in and around lakes which can enhance the economic status of the local people.

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

- Trained at least 200 small scale farmers on water hyacinth compost making and watershed management and educate and aware 400 secondary school students, 100 college students and 25 members of lake stakeholders on sustainable lake ecosystem conservation and sustainable way of invasive water hyacinth use in local level.
- Rehabilitated the degraded parts of two watersheds mobilising the students, farmers and concerned lake stakeholders participated in the training, education and awareness activities and incorporate invasive water hyacinth consumption and watershed management activities in the annual work plan of at least four farmers' group of the concerned watersheds.
- Found out effects of water hyacinth removal on the difference in number and diversity of water-birds; and diversity and productivity of fish.

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

Local people, especially the farmers, fishermen, boaters, students and teachers, show the interest and participated in almost all the project activities. They have been benefitted from the project by enhancing their knowledge and skill on Lake Biodiversity conservation, watershed rehabilitation, beneficial use of invasive plants and overall environment conservation issues. They have got direct or indirect benefit from reduced cost of agricultural inputs using home-made bio-compost, enhanced crop production and reduced risk hazards due to watershed rehabilitation and improved prospects for future income and employment from the improved lake environment, etc.

5. Are there any plans to continue this work?

Yes, I am planning to continue this work but by different way. I have planned to develop the project for the promotion of tourism for the optimum use of the beauty of the lakes. This will contribute to the enhancement of socio-economic status of local people which will be the means to motivate them in the sustainable lake conservation. Conservation without consideration of peoples' livelihood cannot be successful and sustainable. The next work will be for the theme 'lakes for tourism and local development'.

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

We have published the informative leaflet describing the project details and outputs and distributed to large mass of people. The paper media and local FM radio also covered our project activities and outputs. We will now planning to cover our project activities through electronic media, mainly the internet web page of our own.

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 over the period of 14 months from the commencement of the project. Somehow delay of the project work is due to the difficulty in managing the time of local people to involve in project works and some other socio-political externalities. Also the project approval information time was late than the anticipated panned timeframe. But the difference as compared to the anticipated time period is not so more.

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 (£ sterling)	Actual Amount (£ sterling)	Difference (£ sterling)	Comments
PERSONNEL EXPENSES	1800	1800	0	Project crew as per the project plan
1. Subsistence to project leader: 180man days @ £5= £900				
2. Subsistence to a field co-				

<p>ordinator: 150 man days @ £4 = £600</p> <p>3. Subsistence to resource persons (2 persons): 30man days @ £10 = @ £300</p>				
<p>TRANSPORTATION AND TRAVEL EXPENSES</p> <p>1. Local transportation to project leader, resource persons, students and project team during project period = LS £200</p>	200	180	+20	Lump sum estimates differed from the actual expenses
<p>SUPPLIES AND EQUIPMENT</p> <p>2. Materials for composting demonstration (4 set of Plastic sheets and other accessories) = LS £200</p> <p>3. Plant seedlings and grass seeds for watershed rehabilitation works = LS £200</p> <p>4. Binoculars for bird watching: 2 pieces @ £50 = £100</p> <p>5. Nets and Ropes for fish survey = LS £50</p>	550	510	+40	Lump sum estimates differed from the actual expenses
<p>MEETINGS, TRAININGS AND EDUCATION</p> <p>1. Meetings with Stakeholders/farmer groups: 6 meetings @ £50 = £300</p> <p>2. Inception Workshop to Stakeholders/Farmer groups: 1 event @ £300 = £300</p> <p>3. Dissemination Workshop Expenses (75 participants): 1 event @ £500 = £500</p> <p>4. Light Snacks for 400 school students, 100 college students, during school teaching and conservation field movements = = LS £250</p> <p>5. Light Snacks for farmers and other stakeholders (about 250 person) during on-site trainings, Water hyacinth removal and watershed rehabilitation activities = =</p>	1650	1550	+100	Due to market fluctuation

LS £250 6. Medicines for primary aid = = LS £50				
PHOTOCOPY, PRINTING AND STATIONERY Stationery, photocopy and printing of documents (including School teaching curricula and handouts) during project = LS £300,	300	310	-10	Lump sum estimates differed from the actual expenses
PUBLICATION, EXTENSION AND DISPLAY 1. Publication of informative booklet with project issues, process and outcomes: 1000copies @ £0.75 = £750 2. Press Release in Local and National Media = LS £300 3. Installation of informative hoarding boards: 4 boards @ £50 = £200	1250	1400	-150	2 more hoarding boards established
COMMUNICATION Postage, Phone, Fax, Internet, etc. = £250	250	260	-10	Lump sum estimates differed from the actual expenses
Total	6000	6010	-10	covered by the project team

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

The awareness of the local people towards the lake conservation and sustainable use of lakes' resources is enhanced due to project efforts and other initiatives taken by the Government and non-government and community level organisations. The next step for long-term benefit of the lakes to the local communities, there should be the focus on the tourism promotion activities like establishment of information centres, publication and dissemination of informative materials like brochures, pamphlets, posters, etc. , sharing of information of through internet websites, guest hosting, language and nature guide training to the local guides/youths, formation and strengthening of the tourism management committee at local level will help to justify the long term effect of the project initiatives.

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?

Of course, we used the logos in the banner and other materials like publications during our project events. Most of the local farmers, boaters, fishermen, teachers and students are now familiar with the RSGF logo. When we reach to the project area and visit them, they use to say us the 'Sir of Rufford' and ask about the RSGF with its details.

11. Any other comments?

RSGF's support in the conservation sector of Nepal is really appreciated by the Nepalese communities and the support in the form of small grants is resulting greater change in the conservation as well as social-economic aspects. Not only the work on Lake Environment enhancement, there are many more potentialities for the studies, research and education for improving other terrestrial and aquatic ecosystem mobilising local communities which not only conserves Nepal's ecosystem but also contributes to the global environment conservation efforts.

Name of the project: Sustainable Lakes Conservation through Participatory Management of Invasive Water hyacinth and Watershed Management in Pokhara Valley Lakes, Nepal (Project Ref. 9652-2)

Project Leader: Mohan Raj Kafle

Country: Nepal

Financial Support : The Rufford Small Grants Foundation

Images showing project activities



Water hyacinth removal event



Collection of Water hyacinth for composting



Water hyacinth removal and fish collection



Fish assessment



Lakes before removal of Water hyacinth



Lakes after removal of Water hyacinth



Watershed rehabilitation work



Watershed rehabilitation work



Farmers planting in Begnas Watershed



Plantation in Begnas Watershed



Farmers and Students planting trees in Rupa Watershed



Project Leader planting tree in Begnas Watershed



Students in a Plantation programme



Students and Teachers in a Plantation programme



Students Planting trees and grasses in Begnas and Rupa watershed



Interview and discussion with fishermen and boaters in Project area



Community level training cum workshop event in Rupa Watershed



Training to Teachers and elite farmers



Farmers training cum workshop in Begnas Watershed



Informative hoarding board near Rupa lake



Informative hoarding board on the way to Begnas lake



Project Leader observing composting



Compost making by a farmer



Prepared compost packed in plastic sacks for used



Composted product of Water hyacinth in a pit



Experiment of Water hyacinth compost in Potato



Application of Water hyacinth compost in vegetable crops



Application of Water hyacinth compost showing good growth and production of green vegetable



Students, teachers & farmers in a conservation Rally



Women groups in conservation campaign and orientation programme



Project crew with project leader in the field



Project leader with team members in the field



Project leader in fish and bird assessment events



Project Leader with RSG Director Josh Cole in 1st Nepalese RSG conference in Kathmandu, Nepal