

## The Rufford Foundation

### Final Report

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Congratulations on the completion of your project that was supported by The Rufford 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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

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Grant Recipient Details	
Your name	Deepa Paudel
Project title	Farmland Based Important Bird Areas (IBAs): Are they safe from current using practices of chemical pesticides?
RSG reference	20090-B
Reporting period	Final Report
Amount of grant	£9990
Your email address	skt_deepa1@yahoo.com
Date of this report	October 10, 2017

**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
Exploration of locally available and used pesticide				
Enhancement Community Knowledge				
Assessment of pesticide Impact				Need to cover larger area in addition
Community Outreach Activities				Election announcement and its postponement twice, money exchange rate
Extension Material Publication				

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

This time I have faced following unforeseen difficulties that arose during the project implementation.

**A. Deduction in Money exchange rate:** With the separation of UK from the European community, the exchange rate to GBP reduced dramatically. There was difference around 725 £ (pound sterling) compared to requested budget so we have reduced some activities like radio and sharing/discussion program.

**B. Election and its postponed time to time:** In the mid phase of project period, the Nepal Government announced the election whole over the Nepal. The announced election was again postponed with a new date. This has created difficulties to complete the project in time. Similarly, this also increased the field visit activities which simultaneously increased transportation, food and accommodation cost. We managed the resources with compromising some activities.

**c. Flooding:** Due to immense flooding in Chitwan and other districts in the monsoon, it also increased the time duration. Site of Chitwan district is more affected area where there was the huge flooding after 20 years.

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

It takes more time to have measurable outcomes and visible impacts. Our effort is to assess the ground situation and disseminate knowledge to reduce use and impact of the pesticide so that human health, environment and biodiversity become safe.

We can assume that our effort was definitely able to create change to some extent in favour of people and biodiversity. For instance, to find out the project effectiveness, we collected feedback from participants, conservationists, professionals, individuals, academicians and team members during and after project period. Based on this feedback, following outcomes were considered as the three most important.

**A. Available pesticide at the local area explored:** During the project period, we visited farmers' houses, farmland and pesticide shops and interacted with farmers and pesticide sellers about the locally available pesticides and their toxicity. We took photos of pesticides and categorised their toxic level. In our survey, we find all kinds of pesticides; red, yellow, blue and green colour labelled. Among them, yellow labelled (coloured) pesticides were most common whereas red labelled (coloured) were found in few places. Similarly, we explored the chances of human health hazard, environment pollution and effect on wetland, birds and living beings from these types of pesticides.

**Possible Outcome:** People knew the meaning of red, yellow, blue and green labelled (coloured) pesticides so the dealing in more toxic pesticides will be decreased in the locality which ultimately creates a safer environment to human, farmland birds and agro-biodiversity.

**B. Exploration of Pesticide used and Community Outreach:** We found use of yellow (labelled) coloured pesticides in higher frequency compared to others. Very few red labelled (coloured) chemical pesticides were observed in the project sites. These red coloured are the most toxic, whose uses and misuses can affect agro-biodiversity and human health. We also noticed some people buying pesticides for fishing in wetland and waterways of farmland. It means pesticides are being misused. According to the local people, people use chemical pesticides as bait for hunting farmland and water birds. Similarly, people are using rodenticide (red labelled chemicals) to kill rats. These rats are thrown anywhere from which many birds are susceptible by consuming them.

From the household and pesticide shop survey, we found that both farmers and pesticide sellers are less aware about the consequences of toxic chemicals on farmland birds, environment and the farmer health. They only targeted for the quick affection to pest control.

**Possible Outcome:** After knowing these cases, we organised the education and school teaching programme in the pocket areas. We also contacted pesticide sellers and shared with them the chances of misusing of chemical pesticides. From this we can conclude the use of more toxic chemical and misuse of chemical will be reduced which will be milestone to keep the important bird area more safe. This assists to increase bird population.

**C. Local Student Mobilisation and Promotional Material:** In the project, we involved local students who are from environment and biodiversity conservation field. We also mobilised those local people who are working in the conservation sector. This

involvement of local people was beneficial to sensitise them about their local environment and existing situation. These people will be resource persons in that locality. Similarly, we have developed educational booklet and many promotional materials that will be helpful to interested people to learn about the chemical pesticides, their consequences and possible mitigation measures.

**Possible Outcome:** We generated the human resources at local level so we can expect their contribution in the long term. Similarly, the prepared promotional material will be beneficial many more people who want to work and organise education programme regarding chemicals and their potential impact on human health, farmland birds and agro-biodiversity. These human resources and promotional material could influence large number of people for long term.

In addition, we have collected knowledge of chemical pesticide sellers, farmers and other conservation stakeholders which will be beneficial to develop strategy in favour of important bird areas. Based on the collected data, we are writing the article for publication which will be a medium to disseminate information among the scientific community. We have collected photos of available of pesticide and misuse of chemical pesticides in the locality. From this compilation, we are going to prepare short documentary which will be training material to other concerned people.

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

It is a field based project and main target groups are farmers, chemical sellers, conservationists, students, teachers etc. Without involvement of local community, the mission of project couldn't be achieved. We therefore implemented the project with the maximum involvement of community and local people. From the cost effectiveness perspective also, we have to encourage local participation as much as possible. Community based organizations, local NGOs, farmers, clubs, students, conservationists, pesticide sellers, teachers etc. were involved during the project period. Some events were organised in the initiation of local conservation groups and NGOs.

We hired the local youth for the data collection from which they got the chance to learn about the situation of pesticide uses and generate some financial benefits too. While mobilising conservation based students also, we had given the priority to those students who live in the project sites, so that monitoring of project impact can be done easily in future. For less cost, we can visit project sites and interact with students, farmers, pesticide sellers and teachers in coming days also.

#### **5. Are there any plans to continue this work?**

Being an academic professional in the agro-forestry field, I have planned to continue my career in wetland, agro-biodiversity and agroforestry. I believe that organizing some activities in some pockets cannot address conservation issue of all areas. Continuity and disseminating project finding and learning in wide range of

other prominent sites keep significant role to address similar issues of other areas. So, we are trying our best to share our success stories to other sites as much as possible.

Our project has shown that chemical fertiliser/pesticide using practice is critical in these sites and we have assumed that other areas and globally important wetlands are also being highly impacted so our next plan is to replicate project to other sensitive sites. In this project, we mobilised many students of conservation field. They have learned many conservation issues related with pesticide, farmers, wetland and birds so we want to utilise their learning in wide range. We will encourage them to monitor project impact in the future days too.

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

Conducting some activities in some pockets could address only problem of specific area where as dissemination of success stories could influence larger area having the same problem. So, activity reports will be shared through media, local papers, meetings, discussion forum etc. We will also visit the field in coming days to monitor impact of our project. The post project report will be regularly sent to RF for disseminating through official webpage. We will also utilise the social media as much as possible.

In future, project based article will be published in local language and local paper to share at local level. Success stories will be shared in seminar, workshop and other group discussion. The article will be prepared for publishing peer reviewed journal which will be best option to disseminate among the scientific community.

#### **7. Timescale: Over what period was The Rufford Foundation grant used? How does this compare to the anticipated or actual length of the project?**

The grant was used during the project period i.e. is 15 months. I have planned to complete the project in anticipated time (12 months) but due to different unforeseen circumstances like; election and its postpone time to time, I had to extend time for few months. The grant was used as per application. The detail is;

<b>Time frame</b>	<b>Activity</b>	<b>Support</b>
<b>July 2016 - October 2017</b>	Pocket Area Identification, Questionnaire Survey (Farmer, seller), Focus Group Discussion, Direct Observation, Water sample collection, Water Sample test, Consultation, Education / School Teaching, Poster, Booklet Production and distribution, Public Hearing, Finding Dissemination/Workshop, Communication, Transportation and fuel, Stationery, Team Members food/subsistence, accommodation etc	<b>Rufford Foundation (RF)</b>

<b>After October 15, 2017</b> <b>Project Continuity</b>	Article Writing and Publication, Post Project Monitoring / Reporting, Progress Updating	<b>Project Member (Voluntarily)</b>
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Based on this project, we are writing article to publish in journal.

**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
Accommodation	1440	1600	-160	Days increased /Exchange rate
Food (Subsistence)	2400	2600	-200	Days increased /Exchange rate
Pocket Area Identification	350	350	00	
Direct Observation	250	250	00	
Water Sample Collection	600	600	00	
Water Sample Test	650	600	+50	Still remaining some sample
Expert Consultation	300	250	+50	Participant's number decrease
School teaching	600	650	-50	Days increased /Exchange rate
Poster	400	500	-100	Number increased /Exchange rate decreased
Booklet Production/distribution	600	550	+50	Reduced the number and working days in writing
Radio program	500	00	+500	Because of exchange rate
Public Hearing	600	550	+50	reduced in event number
Finding Sharing	250	250	00	
Communication	250	300	-50	Project duration increased due to election
Transportation	500	610	-110	Increased field visit numbers
Stationery	300	350	-50	household number increased
<b>Total</b>	<b>9990</b>	<b>10010</b>	<b>-20</b>	

**Explanation:** With the separation of UK from the European Union, the exchange rate GBP reduced dramatically. There was difference around £725 compared to requested budget so we have reduced some activities like; radio and sharing/discussion program. While submitting the application, the exchange rate



was £1: 150 Nepalese rupees but at the time of fund deposition, it dropped into £1: 140 Nepalese rupees.

Similarly, due to flooding in project sites, election and its postponing has increased our field visit number and transportation. Sometimes we returned without any activities or somewhere we could only organise fewer events than expected. So, we had to increase our field visit numbers. To overcome the situation to some extent, we mobilised the local human resources and rearranged the budget section also. In addition with this, flood throughout project sites has also interrupted the time schedule and maximized our field visiting frequency.

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

Organising some activities in some pockets cannot address conservation issue of all areas. Continuity and disseminating project finding and learning in wide range of other prominent sites keep significant role to address similar issues. We are trying our best to share our success stories to other sites as much as possible.

Our studies explored that chemical fertiliser/pesticides using practice is critical in these sites and we have assumed that other areas and globally important wetlands are also being highly impacted so our next plan is to replicate project to other sensitive sites.

In this project, we mobilised many students of conservation field. They have learned many conservation issue related with pesticides, farmers, wetlands and birds so we want to utilise their learning in wide range. We will encourage them to monitor project impact in the future days too.

### **10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?**

We take this issue seriously so we are very much sincere on providing credits and acknowledge to contributors. Logo of Rufford Foundation (RF) was used in most of the activities and publication that were produced in relation to this project.

Logo was used in banner, poster, t-shirts, promotional material, report etc. Somewhere Rufford Foundation was also written as supporting organization when there was not a chance of printing logo. Somewhere, our member shared about RF and its contribution to nature conservation throughout world. Person, Prashant Shrestha, whom we supported for the research work had also acknowledged RF in his defence and report.

### **11. Any other comments?**

Many helping hands were with me to accomplish this project. I would like remember Professor Krishna Raj Tiwari PhD, Dean, Institute of Forestry, Tribhuvan University, Nepal, Rhishja Cota Larson, Annamiticus, USA, Dev Raj Gautam, Care-Nepal for their incredible support. Local partners; Schools, Farmer groups, Pesticide sellers, Co-

workers (RSG-Grantees), NGOs, CBOs, clubs, teachers, students etc also deserve thanks for their support during the project activities. I would like to thank Bishnu Hari wagle, Rajan Subedi, Prashant Shrestha, Santosh Paudel, Manita Khanal, Prashanta Ghimire, Anu Paudel, Sima Acharya, Bimal Kanta Dallakoti, Youban K Parajuli, Pujan Adhikari etc.

Last but not least, I would like to express special gratitude to RF for the financial assistance. I am personally am very much thankful to RF because its support has been playing crucial role in developing my career.



Sarus crane at farmland



Interaction during farm visit



Water sample collection



Farmer with pesticide



Pesticide preparation with naked



Woman spraying chemical pesticides



hand



Young sharing poster's message to his parent

without safety measures



Highly toxic chemical (for rodent control)



Pesticide selling with children doll (gift) shop



Pesticide selling in vegetable shop



School teaching



Poster dispatching shop's wall