

## 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               | Balram Awasthi   |
| Project title           | Human-Elephant Conflict Mitigation For The Welfare Of SWR And Buffer Zone Community Stewardship In Far-Western Part Of Nepal |
| RSG reference           | 21691-1  |
| Reporting period        | From 1 March 2017 to 30 March 2018   |
| Amount of grant         | £ 4940   |
| Your email address      | awbalramsnsctu@gmail.com   |
| Date of this report     | 11 June , 2018   |

**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   |
|--|--------------|--------------------|----------------|--|
| The study will attempt to generate positive attitude among the local people towards elephant conservation and minimize Elephant conflict through different awareness raising activities. |              |                    |                | This project was able to create the positive attitude of local people toward elephant conservation. But a 1-year study was not enough. Therefore long-term field survey with different awareness programmes are required to completely create elephant friendly environment in the community through the development of positive vibe among the stakeholders.  |
| The status of the extent of damage and impact of HEC conflict in SWR.  |              |                    |                | The study sites were divided into five blocks named Dodhara-Chadani, Majhagaun-Piparaiya, Nimbukheda-Gobariya, Baghphanta, and Beldandi area. Data on seasonal, spatial and temporal pattern of HEC (crop raiding, property damage, human injury) were collected through the household (n=300) survey as well as direct field visit in the affected site. Mainly the Chadani, Gobariya, Baghphanta, and Beldandi are found to be much affected by HEC. |
| To identify the Probable historical route of elephant  |              |                    |                | The elephant walk route was explored on the basis of social survey, stakeholder consultation, elephant presence/absence study and frequency of conflict in the study area. A total of eight major elephant movement trails were identified in the study area.  |
| To conduct workshops and interact with stakeholders on human-elephant conflict mitigation for the communities and park staff.  |              |                    |                | The interaction programme and workshop was successfully organised on the occasion of International Elephant Day 2017- August, 12. The chief Conservation Officer of Suklaphanta National Park, District Forest Officer (DFO), Conservation Officer of the NTNC/SCP, professors, universities students, journalists, elite people, and local communities were actively participated during this programme.  |

|  |  |  |  |
|--|--|--|--|
|  |  |  | <p>Nine Human Elephant Conflict Mitigation Groups were established in Buffer Zone Management Committee.</p> <p>Furthermore, two coordination interaction meetings were organised in collaboration with local stakeholders with the aim of mitigating the human elephant conflict and sustainable coexistence between human and elephant in the area.</p>   |
| <p>To prepare elephant conservation education materials for the HEC affected communities and mobilize conservation awareness campaign in project area.</p> |  |  | <p>Awareness materials such as brochure, leaflets and posters highlighting conflict mitigation measure were developed and distributed to local people, students and schools children during conservation outreach programs.</p> <p>A radio jingle in Nepali languages was developed and broadcasted in local Mahakali FM three times a day during the peak conflict season (September to December).</p> <p>An elephant conservation rally and school level open essay competition entitled "Maintain Coexistence Between Human and Elephant not a Conflict" was successfully conducted. The hoarding board was installed in the Mahendranagar City delivering message to reduce elephant conflict.</p> |
| <p>Human- elephant conflict hot spot map will prepare to show the existing conflict status.</p>  |  |  | <p>The GPS location of the conflict incidents such as crop damage, human casualties and property damage were noted and overlaid in GIS map to identify the HEC hotspot.</p>  |

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

There were no major difficulties occurred during the project implementation.

**3. Briefly describe the three most important outcomes of your project. The major three outcomes of the project are as follows:**

**a). Monitoring Human Elephant Conflict (HEC) status-**

The intensity of human-elephant conflict in Suklaphanta National Park (ShNP) was identified during the project period. The result showed that, human-elephant conflict has emerged as a critical issue affecting human communities and elephants in

many parts of the site. The majority (64%) of the respondents reported that HEC had increased significantly during the previous 3 years. Every year, herds of elephant are coming from SNP as well as from the Dudhwa National Park (India) through trans-boundary migration. A total of 140 HEC incidents were recorded (including fence and crop damage, destroying paddy and crop field, etc. Between August 1<sup>st</sup> - December 31<sup>st</sup> 2017, out of 140 HEC incidents, 103 were crop raiding incidents, 14 were property loss (such as fencing and water installations), 13 were destroyed homes, and three human injuries. Eighty percent of the respondents liked elephant but 59% of people do not like elephant in the ShNP. Most of the respondents (72%) were not satisfied with the present government compensation schemes. The lack of awareness and high expectation of local people for the compensation was found to be the main challenge for the elephant conflict.

**b) Identification of elephant movement patterns/ Walk Trails:**

The elephant walk route was explored on the basis of social survey, stakeholder consultation, elephant presence/ absence study and frequency of conflict in the study area. A total of eight major elephant movement trails were identified in the study area. Finding of elephant migratory trails are a roadmap to minimise the conflict frequency and direct encounter of humans with elephants. The frequency of movement of elephant in the Suklaphanta National Parks was concentrated during (August-November), ripening of rice/wheat/maize season.

| S.N | Route (questionnaire and key informant survey)  | Remarks                    |
|-----|---|----------------------------|
| 1.  | Dudhuwa- Laljhadi-Dhakka Beldandi- Lalpani- Ranitaal-Malubela   |                            |
| 2.  | Dudhuwa- Laljhadi- Dhakka Beldandi- 26/27 no. Piller-dodhara-chandani-India   |                            |
| 3.  | Dudhuwa- Laljhadi- Dhakka Beldandi- 26/27 no. Piller-Barkola Piparaiya-Mangalser(Bagphanta)-bankatti-Return back in the same route  |                            |
| 4.  | Malubela post-Bagphanta-Khairbhatti-Nimbukheda-Gobariya-Maghgaun  |                            |
| 5.  | Dudhuwa-Laljhadi-dhakka-26/27 no pillar- piparaiya-Bankatti-chandmari(Gobaraiyaa)-Khairbhatti-Malubella-chaudharkholla-Badanikheda(Daijee)Hattithala-chella-Hattithala simalphanta-Arjuni-Dhakka-Laljhadi-Dudhuwa |                            |
| 6.  | Malubela-Ranitaal-Radhapur-Beldandi-Dhakka-Laljhadi-Dudhuwa   |                            |
| 7.  | Chakarpur(India)-Chandani(Jogbuda)-dodhara-SNP-Dudhuwa  |                            |
| 8.  | Tanakpur(India)-Brahmadev-Chure-Hattithala-Bitchaphanta-Chisapani- Badiya   | (Ancient historical route) |

**c). Developed conservation awareness materials and distributed.**

The community interaction and awareness programmes were conducted to reduce human-elephant conflict which was one of the most important achievements of the project. During the project period several awareness programmes were done. In

those programmes Chief Conservation Officer of ShNP, District Forest Officer (DFO), Kanchanpur, Conservation officer (National Trust for Nature Conservation), journalists, teachers, undergraduate students from Siddhanath Science Campus and other local stakeholders were included. Such programmes were also helpful to the policymakers in respect to HEC mitigation.

Production and distribution of posters, brochures, leaflets and media message to the target groups were very effective in terms of disseminating the conservation message regarding human-elephant conflict mitigation and build up people's attitude towards elephant conservation for long term conservation of this Endangered species in Nepal.

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

The local communities were participated actively in all activities of the project since its beginning, which was a key to success of the project. The local institutions, Buffer Zone Management Committee (BZMC), local farmers, community groups, teachers, students, government agencies were also involved and co-operated during the project implementation, formulation of the project concept, identification of elephant walk trail, mapping as well as in different conservation programme (interaction, rally, easy competition and material dissemination). The local communities directly benefited in terms of knowledge upgrading in relation to human –wild animal interaction. All the participants learned about elephants, their behaviour, and causes of conflict with people and ways to avoid. Furthermore, local people have developed a skill to cope and careful handling of conflict situation.

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

Definitely yes, I would like to continue my work in Suklaphanta national park and its buffer zone area with more awareness and livelihood supportive activities to the community. It has been requested to continue the project for long term solution of human-elephant conflict mitigation and development of human-elephant coexistence. Furthermore, I have planned to extend the scope of my work in other HEC prone area including laljhad-mohana and brahmadev corridor of far-western Nepal which are need. I would also like to trial out different early warning detection systems as a mitigation method for HEC and continue awareness activities in the conflicted area.

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

The sharing and dissemination of the project output will be helpful to effectiveness conservation of elephant with encouragement of local people. I am sharing the findings of my work with Buffer Zone Management Committee, villagers and students and other stakeholders during the education programme. I have shared the findings of the project in national and international level conference conferences such as RSG Nepal conference, 2017(Oral Presentation), SCB India Conference, 2018 (Poster Presentation), AFEX-X 2017, China (Oral Presentation) and Conference on Science

and Technology(Oral Presentation) organised by Nepal Academy of Science and Technology, May 21-22, 2018). I have planned to keep all the findings and information of the project in my blog ([www.togetherwithelephant.blogspot.com](http://www.togetherwithelephant.blogspot.com)). Furthermore, I am planning to share the results of project through the publication of article in regional and international level scientific journals. The final report is being prepared will be kept in the ShNP library and Siddhanath Science Campus Library where interested people such as students, researchers, etc., can get access. Final video film on elephant conservation is under preparation and will be soon uploaded in my blog.

**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 Rufford Foundation grant was used from April 2017 to March 2018 for the proposed works in collaboration with all the project partners and local government authorities. Most of the project activities including pilot survey, extensive survey, capacity building training and workshops, co-ordination meetings and community educational outreach events were completed in time as anticipated. However, the detailed report submission period was extended two month more than the anticipated duration.

**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   |
|---|-----------------|---------------|------------|--|
| Transportation cost during the during field visit (intensive survey, campaign and monitoring)                                   | 160             | 200           | -40        | Due to decrease in exchange rate of £ sterling and increase market prices, previously estimated budget was insufficient        |
| Questionnaire preparation and printing , Materials/ Equipment, Topographic Materials, Stationery and communication              | 370             | 370           |            | As proposed  |
| Daily subsistence allowance for the investigator and assistant  | 1440            | 1440          |            | As proposed  |
| Elephant Conservation Essay Competition and Drawing competition (banner, prize, stationary etc.); Education awareness materials | 950             | 1050          | -100       | We proposed of making 2 copies of banner. However, finally we made 4 copies. We also made 200 copies of Brochure which was not |

|  |      |      |          |  |
|--|------|------|----------|--|
| (Banners, poster, leaflets, Brochure production and distribution). Hoarding Board Preparation and installation.  |      |      |          | includes in the conservation awareness. Supplementary outreach materials were produced in collaboration with project partners. Additional events were launched through support of Siddhanath science campus. |
| GIS and mapping  | 100  | 100  |          | As Proposed  |
| Public Presentation Programs (Video Tapes (Video film on Wildlife Conservation) and photographs development.)  | 120  | 120  |          | Final Video film on elephant conservation is under preparation and will be soon uploaded in my blog.   |
| District level and local community workshops regarding human Elephant conflict mitigation measure(2workshops x £250 each) Human elephant conflict mitigation and elephant conservation Rally | 750  | 750  |          | As proposed  |
| Formation of HEC mitigation group and establish an information centre and capacity building  | 250  | 280  | -30      | The increased expense is due to addition of one more HEC mitigation group.   |
| Conservation radio message development & broadcasting from local radio(Three month)  | 500  | 550  | -100     | The message disseminated through F.M and as well as daily newspaper which are not included in the proposal.  |
| Draft Report and final report preparation; Printing, Photocopy, Posting Charge, Project Overhead and Miscellaneous   | 300  | 200  | +10<br>0 |  |
|  | 4940 | 5060 | 120      | <b>Note:</b> * Local exchange rate at the time of grant receipt: 1£= NRS 129.37  |

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

The nature conservation should be linked with the livelihood of local people. Without uplifting the livelihood of local people, we cannot successfully implement the conservation work and neither obtains the support from local people. So I will search for type of conservation friendly alternatives for the enhancement of their livelihood. In the next step, I want support continuously to the human-elephant conflict mitigation group through the community based conflict management techniques including construction of appropriate biological fences such as honey bee, cactus plantation, alternative crop plantations, increase awareness amongst

the communities and other stakeholders on elephant movement, behaviour and habitat. This approach will help to build their capacity to avoid interactions with elephants and garner public support for elephant conservation. Effective conservation and management of the elephant requires in-depth knowledge of phylogeny and migration behaviour and role of seed dispersal of elephant.

No genetic studies have been conducted on this species in far west Nepal so far. So, there is urgent of genetic study for the determination of the level of genetic variation, population structure and gene flow among populations throughout the Nepal.

**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?**

Yes, the Rufford Foundation logo was used in all the awareness materials including flex, hoarding boards, banner, poster brochures, leaflets, audio-visual presentation, FM radio, media and other publications. The Rufford Foundation logo was also used during the oral and poster presentations in different national and international conferences. I mentioned name of Rufford Foundation when local people asked me about the source of funding of the project.

**11. Please provide a full list of all the members of your team and briefly what was their role in the project.**

**Bikram Singh Dhimi:** Undergraduate student at Siddhanath Science Campus, doing Bachelor level thesis on the topic of Status of Human Elephant Conflict in National Park, Nepal. He has participated in field data collection as well as volunteer during the different awareness activities in study area.

**Suraj Prasad Joshi:** Undergraduate student at Siddhanath Science Campus. He has participated in field data collection as well as volunteer during the different awareness activities in study area.

**Lata Pant:** Undergraduate student at Siddhanath Science Campus. He has assisted as field data collection as well as volunteer during the different awareness activities in study area.

**12. Any other comments?**

In fact, the project was successful. The project was implemented in collaboration with Suklaphanta National Park, National Trust for Nature Conservation (NTNC)/ SCP, Buffer Zone Management Committee (BZMC) and Radio Mahakali, Janakranti Daily, Sudhurkhabar Daily and local peoples, such collaborative efforts resulted very smooth and successful implementation of the project.

I would like to express my deep gratitude to Rufford Foundation for providing the funding to carry out this work. This project would not have achieved most of the outputs without financial support. I would like to thank Suklaphanta National Park,

NTNC/SCP, Buffer Zone management committee (BZMC) for their support. I appreciate the cooperation of teacher, staffs and students from Siddhanath Science Campus, local people and community forest users. My sincere thanks go to all the referees for their recommendations and continuous guidance. HEC remains to be the major reason of elephant decline, so this work is not only sufficient to save this endangered elephant species. Since we are continuing the efforts in Suklaphanta with hope of co-existence with local people and elephant. Therefore, we look forward to Rufford Small Grant for parallel support in these missions. Last but not a least, I would like to thank to all who supported directly or indirectly to accomplish this project.



A male elephant died in Punarbas Municipality-10 Bikas Basti near the Laljhandi Mohana corridor adjoining area of Suklaphanta National Park. ©Balram Awasthi