



Final Evaluation Report

| Your Details | |
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| Full Name | Fathul Bari |
| Project Title | Conservation of Threatened Vulture Species Through Research and Awareness Raising Programs in Chitral Pakistan |
| Application ID | 29158-1 |
| Grant Amount | GBP 6000 Requested and approved (GBP 5759 Received). |
| Email Address | bari@uoch.edu.pk |
| Date of this Report | 12-02-2022 |

1. 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 |
|--|--------------|--------------------|----------------|--|
| Investigate the availability and use of NSAID drugs in the veterinary hospitals and shops in the area. | | | | Surveys conducted in different government veterinary hospitals and shops in Chitral, Booni, Broze, Droshe, Ayun Bazars. Sixteen veterinary facilities including government hospitals and private shops were surveyed during the study in Chitral. The following drugs were found in different veterinary shops/ hospitals during the survey; Flunixin Meglumine, Diclofenac Sodium, Butadin, Phenylbutazone, Mefenamic Acid, Analgen. |
| Conduct surveys to explore population status of the three vulture species i.e Himalayan griffon, Bearded vulture and Egyptian vulture in Chitral | | | | Surveys conducted in 12 different valleys of Chitral including Shishi-Koh, Gehrait, Golen, Chitral Gol National Park, Tooshi-Shasha, Bakamak-Uchusht, Jughor, Koghuzi, Booni Gol, Qaqlasht and Ayun, Bumborait. The survey is conducted repeatedly. From December 2020 to December 2021 four seasonal surveys along with one preliminary survey have been conducted. The survey revealed an average count of 36 Himalayan griffon each season. Eight bearded vultures were sighted. No Egyptian vultures were found during the survey from the study area. |
| Food availability to these vultures in the area will also be investigated | | | | Food availability was also assessed during population surveys. Some dumping sites and places like butcher houses, etc., were also visited. Food availability appears very low despite presence and death of different wild animals. The butchers are putting their waste in the fast-flowing river making them unavailable for vultures. Some dump sites for domestic waste are available in different areas. But presence of vultures was not detected |

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| | | | | there. The field staff of wildlife department are also burying naturally dead animals due to the fear of facing an explanation call from high officials. |
| Conduct awareness raising programs for school children and community members regarding vultures, their importance and conservation of these species | | | | In coordination with education department nature clubs have been established in six different schools. While in another four schools, nature clubs were already established by SLF where awareness materials were provided, and lecture delivered. Vulture awareness material prepared and printed for distribution. Booklets prepared for school children and community members were distributed. Interactive sessions were conducted in schools. |

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

One of the obvious unforeseen difficulties was Covid-19 pandemic which hampered our work and disturbed our timeline. Producing awareness materials in local and regional languages is a difficult task. There are few experts in the field which can translate scientific work in local languages, but they were very expensive. We had selected schools in far flung areas, it appeared very difficult to conduct awareness sessions in those schools, when you have to invite/bring expert from outside area. Due to such reasons the awareness raising component of the project was not fully achieved.

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

- NSAID are available and in use in the local markets, although Meloxicam is also available. All such drugs are manufactured and transported to this part of the country from big cities like Lahore, Karachi and Islamabad. The line departments have assured us to remove the vulture toxic drugs. We found that most of the veterinary practitioners were unaware of the consequences of NSAID drugs and our programme provided the necessary understanding for environment and biodiversity friendly drugs and practices.
- We found existence and presence of Himalayan griffon in different valleys of Chitral District. We also recorded active nests in different valleys indicating a breeding population present in the area. Bearded vulture (*Gypaetus barbatus*) is rare as compared to Himalayan griffon. We have not sighted Egyptian vulture during our surveys in the study area despite literature show its summer grounds in lower Chitral.
- Wild animals like Markhor died due to natural causes are buried by the field staff of wildlife department, while the butcher houses put their waste in the torrent River Chitral, thus food availability is comparatively low.

- A significant part of the school children and other community members became aware of the ecological importance of vultures. They have developed positive perceptions and attitude towards vultures as compared to before their involvement in the awareness sessions. They understand the importance of nature conservation. The nature club established may be helpful in awareness raising programs in future.

4. What do you consider to be the most significant achievement of this work?

5. Briefly describe the involvement of local communities and how they have benefitted from the project.

Community members were present in the awareness raising sessions and some of them remained part of the population survey teams in different valleys. Local communities remained involved during our field activities in different capacities where we had the opportunity to benefit from their knowledge about presence of vulture in their locality. We also shared with them ecological importance of vultures and the need for their conservation. Those who were able to read the awareness raising materials/ booklets gained awareness and knowledge about vulture species and their ecological importance. Some of the community elders later discussed the booklet and the subject in detail with me and our other team members. Some of them also provided their feedback on the booklet itself and how we should improve it. Those who were part of our survey teams were also briefed about vultures, their ecological importance. The community members who accompanied our population survey teams also gained financial benefits as we provided remuneration from the grant to all of them.

6. Are there any plans to continue this work?

We have identified nesting areas of Himalayan Griffon in some valleys. I'll try to monitor those nesting sites on annual basis. Some areas along the international border with Afghanistan, particularly in the southern part of the study area, remained off limits for us due to security reasons. In the coming summer I'll try to visit those areas, if situation permitted so, in order to explore occurrence of Egyptian vulture population there. We plan to carry out a habitat suitability modelling for the species based on the surveys.

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

The NSAID drugs results have been shared with the line departments (Agriculture and Wildlife). The shopkeepers and veterinarians have also been informed accordingly. The results of NSAID drug surveys will be shared with SAVE partners at national and regional level for possible control and liaison with the regulatory authorities. The NSAID drug report has been shared with SAVE Program Manager (Dr. Chris Bowden) earlier. Population status of the vulture species are part of undergraduate thesis of Mr. Ishtiyaq Ahmad, who is working under my supervision. We plan to publish the results in a reputed journal.

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

The Rufford Foundation grant was used in 18 months period. Initially the specified time was twelve months period. Due to covid restrictions we couldn't work and our request for six months extension was approved by the grant administration.

9. Budget: 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. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

| Item | Budgeted Amount | Actual Amount | Difference | Comments |
|---|-----------------|---------------|------------|---|
| Salary for one Research Assistant for twelve months | 1800 | 1800 | | Salary per month was fixed as per contract. |
| Payment for Field Assistants/Porter/Guide for 90 days | 900 | 820 | -80 | Part of the balance was adjusted in vehicle hire. |
| Awareness materials+ maps+ printing | 400 | 384 | -16 | 74% was used in printing and publishing 26% was paid for preparation and editing of the booklet/ awareness materials |
| Travel costs/ Vehicle hire 40 days | 1000 | 1105 | +105 | Frequent hikes in fuel prices and more than 40 days of vehicle hire caused more amount allocation for this item. |
| Camp meal/food during survey | 1350 | 1100 | +250 | A significant amount was deducted by the bank for conversion and transfer of grant amount. Large part of this balance was adjusted there. |
| Conduction of awareness programs | 500 | 450 | -50 | 50% of the account maintenance charges were adjusted in this balance. |
| Miscellaneous | 50 | 100 | +50 | Paid for account maintenance to the finance section of the university. |
| Transfer charges | | 241 | +241 | We received 5759 GBP into our account due to |

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| | | | | deduction of (241 GBP) currency conversion and other charges from the central bank. |
| Total | 6000 | 6000 | | |

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

The next important step for me is to finalise the thesis of the student working on vulture and produce a good publication in one of the reputed journals. Along with this completion of the detailed final report compilation of the project which is to be submitted to The Rufford Foundation and other local partners such as Department of Wildlife.

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

Yes, the logo was used in the awareness materials which we produced for school children and other community members. The same logo was also placed on the banners, posters displayed at the time of awareness sessions. The logo was also placed on other documents and files related with the project.

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

| Name | Role |
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| Mr. Shah Fahad Ali Khan HoD, Department of Zoology University of Chitral | Project Advisory Team Awareness Expert |
| Mr. Javeed Farooqi Lecturer, Department of Zoology University of Chitral | Project Advisory Team Research and Awareness Expert |
| Mr. Jami Ullah Khan Social Mobilizer Snow Leopard Foundation, Chitral, Pakistan | Awareness Sessions/Lectures |
| Mr. Ejaz Ur Rehman Ex-NRM Specialist Snow Leopard Foundation Range Officer Wildlife Chitral Wildlife Division | Awareness Sessions/ Lectures |
| Mr. Muhammad Younis Field Biologist Wildlife & Ecosystem Research Lab University of Chitral | Population Surveys, Data Collection, Awareness Lectures and Coordination |
| Mr. Sami Ullah Student/ Volunteer | NSAID surveys, Awareness Material preparation, Data |

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| | Analysis, Mapping |
| Mr. Qazi Mashhood Ahmad Student/Volunteer | Population Survey of Vulture, Awareness Session Facilitation |
| Mr. Syed Mueenul Haq Student/Volunteer | Population Survey of Vulture Awareness Session Facilitation |
| Mr. Ishtiyaq Ahamed Student/ Researcher, Department of Zoology, University of Chitral, Pakistan | Population Survey of Vulture NSAID Drug Survey, Data analysis, Production of Research Publication. |

13. Any other comments?

Thank you very much for enabling us to carry out this project. Without the RSG financial support it was not possible to explore population of vultures and threats to their survival in the study area.