

**Monitoring & Conservation of Cheer Pheasant
(*Catreus wallichii*) in Jhelum Catchments, Pakistan**

Final Report

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Muhammad Naeem Awan*
Project sponsor:



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Cheer Pheasant in Incubation,
Photo by Muhammad Naeem Awan

Contact Information:

Muhammad Naeem Awan
Challa Bandi, Muzaffrabad
Azad Jammu & Kashmir
Pakistan. 13100
ajkwildlife@gmail.com
Naeemawan85@hotmail.com

EXECUTIVE SUMMARY

Cheer Pheasant is listed as an endangered species in Red Data Book (IUCN). It is found in some areas of Azad Jammu and Kashmir, especially in Jhelum valley where its population is declining due to hunting and habitat degradation by local people. The main habitats of Cheer Pheasant are distributed through southern foothills of the Himalayas from Pakistan to Nepal, occurring in northern Pakistan, Azad Jammu and Kashmir, two States of India (Himachal Pradesh and Uttar Pradesh) and one of the main threats to the species appears to be its distribution in small isolated population, the control and conservation of habitat is difficult as communities historically dependent on natural resources (Panday and Walls, 1997). Similarly in Jhelum catchment area, cheer pheasant is found in human inhabited areas and community is depending upon the natural resources for their livelihood. Community is converting the wild areas into agricultural lands for their livelihood, degrading the Cheer Pheasant habitat. Cheer Pheasant's major population exist in Jhelum Valley in Pakistan and its population was estimated in 2002 for the first time before that it was assumed to be extinct from Pakistan. After 2002 no systematic survey has been conducted on this species in Jhelum valley. The current project was designed to monitor the population trend of Cheer along with some conservation measures. Monitoring and conservation was done in three zones of Jhelum Valley i.e. Pirchinasi Zone, Gari Doppata Zone and Chianri Zone. We established a survey regime for the future monitoring of this threatened species in the project area and build the capacity of the wildlife field staff to monitor these survey plots for population estimates in future. A serious decline has been recorded in the population of Cheer in Two zones (Gari Doppata and Pirchinasi), while major population still survive in Chinari zone. The major finding is the breeding population of cheer from the project areas we found nine nests with eggs. It is recommended that area must be notified as protected area for the future conservation and protection of threatened Cheer Pheasant.

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I am sincerely thankful to Rufford Small Grants Foundation for providing me support for this project which has enables me to conduct survey of this important species in this far-flung area of the world after a long period of six year. My thanks are due to my referees for trust in my capabilities and guidance they provided me during the project period especially Professor Z B Mirza and Dr K Ramesh for their Kind attitude. Thanks are also due to Mr. Javid Ayub, Director Wildlife, Azad Jammu & Kashmir, for his encouragement and legal support which he provided during the implementation of the project. I am also thankful to all wildlife field staff especially Raja Nazir Ahmad, Abid Hussain Shah, Khadam Hussain Shah, Safder Mir and Imtiaz Hameed for the help they provided during the field survey.

Last but not least I am really thankful to World Pheasant Association, UK for the technical support which they provided me for this project and overall on the Gallifomes of Pakistan.

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1. Introduction

1.1. Background

Cheer Pheasant is listed as an endangered species in Red Data Book (IUCN). Cheer Pheasant's population is surviving only in some areas of Azad Jammu and Kashmir throughout in Pakistani part of its range. Major part of this population is found in Jhelum valley where its population is declining due to hunting and habitat degradation. The existing population seems to suffer disproportionately by indiscriminate hunting probably because they roost commonly at lower elevations and closer to inhabited areas than do other Himalayan Galliformes (Ali and Ripley, 1968-1998, Roberts, 1992 and Kalsi, 1999). As the species is found only in AJK at the end of its distributional range from Nepal towards Pakistan and no systemic survey has been carried out since 2004, so, it was necessary to monitor the population trends of this threatened species in its range in Pakistan. So, keeping in view all the above mentioned facts the current project was planned with the following aims and objectives

1.2. Aims and Objectives

The main aims and objectives of this project were:

- 1 Repeating existing survey points to monitor any change in Cheer Pheasant densities.
- 2 Identification of new monitoring sites with Cheer pheasant population.
- 3 Record incidental observations of mammal and bird species in the Cheer Pheasant habitat.
- 4 Assess fire damage on pheasant breeding habitat.
- 5 Capacity building of the wildlife staff in Cheer Pheasant's monitoring.
- 6 Creating Awareness among school children of some selected school existing in and around the Cheer Pheasant habitat.
- 7 Based on the finding, recommendations will be made for the better Conservation and Management of this threatened species.

1.3. Study Area

Jhelum catchment (Study Area) consists of three zones (Pirchinasi zone, Gari Dopatta & Chinari Zone). Pirchinasi zone is situated in District Muzaffarabad while other two zone in distract Hattian. The Jhelum valley of Azad Kashmir has major part of its human population (90%) is scattered as small human settlements in rural areas and only 10% is settled in comparatively larger towns as urban settlements. The human population mainly depends upon the subsistence agriculture, distributed as scattered small farms in favorable patches, and maintenance of livestock. Community of the Jhelum valley largely depends directly or indirectly upon harvesting of natural resources of the area. With the increasing human population and development of communication links and quality of life, the stress on the natural biotic resources is expected to increase in the coming years, warranting a careful future action plan for conservation/ management of natural resources leading to the conservation and management of important Biodiversity.

2. Methodology

2.1. Planning

Based on the pre-existing data and information collected after conducting meetings with the wildlife staff, local community and hunters, survey protocol was designed and a total of 17 sites were selected for the present survey, six new survey plots have been established along with 11 previously surveyed plots. As no research has been conducted in the study area since 2003, it is considered as an important survey regarding presence/ absence of this threatened species in Pakistan. Villages and schools in the vicinity of the survey plots were selected for the conservation education and awareness campaign.

2.2. Techniques used

Gaston's (1980) call count technique was used to estimate the population on the 17 selected calling sites in Jhelum Catchment Areas, Kashmir, Pakistan (Map Attached). Before starting surveys, training of wildlife staff appointed in the area, was carried out to build their capacity in Galliformes surveys.

Was launched conservation education and awareness campaign for community and school children through workshops, talks and distribution of awareness material.

3. Results

3.1. Conservation Awareness

i. Preparation of Awareness Material

Awareness material was prepared before starting activities. One poster having Cheer Pheasant Picture with Description on its global distribution, Habitat and threats was designed and printed. During each activity awareness material was distributed among the community and school children as a part of awareness as a part of awareness campaign.



ii. Awareness campaign for community members

Community living around the potential habitat especially near survey plots was sensitized through workshops, talks and distribution of awareness material. During these events they were educated regarding importance of Cheer Pheasant, its habitat and threats to this threatened species.



iii. Training of school children

Students of different schools, government and private were educated through different activities about the importance of the cheer pheasant. Workshops were organized for the school children to create awareness regarding global importance of cheer pheasant and role of Birds in ecosystem. They were involved in activities like quiz completion, field trips and talks about Cheer Pheasant and its habitat and threats to this species. They were also sensitized about its rapidly declining population

and factors involved in its decline. During these activities teachers of the school were also involve and shown their interest to protect the cheer pheasant and its habitat. Field trips were also arranged to practically educate the student about the habitat of the species and it conservation.



3.2. Monitoring

i- Capacity Building of the Wildlife Staff in Monitoring.

Wildlife field staff of Azad Kashmir Wildlife Department generally have knowledge in wildlife management especially law enforcement but as far as pheasant's surveys are concerned they don't have much knowledge so, as a first step field staff they were trained in monitoring of Pheasant's population especially Cheer pheasant. They will be trained in data collection using the Gaston's (1980) call count technique. During the training workshop they were told why Presence/absence data is important and how they will collect such data for effective conservation and management practices.



ii- Surveys of already identified sites

We selected 11 previously surveyed plots for monitoring the population of Cheer Pheasant in Jhelum Catchment Area. We recorded 126 birds on 11 previous survey plots. We reviewed the previously literature for the site selection and after review it is found that the most systematic surveys were conducted in 2002 by Awan et al (2004) during which large number of site were selected for surveys. The 11 selected surveys plots were monitored for population estimation using Gaston (1980) call count technique. The results showed a major population decline on all survey plots. Significant Population decline has been observed in Gari Dopata zone where a population of 8 adult pair was estimated in 2002 (Awan et al) but no calls has been heard from the survey plot CH5. Similarly a serious decline has been recorded on survey plot number CH7 & CH10 where population estimates are almost half than the 2002 estimates. Similarly on 8 previously survey plots population decline has been recorded.

iii- Surveys of new sites.

6 new survey plots were established which were not discovered in the last survey of 2002 and population of 80 birds has been estimated on these plots. Out of six newly established survey plots, one was located in Pirchiasi Zone (CH3), one in Gari Doppata Zone (CH4) and remaining 4 in Chinari Zone (CH12, CH15, CH16, CH17). Reasonable population has been recorded on Plot No. Ch3 but no call has been heard at the Plot No. CH4. On Survey Plots No. 12, 15, 16 & 17 cheer pheasant has been recorded.

4. Outcomes

- 1 Establishment of preliminary baseline survey regime (Presence/absence) of Cheer Pheasant in Jhelum Catchment Area, which can be used as reference for future surveys.
- 2 Population estimation of Cheer Pheasant in study area after almost one decade.
- 3 Organization and involvement of locals in the conservation of Natural Resources of the area especially cheer Pheasant and its Habitat.

- 4 Capacity building of wildlife staff in planning and conducting surveys of Galliformes especially in monitoring Cheer Pheasant on newly established survey plots for long term monitoring of this threatened species.
- 5 Created Awareness among locals especially school children about the importance of Cheer Pheasant, its Habitat and threats.
- 6 Scientifically sound documentation of Cheer Pheasant's population distribution and trends in Jhelum Valley of Azad Kashmir, Only a major Population of Cheer in Pakistan.

4.1. Major Outcome

During the survey breeding population has been recorded from the study area. A total of nine nests have been recorded. These nests were monitored to estimate the breeding success rate of the Cheer Pheasant in the area. Number of eggs was between 6-12 in all of the nine nests. In Five nests out of nine Nest posses no dead chick or any rotten egg, and shells of the eggs were present in the nests. Rotten eggs dead chicks were found in only 4 nests. A paper on breeding population status is under preparation and will be submitted for publication shortly.





5. Conservation Recommendations.

Results of these surveys showed that Population is decline in the Jhelum Catchment area. It is supposed that this decline is due to increase in human population who is converting its habitat into agricultural land due to hiking in the prices of daily use food items. Current surveys have revealed that a handsome population of Cheer is still surviving in Jhelum Valley under high anthropogenic activities. Human population growth rate demanding more and more natural resource utilization resulting into the increasing pressure on the habitat of Cheer, pushing its population near Line of control (LOC), where they found a safe refuge due to less human disturbance in the army area & it is clear from the results of current surveys that major part of population is found near LOC.

To address these issues a strong Conservation education and awareness campaign is the need of the time and uplift of socio-economic condition through enterprise development specially for women as a key target group is also important.

Unfortunately there is no protected area in the study area for the conservation and protection of the major Pakistani population of this threatened species. So , it is strongly recommended that Government must notify this area as Cheer Pheasant Reserve and to start some conservation project to conserve the surviving population of Cheer for future. Under such conditions the population of this important pheasant will keep on decreasing under different anthropogenic pressures.

Others (Additional Progress)

- A brief meeting was arranged with relevant wildlife officials to seek their views on the project.
- Meeting was conducted with the head of Zoology Department, University of AJK to involve the MSc students in the monitoring of this threatened species within AJK.
- Collection of Feather samples and fecal pellets of Cheer for Different studies.
- Wrap up meeting with the Director, Azad Kashmir Wildlife and Fisheries Department and presentation on activities of the project, outcomes and conservation Recommendation on Cheer Pheasant Conservation in Jhelum valley.

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Figure 1. Livestock in The study area



Figure 2. Forest Fires and Human settlement patterns in study area

