PHAYRE'S LANGUR POPULATION IN NORTHEAST BANGLADESH: UNDERESTIMATED AND UNDER-PRESSURE

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INTRODUCTION

- Phayre's Langur (Trachypithecus phayrei) is a globally endangered primate (Bleisch et al. 2008)
- It is distributed to South Asia (Bangladesh & India) and south-east Asian countries.
- Globally it's population is on decline by various anthropocentric threats (Bleisch et al. 2008; Molur et al. 2003).
- Numbers of forests harbor the species in northeast & south-eastern Bangladesh (IUCN Bangladesh 2015).
- No precise estimation of it's population available in Bangladesh.
- We are embarking a survey it's population and threats in 5 sites of northeast Bangladesh.



2003, Bleisch et al. 2008, IUCN Bangladesh 2015)

METHODS

Population Survey



- Survey is being carried out since March 2018 to till now
- Pre-established forest trails, roads and dried streamlines are used as transects.
- Distance Sampling methodologies are applied to collect population data (Buckland 2001, Campbell et al. 2016).

Data Analysis:

We present the results of population survey based on direct counting data only (as it's an ongoing y). Population density was calculated using the following formula (Sutherland 2006):

D = n/2LaD = densityn= number of individuals a= sampled area L= length of transect

Threats data were categorised for quantification and then percentile (Naher et al. 2017).

(Source: Gettins and Akonda 1982, Ahsan 1984, Molur et al.

Threats Assessment

- Direct observation of local people's forest use
- Personal interviews of local community people and forest departmental staff
- Extensive literature survey Expert's opinion





Satchari National Par Rema-Kalenna Wildlife Sanctuar Sylhet Division 0 0.25 km

RESULTS

Population



- Total 28 groups were recorded in 4 forests.
- Mean group size was 11.04 ± 5.54 (4 26 ind.)
- 47% individuals were adult.
- 38% adults were male and 62% were female. Adult male-female the ratio was 1:1.63
- Mean density was 0.70 ± 0.43 groups/km²
- 21% population living outside of protected areas.







Threats



DISCUSSION

- Less than 100 individuals was thought for more than last 15 years with less than 50 mature individuals in Bangladesh (Molur et al. 2003).
- . 135 mature individuals were recorded in only 4 forests of NE Bangladesh.
- So, we predict the population was previously underestimated.
- . Enough evidences weren't found to support 80% population decline in last 20 years (IUCN Bangladesh 2015).
- Habitat destruction and huge extraction of food plants (e.g. bamboo) are threating long term survival.
- The landscapes alternation due to agricultural expansion in and around protected forest areas was alarming.
- . Population has been surviving in fragmented landscapes under anthroopocentric pressures and non-protected areas.
- Immediate conservation measures are required besides continuous investigation on population and threats.

RECOMMENDATION

- Decreasing forest encroachment and habitat destruction.
- Building capacity of forest staffs, eco-tourists guides and public awareness.
- Proper implementation of laws and acts against illegal activities into the forest.
- Implementation of national park protocols and control tourism.
- Establishing local intelligence network to inform Bangladesh forest department regarding illegal hunting, poaching and trading animals.
- Update protection status of Rajkandhi Reserve Forest into a national park.

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