Introduction

➢ Globally, approx. 6 million sq. miles of land are allocated for national parks (Gray et al., 2016; Melillo et al., 2016)
➢ 300-350 million people living within or nearby parks (World Wildlife Fund, 2018)
➢ Proximity causes heightened human-wildlife conflict (Peterson et al., 2010)

Rationale

➢ Compensation schemes: ex-ante or ex-post (Boitani and Raganella, 2010)
➢ Schemes have been largely ineffective (Madhusan 2003)
➢ People choose not to, or are Unable to, report their loss

Objective

➢ To explore the factors influencing the likelihood to report the loss from wildlife

Study Area

![Study Area Map](image)

Methods

➢ In-person survey included:
  Part I: Socio-demographic background of respondents
  Part II: Experience of human wildlife conflict
➢ 197 households were randomly surveyed
➢ Households within 1.5 km from forest were considered
➢ Survey date: July 2017

Theoretical Framework

➢ Dependent variable (Y): “whether the respondent has reported a loss after experiencing human-wildlife conflict”
➢ The probability of a “yes” response was estimated given the independent (X) variables as:

\[
\pi(x) = \text{Probability (} Y = 1 | X = x) = \frac{e^{\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_n x_n}}{1 + e^{\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_n x_n}}
\]

Results

➢ All respondents reported crop loss, and about 60% reported livestock death

| Table 1: Logistic Regression showing only significant variables |
|----------------|----------------|----------------|
| Variables      | Coefficient (β) | Standard Error (SE) | Level comparisons |
| Age            | 1.63**          | 0.65            | 30-39 vs 20-29 |
| Gender         | -0.53**         | 0.26            | Male vs Female |
| Common Leopard | 0.83**          | 0.34            | Yes vs No      |
| Bengal Tiger   | 0.63***         | 0.22            | Yes vs No      |
| Asian Elephant | 0.58**          | 0.27            | Yes vs No      |

Note: ** and *** indicates significance at α=0.01 and α=0.05 respectively

Conclusions and Policy Recommendations

➢ Statistically significant variables like age, gender, family size, common leopard, Bengal tiger, and Asian elephant were likely to influence the likelihood to report the loss
➢ Age 20-29 population and males in the community should be targeted while disseminating the information about compensation scheme
➢ The compensation scheme should also consider deer, monkey, porcupine, black buck, and wild birds rather than being limited to the current eligible species

Future Work

➢ This research could be expanded to include other parts of the country, and other developing countries that experience challenges with conservation areas

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References