



Research Article

ASSESSMENT OF HUMAN-LEOPARD INTERACTION IN VANSDA TALUKA, SOUTH GUJARAT

¹M.I. Dahya, ²A.A. Kazi, ³A.I. Shah and ⁴D. Nayak

¹BKM Science College, Valsad - 396001 Gujarat, India

^{2,4}College of Forestry, Navsari Agricultural University, Navsari - 396450, Gujarat, India

³B.P. Baria Science Institute, Navsari - 396445, Gujarat, India

Article History: Received 20th July 2021; Accepted 19th August 2021; Published 25th August 2021

ABSTRACT

The leopard has been a menace in the Vansda Taluka since the occurrence of negative interaction with this cat has increased many folds in the last decade. In 42 villages of Vansda Taluka, 29 human casualties were reported in five zones of the study area in the last ten years and out of them, maximum incidents were reported in North zone (n=8), whereas the least were from West zone (n=2). Farmers working in the sugarcane fields have been found the most vulnerable in this study. Out of total casualties on humans, the highest (n=10, 32.14%) were reported in the age group of 31 to 40 years, followed by 21 to 30 years (21.4%). The highest casualties (n=21, 75%) were in the evening time between 4 to 10 pm, whereas 26.5% casualties were in the morning 4 to 10 am. 66 % incidents have been experienced during the crop operation work followed by livestock rearing (22%) and household work (12 %). The study shows a significant variation in the activities of the victim while the attack of leopard coincides with time, location and type of activity. A base map has been prepared by using 0.79 cm scale to understand the activity of leopards and chances of human interaction in the study area.

Keywords: Leopard, Interaction, Human causality, Vansda.

INTRODUCTION

Leopard is one of the most common animals in human-animal conflict (Karanth *et al.*, 2012; Khorozyan *et al.*, 2015). Reasons for high human-leopard conflict are due to the greater adaptability of leopard's diet- from mammals, arthropods, rodents, amphibians to rotting carcasses (Daniel *et al.*, 1999; Karanth *et al.*, 2012). In most part of India, government grant ex-gratia for livestock damage, crop raid or human injury by any wild species including leopard; however, a large sum of rural population is unaware about these compensatory schemes. Sometimes villagers indulge in retaliatory killings because of high panic or aggravated anger (Athreya *et al.*, 2015; Malviya & Ramesh, 2015). In one of the studies by Terborgh *et al.*, (2002), 11 people were killed by Leopard in 1995; and as a reaction villagers killed 17 Leopards in a small village of Karnataka. Attacks on livestock are tolerated to a large extent due to the inherent non-violent attitude of the people and also due to the ex-gratia paid by the

government, but human-leopard conflict turns uncontrollable once human injury or deaths are experienced. One of the most important factors that allow leopards to survive close to human habitation is large number of stray animals. India is agriculture-based country and livestock is a subsidiary vocation. Most of the cattle are grazed around village lands, kept near homes and similarly large numbers of stray dogs can be seen in the cities (Dahya *et al.*, 2021; Dhurandhar *et al.*, 2013). Moreover, population control of stray animals is not routinely carried out and cows are not killed because of religious sentiments (Athreya & Belsare, 2007; Athreya *et al.*, 2016). This has lured leopards from forests to villages and towns. Sugarcane field, tea plantation and other tall crop like jowar and bajra have provided ideal habitat, and thereby imposing leopards to live close to humans and consequently cause the conflict. In Gujarat too, the same reasons are guessed as possible causes for the increasing in human-leopard conflict (Mishra, 1997; Mukherjee & Mishra, 2001).