



Assessing the Impact of Stray Animals on Road Safety and public well-being in Jaffna, Sri Lanka

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Abstract

Ensuring the safety of humans and animals in public spaces is crucial, particularly concerning the movement of stray animals on roads. This research evaluates the impact of stray animal movements in Jaffna, focusing on road safety. Utilising Global Positioning System (GPS) and Geographical Information System (GIS) technologies, spatial data on animal movements were collected and analysed using ArcMap 10.4. Additionally, secondary data on animal-related incidents, including bites, attacks, and accidents, were obtained from the Jaffna Teaching Hospital and Jaffna Police Station for a comprehensive statistical overview. The study mapped 300 locations of stray animal movements, finding that dogs constituted 84 percent of the observed animals, mainly active in the morning and evening. Cow movements accounted for 13 percent, while cats represented 3 percent. Between 2020 and 2023, over 15,000 individuals experienced animal bites, and more than 1,554 reported animal attacks, with many accidents involving stray dogs, especially near motorbike riders. Additionally, some dogs strayed from their homes, contributing to road hazards. Cow movements were often linked to food waste, as people regularly feed them during the day, notably near jewellery shops, where their presence is seen as a good omen. The study also highlighted public health concerns related to animal waste on roads, posing sanitation issues. Factors contributing to these challenges include inadequate animal welfare laws, lack of vaccinations, irresponsible pet ownership, and improper feeding practices. The study recommends implementing stricter animal control regulations, enhancing public education on responsible pet ownership, and promoting humane cow-rearing programmes to address these issues. Emphasising a compassionate attitude towards animals and integrating safety strategies can improve the Human-Pet Friendly Approach and enhance overall safety and public health in Jaffna.

Keywords: Hazards, Human-Animal Protection, Human-Pet Friendly Approach, Stray Animals

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