2022

DRIVERS OF HUMAN–WILDLIFE INTERACTIONS IN A CO-EXISTENCE AREA: A CASE STUDY OF THE NGORONGORO CONSERVATION AREA, TANZANIA

Oswin F. Linuma, Anesi S. Mahenge, Rubhera R. A. M. Mato & Alex D. Greenwood

Linuma, O. F., Mahenge, A. S., Mato, R. R., & Greenwood, A. D. (2022). Drivers of Human–wildlife interactions in a co-existence area: a case study of the Ngorongoro conservation area, Tanzania. *Discover Sustainability*, *3*(1), 45.

ABSTRACT

Communities in Africa bordering national parks or protected areas commonly overlap with wildlife. However, it is unclear to what degree such overlaps result in interactions with wildlife. The Ngorongoro Conservation Area (NCA) was designated a multiple land-use conservation area in 1959. Maasai and Datoga pastoralists and Hadzabe hunter-gatherers reside with protected wildlife in NCA. The study was carried out in four Maasai villages within the NCA, including Kayapus, Endulen, Meshili, and Nainokanoka. A cross-sectional study was used to assess drivers of human–wildlife interactions using questionnaire surveys, focus group discussions, and field visits. A total of 396 households participated in the survey. The collected data were analysed using qualitative data analysis techniques and descriptive statistics such as frequencies and means. The habitat, which comprises water, pasture, shelter, and space, accounted for 100% of interactions, indicating that it is the primary driver of human–wildlife conflict. Other driving factors for human–wildlife interactions are the increase in wildlife, collections of firewood, domestic animals kept, and influence of community sleeping arrangements, searching for traditional medicines, and killing of lions for ritual purposes or defense. Large household sizes (36 family members) coupled with climate change have also driven and fuelled human–wildlife interactions. Challenges identified as threatening human–wildlife co-existence are injuries, deaths, disease transmission, and destruction of property. To mitigate human–wildlife conflicts, the following are recommended: the increase in boarding schools coupled with the increase in enrolment of students in boarding schools or providing reliable transport, distribution of tap water, increasing food assistance to the community living in poverty, controlling population increase through reallocation the population in other areas, introducing zero-grazing, using biogas, discouraging community sleeping arrangements, i.e., humans with calves in the same house, improving record-keeping of the wildlife attacks, provisional dissemination of research findings to the community.