

## ABSTRACT

Globally, the conservation community had continued to harness the use of ICTs in the management of the protected areas, including monitoring of endangered or threatened animals in their habitat. The adoption and use of advanced technologies in wildlife monitoring have shifted the traditional models in conservation management. This study aimed at assessing the effectiveness of ICT uses in sustaining wildlife animals monitoring within the conservation areas in Tanzania. The study was conducted at Ngorongoro Conservation Area Authority which is the institution under the Ministry of Natural Resource and Tourism.

This study was important as it enabled the institutions and government to understand in detail how ICT uses can effectively contribute into sustainable wildlife management. The associated challenges such as human-wildlife conflict, poaching, inadequate tracking of animals, inadequate controls of wild animal's movement and destructions of the environment can greatly be addressed through technologies.

The study was carried out in Ngorongoro Conservation Area whereby the respondents from the NCAA management team, Wildlife and Range Management, Research and Development, Planning and Investment, Protection Service, Tourism Service and ICT departments were involved. The choice of respondents was based on the fact that they were the ones with direct and indirect roles of monitoring wildlife activities carried within the conservations area. The research design in this study used a quantitative approach in collecting data.

The data were collected from the primary source using various methods for the data collection. In this case, a structured questionnaire and document review were used to collect data. The data were collected from 100 respondents and analysed using correlational and linear regression techniques to depict the existence of relationships among variables under study. The study findings revealed that effective use of ICT has a strong and positive relationship in wild animal monitoring performances.

