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## Forest conservation practices: insights of local communities near wildlife-protected areas in Ghana

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### Abstract

Effective forest conservation depends on active community participation, however, local communities in Ghana are often excluded from policy development and decision-making processes. This study explored community perspectives on forest conservation by identifying practices that local inhabitants believe could help preserve and sustainably manage two wildlife-protected areas within the forest–savannah transition zone of Ghana: Boabeng-Fiema Monkey Sanctuary (BFMS) and Kogyae Strict Nature Reserve (KSNR). A cross-sectional survey of 300 respondents was conducted using semi-structured questionnaires to gather insights into conservation practices suggested by the local populace. A Multinomial Logistic Regression (MLR) model was employed to assess whether socio-demographic variables such as age, sex, education level, occupation and residential status influenced these perspectives. Results indicate that wildfire prevention was the most emphasised conservation strategy in BFMS (38.6%), reflecting concerns over increasing fire incidence and its ecological impacts, whereas, respondents in KSNR (37.2%) emphasised the need for increased staffing and improved monitoring and enforcement capacity. Socio-demographic variables did not have a statistically significant influence on conservation preferences ( $p > 0.05$ ), indicating that direct interaction with the forest, as experienced by local communities, is one of the key drivers of knowledge on how to sustainably preserve and manage it. These findings highlight the important role of local knowledge and community-driven strategies in shaping sustainable land-use practices and improving governance of

protected landscapes. Integrating such perspectives into formal conservation policies can enhance ecosystem resilience, strengthen landscape multifunctionality and support equitable resource management. The study contributes to ongoing discussions on participatory governance and policy innovation in tropical landscapes and aligns with global sustainability goals, particularly SDG 13 (Climate Action) and SDG 15 (Life on Land).

**Keywords:** Biodiversity conservation, forest-savannah transition zone, sustainable forest management