

## Ecotourism Development in Ikogosi Warmspring, Nigeria: Implications on Its Floristic Composition and Structure

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**Abstract :** The high rate of infrastructural development in Ikogosi warm spring towards harnessing her great ecotourism potentials calls for a serious concern, as more forest areas are been opened up for public access and the landscape is modified. On this note, we investigated the implication of ecotourism development on the floristic composition and forest structure in Ikogosi. The study aimed at identifying the past and present status of infrastructural development, assessing and comparing the floristic composition and structure of the built- up/ recreational areas and undisturbed forested areas, to infer on the impact of ecotourism development on the study site. We conducted stakeholder interview and field observation to identify the past and present status of infrastructural development respectively. A total of ten quadrants were employed in the vegetation assessment to characterize the woody tree species composition, diameter at breast height and height, to obtain mean indices characterizing each part of the site. These indices were compared using T - test analysis. A total of 49 different woody tree species distributed in 21 families were identified in the built-in/ recreational areas while 67 different woody tree species belonging to 25 families were recorded in the undeveloped forested areas. Although, the latter has a higher mean diameter at breast height of woody trees, it was not significantly different from the former (T-test = -0.74, p = 0.46). On the contrary, the built-up area had a higher mean trees height than the undeveloped areas, but the difference was not statistically significant (T-test= 1.04, p = 0.30). Despite these, the slight reduction in richness and diversity of the woody tree species in the built- up/ recreational areas implies mitigating the negative effects of infrastructural development on the warm spring's vegetation.

**Keywords :** ecosystem services, forest structure, vegetation assessment, warm-spring

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