

## Developing Vulnerability Index for Human Wildlife Conflict in Kerala Pilot Study

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### Abstract

Human-wildlife conflict (HWC) has emerged as a critical environmental and socio-economic challenge in Kerala. Kerala, despite having 29.67% forest cover and rich ecological diversity, continues to witness rising incidents of human deaths, crop destruction, livestock loss and property damage. Existing studies, policies and response mechanisms **remain largely reactive**, fragmented and inadequately integrated.

This study tried to provide, quantitative approach towards human-wildlife conflict vulnerability in Kerala. The framework developed will help identify areas experiencing severe conflict, and locations where intervention is urgently required. The spatial outputs enable planners and decision-makers to distinguish between high, medium and low vulnerability zones, allowing for more targeted and efficient allocation of resources in Kerala.

Overall, the study provides a decision-support tool that can assist forest departments, local governments and planners in **prioritising mitigation measures, improving conflict preparedness and designing context-sensitive strategies** for reducing human-wildlife conflict in Kerala.

