



DEVELOPING AN AI BASED ANIMAL INTRUSION DETECTION AND PREVENTION DEVICE

Sekrop Innovations



Problem Statement

Human-animal conflict often leads to significant crop and livelihood losses for farmers and forest communities. Sekrop Innovations has developed Kavach, an AI-based animal intrusion detection and prevention device designed to reduce such conflicts. The solution helps protect agricultural fields by detecting animal movement and preventing intrusion before damage occurs.



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Technology

Kavach uses artificial intelligence to detect animals approaching agricultural fields and identify their species. Once detected, the system emits species-specific ultrasonic and infrasonic sound waves to safely deter the animals and prevent entry into the field. This intelligent detection and response mechanism enables effective and humane crop protection.

Highlights

Kavach is an AI-powered, solar-operated ultrasonic deterrent system that protects farms from wild and stray animals. It provides automated 24/7 crop protection through intelligent species detection and non-lethal ultrasonic and infrasonic deterrence. The device is fully off-grid and weatherproof (IP65), eliminating the need for manual night patrols while preserving wildlife through humane repulsion technology.