

KAU develops early warning system

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Thrissur: Kerala Agricultural University (KAU) has come up with a system to detect the intrusion of wild elephants into human habitats and give an early warning to the people and to agencies like forest department and police.

WILD ELEPHANTS

The system has been developed by S. Gopakumar of KAU's College of Forestry, in collaboration with scientists at Government Model Engineering College, Thrikkakkara and Integrated Rural Technology Centre (IRTC), Mundur, in Palakkad. According to Gopakumar, the system facilitates wireless messages to human habitations within 5km about elephant intrusion. The system uses infrared sensors and high-resolution cameras, which will capture images of the animals straying into the human habitations and send them to control room.

"The first sensing system was established in one of the main elephant pathways in the Pudur panchayath in Palakkad," he said. "Realizing that the first prototype was inefficient to distinguish the elephant from other animal species coming in the view of the camera, we developed an algorithm for the exact detection of elephants and to avoid false alarm. Once the moving animal is confirmed as elephant, the system sends a message to LORA receiver kept in a control room around 2km away. Subsequently, a wireless alert message will be relayed to the human habitations located around 3-5 KM from the elephant pathways," he explained.

M Pradeep of the Model Engineering College said about 15 infrared cameras would be required to cover an area of 1km in the forest boundary.

Director of research of the KAU P Indira Devi said that the device will be useful in sending an early warning to railway authorities about the presence of elephants on the Walayar-Kanjikode elephant death trap and warn forest staff about elephants attempting to cross national highway adjoining wildlife sanctuaries in Wayanad, Muthanga and Bandipur.