

KAU's alert system on elephant intrusions

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It facilitates wireless messages to human habitations within 5 km

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Against the backdrop of increasing man-elephant conflicts, Kerala Agricultural University (KAU) has developed a system to alert people on intrusion of wild elephants into human habitats.

The system, developed by S. Gopakumar, professor at KAU's College of Forestry, in collaboration with scientists at Government Model Engineering College, Thrikkakkara, and the Integrated Rural Technology Centre (IRTC), Mundur, facilitates wireless messages to human habitations within 5 km.

Dr. Gopakumar initiated the research, as part of a Western Ghats Cell-funded research project, for developing an all-weather electronic system for early warning on the presence of wild

animals. The first sensing system developed, using IR (infrared) sensors and high resolution IR camera, has been set up in the Wadi project area in Pudur grama panchayat in Palakkad, one of the main elephant pathways in the State.

"However, the first prototype has been found inefficient to distinguish the elephant from other animals coming in the view of the camera.

Thus we have developed an algorithm for the exact detection of elephants to avoid false alarm.

Once the moving animal is confirmed as elephant, the system sends a message to a receiver kept around 2 km away.

Subsequently, a wireless alert message will be relayed to human habitations located around 3-5 km from the elephant pathways," ex-

plained Dr. Gopakumar.

KAU Vice Chancellor P. Rajendran said the system assumed importance against the backdrop of increasing incidents of human-wildlife conflict, which is a growing concern.

"The overlapping needs of humans and the wildlife are the primary cause of such conflicts. Fragmented habitats, water and food requirements are forcing wild animals to intrude into human habitations," he said.

P. Indira Devi, KAU Director of Research, said the device would be also useful in sending early warning to railway authorities about presence of elephants in the Walayar-Kanjikode corridor.

M. Pradeep and Jagdeesh Kumar of Government Model Engineering College, Thrikkakkara, and R. Satish of IRTC, Mundur, were co-investigators of the project.