

India acquires eyes in the sky with drones

Unmanned Aerial Vehicles with cameras find increasing use, from tracking down tigers to solving murders.

S Srinivasan Last updated: 10 Mar 2014 05:34





Officials say UAVs act as force-multipliers for overstretched police force [Supplied/S Srinivasan]
Panic is in the air with a tigress on the prowl in the lower reaches of the Himalayas in India. The big cat has already killed seven people and could be waiting behind the bushes for its next kill.

Local residents have grown increasingly paranoid, as even the hunters hired to track and kill the big cat return empty-handed from the forests every sunset. They are now looking skywards - both for divine intervention and an Unmanned Aerial Vehicle (UAV) - to come to their aid.



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Similar hopes were pinned on a UAV in the state of Tamil Nadu, which was rocked by the gruesome murder of a software engineer. When investigators struggled to find leads to crack the case, they took the aerial route and the murder mystery was soon solved with the help of a UAV.

From windswept hilly Uttarakhand in northern India, where the tigress has struck terror, to the hot humid plains of Tamil Nadu, UAVs are being used by the authorities in India with aplomb and alacrity in tackling varied situations.

Be it tracking down a man-eater, cracking a murder case, or even keeping an eye on a protest march, having eyes in the sky are proving to be critical.

Mukesh Kumar Agarwal, an inspector-general of Tamil Nadu police intelligence unit, agrees.

The decomposed body of Uma Masheshwari, an engineer with the Tata Consultancy Services, was found inside thick foliage some 30km east of the city of Chennai, nine days after she had gone missing. She was robbed, raped and then killed.

"We used every lead, every technique," Agarwal says. UAV images of a red thread that hung from thorny bush were traced to the shirt of one of the accused and the case was cracked. Another suspect was incidentally arrested with the help of CCTV grabs from an ATM while he attempted to withdraw cash using the victim's credit card.

Security tool

Indian security forces are increasingly using many types of UAVs for crowd and traffic management, surveillance, disaster relief, and now for tiger hunts and crime investigation.

Ankit Mehta, chief executive officer of IdeaForge, a start-up manufacturing UAVs, says the drones with their cutting-edge technologies enhance the abilities of the state apparatus.

"Trying to spot the tigress is like trying to find a needle in the haystack," Mehta points out. The area where the tigress reportedly is spread across hundreds of square kilometres. "Scanning an area of 2km could itself have otherwise taken two days," he says.

Aerial cameras mounted on the UAVs are scanning the region and relaying back images that are being analysed in a laptop. That pinpointing the exact location of a moving target, like the tigress, still remains difficult, is beside the point.

But UAVs have in the recent past made impossible missions in difficult terrain possible. In June 2013, rescue teams fell back on UAVs to locate survivors after devastating floods and landslides swept the inhospitable terrains of Uttarakhand state.

The UAVS scoured 50 areas in the Himayalan foothills, 20 of which the rescuers had not been able to reach.

In July, police in Gujarat state employed UAVs to monitor pilgrims participating in Jagannath Rath Yatra, a religious procession, in the city of Ahmedabad.

Police in the cities of Kolkata and Mumbai are also using the drones to keep an eye on millions who gather every year for the immersion of deities during the popular Durga and Ganesh Chaturthi festivals.

"We regularly use the UAVs for law and order arrangements," says Mahesh Patil, a spokesman of Mumbai police.

In a nation where the police-population ratio is abysmal, India has an average of one policeman for every 761 people as against the UN norm of one for 450, UAVs become "force multipliers", admits one top officer.

Contraptions resembling helicopters and carrying a camera, the "multi-copters" - as they are also called - are remotely controlled from the ground and can be made to zoom, pan and tilt.

Mehta of IdeaForge says UAVs usage in India is destined to grow manifold.

"India has 1,000 battalions of armed forces, 14,000 police stations and 2,000 fire stations and they are all our prospective clients."

Growing demand

Business has already exponentially grown for Mehta since he set up his firm some years ago with two college mates. Today, he employs a staff of 35. "The business is profitable and has a huge unexplored potential," he explains.

Experts say the usage of UAVs has grown since India's financial capital Mumbai came under co-ordinated attacks in November 2008, which left more than 160 people dead.

Defence forces are now using them even for snow and avalanche studies.

"As we speak, a UAV is being used to hunt an adventure sports person who has gone missing near Bangalore," points out Mehta.

A drone also kept an eye on spectators as the nation's cricketing icon Sachin Tendulkar turned out to play in Kolkata's Eden Gardens for his penultimate match, before retirement.

Dr K Senthil Kumar, an associate professor with Madras Institute of Technology, says drones are potential life savers. "It can be deployed for transporting vital organs for transplantation from one hospital to another. A harvested heart

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"It can be deployed for transporting vital organs for transplantation from one hospital to another. It can also be used to transport medical supplies and medicines. It could be transported quickly without traffic hassles from one part of the city to another," he says.

Critics of drones in the western world say they are intrusive. But Indians share no such inhibitions over the prying eyes as yet.

Source: Al Jazeera

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