

Drones to the rescue

Remove curbs on UAVs for emergency services

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During Covid-19, we see unmanned aerial vehicles (UAVs, or drones) being used for critical services. These include monitoring crowds, disinfecting contaminated areas, thermal screening, broadcasting information and delivering medical supplies.

UAVs provide significant advantages over traditional methods. They minimise physical risks, response time and costs. They also enhance disaster resiliency. Drones fly at low altitudes and reach places big aircraft can't. They have a significant cost advantage in terms of operation and maintenance.

What makes drones highly efficient is their mobility, coupled with the capacity to carry payloads such as cameras and sensors along with in-built advanced navigation systems and basic safety features. It is easier and safer to guide them accurately to inaccessible areas.

Drones can capture real-time high-resolution images of disaster zones while covering vast areas, generating a vast amount of data. This allows response teams to map areas and conduct risk and damage assessment promptly. This also helps in enabling faster and safer search and rescue operations.

Globally, UAVs have been used by various aid organisations during natural disasters. In India, the National Disaster Management Authority used drones for the first time during the Uttarakhand floods in 2013, and subsequently during the Kerala floods in 2018.

UAVs are also used to transport medical supplies, first aid and essential food items to remote and inaccessible areas. Following Rwanda and Ghana, which use drones to deliver blood and essential medicines to far-flung clinics, Telangana is also working on a 'Medicine from the sky' project with the World Economic Forum and Healthnet Global to use drones for delivering medical supplies to remote areas.

Fire-fighting drones have proven effective in managing wildfires or structure fires along with search and rescue missions. Fire departments in many countries have already inducted drones. Mumbai's fire department is considering using drones to assist its personnel in operations. Drones are also being used by law enforcement agencies for crowd surveillance, traffic management and maintaining security at large events. Kerala police is deploying drones to track violators of the current lockdown.

Due to restrictive regulations, drone operations have been impacted in India. Government agencies providing drone services require to be 'No Permission No Takeoff' (NPNT) compliant and take permission for operations, just like other commercial aerial operators.

This is not practical under emergencies. The government should consider exempting such agencies from NPNT and Digital Sky restrictions by issuing a directive. Steps should be taken for access to the best drone technology while ensuring safety and security protocols.

Recent constructive steps by the government such as the announcement of six green zones for unhindered drone operations near six metros and organising stakeholder consultation on broadening of eligibility criteria for organisations to train drone pilots are encouraging, and will boost the drone ecosystem.

However, to ensure the prevalence of UAVs, especially for emergency services, the government must look at practical and concrete regulations and policies.

While easing out the policy for emergency services, the government may consider prohibitions outlining unauthorised activities and operation in the immediate area of manned aircraft.

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