



# DRONE APPLICATION AND RESEARCH CENTRE



# DRONE APPLICATION & RESEARCH CENTRE

01

Joint Initiative of  
ITDA and NTRO

02

Promote and  
nurture R&D in  
the field of Drone  
Technology

03

Train Government  
officials to implement  
Drone Technology  
safely and effectively

04

Integration and  
Adoption of Drone  
Technology in various  
sectors

05

Drone Ecosystem

# TRAININGS CONDUCTED



**DGCA Requirement**

**47 Trainings Conducted**

**1163 Personnel Trained**

**Hands On Practical, Simulator &  
Theoretical Training**



# CHAMOLI DISASTER

Home / India

## Uttarakhand disaster: No headway in tunnel, officials deploy drones, laser imaging

So far, 32 bodies have been recovered in the region, with over 170 people still missing.

Written By **Lalmani Verma** | Tapovan (Dharamshala) |

Updated: February 10, 2021 7:50:42 am



Rescue works underway near Raini village on Thursday.

- Restoring network connectivity in the affected villages in just 2 hrs by successfully sending a 48 core Fibre Optic cable, using drones, across the river bed of span 160 m.
- Drones monitored and surveyed the affected areas and accessed the view, which was beyond the line of sight.
- Aided in assessing the widespread damage and facilitating the search mission.
- Created 3D model of the Dam area for damage assessment.

# SURVEYING & MAPPING PROJECTS

1

Map Slum Area Located at Rispana Bridge

2

Mapping of State Headquarters

3

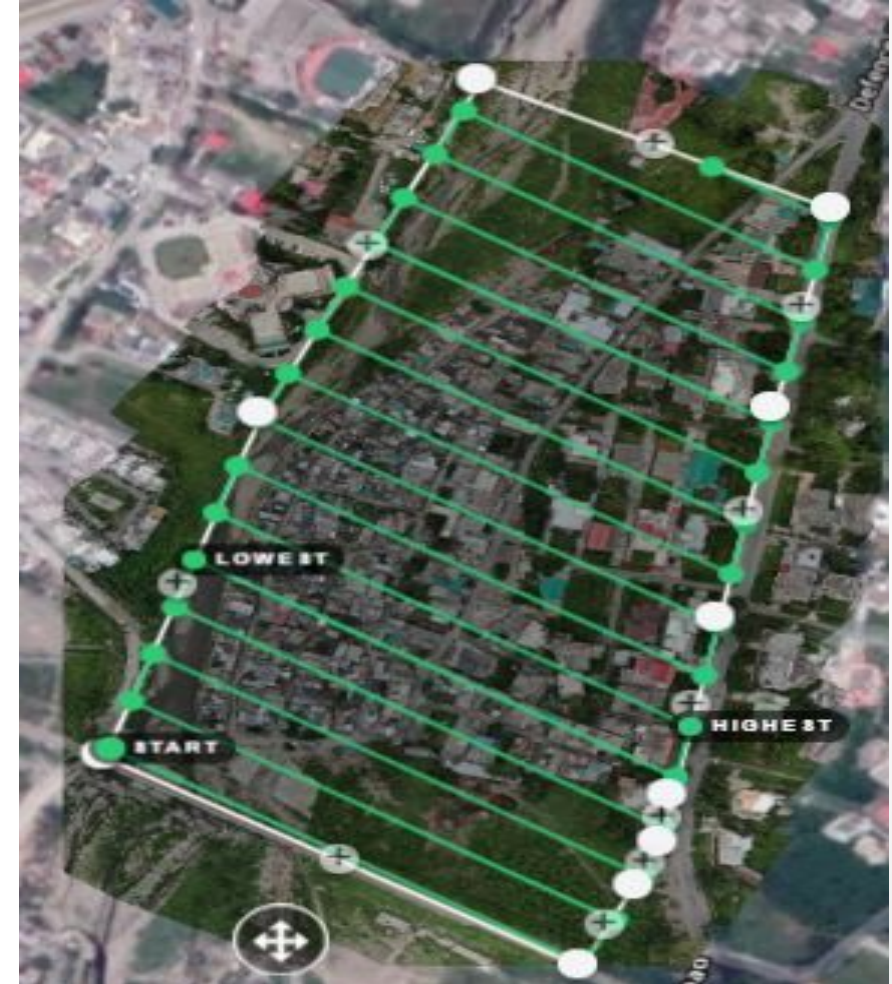
Dwara Gram Panchayat Mapping for Bharat Net

4

Maldevta River Bed Mapping

5

Dehradun Mines



Annotations

- ▶  Roads
- ▶  Permanent Houses
- ▶  Slum Area

Layers

- Ortho new



Polygon

Name

Mr Rakesh

Description

Owner

Label annotation

Measurements

Perimeter 68.01 m

Area 270.99m<sup>2</sup>

Styles

Stroke | 100

Stroke Width 2

Fill | 100

Export



 Polygon  

Name 

Mr Rakesh

Description 

Owner

Label annotation

Measurements

Perimeter 61.12 m 

Area 216.37m<sup>2</sup> 

 Styles

Stroke  
 D0021B | 100

Stroke Width  
 2

Fill  
 86E9E2 | 100

 Export



# DRONATHON@DRONANAGARI 1.0



Drone Hurdle Racing

Maximum Take Off Weight

Dhanvantri

Flying Eyes

Image / Video Analysis

Panel Discussions





◀ Drone Hurdle Racing ▶



**DRONATHON@DRONANAGARI 1.0**



◀ Maximum Take Off Weight  
Dhanvantri ▶







# DARC DRONE

- DARC was appreciated by Hon'ble Civil Aviation Minister Shri Jyotiraditya Scindia for demonstrating the capabilities of in-house 3D printed drones.
- Quadcopter
- Range – 4 Km
- Endurance – 20 – 25 mins
- Payload – RGB Camera
- Weight – 1.4 – 1.6 Kg



# DARC DRONE



**"नभ नेत्र" : Eye in the Sky for disaster management**



# Showcasing GCS to Prime Minister of India at Bharat Drone Mahotsav





# DARC ROADMAP

1

**RESOURCE CENTRE**



2

**RESEARCH & DEVELOPMENT**

3

**TRAINING**

4

**DRONE ECOSYSTEM**

5

**DARC AS NODAL AGENCY**

# PROJECTS DONE

**1 Chamoli Disaster**

**2 USDMA**

**3 Drone Flying Permission App**

**4 DARC Mapper**

**5 DARC App for DJI Drones**

**6 DARC Drone**

**7 Urban Development Pilot Project**

**8 Mining Department**

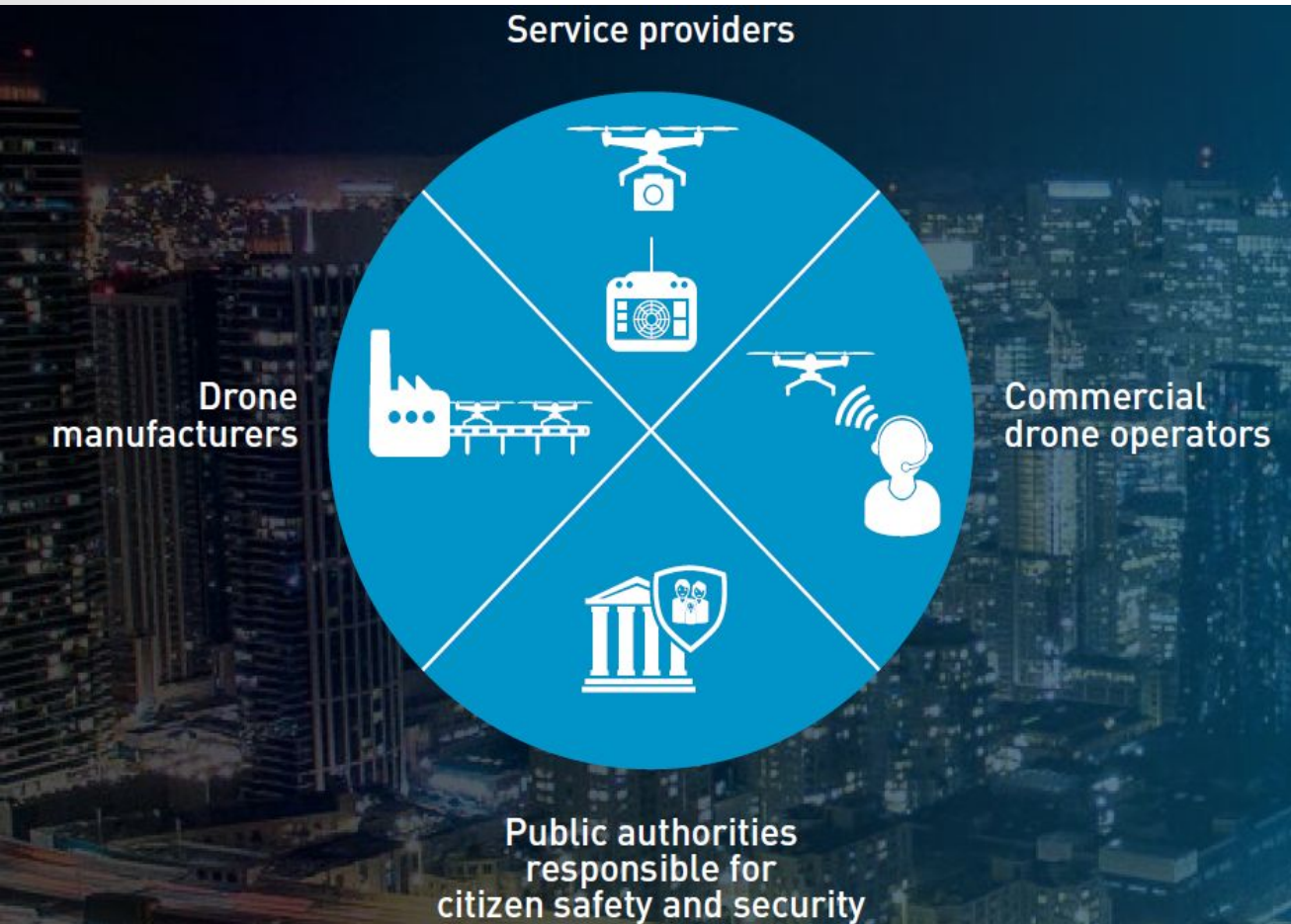
**9 Trainings**

**10 Dronathon@Dronanagari**

**11 UAV Forensic Hackathon**

**12 Drone Surveillance During Covid**

# ROADMAP FOR ESTABLISHMENT OF DRONE ECOSYSTEM



01

DRONE PARK

02

DRONE TESTING &  
CERTIFICATION CENTRE

03

INSTITUTIONAL FRAMEWORK  
-POLYTECHNIC INSTITUTES

04

CENTRE OF EXCELLENCE  
WITH IIT ROORKEE, STPI

**THANK YOU**