

## **1. Survey Of India To Deploy 300 Drones For Mapping Country**

**Prelims: Geography of India**

**Mains: GS-I- Salient features of World's Physical Geography; Distribution of key natural Resources across the world (Including South Asia and the Indian sub-continent)**

### **Why in News?**

- ▶▶ India's oldest scientific department, the Survey of India (SoI), historically tasked with mapping the country will for the first time rely on drones to map the country.

### **About the Mapping Exercise:**

- ▶▶ The main aim of the exercise is to provide good high-resolution foundation maps. This involves mapping of 75% of India's geography, about 2.4 million sq km of the 3.2 million sq km within the next two years.
- ▶▶ However, forests, hills and deserts are likely to be left out.
- ▶▶ Currently the best SoI maps have a resolution of 1:250000, meaning a 1 cm on the map represents 2500 cm on the ground.
- ▶▶ The maps that are being planned to produce will be of 1:500 resolution, meaning 1 cm will represent 500 cm.
- ▶▶ SOI has been using aerial photography for mapping purposes (taking pictures from planes) but it has been expensive and has its own limitations. So the organisation aims to procure about 300 drones to accomplish this task and so far about 30 have been sourced for the gargantuan exercise.
- ▶▶ Every square kilometre mapped by drones will be encapsulated in 2500 pictures and thus be a trove of digital data.

### **Advantages of the Mapping Exercise:**

- ▶▶ The mapping will create high resolution maps of land in villages which will also facilitate in the digitisation of land titles in villages.
- ▶▶ It also involves mapping of settled habitations in villages and based on the availability of accurate maps, residents will be finally able to get property cards as well as proper legal titles to their lands.

### **About Survey of India (SOI):**

- ▶▶ Survey of India, The National Survey and Mapping Organisation of the country functions under the Department of Science & Technology.

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- ▶▶ The Survey of India is India's central engineering agency in charge of mapping and surveying. It was set up in the year 1767 to help consolidate the territories of the British East India Company. It is one of the oldest Engineering Departments of the Government of India.
  - ▶▶ Its members are from Survey of India Service cadre of Civil Services of India and Army Officers from the Indian Army Corps of Engineers. It is headed by the Surveyor General of India.

