

1. Landslide Atlas of India

Why in News?

- National Remote Sensing Centre (NRSC) under the Indian Space Research Organisation (ISRO) has recently released the Landslide Atlas of India, a detailed guide identifying Landslide Hotspots in the country.

Highlights

- NRSC has the mandate for remote sensing satellite data acquisition, processing, archiving, and dissemination to various users
- For the first time, scientists did a risk assessment on the basis of 80,000 landslides recorded between 1998 and 2022 in 147 districts in 17 states and two Union Territories to build a “Landslide Atlas” of the country.
- The atlas used satellite data of ISRO to map all seasonal and event-based landslides like the Kedarnath disaster in 2013 and landslides triggered due to the Sikkim earthquake in 2011.
- The pan-India landslide database classifies landslides into – seasonal (2014, 2017 monsoon seasons), event-based and route-based (2000 – 2017).
- India is considered among the top five landslide-prone countries globally, where at least one death per 100 sq km is reported in a year due to a landslide event.
- Rainfall variability pattern is the single biggest cause for landslides in the country, with the Himalayas and the Western Ghats remaining highly vulnerable.
- Excluding snow covered areas, approximately 12.6 % of the country’s geographical land area is prone to landslides.
- As many as 66.5 % of the landslides are reported from the North-western Himalayas, about 18.8 % from the North-eastern Himalayas, and about 14.7 % from the Western Ghats.
- In the Western Ghats, despite fewer events, landslides were found to be making inhabitants significantly vulnerable to fatalities, especially in Kerala.