

Dirty Bomb

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In news— Defence Minister of India has recently expressed concerns over the alleged threat of the use of 'dirty bombs' in the ongoing war with Ukraine.

What is Dirty Bomb?

- The term 'dirty bomb' **refers to explosive devices that disperse radioactive material, such as Uranium, or Plutonium**, after being triggered when the conventional explosives detonate.
- It is **different from nuclear bombs as it doesn't need highly refined radioactive material**.
- It can be made using radioactive materials from hospitals, nuclear power stations, and even research laboratories. They can be **transported quite easily as well**.
- Moreover, **it doesn't create a radiation cloud as in the case of a nuclear bomb**. Instead, it scatters the radioactive material over a radius spanning a few hundred metres.
- There is **no recorded use of 'dirty bombs'**. They have, so far, **been tested only**.
- They are designed to disperse radioactive material over a certain area.
- The purpose of the weapon is to contaminate the area around the dispersal agent/conventional explosion with radioactive material, serving primarily as an area denial device against civilians.
- The aftermath of the use of such an explosive device can be devastating for the area and the clean-up could be highly expensive and time-consuming.
- It may well be rendered unusable for a long time, depending on the amount of radioactive material used in the bomb.