

Operation Rising Lion

Prelims: Current events of National Importance and International Importance | International Relations

Why in News?

Israel's military strikes on Iran were named Operation Rising Lion.

- **Rising Lion** The name is taken from a Bible verse, which symbolizes <u>Israel's</u> <u>strength and determination</u>, comparing the nation to a lion rising for battle.
- Israel's strikes focused on nuclear facilities, missile production sites, and senior Iranian military figures.
- Chief among them was Iran's *principal uranium enrichment site at Natanz*.
- Natanz is home to thousands of centrifuges and has long been at the centre of Western and Israeli concerns about Iran's nuclear ambitions.
- Reports showed fires near the above-ground Pilot Fuel Enrichment Plant (PFEP).
- The below-ground Fuel Enrichment Plant (FEP), which is three stories deep, is considered more resistant to conventional airstrikes.
- This marks the most direct Israeli attack on Iranian nuclear infrastructure since the *Stuxnet cyberattack* over a decade ago.

Iran's Nuclear Infrastructure

- Over the past five years, Iran has steadily accelerated its <u>uranium enrichment</u> <u>programme</u>, shortening the time it would take to produce enough fissile material for a nuclear weapon.
- This breakout time, the period needed to enrich uranium to weapons-grade levels sufficient for one nuclear device, reportedly shrunk to just a few weeks.
- Under the terms of the 2015 Joint Comprehensive Plan of Action (JCPOA), that timeframe was estimated at over a year.
- The International Atomic Energy Agency (IAEA) estimates that Iran possesses enough 60% enriched uranium, if enriched further to 90%, to manufacture nearly 4 nuclear warheads.
- Tehran maintains that its nuclear activities are for peaceful purposes.

Other Nuclear Facilities

- Fordow Located in the city of Qom, south of Tehran, is its most fortified.
- **Isfahan** Isfahan is a multi-purpose nuclear complex located on the outskirts of Isfahan in central Iran.
- The Uranium Conversion Facility (UCF) here is where yellowcake <u>uranium is</u> <u>processed into uranium hexafluoride (UF6)</u>, the gaseous form used in centrifuges for enrichment.

- Khondab Khondab is located near the city of Arak in western Iran.
- Originally known as the Arak Heavy Water Reactor, the Khondab facility has the potential to produce plutonium, another pathway to a nuclear bomb.
- **Tehran Research Reactor** The capital's research reactor is primarily used for academic and medical purposes.
- **Bushehr** Located in southern Iran, on the Persian Gulf coast, Bushehr is Iran's only operational civilian nuclear power plant.
- Constructed with Russian assistance, the facility is powered by Russian-supplied fuel, which is returned to Russia after use.

Reference

Economic Times | Operation Rising Lion

