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1 Bengal Florican (Source: Down To Earth)

The Bengal florican also called Bengal bustard, is a bustard species native to the Indian subcontinent, Cambodia, and Vietnam.

- *Small population also present on Nepal.*

Major Threats

- Habitat Loss (Grasslands)
- Collision with power transmission line

Protection Status

- **IUCN Status**: Critically Endangered.
- **Wildlife Protection Act of India, 1972**: Schedule I
- **CMS**: Appendix 1

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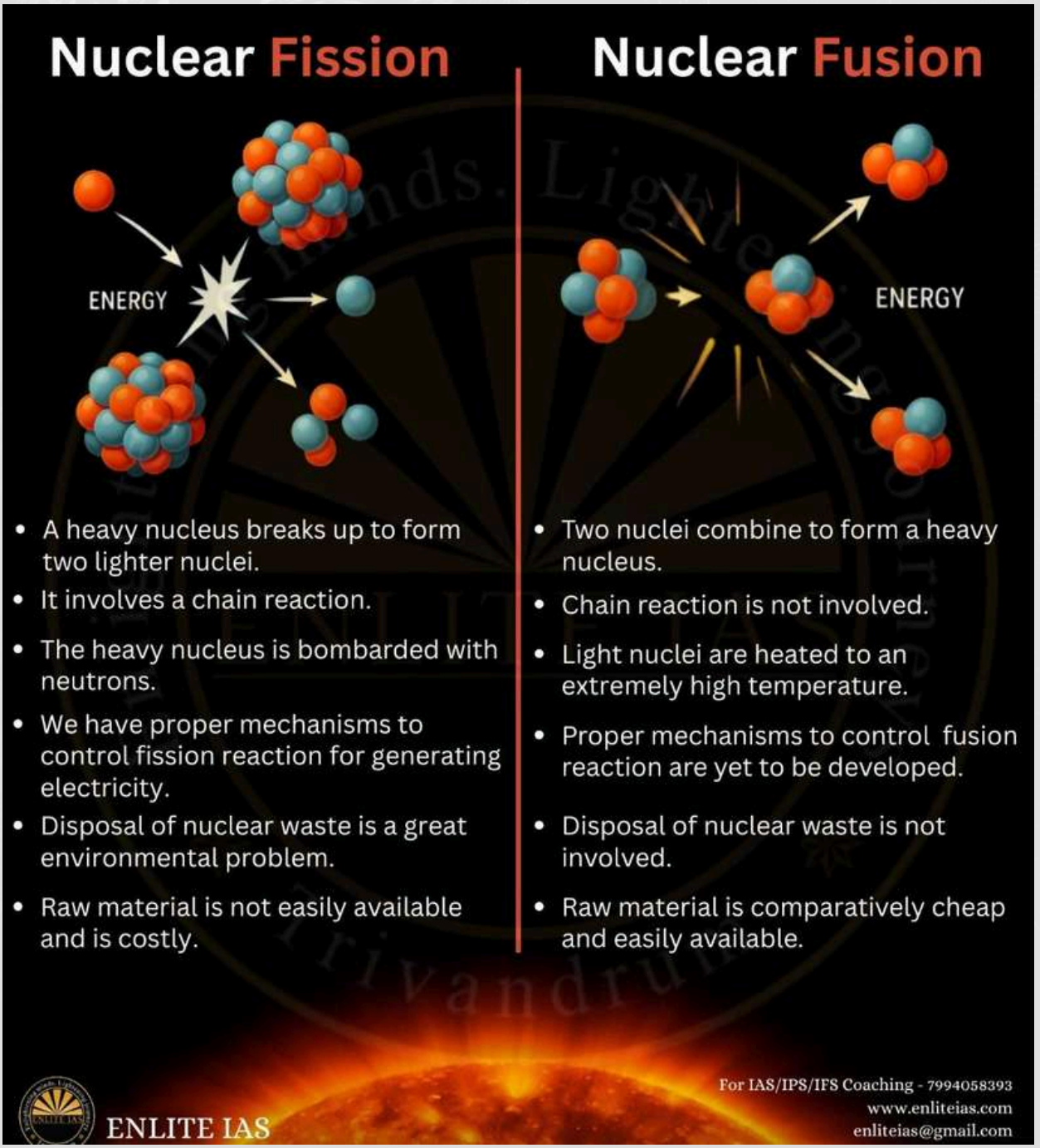
2 Nuclear Fusion VS Nuclear Fission *(Source: The Hindu)*



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3 Tropical Monsoon Intra-seasonal Oscillation and Mid-latitude Oscillation *(Source: The Hindu)*

Tropical Monsoon Intra-seasonal Oscillation

- Tropical monsoon intra-seasonal oscillation (ISO), often called the Monsoon Intraseasonal Oscillation (MISO) or Boreal Summer Intraseasonal Oscillation (BSISO), drives active and break phases in Indian summer monsoon rainfall.
- This oscillation features eastward and northward propagation of convective bands over the Indian Ocean and monsoon regions, with periods of 10-20 days (quasi-biweekly) and 30-60 days.
- It causes wet active spells and dry breaks lasting 1-3 weeks, impacting agriculture in South Asia during May-October.
- Key drivers include Madden-Julian Oscillation (MJO) influences and local air-sea interactions.

Mid-latitude Oscillation

- Mid-latitude oscillations refer to patterns like the circumglobal teleconnection (CGT), which involve wave trains in upper-level winds influencing monsoon variability from extratropical regions.
- Mid-latitude ISOs arise from jet stream interactions with topography and exhibit low-frequency variability (10-60 days) in the Northern Hemisphere extratropics.
- The CGT pattern, a wavenumber-5 Rossby wave train along the subtropical jet, originates near the Caspian Sea and extends across Eurasia to the Pacific.
- It links North Atlantic variability, like NAO-related waves, to Asian circulation

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4 Life Cycle of Star *(Source: The Hindu)*