African Grey Foam Nest Tree Frog

Prelims: *Current events of national and international importance | Species*

Why in News?

Recently, A study published highlights the unique communal nesting behaviour of the African grey foam-nest tree frog, revealing how cooperation among multiple frogs enhances survival of offspring.

- **Common Name –** African Grey Foam-Nest Tree Frog.
- **Scientific Name –** Chiromantis xerampelina.
- **Habitat –** Tree branches overhanging pools in South Africa.
- **Adaptation –** Eggs laid in aerial foam nests rather than water.



Nesting Behaviour

- **Foam Nest Construction –** Female secretes fluid; male and female mix it with hind legs into froth; nests built during rainy season (October–February).
- Eggs hatch inside; tadpoles drop into pool below.
- **Cooperative Strategy –** Often dozens of males join a female, creating nests up to three times larger, larger nests retain moisture longer, preventing egg dryness.
- **Paternity Split –** DNA testing shows multiple males father offspring in communal nests, ensuring survival of at least some offspring.
- **Surfactants –** Male skin secretions suspected to contain compounds that stabilize bubbles, preventing collapse.

- **Evolutionary Trade-Offs –** Large nests attract predators, spread diseases faster, and risk "cheater" females who lay eggs without contributing fluids.

An aerial foam nest protects developing tadpoles by providing a safe, moist nursery and then drops them directly into water, while aquatic egg laying leaves immobile embryos exposed to predators and water fluctuations.

Reference

The Hindu | African grey foam-nest tree frog

