Komodo Dragon

Recently, the Indonesian government ordered to relocate the residents of an island in eastern Indonesia called the island of Komodo in a bid to conserve rare Komodo dragons.

- This eviction has been ordered with a view for the recovery of the reptiles and the Komodo National Park (the only habitat for the world's largest lizard species).
- The recovery effort of this national park was needed due to the deterioration caused by excessive tourism.
- However, shutting down of such ecological sites is not the right approach unless it is an ecological emergency as the relocation of the residents may lead to loss of livelihood.
- Instead, the system could be revamped to build local communities into the revenue generation process and manage tourism flows.

Komodo Dragon

- The Komodo dragon is the **largest living species of lizard.**

- They are listed as **Vulnerable by the IUCN.**
- Komodo dragons hunt and prey including invertebrates, birds, and mammals.

- Comparison of Komodo’s venom with Snake’s venom:
    - It is claimed that Komodo's have a venomous bite, which has been shown to secrete an anticoagulant.

        An anticoagulant is a compound that prevents the victim's blood from clotting, causing it to bleed to death.

    - Snake venoms are composed of a complex collection of toxins, enzymes, and non-toxic substances. It can be classified into **three main types: Neurotoxins, Hemotoxins, and Cytotoxins.**
        - **Neurotoxins** are chemical substances that are **poisonous to the nervous system.** Neurotoxins work by disrupting chemical signals (neurotransmitters) sent between neurons. **E.g.: King Cobra**
        - **Hemotoxins** are **blood poisons** that disrupt **normal blood coagulation processes.** They work by causing **Red Blood Cells (RBCs) to burst open**, by interfering with blood clotting factors, and by causing tissue death and organ damage. **E.g.: Vine snake**
        - **Cytotoxins** are poisonous substances that **destroy body cells**. Cytotoxins lead to the death of most or all of the cells in a tissue or organ. **E.g.: Puff adders, Mozambique spitting cobras**
            - Cytotoxins help to partially digest the prey before it is even eaten.
            - Cytotoxins are **usually specific to the type of cell** they impact. E.g.: **Cardiotoxins** are cytotoxins that **damage heart cells. Mycotoxins** target and **dissolve muscle cells.**