

## Prelim Bits 27-06-2019

### High Methane Levels on Mars

- High amounts of **Methane** in the air on **Mars** was **rediscovered by Curiosity**.
- **This** lead to excitement whether this was an indication of life on the Red Planet.
- On Earth, methane (CH<sub>4</sub>) is a naturally occurring gas.
- Most of the methane on **Earth** is produced in biological processes.
- However, methane can also be produced by abiotic processes as chemical reactions, found in rocks, springs and aquifers.
- Since many living organisms in Earth releases methane, the presence of methane in Mars is considered a potential indicator of life.
- **Curiosity** has an instrument called the **Sample Analysis at Mars** which is a **laser spectrometer** capable of measuring atmospheric composition.
- But it cannot definitively say whether the source of the methane is biological or geological.
- In most previous observations on **Mars**, the concentration of methane in the Martian air has been low (**7 parts per billion**).
- Last week's initial readings were an unprecedented **21 parts per billion**.
- But the the second reading had **fallen back** to less than **1 part per billion**.
- So this suggests that last week's methane detection was a transient **methane plume**.
- However scientists haven't been able to determine how long the spikes last or why they differ.

### Varuna

- It is a **Indo-French Joint Naval Exercise**.
- It is held either in the Indian Ocean or Mediterranean sea with the aim of improving Indo-French coordination.
- The Indian Navy is represented by
  1. Aircraft carrier INS Vikramaditya,
  2. destroyer INS Mumbai,
  3. the Teg-class frigate,
  4. INS Tarkash,
  5. the Shishumar-class submarine INS Shankul, and

6. the Deepak-class fleet tanker INS Deepak.

- It is the largest ever joint exercise undertaken by the two navies.
- The exercise was conducted in two phases with first phase being held in **Goa**.
- The second sea phase is scheduled to be held at the end of May in **Djibouti**, located on the Horn of Africa.
- The exercise underscores the shared interests and commitment of both nations in promoting maritime security.

### **Assam NRC additional draft exclusion list**

- The additional draft exclusion list of NRC, containing the names of 1,02,462 people was released.
- This is apart from the 40.07 lakh people excluded last year.
- These 1 lakh were declared ineligible during the process of verification carried out by the Local Registrars of Citizens Registration (LRCRs).
- The NRC is being updated under the monitoring of the Supreme Court and the final list is scheduled to be released on July 31.
- The preparation of the draft exclusion list of the NRC was approved by the SC under **Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules, 2003**.
- NRC prepared in 1951 is being updated to include the names of people or their descendants who appear in the 1951 NRC, in any of the Electoral Rolls, or in any of the admissible documents issued up to the midnight of March 24, 1971.
- The additional draft list excluded the persons who were found to be,
  1. Declared Foreigner,
  2. Doubtful Voter,
  3. Persons with cases Pending at Foreigners Tribunals,
  4. their descendants, as applicable, discovered after publication of draft NRC,
  5. persons who were found to be ineligible while appearing as witness in hearings held for disposal of Claims & Objections,
  6. persons who were found to be ineligible during the process of verification carried out by the Local Registrars of Citizens Registration after publication of draft NRC.
- Those persons who have been excluded will be informed individually through Letters of Information with the reason for exclusion.
- Each letter will mention the venue of claim submission and hearing.
- Such persons can file their claims which will be disposed of through a

hearing by a Disposing Officer before the publication of the Final NRC on 31st of July.

- About 3.29 crore persons had applied for inclusion of names in the NRC and 2.9 crore were found to be eligible.

**Source: Indian Express, PIB**

