UPSC Daily Current Affairs | Prelim Bits 15-03-2021

Sounding Rockets

- Indian Space Research Organisation (ISRO) has launched RH-560, a sounding rocket to study attitudinal variations in the neutral winds and plasma dynamics.
- Sounding rockets are one or two stage solid propellant rockets used for probing the upper atmospheric regions and for space research.
- They serve as platforms to test or prove prototypes of new components or subsystems intended for use in launch vehicles and satellites.
- It is possible to conduct coordinated campaigns by simultaneously launching sounding rockets from different locations in a single day.
- ISRO started launching indigenously made sounding rockets from 1965.
- In 1975, ISRO consolidated all its sounding rocket activities under the Rohini Sounding Rocket (RSR) Programme.
- RH-75 was the first truly Indian sounding rocket from the Thumba Equatorial Rocket Launching Station (TERLS) [Numbers in the name indicates the diameter of the rocket in mm]

Flowering of Bamboo - A Threat

- Bamboo groves of Wayanad Wildlife sanctuary, and Mudumalai Tiger Reserve and Gudalur forest division in Tamil Nadu have fully bloomed.
- [The flowering of bamboo is a phenomenon said to occur once in the life cycle of bamboo plants.]
- With the advent of the season, migration of wild animals starts from the adjacent sanctuaries in Karnataka and Tamil Nadu to Wayanad due to shortage of fodder and water.
- Bamboo groves in the Wayanad forest are the mainstay of herbivores in the Nilgiri biosphere during summer.
- The recent flowering may adversely affect migration of wild animals owing to the mass destruction of bamboo groves after the flowering.
- Moreover, 25% of bamboo groves in Wayanad and nearby sanctuaries have bloomed since 2010, and the phenomenon is continuing.

Bamboo Regeneration

- Thorny bamboo (Bamboosa bambos) is a monocarpic (flowering only once)

plant belonging to the grass family.
- Its flowering cycle varies from 40 to 60 years.
- Profuse natural regeneration occurs from seeds after flowering.
- Seeds have no dormancy, and it helps germination under favourable conditions soon after seed fall.

Illegal Farming in Wenlock Downs

- Over 100 hectares of the total expanse of 1,500 hectares of the last remaining grasslands in the Wenlock Downs of the upper Nilgiris is being slowly eroded by encroachments of the Todas and Kotas.
- This is because many of the Todas and Kotas have leased the “forest lands” to non-tribals in exchange for a small fee.
- A majority of these encroached lands were formerly lands to which the Todas had grazing rights to, or Toda patta lands, where the Todas were allowed to cultivate with the permission of district administration.
- However, since the early 2000s, the adivasis have stopped applying for permissions and are cultivating without proper approvals.
- The problem is that the adivasis encroach on a portion of grassland one year, and the next they lease it to outsiders and move to another portion.
- There is also the question of the Forest Rights Act in this area, as to whether it would supersede the rights acknowledged under the Toda patta lands, or whether it offers additional protection.

Wenlock Downs

- Wenlock Downs Reserve Forest is a crucial wildlife corridor, as it allows wildlife from Sigur plateau to make their way up to the upper Nilgiris.
- The landscape is also one of the last remaining patches of Shola and grasslands in the entire Nilgiris other than Mukurthi National Park.

Turing Scheme

- Having left the European Union’s Erasmus scholarship programme after Brexit, the United Kingdom launched its own replacement called the Turing scheme - Named after the English mathematician Alan Turing.
- Starting in 2021-2022, it would enable schools, colleges and universities in the UK to apply for government funding to allow students to study and work across the globe.
- After schools and universities apply for funding for exchanges, university study and work placements, they can invite their students to apply for individual funding.
- The scheme would be a global programme in which every country in the

world will be able to partner with UK institutions.
- [This is in contrast with the Erasmus+ programme, which only included European countries.]
- It targets students from disadvantaged backgrounds and areas from where not many could benefit under the previous Erasmus+ scheme.
- The UK's Department for Education (DfE) has confirmed that India could be among the leading list of countries with which the UK universities seek to strike student exchange projects.

SERB-PRISM Portal

- The Science and Engineering Board (SERB) has set up a portal called 'SERB - PRoject Information System & Management (SERB – PRISM)'.
- [SERB is a statutory body of the Department of Science and Technology (DST) with the mandate to plan, promote and fund internationally competitive research in emerging areas.]
- SERB-PRISM portal is an e-platform that offers real time information regarding all research projects sanctioned by SERB from 2011 onwards.
- It would work as a comprehensive tool to help forge stronger scientist-scientist, and science-society connections.
- Among other things, it will help researchers to look at research trends, locate critical equipment in their vicinity and help seek collaborations across disciplines.

Seabuckthorn Plantations

- Himachal Pradesh government has decided to start planting seabuckthorn in the cold desert areas of the state.
- Seabuckthorn (or chharma) is a shrub that produces an orange-yellow coloured edible berry.
- In India, around 15,000 hectares in Himachal, Ladakh, Uttarakhand, Sikkim and Arunachal Pradesh are covered by this plant.
- It is found above the tree line in Himalayas, generally in dry areas such as the cold deserts of Ladakh, Lahaul and Spiti, and Kinnaur.
- **Benefits** - As a folk medicine, seabuckthorn has been widely used for treating stomach, heart and skin problems.
- Its fruit and leaves rich in vitamins, carotenoids and omega fatty acids, among other substances help people acclimatise to high-altitude.
- Besides being a source of fuel wood and fodder, seabuckthorn is a soil-binding plant which prevents soil-erosion, checks siltation in rivers and preserves floral biodiversity.

Source: PIB, The Hindu, The Indian Express, Down To Earth, Business Standard

