

SPECIAL PROGRAMME IN VILLAGE ALONG CHINA BORDER

Why in news?

- Union Home Minister Amit Shah is scheduled to launch the Vibrant Villages Programme (VVP) in Kibithoo, a village along the border with China.

What is Vibrant Villages Programme?

• Background:

- Vibrant Villages Programme (VVP) was announced in the Finance Minister's Budget Speech 2022.
- The programme envisages coverage of border villages on **Northern border** having sparse population, limited connectivity and infrastructure, which often get left out from the development gains.

• Coverage

- The Centrally sponsored village scheme will cover the border areas of Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim and Ladakh.

• Aims

- To ensure comprehensive development of these villages thereby improving the quality of life of people living in identified border villages.
- To encourage people to stay in their native locations in border areas, reversing outmigration from these regions and contributing to improved border security.

• Implementation

- The programme will provide funding for the development of vital infrastructure and creation of livelihood opportunities in 19 districts, 46 border blocks, four states, and one UT.
- It will cover 2,963 villages with 663 villages included in the first phase.
- With respect to tourism, regular field trips will be held for students as part of a Seema Darshan programme.

• Institutions involved

- Gram Panchayats will assist the district administration in developing vibrant village action plans.
- Through this 100 % saturation of Central and state schemes will be ensured.

- **No overlap with Border Area Development Program(BADP)**
 - The government has stated that VVP will not have an overlap with BADP.
 - The **Department of Border Management, MHA** has been implementing the BADP through the State Governments/ UT Administrations as part of a comprehensive approach to Border Management.
 - It covers 460 border blocks of 117 border districts in 16 States and 2 UTs
 - The programme aims to meet the special development needs of the people living in remote and inaccessible areas (within 0-10 km) situated near the international border.
 - It also aims to saturate the border areas with the essential infrastructure.

WHAT ARE RARE EARTH ELEMENTS (REE)?

Hyderabad based National Geophysical Research Institute (NGRI) has found large deposits of 15 rare earth elements (REE) in Andhra Pradesh's Anantapur district.



About Rare Earth Elements (REE):

- REE are a set of **seventeen elements in the periodic table**. These include the **fifteen lanthanides** on the periodic table **plus scandium and yttrium**.
- REE **are all metals**, and the group is often **referred to as the "rare earth metals"**.
- Although called "rare", **they are actually found relatively abundantly** in the Earth's crust.
- **Why they are called "rare"?** These metals are **very difficult to mine** because it is unusual to find them in concentrations high enough for economical extraction.
- They are **also referred to as "rare earth oxides"** because many of them are typically sold as oxide compounds.
- **Applications:**
 - REE and alloys that contain them are **used in many devices that people use every day** such as computer memory, DVDs, rechargeable batteries, cell phones, catalytic converters, magnets, fluorescent lighting and much more.
 - Rare earths are **used as catalysts, phosphors, and polishing compounds**.

GAGANYAAN MISSION: FROM ASTRONAUTS' TRAINING TO TECH UPGRADE, ISRO MAKING LEAPS TO MEET 2025 TARGET FOR MANNED MISSION

Why in News?

- The Indian Space Research Organisation (ISRO) has been busy working towards sending humans to space under the Gaganyaan Mission.

What is the Gaganyaan Mission?

- Gaganyaan project (expected to be launched in 2025) envisages **demonstration of human spaceflight capability** by launching a **crew of 3 members to an orbit of 400 km** for a 3 days mission and bring them back safely to earth.
 - It is part of the **Indian Human Spaceflight Programme (IHSP)**, which was initiated (2007) by the ISRO to develop the technology needed to launch crewed orbital spacecraft into low earth orbit (LEO).
- **Launch Vehicle Mark-3 (LVM3/GSLV Mk3) rocket** - the well proven and reliable heavy lift



launcher of ISRO, is identified as the launch vehicle for Gaganyaan mission.

How is ISRO getting ready for the Gaganyaan Launch?

- Some of the recent efforts -
 - HLVM3 launch vehicle,
 - Upgrading the mission control complex,
 - **Building an 'umbilical tower'** on the second launch pad (Sriharikota) for maintenance of the rocket while on the launch platform,
 - **Agreement with Australia** for setting up a mobile unit for direct-to-ground communication at Cocos Island.
- **The selected astronauts** have completed the first semester of the mission-specific training in India, after completing a generic training for spacefaring in Russia.
- The space agency **will undertake two test vehicle missions** to demonstrate crew escape systems mid-flight and the retrieval of the crew module once it splashed down in the ocean.

- This will be **followed by the first unmanned Gaganyaan mission** that will carry an unpressurised crew module.
- Subsequently, there will be two more test vehicle missions to check all systems before the **second unmanned flight**.

Other ISRO's Missions to be Launched this Year:

- The space agency has planned 15 satellite and launch vehicle missions this year, including the launch of the recently operationalised **small satellite launch vehicle and three space science missions**.
- There will be one mission of the heavy rocket LVM3, which is likely to carry on-board **Chandrayaan-3** likely by mid-2023.
 - The mission will **complete the objectives of Chandrayaan-2**, attempting a soft landing and then roving on the lunar surface close to the south pole of the celestial body.
- **The Aditya L1 mission** is likely to take place in June or July in 2023 on board the workhorse PSLV.

ELECTION COMMISSION SHELVES REMOTE VOTING PLAN FOR NOW

Why in news?

- The Election Commission's proposal to use specially-designed Remote Voting Machines (RVMs) has been shelved for now.
 - In December 2022, EC had announced that it is ready to pilot remote voting for domestic migrants.
 - The EC had invited political parties for a discussion and demonstration of the RVM in January 2023.
 - But the demonstration was not held as nearly all parties objected to the idea.
 - This proposal has been dropped temporarily as nearly all political parties are opposed to it.

What is Remote Voting Machine (RVM)?

- In order to enable remote voting for domestic migrants, a technological solution was proposed in the form of RVM.

- RVM relies on the creation of a robust electoral roll and identification mechanisms (to stop duplicate voting), and allow voters to vote remotely, in a safe and controlled environment.
- It was developed with the assistance of Bharat Electronics Limited (BEL) and the Electronics Corporation of India Limited (ECIL). It is based on the currently used Electric Voting machines (EVM) system.

What will be the benefits of RVM?

- Many times, migrants are reluctant to get themselves enrolled at their place of work for various reasons such as:
 - frequently changing residences,
 - not enough social and emotional connect with the issues of area of migration,
 - unwillingness to get their name deleted in electoral roll of their home/native constituencies as they have permanent residence/property etc.
- The remote voting initiative, if implemented, can lead to a social transformation for the migrants and connect with their roots. It will also result in better voter turnouts.

Different challenges that would have been faced by RVM

Administrative Challenges	Legal Challenges	Technological Challenges
Enumerating remote voters-self declaration? Providing controlled environment - ensuring secrecy of voting at remote locations Provision of polling agents at remote voting booths & ensuring identification of voters to avoid impersonation Number of booths to be set up & locations Appointment of polling personnel for remote polling stations and supervision thereof Implementation of MCC in remote location (other State)	Laws/Rules needing amendments <ul style="list-style-type: none"> • RP Act, 1950 & 1951 • The Conduct of Election Rules, 1961 • The Registration of Electors Rules, 1960 Defining Migrant Voter <ul style="list-style-type: none"> • Poll day absence to permanently shifted • Retain registration at original place in the context of 'ordinary residence' & 'temporary absence' legal construct Defining Remote Voting <ul style="list-style-type: none"> • Dealing with territorial constituency concept • Defining remoteness: outside constituency, outside district or outside state 	Method of remote voting Familiarity of the voters with the methods/ Multi-Constituency Remote EVM or any other technology. Counting of votes cast at remote booths and transmit to RO located in other State.

- There is no accurate number of migrants. Also, in 2017, the ECI had told the SC that it was not feasible to track movement of domestic migrants to allow remote voting.
- Also, migrants are not a uniform and defined class, with fluid identities, locations and situations.

AMENDMENTS TO THE IT RULES 2021: WILL PLATFORMS HAVE TO TAKE DOWN 'FAKE NEWS'?

Why in News?

- Recently, the Ministry of Electronics and Information Technology (MeitY) notified amendments to the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021**.
- The amendment empowers the Union Government to **designate an official fact checker for misinformation and 'fake news'**, and to regulate the online real money gaming industry.

What is the Background in which these Amendments Released?

- Social media companies have **traditionally** enjoyed legal immunity ("safe harbour") for content posted by users, as **the IT Act 2000 treats them as intermediaries**.
- According to the **IT Rules 2021**, they lose this status if they don't have a grievance officer for India or don't promptly respond to customer complaints.

SOCIAL MEDIA	DIGITAL MEDIA & OTT PLATFORMS	
<p>Rules Seek To Empower Users Of Digital Platforms & Ensure Accountability</p> <p>1] Tighter timelines to take down unlawful content, assist law enforcement</p> <p>2] Identify first originator of a message that causes identified offence</p> <p>3] Stricter rules for bigger platforms, including local presence</p> <p>4] Voluntary user verification mechanism</p>	<p>Seek to address concerns over digital content through...</p> <p>1] Self regulation & self-classification of content - universal, adult etc</p> <p>2] Code of ethics - To follow prescribed guidelines</p>	<p>3] Three-tier grievance redressal mechanism</p> <p>4] Subjects digital news media to same laws as traditional media</p>
<p>IN CASE OF NON COMPLIANCE...</p> <p>Intermediary will lose its safe harbour from user content</p> <p>Liable to punishment under IT Act or IPC</p>		

What does the New Amendment say on Fake News?

- **The fact check unit of the Press Information Bureau (PIB)** will be notified as the official fact checker for the Union Government.
 - PIB has been 'debunking' WhatsApp forwards and news articles on Central Government schemes and departments for years.
- Now, the fact check unit **could effectively issue a takedown order** to social media platforms and even other intermediaries across the internet stack, for potentially bypassing the **Section 69A of the IT Act, 2000**.

- **Section 69** allows the government to issue **content-blocking orders** to online intermediaries such as Internet Service Providers (ISPs), search engines, etc.
- If the PIB notifies any news as fake, social media companies **will lose their “safe harbour” for such content**, opening them up to lawsuits or other legal action.

Why has the Amendment Caused Concern and the Govt’s Response?

- According to organisations like the Editors Guild of India,
 - They were either **not consulted or that their views were not taken into account**.
 - **The amendment is akin to censorship**: Will have a chilling effect on the **fundamental right to speech and expression**, particularly on news publishers, journalists, activists, etc.
 - **It is legally contentious**. There is also a concern around the **government changing course on different provisions** in the same law.

What does the Amendment say on Real Money Online Games?

- The real money gaming services, **where users deposit money in expectation of winnings**, to be certified as “**permissible**” by a **Self-Regulatory Body (SRB)** consisting of experts and industry members.
- The “permissible” real money games would **likely be those where the outcome doesn’t depend purely on chance**.
- The games that are **not declared “permissible”** would fall under the “**betting and gambling**” category, opening them up to restrictions from States where such activities are prohibited.

[WHAT IS THE ARTEMIS II MISSION?](#)

NASA recently announced the crew that will fly aboard its Artemis II mission



About Artemis II Mission:

- It will be the **first mission to carry humans to the moon's vicinity since 1972**.
- It is the **second scheduled flight of the Artemis program** and the **first crewed Artemis mission**.
- During Artemis II, **four astronauts will fly around the moon** before returning to Earth.

- It will use the **huge Space Launch System (SLS) mega-rocket** and **Orion spacecraft** to launch the crew on the lunar flyby mission.
- The astronauts and mission controllers will **collect data on Orion and the crew's performance to assess how ready the Artemis program is to send people to the moon's surface.**

Key Facts of Artemis Program:

- It is **NASA's program to return astronauts to the Moon**, preparing the way for human missions to Mars.
- It aim to **"land the first woman and first person of colour on the Moon"**, explore the lunar surface.
- The Artemis program **includes the construction of the Lunar Gateway space station** in orbit around the Moon.
- **Artemis I: An uncrewed test flight of the Orion spacecraft**, launched on the Space Launch System (SLS) rocket on November 16, 2022.

INDIA'S FIRST 3D-PRINTED POST OFFICE

Bengaluru will soon have India's first post office constructed using 3D printing technology



About 3D-printed post office:

- **Location:** Cambridge Layout in Ulsoor, **Bangalore.**
- It is being **implemented by Larsen & Toubro**, which has experience in constructing 3D-printed buildings.
- It is a **1,100 sqft building** which is expected to **cost 30-40 per cent less than conventional buildings** because of the technological intervention.
- It is being built at a **cost of Rs 23 lakh.**

What is 3D-printing?

- 3D printing or **additive manufacturing** is a process of **making three-dimensional solid objects from a digital file.**
- The creation of a 3D printed object is **achieved using additive processes.**

- In an **additive process**, an object is created by laying down successive layers of **material** until the object is created. Each of these layers can be seen as a thinly sliced cross-section of the object.
- 3D printing **enables you to produce complex shapes** using less material than traditional manufacturing methods.

WHAT IS MIYAWAKI METHOD?

To tackle climate change and pollution, the Brihanmumbai Municipal Corporation (BMC) recently started creating a Miyawaki forest at Deonar village in Govandi.



About Miyawaki method:

- It is a **method of afforestation** developed by the **Japanese botanist** and plant ecology expert **Professor Akira Miyawaki**.
- It involves **planting two to four types of indigenous trees** within every square meter.
- In this method, **the trees become self-sustainable and grow to their full length within three years**.
- Miyawaki forests **grow 10x faster, are 30 x denser and contain 100x more biodiversity**.
- They are **quick to establish, maintenance-free after the first two-to-three years**, and can be **created on sites as small as 3 sq m**.
- The goals of a Miyawaki technique include **improving biodiversity, sequestering carbon, increasing green cover, lowering air pollution**, and preserving the water table.
- Miyawaki forests are **viable solutions** for cities looking to rapidly **build climate resilience**.

RONGALI BIHU

On the eve of the Rongali Bihu the Assam government has planned a spectacle around the folk dance and 11,140 artists from all districts of the state will perform together at Guwahati's Sarusajai Stadium.



About Rongali Bihu:

- It is one of the major **festival of Assam** which is commonly known as **Bohag bihu**
- It is the most popular Bihu that celebrates the onset of the Assamese New Year and the **coming of spring**.
- The word 'Rongali' is derived from 'Rong' which means **Happiness and celebrations**.
- This festival reflects the rich culture of Assamese society.
- During the celebration, traditional pat or muga silk or cotton **mekhela chadors** are worn by ladies (the two-piece attire).
- As a sign of affection and respect, **gamocha**, the traditional Assamese towel, also known as Bihuwaan, is exchanged.

Key facts about Bihu

- Bihu is a secular festival that is celebrated by people from all parts of Assam irrespective of caste creed or religious background.
 - The first Bihu is known as the **Rongali Bihu or Bohag Bihu**, which is celebrated in the **month of April**.
 - The second Bihu is known as **Kati Bihu or Kongali Bihu**, which is celebrated during the **month of October**
 - Finally there is **Magh Bihu**, which is observed during the **month of January**.
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