

POSHAN PAKHWADA

The Ministry of Women and Child Development will celebrate the fifth Poshan Pakhwada from 20th March 2022 to 3rd April 2023 with various activities nationwide.



About Poshan Pakhwada:

- The Poshan Pakhwada aims to raise awareness about the importance of nutrition and promote healthy eating habits through Jan Andolan and Jan Bhagidari.
- The **theme** of this year's Poshan Pakhwada 2023 is "**Nutrition for All: Together Towards a Healthy India**".
- With the declaration of 2023 as the International Year of Millets, this year the focus of Poshan Pakhwada will be to **popularise 'Shree Anna'**- the mother of all grains, as a valuable asset to address malnutrition.
- The activities during the Poshan Pakhwada will focus, inter alia, on the following key themes:
 - **Promotion and popularization of Shree Anna / Millets for nutritional-** well-being through the organization of drives to link Millet-based foods with supplementary nutrition, Home visits, Diet consultation camps, etc
 - **Celebration of Swasth Balak Spardha:** Celebrate and recognize the 'Swasth Balak' or Healthy Child as per defined criteria by generating a healthy spirit of competition for good nutrition good health and well being
 - **Popularize Saksham Anganwadis:** Campaigns will be organized to increase awareness and popularise Saksham Anganwadis with upgraded infrastructure and facilities as centres of improved nutrition delivery and early childhood care and education.
- **Nodal Ministry:** Ministry of Women and Child Development

What is Poshan Abhiyaan?

- Poshan Abhiyaan, launched by the Prime Minister of India on 8th March 2018, has been instrumental in ensuring people's participation and bringing the discourse on **nutrition to the forefront**.

- Poshan Abhiyan was launched to improve nutritional outcomes holistically.
 - Behavioural change at the individual and community levels is an important component to achieve the **desired goals of a Kuposhan-mukt Bharat.**
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VENUS

Recently, NASA Magellan spacecraft captured images of Venus' surface from different orbits. A few locations, including those suspected to have volcanic activity, were observed two or three times over two years.



About Venus:

- Venus the second planet from the sun, is the **hottest and brightest planet** in the solar system.
- Venus is **highly visible from Earth** due to its reflective clouds.
- Venus and Earth are often called **twins** because they are similar in size, mass, density, composition and gravity.
- With respect to other **planets, Venus and Uranus spin backwards** which means for these two planets, the sun rises in the west and sets in the east.

What are the findings of the Magellan spacecraft?

- A 2.2 square kilometre volcanic vent on Venus changed shape in eight months, indicating volcanic activity.
- It showed signs of drained lava, hinting at activity and eight months later, radar images indicated that the same vent had doubled in size and the lava lake seemed to have reached the rim.
- The vent is associated with **Maat Mons**, Venus's second-highest volcano.
- It sits in the **Atla Regio**, a vast highland region near **Venus' equator**. These changes were likely due to lava flow escaping the vent, hinting at a possible volcanic activity.

Key facts about the Magellan spacecraft

- It was one of the most successful deep space **missions of NASA**..
- It was the **first spacecraft to image the entire surface of Venus** and made several discoveries about the planet.

THE RETURN OF THE NET NEUTRALITY DEBATE IN INDIA

Why in News?

- Since November 2022, the Cellular Operators Association of India (COAI), which represents major telecom operators in India, has been demanding that platforms such as YouTube and WhatsApp pay a share of revenue to make up for the network costs.
- In an immediate response to this demand, the Broadband India Forum (BIF), which represents Internet firms such as Meta and Google, wrote a letter to the Department of Telecommunications (DoT) rebutting the COAI's demands.
- This has reignited the debate around **Net Neutrality**.

Who are Different Stakeholders in the Internet Space?

- To understand the concept of net neutrality, it is important to note the four different kinds of stakeholders in the internet space that may be affected by the issue.
- They are –
 - **Consumers** of any internet service,
 - **Telecom Service Providers (TSPs)** or Internet Service Providers (ISPs),
 - **Over-the-top (OTT) service providers** (those who provide internet access services such as websites and applications), and
 - **Government**, who may regulate and define relationships between these players.
- **Telecom Regulatory Authority of India (TRAI)** is an independent regulator in the telecom sector, which mainly regulates TSPs and their licensing conditions, etc.

What is Net Neutrality?

- The principle of net neutrality states that internet users should be able to access all content on the internet without being discriminated by TSPs.
- This means that –
 - All websites or applications should be treated equally by TSPs,
 - All applications should be allowed to be accessed at the same internet speed, and
 - All applications should be accessible for the same cost.

- Net neutrality argues that the **internet should be accessible to everyone and requires all ISPs to provide the same level of data access and speed to all traffic.**
 - Traffic to one service or website cannot be blocked or degraded.

What will happen if there is no Net Neutrality?

- If there no net neutrality, ISPs will have the power (and inclination) to shape internet traffic so that they can derive extra benefit from it.
- For example, several ISPs believe that they should be allowed to charge companies for services like YouTube and Netflix because these services consume more bandwidth compared to a normal website.
 - Basically, these ISPs want a share in the money that YouTube or Netflix make.
- Without net neutrality, the internet as we know it will not exist. Instead of free access, there could be package plans for consumers.
 - For example, if you pay Rs 500, you will only be able to access websites based in India. To access international websites, you may have to pay a more.
 - Or maybe there can be different connection speed for different type of content, depending on how much you are paying for the service and what add-on package you have bought.
- Instead of an open and free internet, without net neutrality, we are likely to get a web that has silos in it and to enter each silo, you will have to pay some “tax” to ISPs.

How is Net Neutrality Regulated?

- Until now, **net neutrality has not directly been regulated in India by any law or policy framework.** Earlier, in 2016, the TRAI had ruled in favour of net neutrality.
- However, **despite lack of formal rules, ISPs in India mostly adhere to the principal of net neutrality.**
- There have been some incidents where Indian ISPs have ignored net neutrality but these are few and far between.
- Internationally, countries like the USA, Japan, Brazil, Chile, Norway, etc. have some form of law, order or regulatory framework in place that affects net neutrality.

- The US Federal Communications Commission (telecom regulator in the USA) released new internet rules in March 2015, which mainly disallow blocking, throttling or slowing down, and paid prioritisation of certain applications over others.
 - While the UK does not allow blocking or throttling of OTT services, it allows price discrimination.
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SAMUDRAYAAN MISSION: INDIA SET TO DIVE TO EXPLORE MARINE BIODIVERSITY

Why in News?

- In order to explore the potential of the seabed, the National Institute of Ocean Technology's (NIOT) MATSYA 6000 will dive 6,000-meter into the Indian Ocean under the Samudrayaan mission.

What is NIOT?

- Established in **1993** as an autonomous society under the **Ministry of Earth Sciences (MoES)**, NIOT is based in **Chennai**.
- The major aim of starting NIOT was to develop reliable indigenous technologies to solve various **engineering problems associated with harvesting of non-living and living resources** in India's exclusive economic zone (EEZ).

What is Samudrayaan Mission?

- Samudrayaan, or the journey into the sea, is a mission launched in **2021** to unlock the mysteries of the deep ocean for **mineral resources and develop deep sea technologies** for sustainable use of ocean resources.
- A sub-component of India's **Deep-Sea Mission**, the Samudrayaan mission aimed at supporting the **Blue Economy initiatives** of the Indian government by developing niche technology, **vehicles to carry out subsea activities**.
- The MoES is the **nodal ministry** to implement this multi-institutional ambitious mission.

- The estimated cost of the mission will be **Rs 4077 crore** for a period of 5 years to be implemented in a phase-wise manner - cost for the first phase (2021-2024) would be Rs 2823.4 crore.
- Indian Space Research Organization (**ISRO**), **Indian Institute of Tropical Meteorology** (Pune) and Defence Research and Development Organisation (**DRDO**) will actively participate in this mission.
- It was conceptualised based on the forthcoming **Gaganyaan mission** - ISRO's attempt at a crewed mission into space - expected in late 2024 or 2025.

DEEP OCEAN MISSION	
<ul style="list-style-type: none"> > Deep Sea Mining through 'Underwater Vehicles' and 'Underwater Robotics' > Asserting exclusive rights to explore polymetallic nodules from seabed over 75,000 sq km of areas in international water > Estimated polymetallic nodules resource potential: 380 million tonnes (MT) 	<p>THESE POLYMETALLIC NODULES CONTAIN</p> <p>Manganese 92.6 MT</p> <p>Nickel 4.7</p> <p>Copper 4.3</p> <p>Cobalt 1</p> <p>(*figures are rounded)</p>
<ul style="list-style-type: none"> > Development of ocean climate change advisory services > Technology for sustainable utilisation of marine bio-resources 	<ul style="list-style-type: none"> > Deep ocean survey and exploration > Energy from the ocean offshore-based desalination > Krill fishery from southern ocean

What is MATSYA 6000?

- It is a **manned submersible vehicle** developed by NIOT under the Samudrayaan mission to facilitate humans in the deep ocean in exploring mineral resources like Nickel, Cobalt, Rare Earths, Manganese, etc.
- Expected to be launched in 2024-25, it would make India **only one among six countries (US, Russia, Japan, France, and China)** to have piloted a crewed under-sea expedition beyond 5,000 metres.

News Summary Regarding MATSYA-6000:

- India's seabed and the relevant zones with economic potential are not deeper than 6,000 metres.
- India's energy needs and increasing competition to harness ocean resources are the key thrust for the Samudrayaan mission.
- **The International Seabed Authority (ISA)** has allocated about 75,0000 square kilometres in the Central Indian Ocean Basin (CIOB) to conduct exploratory mining (of polymetallic nodules).
- Just this month the UN passed the **High Seas treaty** (India too has committed to this) that seeks **to protect 30% of the world's ocean by 2030**.
- **MATSYA-6000** is a spherical, titanium hull (made by ISRO) equipped with life-support, capable of floating underwater and collecting soil and rock samples from the seabed with attached robotic arms.

- **Three navigators**, over a fortnight and about 1,500 km away from Kanyakumari will undertake multiple trips - each lasting about 12 hours (descent and ascent will be 8 hours and rest is exploration, surveying and scientific activity).
- At a depth of 6,000 metres, **the weight of water would be nearly 600 times that at sea level** which makes the pressurised hull the most important component of the submersible.
- **About 60%** of the submersible was manufactured in India. Components such as cameras, sensors, and communication systems were bought from international vendors.
- Over the years, NIOT has consulted with crewed-submersible experts from several countries - Japan, Russia, France and the know-how to ensure a safe ascent and descent.

INDIA'S STAND ON SAME-SEX MARRIAGE

Why in news?

- Recently, a Bench led by Chief Justice of India D.Y. Chandrachud referred petitions to legally recognise same-sex marriages to a Constitution Bench of five judges of the Supreme Court.

News Summary: India's stand on same-sex marriage

What is the case?

- The Court has been hearing multiple petitioners' requests for legal recognition of same-sex marriages under a special law.
- SC took up the case as petitioners claimed that the non-recognition of same-sex marriage amounted to discrimination that strikes at the root of dignity and self-fulfilment of LGBTQIA+ couples.
- The petitioners cited the Special Marriage Act, 1954 and appealed to the Court to extend the right to the LGBTQIA+ community, by making the marriage between any two persons gender neutral.
- Special Marriage Act, 1954 provides a civil marriage for couples who cannot marry under their personal law.

Why does the community want this right?

- Even if LGBTQIA+ couples may live together, legally, they are on a slippery slope.
- In Navtej Singh Johar case (2018) homosexuality was decriminalised.

- They do not enjoy the rights married couples do.
- For example, LGBTQIA+ couples cannot adopt children or have a child by surrogacy;
- They do not have automatic rights to inheritance, maintenance and tax benefits;
- After a partner passes away, they cannot avail of benefits like pension or compensation.
- Most of all, since marriage is a social institution - that is created by and highly regulated by law - without this social sanction, same-sex couples struggle to make a life together.

What is the Centre's stand?

- At depositions in courts and outside, the Centre has opposed same-sex marriage.
- It said that the judicial interference will cause complete havoc with the delicate balance of personal laws.
- While filing a counter-affidavit during this hearing, the government said that decriminalisation of Section 377 IPC does not give rise to a claim to seek recognition for same-sex marriage.

GLOBAL MILLETS CONFERENCE

Why in news?

- PM Modi inaugurated the Global Millets (Shree Anna) Conference at IARI Campus, PUSA New Delhi.
- Besides delegates from countries such as Maldives, Mauritius, Sri Lanka, Sudan, Suriname, and the Gambia, more than 75 lakh farmers virtually joined the event.
- The two-day global conference will have sessions on all important issues related to millets (Shree Anna) like:
 - promotion and awareness of millets among producers, consumers and other stakeholders;
 - millets' value chain development;
 - health and nutritional aspects of millets; market linkages; research and development etc.
- A Ministerial round table on millets was also held here with the participation of Ministers and officials from 10 countries, including India.

What are Millets?

- Millets, popularly called "Mota Anaj" in Hindi, are a collective group of small-seeded annual grasses that are grown as grain crops, primarily on marginal land in dry areas of temperate, sub-tropical, and tropical regions.
- In India, millets can be clubbed into major, minor, and pseudo categories.
 - **Major Millets:** Sorghum (Jowar), Pearl Millet (Bajra), Finger Millet (Ragi/Mandua)
 - **Minor Millets:** Foxtail Millet (Kangani/Kakun), Proso Millet (Cheena), Kodo Millet, Barnyard Millet (Sawa/Sanwa/ Jhangora), Little Millet (Kutki)
 - **Pseudo Millets:** Buck-wheat (Kuttu) and Amaranth (Chaulai)
- The top five states producing Millets are Rajasthan, Karnataka, Maharashtra, Uttar Pradesh, and Haryana.

Millets and UN 2030 Agenda for Sustainable Development

- The sustainable cultivation of millets can support climate-resilient agriculture - **SDG 13** (Climate Action) and **SDG 15** (Life on Land).
- The sustainable production of millets can fight hunger and contribute to food security and nutrition – **SDG 2** (End Hunger).
- Millets can be an important part of a healthy diet - **SDG 3** (Good Health and Well-Being).
- Greater consumption of millets can offer opportunities to smallholder farmers to improve their livelihoods - **SDG 8** (Decent Work and Economic Growth).
- Proper handling of millets is key to maintaining their high quality and nutritional benefits - **SDG 2** (End Hunger) and **SDG 3** (Good Health and Well-Being).
- Greater trade in millets can improve the diversity of the global food system - **SDG 8** (Decent Work and Economic Growth) and **SDG 12** (Sustainable Consumption and Production).

JHAMARKOTRA AND ZAWAR

Recently, the Society of Earth Scientists (SES), a group of independent researchers bridging the gap between earth science and society gathered to scout a fossil park at Jhamarkotra and the metallurgical remains at Zawar, around 20 km southeast of Udaipur, Rajasthan.

About Jhamarkotra:



- A fossil park at Jhamarkotra located in the state of **Rajasthan** hosts **stromatolites** dating back 1.8 billion years, exhibiting a variety of textures and sizes.
- A stromatolite is a layered sedimentary rock created by microorganisms.
- Stromatolites are sometimes called ‘**crocodile-skin rock**’ due to their unusual textures.
- As such, stromatolite **fossils preserve records of cyanobacteria**, commonly known as **blue-green algae** – the earliest life on the planet.
- These organisms developed the ability to photosynthesise and make their food. By doing so, they pumped large quantities of oxygen into the atmosphere of primaeval earth, allowing most other life to evolve and flourish.
- Jhamarkotra’s **fossils are phosphate-rich** because the trapped sediments were mainly phosphate minerals.

About Zawar

- It is an interesting geo-heritage site that lies some 40 km south of Udaipur which is the world’s **oldest known zinc-smelting site**.
 - The discovery here of earthen retorts – brinjal-shaped, long-necked vessels – is particularly significant: their presence here suggests Zawar had a unique zinc-smelting legacy.
 - Zawar’s zinc-smelting operations date back 2,000 years.
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