

SWACHHATA PAKHWADA



Recently, the Ministry of Development of North Eastern Region (MDoNER) has taken a significant step towards promoting cleanliness and environmental sustainability with the launch of Swachhata Pakhwada and it will run from 16th May to 31st May 2024.

- It is an initiative **launched in April, 2016** under the **Swachh Bharat Mission**.
- **Objective:** It was launched with the objective of bringing a fortnight of intense focus on the issues and **practices of Swachhata** by engaging the central government ministries/departments.
- **Aim:** It aims to include all ministries and departments through a common programme to contribute for Swachh Bharat Mission.
- An annual calendar is pre-circulated among the ministries to help them plan for the Pakhwada activities.
- The ministries observing Swachhata Pakhwada are monitored closely using the online monitoring system of **Swachhata Samiksha** where action plans, images, videos related to Swachhata activities are uploaded and shared.

Key facts about Swachh Bharat Mission:

- The Indian government launched the swachh bharat mission on **October 2, 2014**.
- The mission covered all **rural and urban areas**.
 - The urban component of the mission is implemented by the **Ministry of Urban Development**, and the rural component by the **Ministry of Drinking Water and Sanitation**.
- The programme includes elimination of open defecation, conversion of unsanitary toilets to pour flush toilets, eradication of manual scavenging, municipal solid waste management and bringing about a behavioural change in people regarding healthy sanitation practices.

WHAT IS DIGITAL ARREST?

Digital Arrest is a new and innovative tactic employed by **cybercriminals** to defraud gullible victims and **extort money**.

- **Modus operandi:**
 - The modus operandi in this cybercrime method is that **fraudsters pose as law enforcement officials** such as police, Enforcement Directorate, CBI, among others and manipulate them into believing that they have committed some serious crime.
 - In certain cases, the victims are “digitally arrested” and forced to **stay visible over Skype or other video conferencing platforms** to the criminals until their demands are met.
- The cyber fraudsters deceive the victim into believing that he or she has been put under ‘digital arrest’ and will be prosecuted if they do not pay the scamsters a huge money.
- The cyber criminals often force the naive victims to **self-arrest or self-quarantine themselves**, by tricking them into believing that they have been put under ‘digital arrest’ and cannot leave their house unless they pay up.

Preventing measures

- **Cyber Hygiene:** It is done by regularly updating passwords, and software and also **enabling two-factor authentications** to reduce unauthorized access.
- **Phishing Attempts:** These can be evaded by refraining from clicking on dubious links or downloading attachments from unknown sources and also authenticating the legitimacy of emails and messages before sharing any personal information.
- **Secured devices:** By installing reputable **antivirus and anti-malware solutions** and keeping operating systems and applications up to date with the latest security protocols.
- **Virtual Private Networks (VPNs):** VPNs can be employed to encrypt internet connections thus enhancing privacy and security. However one must be cautious of free VPN services and OTP only for trustworthy providers.

- **Secure communication channels:** Secure communication techniques such as encryption can be done for the protection of sensitive information. Sharing of passwords and other information must be cautiously done especially in public forums.
 - **Awareness:** There is a need for preventive measures and increased public awareness.
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WHAT IS DEDA METHOD?



Muria tribal farmer, who migrated from Chhattisgarh and settled in the dense forests of the Godavari Valley, is practising ‘deda’ method.

- It is a method of **preserving seeds** that his ancestors handed over to his family.
 - **How do they preserve?**
 - The **seeds are preserved in leaves** and packed almost **airtight** to look like boulders from a distance.
 - The packaged seeds are, in turn, **woven with Siali leaf** (*Bauhinia vahlii*), which is locally known as ‘addakulu’ to make the deda.
 - A deda has three layers. In the first layer, **wood ash is spread** inside the Siali leaves.
 - Later, the ash is covered with **lemon leaves** to form a casing, and, lastly, the seeds are preserved inside the casing and sealed. Each deda is crafted to support at least 5kg of seeds.
 - **Advantages**
 - The deda method guarantees the **protection** of seed from **pests and worms**.
 - In this method, the stored seeds can be used **for cultivation of up to five years**.
 - It helps in preserving the seeds of pulses like the green gram, red gram, black gram and beans.
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DRAFT DIGITAL COMPETITION BILL, 2024

Why in news? The Internet and Mobile Association of India (IAMAI) has expressed apprehensions about the draft Digital Competition Bill 2024. It suggested that this bill could have adverse effects on Indian startups and other digital enterprises.

IAMAI is a key industry body that represents numerous digital entities, including big tech firms.

Digital Competition Bill, 2024

- **About**
 - The bill seeks to further regulate large digital enterprises, including news aggregators, as part of efforts to ensure a level-playing field and fair competition in the digital space.
 - It was proposed in March 2024.
 - The new law could prevent big tech companies like Google, Facebook, and Amazon from favoring their own services or using data collected from one of their businesses to help another one of their businesses.
 - It has provisions to set presumptive norms to curb anti-competitive practices before they actually take place.
 - It promises to impose heavy penalties — which could amount to billions of dollars — for violations.
- **Similarity with EU's Digital Markets Act (DMA)**
 - The new law is similar to the EU's Digital Markets Act (DMA), which went into complete effect earlier this year.
 - DMA requires large tech firms like Alphabet, Amazon and Apple to open their services, and not favour their own at the expense of rivals.
- **Nodal ministry:** The Ministry of Corporate Affairs (MCA) is handling the draft.

Criticism of the bill

- **Significant compliance burden**
 - An ex-ante framework with its strict prescriptive norms could lead to significant compliance burden for big tech companies.

- It may lead to shift of focus from innovation and research to ensuring that companies do not presumptively engage in an anti-competitive practice.
 - **Stringent requirements of the EU's DMA and associated impact**
 - Experts have highlighted the fact that because of the stringent requirements of the EU's DMA, there has been an increase of 4,000 per cent in the time it takes to find things via Google search.
 - **Broad definition of who a significant platform could be**
 - Companies are concerned about the broad definition — both quantitative and qualitative — of who a significant platform could be.
 - Unlike EU's DMA which specifically names the 'gatekeeper' entities, that decision in India's draft law has been left to the discretion of the CCI.
 - Companies believe that could lead to arbitrary decision making, which could potentially also impact start-ups.
 - **May affect smaller businesses**
 - Companies are claiming that the bill would force them to make the changes to their platform and cut down on data sharing.
 - It could also impact smaller businesses who rely on their platforms to reach a big target audience.
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LAND ACQUISITION VALID ONLY IF IT PASSES CONSTITUTIONAL TEST

Why in News? In a landmark verdict to protect the interests of landowners against acquisition of their property by the government, the Supreme Court of India ruled that all acquisitions would have to pass the test of Article 300A. The SC quashed the decision of Kolkata Municipal Corporation to acquire private land to build a public park, as the law does not authorise the body to acquire the land and the acquisition was illegal.

The Right to Property in India:

- **Before the enactment of the 44th Constitutional Amendment (1978):**
 - **Part III of the Indian Constitution (Fundamental Rights)** included Article 19 (1) (f) and Article 31.

- Indian residents were given the right to purchase, possess, and dispose of their property under **Article 19(1)(f)**.
 - **Article 31** safeguarded the right against being deprived of one's property. The right was absolute and could not be denied in any circumstance.
 - However, **there was a clash**, because the above provisions limited the state's ability to acquire any movable property in the public interest because the right to property was a fundamental right.
 - **The 44th Amendment to the Indian Constitution:**
 - **It abolished Article 19 (1) (f) and Article 31**, and a modified version of it (Article 31) was inserted as **Article 300-A**.
 - This changed the very nature of the right to property in India from being a fundamental right to a legal/constitutional right.
 - **What is stated in Article 300-A?**
 - Article 300-A states that “**no person shall be deprived of his property except by authority of law**”.
 - The article gives the government the authority to seize someone else's property for the benefit of the general welfare.
 - **How the courts interpreted Article 300-A?**
 - **The Madhya Pradesh HC (2022)** clarified that the law requiring the property acquisition needed to be legitimate and that the state's acquisition of land had to be for the benefit of the public.
 - **In Vidya Devi v. the State of Himachal Pradesh (2022)**, the SC ruled that under a welfare state, even the government authorities cannot seize property without following the necessary legal process.
 - **In Vimlaben Ajitbhai Patel vs. Vatslaben Ashokbhai Patel**, the SC ruled that although it may no longer be a fundamental right, the right to property is still a **human right**.
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KEY FACTS ABOUT NARMADA RIVER



At least seven members of a family, including minors, are feared to have drowned in the Narmada River in Gujarat's Narmada district recently.

- It is the **largest west-flowing river** in peninsular India.
- Of the major rivers of peninsular India, only the **Narmada**, the **Tapti** and the **Mahi** run from east to west.
- **Course:**
 - The **origin** of the river is a tiny reservoir named Narmada Kund, which is situated on **Amarkantak Hill** in East **Madhya Pradesh** at an elevation of 1,057 m (3,467.8 ft).
 - The river **flows through Madhya Pradesh, Maharashtra** and Gujarat between Vindhya and Satpura hill ranges before falling into the **Gulf of Cambay** in the **Arabian Sea** about 10 km north of Bharuch, **Gujarat**.

Length: The total length of the river from source to sea is **1312 kilometres** (815 miles). It is the **fifth longest river** in India. The Narmada basin extends over an area of 98,796 sq. km., which is nearly 3% of the total geographical area of the country.

- The **basin is bounded** on the north by the **Vindhyas**, on the east by the **Maikala range**, on the south by the **Satpuras** and on the west by the **Arabian Sea**.
- The **Tropic of Cancer** crosses the **Narmada basin** in the upper plains area and a major part of the basin lies just below this line.
- It is one of the rivers that **flow in a rift valley** and acts as a divider between north India and south India.
 - **These rift valleys** are the **result of the faulting** that took place when the northern flank of the Peninsula suffered subsidence.
- The river has **numerous waterfalls**, notably the **Dhuandhar Falls**, southwest of Jabalpur, **Madhya Pradesh**.

- **Tributaries:**

- The main tributaries of the Narmada River namely, **Hallon River, Banjar River, Barna River,** and **Tawa River** are the main source of water, irrigation and other resource-based activities in central India.
 - The **Tawa River** is the **longest tributary** of the Narmada River.
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WHAT IS A SYNCHROTRON?



China's latest scientific milestone, the **High Energy Photon Source (HEPS)**, set to be the first fourth-generation synchrotron light source in **Asia**, will begin operations by the end of this year.

- A synchrotron is a type of **circular particle accelerator**, where particles move in a loop.
- It works by **accelerating** charged particles (electrons) through sequences of magnets until they reach almost the speed of light.
- These **fast-moving electrons** produce very bright light, called **synchrotron light**. This very intense light, **predominantly in the X-ray region**, is **millions of times brighter than** light produced from **conventional sources** and 10 billion times brighter than the sun. The light is channelled down beamlines to experimental workstations, where it is used for research.
 - Scientists can use this light **to study minute matter** such as atoms and molecules.
 - They can **examine how a sample scatters, diffracts, absorbs, or reemits** the synchrotron light, which reveals various different details of structure or chemical composition.
- There are **approximately 70 synchrotrons** around the world **in various stages of development**. There are technical differences between the use and capabilities of synchrotrons, with some being used for appliances and others for fundamental/theoretical research.

Key Facts about High Energy Photon Source (HEPS):



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- **Location:** It is located approximately 50 kilometers from Beijing in Huairou, **China**.
 - The HEPS is designed to **accelerate electrons** up to energies of 6 gigaelectron volts within its **36-kilometer circumference storage ring**.
 - This process will **produce high-energy X-rays** that can penetrate deep into samples, revealing intricate details at the nanometer scale.
 - HEPS will provide researchers with **access to 14 beamlines catering to diverse fields** such as energy, condensed matter physics, materials innovation, and biomedicine.
 - **Compared to third-generation** synchrotrons like the **Shanghai Synchrotron Radiation Facility**, which boasts a circumference of 432 meters and stands as China's most advanced working synchrotron, HEPS will offer a time resolution 10,000 times superior.
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