

# NEWS TODAY

## Four projects operationalized under Namami Gange Mission (NGM) 2.0.

The projects are launched in Bihar and Uttar Pradesh.

- These projects will add 145 megaliters per day (MLD) of **sewage treatment capacity**, provide better **sewer networks**, and **intercept numerous drains**.

### About NGM 2.0.

- **Background:** Namami Gange Programme is an Integrated Conservation Mission, approved in 2014 for a period up to **March 2021**.
  - ⊕ The programme was subsequently extended up to 31st March 2026 as **NGM 2.0**.
- **Objective:** Effective abatement of pollution and rejuvenation of the River Ganga.
- **Main Pillars:** Sewage treatment, River-Front development, River surface cleaning, Afforestation, Biodiversity, Public Awareness, Effluent management and Ganga Gram.
- **Implementation Agency:** **National Mission for Clean Ganga (NMCG)** and its state and district counterparts under the **Ministry of Jal Shakti**.
  - ⊕ **NMCG** is registered as a society under the **Societies Registration Act 1860**.
- It is a fully **central funded initiative**.
  - ⊕ There is no State-wise allocation under it.



### Achievements of Mission

- A total of **457 projects** have been taken up, out of which 280 projects have been completed and made operational. (Feb 2024)
- **139 District Ganga Committees (DGC)** have been constituted under the chairmanship of District Magistrates.
- NMCG has sanctioned **Common Effluent Treatment Plants (CETPs)** for industries.

## PM-KUSUM scheme needs recalibration to achieve its targets, says CSE study

Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) has achieved only **30%** of its targets, raising concerns about its ability to meet the 2026 deadline.

### Key findings of the report

- **Most of the implementation has taken place under component B**, while Components A and C have seen minimal implementation.
  - ⊕ Solar Powered Agriculture Pumps has enabled farmers to irrigate their fields during the day.
- **Availability of cheap electricity for farmers leads to a lack of incentive** to shift from electric water pumps to solar water pumps.
- **Non-availability of varying pump capacities in different regions.** E.g. In Haryana, surface pumps of 5 hp and 7.5 hp are not available.

### Recommendations of the Study

- **Decentralized implementation model needed:** Implementing agencies with on-ground knowledge of farmer demographics and needs are able to cater to farmers' needs more effectively.
- **Financial viability:** Farmers should get the option to pay upfront costs in installments in order to make the scheme financially more viable for them.
- **Increase in Central financial assistance:** This should be subject to different states' needs or prices of solar modules.

### About PM KUSUM

- **Launched in 2019**
- **Objectives:** De-dieselisation of the farm sector, providing water and energy security to farmers, increasing the income of farmers, and curbing environmental pollution.
- **Target:** Add a solar capacity of 34.8 GW by March 2026
- **Nodal Ministry:** Ministry of New and Renewable Energy
- **Components**
  - ⊕ **Component A:** 10,000 MW of solar capacity through installation of small Solar Power Plants of individual plants of capacity upto 2 MW.
  - ⊕ **Component B:** Installation of 14 lakh standalone Solar Powered Agriculture Pumps.
  - ⊕ **Component C:** Solarisation of 35 Lakh Grid-connected Agriculture Pumps.

## Chhattisgarh approves a proposal to notify Guru Ghasidas Tamor Pingla Tiger Reserve (TR)

It is formed after integrating the regions of **Guru Ghasidas National Park** and **Tamor Pingla Sanctuary**.

- It will be Chhattisgarh's 4<sup>th</sup> TR. The other 3TRs are **Indravati, Udanti-Sitanadi** and **Achanakmar**.
- Also, it will be **3<sup>rd</sup> largest TR** in the country.
  - ⊖ **Nagarjunsagar Srisailem** (Andhra Pradesh) is the **largest TR in the country** followed by Assam's **Manas**.

### About Tiger Reserve

- TR is considered as critical for tiger conservation, consists of two parts:
  - ⊖ Core or critical tiger habitat: National Park or Sanctuary status
  - ⊖ Buffer or peripheral area: A lesser degree of habitat protection is required
- Currently, there are **55 TRs in the country** (Dholpur – Karauli TR is 55<sup>th</sup>, declared in 2023)

### How are tiger reserves notified?

- TRs are notified by State Governments as per provisions of Section 38V of the **Wildlife (Protection) Act, 1972** on the advice of **National Tiger Conservation Authority (NTCA)**.

### ➤ Alteration and de-notification:

- ⊖ No alteration in boundaries of TRs shall be made except on a **recommendation of NTCA and approval of National Board for Wild Life (NBWL)**.
  - ◆ NBWL is a **statutory board constituted under Wild Life (Protection) Act, 1972** responsible for promotion of conservation & development of wildlife & forests.
- ⊖ No State Government shall de-notify a TR, except in public interest with approval of NTCA and NBWL.

About Guru Ghasidas National Park and Tamor Pingla Sanctuary

### ➤ Guru Ghasidas National Park

- ⊖ It is located on Chhota Nagpur plateau and some part is on Baghelkhand plateau
- ⊖ **Vegetation:** Moist deciduous with moderately dense forest
  - ◆ Key tree includes Teak, Sal, Gurjan, Palas, Tendu, Mahua etc.
- ⊖ **Rivers:** Falls under Son drainage basin.
- ⊖ **Fauna:** Tigers, Leopards, Jackals, Barking deer, Spotted Deer etc.

### ➤ Tamor Pingla Sanctuary

- ⊖ It is known for Asian elephants, Bengal tigers, Indian leopards, bears, Sambar deer, wild boars, etc.
- ⊖ The name of this sanctuary is based on names of **Tamor** and **Pingla** Reserve Forests, that are named after Tamor Pahar and Pingla River.

## Delimitation Commission's Orders Aren't Immune From Judicial Review: Supreme Court (SC)

SC in **Kishorchandra Chhanganlal Rathod** case held that **constitutional courts have the power to review orders of the Delimitation Commission** if an order is manifestly arbitrary and irreconcilable to constitutional values.

- Earlier Gujarat HC had dismissed petition challenging delimitation exercise, taking note of **Article 329(a)** of Constitution, which bars interference by Court in electoral matters.

### Earlier SC's Judgments

- **DMK v. State of T.N:** Rejected complete bar on judicial intervention, it held that constitutional Court can intervene to facilitate the elections or when a case for mala fide or arbitrary exercise of power is made out.
- **Meghraj Kothari's case:** The judicial interference was restricted only to avoid unnecessary delay in the election process. It does not put complete restriction on judicial review.

### About Delimitation

- **Delimitation** is the process of fixing the number of seats and boundaries of territorial constituencies in each State for the Lok Sabha and Legislative assemblies.
- Responsibility of delimitation is assigned to a **high-power body known as Delimitation Commission** (Boundary Commission)
  - ⊖ **Under Article 82**, Delimitation is done by such authority and in such manner as Parliament may by law determine.
  - ⊖ In India, such Delimitation Commissions have been constituted 4 times – in **1952, 1963, 1973 and 2002**.

## United States, Australia, Canada, Philippines held air and naval exercise in the disputed South China Sea (SCS)

The Exercise is to address common maritime challenges and underscore shared dedication to **upholding international law and the rules-based order**.

- SCS is a **part of western Pacific Ocean** stretching roughly from **Singapore and the Strait of Malacca in the southwest, to the Strait of Taiwan in the northeast**.



- ⊖ It is **crucial shipping lane, a rich fishing ground**, home to a highly biodiverse coral reef ecosystem, and believed to hold substantial oil and gas resources.
- Several bordering countries claim portions of the islands to **assert sovereignty over the surrounding sea and its resources**.
- **China continues to press claims** to almost the entire SCS.
  - ⊖ Earlier in 2016, **Permanent Court of Arbitration (PCA)** ruled under United Nations Convention on Law of the Seas (UNCLOS) that its **assertion has no legal basis**.
  - ⊖ **China has refused to acknowledge** the ruling till date.
- In recent times, India has also **enhanced its military and diplomatic engagement with claimant states** such as the Philippines and Vietnam.
  - ⊖ **Strategic interests, freedom of navigation, and oil and gas resources are the factors** determining India's expanded involvement in the SCS.

## Maharashtra approves Wainganga-Nalganga River Linking Project

The Wainganga-Nalganga (Purna Tapi) River linking project will irrigate 3.7 lakh hectare of agricultural land in six districts in Vidarbha region.

- Under the project, excess water from **Gosikhurd dam in Bhandara district will be diverted to Nalganga dam** in Buldhana district in western Vidarbha by **constructing 426.52km of link canals**.
- The National Water Development Agency (NWDA)** presented the detailed project report in 2018 and the project has since **received approval** from the **Central Water Commission**.
- It will supplement the **National River Linking Project (NRLP)**.

### About NRLP

- NRLP** is based on the **National Perspective Plan (NPP)** which was prepared by the then Ministry of Irrigation (now Ministry of Jal Shakti) in 1980 for **transferring water from water surplus basins to water-deficit basins**.
- Under the NPP, the NWDA has **identified 30 links** (16 under Peninsular Component & 14 under Himalayan Component) for Feasibility Reports.
- In 2021, Union Cabinet approved the implementation of **Ken Betwa river link** - first interlinking of rivers project.

**Significance of NRLP:** Providing an additional irrigation in drought prone areas E.g. (Bundelkhand region), provide navigation, reducing flooding problems (E.g. Kosi river), etc.

**Challenges:** Resettlement and rehabilitation of the project, Environmental costs (deforestation, soil- erosion, etc.), etc.

### About Wainganga and Nalganga (Purna Tapi) River

- Wainganga River**
  - Source:** Mahadeo Hills (Madhya Pradesh)
  - Wainganga, is called Pranhita** after the **confluence of river Wardha**, is a major tributary of river Godavari.
  - Its riparian States includes Chhattisgarh, Madhya Pradesh, Maharashtra and Telangana.
- Nalganga** is the main left bank tributaries of river Purna and a sub-tributary of Tapi river.

## Also in News



### Exercise Mitra Shakti

It is an **annual military exercise between India and Sri Lanka**.

- Mitra Shakti” aims to **improve the operational proficiency** of both armies by facilitating the exchange of skills, experiences, and best practices.



### Debt-for-development swaps (Debt Swaps)

Debt for Development Swaps: An Approach Framework paper has been released by the **International Monetary Fund (IMF)**.

### About Debt Swaps

- These are agreements **between a government and one or more of its creditors** to replace sovereign debt with one or more liabilities that include a spending commitment towards a specific development goal.
  - Development goals include **nature conservation, climate action, education, nutrition, support for refugees**, etc.
- Criteria** that need to be considered in determining the appropriateness of swaps include **country's initial debt situation, net financial benefits** etc.
- Classified into two categories, namely, **bilateral** (official bilateral debt is written-off) and **commercial** debt swaps (target debt held by private creditors).



### e-Sankhyiki Portal

It is designed to create a **comprehensive system** for managing and sharing **data, facilitating the easy dissemination** of official statistics across the country.

### About e-Sankhyiki Portal

- Aim:** To provide timely and valuable data inputs for policymakers, researchers, and the general public.
- Launched by: **Ministry of Statistics and Programme Implementation (MoSPI)**
- It comprises **two modules**:
  - Data Catalogue Module:** It enables searching within datasets and tables, downloading relevant data, and enhancing its value and reusability.
  - Macro Indicators Module:** It provides time series data on key macro indicators, featuring tools for filtering and visualising data.



### DCPA or Dacthal

The U. S. Environmental Protection Agency (EPA) banned the **weed-killing pesticide Dimethyl tetrachloroterephthalate, also known as DCPA or Dacthal**.

### About DCPA

- It is used on crops such as broccoli, brussels sprouts, cabbage and onions.
- Fetuses exposed to it could suffer from **low birth weight, impaired brain development, decreased I.Q.**, and impaired motor skills later in life.

 **KAVACH**

Indian Railways is rolling out tenders for equipping 10,000 locomotives with Kavach 4.0

- It is the latest version of the **indigenous Automatic Train Protection (ATP) system**.

**About KAVACH**

- It is an electronic system of **Safety Integrity Level - 4 standards** with **probability of error being 1 in 10,000 years**.
- It is developed by **Research Design and Standards Organisation (RDSO)** in collaboration with Indian industry.
- **Key features:**
  - ⊕ Centralised live monitoring of train movements
  - ⊕ Prevention of Signal Passing at Danger (SPAD),
  - ⊕ Automatic braking for prevention of overspeeding

 **Tribo-Electric Nanogenerator (TENG) technology**

IIT Indore has developed footwear for military personnel based on TENG technology.

**About TENG Technology**

- It converts the **mechanical energy generated from walking into electrical energy** using the **triboelectric effect**, which is then stored in a device embedded in the system.
  - ⊕ The **triboelectric effect** refers to a charge of electricity generated by friction.
- It is considered as a **portable and renewable energy source**.
- The stored energy can **power small electronic devices, wearable devices, IoT (Internet of Things) devices, medical devices** etc.

 **Lake Turkana**

First comprehensive survey held in 50 years regarding Lake Turkana

- The research project is led by **UNESCO and World Food Programme (WFP)** reveals high fish potential in the lake.

**About Lake Turkana**

- It is located in **northwestern Kenya and south-western Ethiopia**.
- It is Africa's **4<sup>th</sup> largest lake** and the **largest permanent desert and alkaline lake** in the world.
- **Over 90%** of inflow comes from the **Omo River** (located in Ethiopia).
- The **Lake Turkana National Parks site** was inscribed on the **World Heritage List** in 1997.

**Threats:** hydro-electric dams and irrigation.

 **Hypervirulent Klebsiella pneumoniae (hvKp)**

WHO has warned against superbug **hypervirulent Klebsiella pneumoniae (hvKp)**.

**About hvKp**

- It is a type of **drug-resistant bacteria** that can cause rapidly progressing, deadly infections, even in people with healthy immune systems.
- It can be found in the environment (soil and water) as well as in the **upper throat and gastrointestinal tract** of various animals and humans.
- It causes **pneumonia**, urinary tract infections, bloodstream infections, and the nervous-system infection meningitis.

 **Bitumen and Bio-bitumen**

Government is set to allow up to 35% bio-bitumen mixing, to save ₹10,000 crore of foreign exchange outflows.

**About Bitumen**

- A black substance produced through distillation of crude oil.
- It is known for its adhesive properties.
- **Applications:** Paving roads, water proofing etc.

**About Bio-bitumen**

- It is a form of bitumen **manufactured from organic elements**. E.g. Bio-char, bio-oil, etc.
- It can be used as an addition to bitumen or to reduce the quantity of bitumen in the binder mixture.

**Benefits:** Reduced imports, address the issue of stubble burning, boosting Bio-economy etc.

 **Tantalum**

Central Government **notified Tantalum as a Critical and Strategic Mineral** under the Mines and Minerals (Development and Regulation) Act, 1957.

**About Tantalum**

- Tantalum is a rare metal with the atomic number 73
- It's grey, **heavy, very hard, and corrosion-resistant**.
- **Characteristics:**
  - ⊕ When pure, tantalum is **ductile** (can be stretched, pulled, or drawn into a thin wire).
  - ⊕ **Extremely high melting point**.
- **Uses:** Making capacitors in electronic devices, surgical equipment & implants, components for chemical plants, nuclear power plants, aeroplanes and missiles etc.