

NEWS TODAY

Delhi government to overhaul State Action Plan on Climate Change (SAPCC)

Originally adopted in 2019, Delhi's action plan needs revision amid intensifying extreme weather (E.g. unprecedented heat waves and record rain this year).

SAPCC:

- States/UTs prepare respective SAPCC to address state-specific issues related to climate change through adaptation & mitigation measures.
 - ⊕ SAPCCs are **context specific**, considering different ecological, social, and economic conditions of each State.
 - ⊕ SAPCCs are **in line with** National Action Plan on Climate Change (NAPCC).
 - ◆ NAPCC, released in 2008, outlines a **national strategy for India's climate change adaptation**.
 - ◆ There are **eight National Missions** which form the core of NAPCC.
- **Funding:** Made under **Climate Change Action Plan scheme**.
- **Status:** **34 States / UTs** have so far prepared their SAPCC.

Barriers to implementation

- **Lack of leadership and political will** because of SAPCC's top down approach & already existing climate change strategies/ plans.
- **Lack of clear actions** (Not specific and clear enough to facilitate implementation)
- **Resource constraints** as State assumed that funding would come from central government/elsewhere.

Way forward

- **International climate finance** could potentially cover additional costs of adaptation.
- **Nominating nodal officers** (For addressing institutional bottleneck) within each key department to act as a focal point for climate change.
- Developing **detailed project reports & Regular updation** of plan.

Significance of State level climate strategies/Plans:

- **Enabling a just transition:** E.g. **Swaniti initiative in Jharkhand** has been able to mobilize **INR 45 Crores** to implement interventions linked to renewable energy and sustainability.
- **Integrating climate action into decentralized development planning:** E.g. **Carbon Neutral Meenangadi project in Kerala**
- **Conservation of mangroves and marine biodiversity:** E.g. **Mangrove cell of Maharashtra**

Five years of Jal Jeevan Mission

It was launched in 2019 to provide **Functional Household Tap Connections (FHTCs)** to all rural households by 2024 with service level at the rate of 55 litres per capita per day.

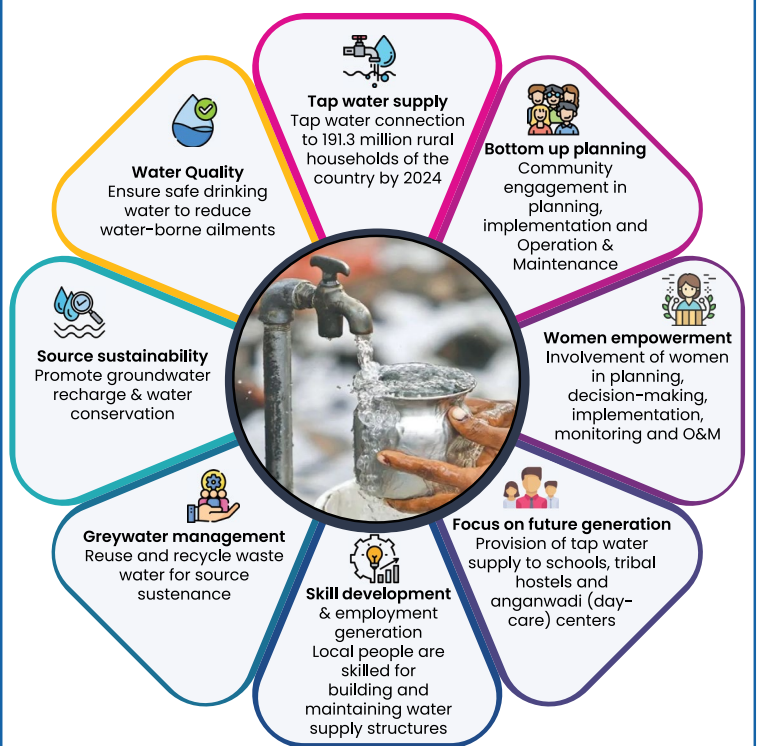
Key Achievements

- **Tap water coverage:** Increased from **3.23 Crore** to around **15 Crore households**.
 - ⊕ 8 states and 3 Union Territories have achieved **100% coverage**.
 - ⊕ **88.91% Schools** and **85.08% Anganwadi centres** nationwide receive tap water.
- 2.28 lakh villages and 190 districts achieved '**Har Ghar Jal**' status.

About Jal Jeevan Mission

- **Background:** National Rural Drinking Water Programme was restructured and subsumed in JJM.
- **Nodal Ministry:** Ministry of Jal Shakti.
- **Type:** Centrally Sponsored Schemes.
- **Women Empowerment:** Mission mandates that half of the members of Village Water & Sanitation Committee/ Pani Samiti need to be women.
 - ⊕ Around **24.59 lakh women** have been **trained** for testing water samples using **Field Testing Kit (FTK)** to ensure quality.

COMPONENTS OF JAL JEEVAN MISSION



India and Poland elevate ties to Strategic Partnership

Decision for elevation of ties was taken during Prime Minister of India's official Visit to Poland to mark **70 years of diplomatic relations**.

Other Key Highlights of Official Visit

- Both Nations agreed to **execute a five-year Action Plan (2024-2028)** for Implementation of **Strategic Partnership**.
- Agreed on a **social security agreement** (To protect interests of **cross borders workers**)
- India to start **Jam Saheb of Nawanagar Youth Exchange Program** between India and Poland.
 - ⊖ During World War II (1942), Maharaja Jam Saheb Digvijaysinhji established a camp in Jamnagar to **shelter refugee Polish children** who had been **displaced from USSR**.

India - Poland Relations

- **Political Relations:** Diplomatic relations were **established in 1954**, leading to opening of Indian Embassy in Warsaw in 1957.
- **Economic & commercial Relations:** Poland is India's largest trading & investment partner in Central & Eastern Europe (**Bilateral trade worth US\$6 billion in 2023**).
- **Sectoral Collaboration:** **Mining sector** (Coal India Limited's trainee receiving training in Polish mines), **Pharmaceuticals** etc.
- **Cultural and Educational Relations:** Strong tradition of Indology studies in Poland, Yoga, **Good (Dobry) Maharaja Connection** (Maharaja Jam Saheb Digvijaysinhji) etc.

Five year Action Plan for Strategic Partnership

- **Trade and Investment:** Meetings of Joint Commission for Economic Cooperation at least twice every five years
- **India-EU:** Co-operation in early conclusion of India-EU trade and investment negotiations, operationalization of India-EU Trade and Technology Council etc.
- **Terrorism:** Co-operation in designating individuals affiliated with groups that are listed by UNSC 1267 sanctions committee.
- **Other areas of cooperation:** Cyber Security, circular economy, waste-water management etc.

Health Ministry bans 156 Fixed Dose Combination Drugs (FDC)

These were banned due to the **concerns about their irrationality and potential risks to human health** with safer alternatives available.

- Previously, 344 combination drugs in 2016 and 14 FDCs in 2023 were also banned.

About FDC

- These are the **combination of two or more Active Pharmaceutical Ingredients (APIs)** in fixed ratios and also known as **'cocktail drugs'**.
 - ⊖ APIs are the **biologically active component** of a drug product that produces the intended effects.

Benefits of the FDC

- **Targeting multiple disease pathways:** Leading to improved response rates and rapid actions.
- **Minimises pill burden:** Fewer pills ensures greater adherence and better outcomes. Eg, a single pill for fever, cough, and pain can foster better compliance.
- **Beneficial for treating chronic illness:** Like TB, diabetes, etc.
- It has a **pharmacokinetic advantage**.
 - ⊖ Pharmacokinetics is defined as the study of **absorption, distribution, metabolism, and excretion** of drugs by the body.

Concerns with FDC

- **Physiological or Chemical reaction:** Opposing/Antagonistic combination can lead to enhanced toxicity, reduced efficacy, etc.
- **Decreased Shelf life:** In case of chemical incompatibility between the two drugs.
- **Growing antibiotic resistance:** Sale of unapproved or banned FDCs containing antibiotics.

Rules Governing FDC in India

- **Appendix VI of Schedule Y to Drugs & Cosmetics Rules 1945**, specifies the requirements for approval of various categories of FDCs.
- **Drug and Cosmetic (Amendment) Act, 2008, section 26A** gives power to the Central Government to prohibit manufacture, etc., of drugs and cosmetics in public interest.

Major Chemical Disaster in Anakapalli, Andhra Pradesh

Disaster occurred due to a reactor blast caused by a fire in a leaked solvent in a Pharmaceutical company.

- **India's vulnerability to chemical disasters** is highlighted by presence of approximately **1,861 Major Accident Hazard (MAH) units** and thousands of other registered hazardous factories (**below MAH criteria**).
 - ⊖ **MAH** is a source of danger that has **potential to cause a major incident**.

Other examples of Chemical Disasters in India

- **Ammonia Gas Leak at Chennai (2024)**: Due to damaged gas pipeline caused by cyclone Michaung.
- **Vizag Gas Leak (2020)**: **Styrene gas leak** at LG Polymers in Visakhapatnam.
- **Bhopal Gas Tragedy (1984)**: Due to leak of methyl isocyanate gas from Union Carbide plant.

Initiatives taken for Chemical accidents

- **Indian**
 - ⊖ **NDMA guidelines** to provide directions to ministries and state authorities for preparation of their **detailed disaster management plans**.
 - ⊖ **Explosives Act 1884** sets safety standards for handling, transportation, and storage of explosives to prevent accidents.
 - ⊖ **Other steps**: Public Liability Insurance Act 1991, Factories Act, 1948 & Occupational Safety, Health and Working Conditions Code, 2019
- **Global**
 - ⊖ **Flexible framework** for addressing Chemical Accident Prevention and Preparedness **by UNEP**.
 - ⊖ ILO code of practice on **Prevention of major industrial accidents, 1991**.
 - ⊖ ILO's **Prevention of Major Industrial Accidents Convention, 1993 (No. 174)**.

Competition Commission of India (CCI) raises objection to Reliance-Disney proposed merger

The deal could **hurt competition** especially regarding the potential dominance of the merged entity in the **cricket broadcasting market**.

- As per the **Competition (Amendment) Act 2023**, when the CCI is of the opinion that a merger is likely to have an adverse effect on competition, it can issue a statement of objections.

Other recent CCI steps to increase competition

- **Google**: CCI imposed a monetary penalty of Rs. 1337.76 crore on Google for **anti-competitive practices** in relation to Android mobile devices.
- **Amazon and Flipkart**: CCI probe found that the E-commerce majors Amazon, Flipkart flouted **antitrust laws** by preferring sellers affiliated with or controlled by Flipkart or Amazon.

Why is lack of competition bad for consumers?

- **Inefficiencies**: The monopoly company may not focus on improving the quality of the products and also create **barriers for competitors** to enter the marketplace.
- **Innovation**: Monopolies lead to a lack of innovation as there is **no need to improve products** to entice consumers.
- **Higher prices**: When a company has **no competitors**, it has a greater ability to set the higher prices.

About Competition Commission of India

- **Genesis**: It is an autonomous statutory body established in 2009 under the **Competition Act, 2002**.
- **Aim**: To manage and enforce the Act, **ensuring fair competition and protection of consumer interests**.
- **Function**: It functions as a **Quasi-judicial body** to ensure competition.

Also in News

World Audio Visual & Entertainment Summit (WAVES)

25 Challenges were launched under '**Create in India Challenge - Season 1**' for the upcoming WAVES in November highlighting **India's creator economy**.

- **Creator Economy**, refers to the **creation and distribution of digital content** through social media platforms like Youtube, tapping a wide audience.

WAVES

- Forum for **promoting collaboration, innovation, and discussions** among various stakeholders in the Media and Entertainment (M&E) industry.
- **Objectives**: Drive India's creator economy, position India as a business friendly investment destination, adapt to new trends, etc.
- **Significance**
 - ⊖ Amplify India's voice as a **Global powerhouse in M&E industry**.
 - ⊖ Ensures **cross cultural exchanges and build skilled workforce**.



Smart Laboratory for Clean Rivers (SLCR) Project

The Green Strategic Partnership between the **Governments of India and Denmark** has led to establishment of the SLCR in Varanasi.

SLCR Project

- Aims to rejuvenate **river Varuna**.
 - ⊖ **Varuna** is a **Minor tributary** of Ganga **originating** near Phulpur, Prayagraj and **merges with Ganga** in Varanasi, UP.
- Features a **hybrid lab model** at IIT-BHU and an **on-field living lab** at Varuna River.
- **Components**
 - ⊖ **Decision Support System (DSS)** to analyze **basin water dynamics**.
 - ⊖ **Characterization of emerging pollutants** and fingerprint analysis.
 - ⊖ **Hydrogeological Model** of the **Varuna Basin for Recharge Sites**, to enhance base flow through Managed Aquifer Recharge (MAR).



Guidelines for Seaplane Operations

Union Minister for Civil Aviation, has launched the **Guidelines for Seaplane Operations in India**.

- The Union Minister also launched the 5.4 version of the UDAN.
 - ⊖ Under UDAN 5.4, fresh bids would be invited for the routes which were cancelled.
 - ⊕ **Regional Connectivity Scheme (RCS)-UDAN (Ude Desh ka Aam Nagrik) Scheme** was launched in 2016 for providing remote/unserved locations with air connectivity.

Key Provisions of Guidelines

- Extension of the **Viability Gap Funding (VGF)** under RCS for seaplane operations.
- Adoption of the **Non-Scheduled Operator Permit (NSOP)** framework (operational for helicopters) for seaplanes.



Gumti River

Ministry of External Affairs denied that floods in eastern districts of Bangladesh were caused due to opening of **Dumbur dam (Tripura)** on Gumti river.

About Gumti River

- This **Transboundary river** rises from a range connecting **Longtharai and Atharamura** in Tripura.
- **Total length of river:** From origin to Indo-Bangladesh border is 167.4 km.
- River then flows through **plains of Bangladesh** and meets the **Meghna river system** near Daudkandi.
- **Major Fall:** Dumbur falls
- **Right bank tributaries:** Kanchi Gang, Pitra Gang, San Gang, Mailak Chhara and Surma Chhara
- **Left bank tributaries:** Ek Chhari, Maharani Chhara, Ganga.



Tokenization

Recently, tokenized cards (Cards using Tokenization) are **enabling CVV-free payments**.

About Tokenization

- Tokenization refers to **replacement of actual card details with alternate code** called "token", which is unique for a combination of card, token requestor and a device.
- Tokens can be used for **online transactions, mobile point-of-sale transactions or in-app transactions**.
- Tokenization can be performed by the **authorized card network or by the card issuer**.
- **Benefits:** Considered safer as actual card details are not shared with merchants, Reduced risk of data breach.



Zinc-ion batteries

Jawaharlal Nehru Centre for Advanced Scientific Research partners with Hindustan Zinc Limited to develop **new variants of zinc materials to propel the use of Zn-ion batteries**.

- New variants of zinc materials would **facilitate low-cost grid-scale energy storage**.

About Zinc-ion batteries

- Type of **rechargeable battery** that uses zinc ions as the charge carrier.
- **Benefits:** fast charge–discharge capability, high power density and energy density, and availability of zinc, etc.
- **Limitations:** low conductivity, safety concerns, etc.



'A1' & 'A2' milk

FSSAI directed food businesses to remove claims of 'A1' and 'A2' types of milk from packaging citing not conforming to **Food Safety and Standards Act, 2006**.

A1 and A2 Milk Category

- **Casein (a protein in milk)** exists in at least 13 different forms.
 - ⊖ **Two primary forms are:**
 - ◆ **A1 beta-casein:** Found predominantly in **cow breeds that originated in northern Europe** e.g. Holstein, Friesian, Ayrshire, and British Shorthorn.
 - ◆ **A2 beta-casein:** Present in milk from breeds **native to Channel Islands and southern France**, including Guernsey, Jersey, Charolais, and Limousin cows.
 - ⊖ While **regular milk** contains both A1 and A2 beta-casein, A2 milk is unique in that it contains only the A2 variant.



Antimatter

Recently Scientists spotted heaviest **antimatter nucleus** in a particle accelerator Relativistic Heavy Ion Collider.

- It is called **antihyper hydrogen-4** (Made up of **antiproton**, two **antineutrons** and **antihyperon**)

Antimatter

- Antimatter particles **share the same mass** as their matter counterparts, but qualities such as electric charge are **opposite**.
 - ⊖ E.g. A positively charged **positron** is an antiparticle to a **negatively charged electron**.
- **Antimatter particles** corresponding to **electrons, protons, and neutrons** are called **positrons, antiprotons, and antineutrons**.
- **Matter and antimatter particles** are always produced as a pair and if come in contact annihilate **one another** (leaving pure energy).

Place in News



Republic of Panama (Capital: Panama City)

Panama has announced more migrant deportation flights to Ecuador, India and China.

Political Features

- **Location:** Country of Central America, located on the Isthmus of Panama.
 - ⊖ **Isthmus of Panama** is a narrow bridge of land that connects North and South America.
- **Territorial Boundaries:** Costa Rica (West) and Colombia (East).
- **Maritime Boundaries:** Caribbean Sea (North) and Pacific Ocean (South).
- It is a member of **G-77, International Solar alliance etc.**

Geographical Features

- **Climate:** Hot and humid, tropical climate, with long rainy season (May to January).
- **Major Rivers:** Río Chagres, Rio Chepo etc.
- **Major Mountain Range:** Cordillera Central (Central Mountain Range)
- **Highest Peak:** Barú Volcano



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI