

NEWS TODAY

OFFICE OF PRINCIPAL SCIENTIFIC ADVISER TO GOVERNMENT OF INDIA RELEASES DRAFT NATIONAL DEEP TECH STARTUP POLICY (NDTSP)

- **Deep Technology** refers to innovations founded on advanced scientific and technological breakthroughs like Artificial Intelligence, blockchain, etc.
- **Deep Tech Startup (DTS)** involves **early-stage technologies based on scientific or engineering advancements**, which are yet to be developed for any commercial applications.
 - DPIIT has recognised more than 10,000 DTS as of May 2023.
- **NDTSP aims to harness transformative potential of technological advancement** across diverse sectors.
 - It'll **strengthen India's capabilities and enhance global competitiveness.**
- **Need of NDTSP**
 - **Address the challenges faced by start-ups** and policy interventions to enhance the ecosystem.
 - Lack of **necessary resources and infrastructure** like skilled personnel.
 - Limited support for **struggling start-ups with valuable Intellectual Property (IP) asset.**
- Draft **NDTSP suggests necessary changes in nine policy areas** such as
 - **Nurturing R&D** and innovation; **Strengthening IPR**; Facilitating **access to funding**; **Enabling shared infrastructure** and resource sharing; **Creating conducive regulations**, standards, and certifications; **Attracting human resources** and initiating capacity building; **Promoting procurement** and adoption; **Ensuring policy inter-linkages**; and **Sustaining DTS.**
- **Recommendations**
 - **Strong cybersecurity protocols and measures** to protect sensitive data.
 - **Centre for Deep Tech Translation to assess Indian research** (publications, patents, etc.) for potential commercialisation.

Four pillars of NDTSP

Fostering Ethical Innovation

Ensuring the Security of India's Economic Future

Facilitating a Seamless Transition to a Knowledge-Driven Economy

Bolstering National Capability and Sovereignty through the Atmanirbhar Bharat Imperative

NITI AAYOG RELEASED “TOWARDS DECARBONISING TRANSPORT 2023: A STOCKTAKE ON SECTORAL AMBITION IN G20” REPORT

- Report **analyses the current state of decarbonisation and climate ambition** in transport sectors of G20 countries.
 - **Decarbonisation** is the term used for **removal or reduction of carbon dioxide (CO₂) output** into the atmosphere.
- **Key highlights**
 - India still has **no overall emissions or energy targets for transport sector**, despite the goal to achieve net-zero emissions by 2070.
 - **India's transport-sector emissions could increase 65% by 2030** and 197% by 2050, relative to 2020 levels.
 - **Road followed by rail transport is the main contributor** to sector emissions.
- **Need to Decarbonise Transport sector**
 - Globally, **India is third most CO₂ emitting sector.**
 - **High dependence on fossil fuels** of the sector leads to exploitation of fossil fuels.
 - **To meet nationally determined contributions (NDCs) targets of India** i.e., reduce emissions intensity of its GDP by 45% by 2030 etc.
- **Constraints: High cost involved in deployment** of new technologies and charging infrastructure; **Hesitancy among consumers** to adopt low carbon transportation such as Electric vehicles etc.
- **Initiatives taken to Decarbonise Transport sector:** Bharat Stage VI Emission Standards; Forum for Decarbonizing Transport in India by NITI Aayog; **FAME India** (part of **National Electric Mobility Mission Plan**) etc.

Recommendations

- Accelerated **expansion of proven low carbon systems.**
- **Increasing investments** to more energy-efficient means of transport.

INDIA TO CONTRIBUTE 16.7 DAYS IN 157 DAYS OF WORLD PLASTIC OVERSHOOT DAYS IN 2023: PLASTIC OVERSHOOT DAY REPORT

- Plastic Overshoot Day refers to the day when the **amount of plastic waste surpasses the capability of waste management systems** to effectively manage.
 - It is based on **country's Mismanaged Waste Index (MWI)** i.e., the **ratio of the mismanaged waste and the total waste.**
- **Other key Findings on India**
 - Categorized as **'The Waste Sponges'** referring to a **low consumption yet a high level of plastic pollution.**
 - Annual per capita plastic **consumption is 5.3 kg/capita/year (among the lowest in the world).**
 - **Ranks 4th in the MWI, with 98.55 % of generated waste being mismanaged.**
 - Mostly due to the **disposal** of collected plastic in **unsanitary landfills and dumpsites.**
 - **330 764 tons of microplastic** generated from tire abrasion, shedding of textile fibers, and paint, etc. **released into waterways.**
 - **1.33 % of its total plastic waste was imported,** while the country **exported 0.8 % of its total waste.**
- **Recommendations: Promoting sustainable alternatives, increasing investment in waste management policies** like Extended Producer Responsibility.
- **Initiatives by India: 1000 Cities to become 3-Star Garbage Free** by October 2024, Mission LiFe, Plastic Waste Management Rule, (Ban on single use of plastics) etc. etc.

STANDING COMMITTEE ON RURAL DEVELOPMENT AND PANCHAYAT RAJ RELEASED REPORT ABOUT FUNCTIONING OF MGNREGA

- **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) 2005** guarantees **100 days of wage employment in a financial year,** to a rural household whose adult members volunteer to do unskilled manual work.
 - 100 days may extend up to 150 days in drought/natural calamity notified rural areas.
- **Key highlights of report**

Observations	Recommendations
<ul style="list-style-type: none"> ● Reduction of Funds in MGNREGA hampers the work being done. 	<ul style="list-style-type: none"> ● Department of Rural Development (DoRD) should assess ground situation regarding demand for job under MGNREGA and coordinate with Ministry of Finance for seeking requisite funds allocation.
<ul style="list-style-type: none"> ● Delay in wage payments and material fund act as deterrence to needy beneficiaries. 	<ul style="list-style-type: none"> ● Ensure timely release of Centre's Shares in wages and materials through effective measures and better coordination with States.
<ul style="list-style-type: none"> ● Newly introduced attendance system through mobile app National Mobile Monitoring System requires availability of smartphones and internet connectivity. ● Workers face language barriers, thus requiring human intervention. 	<ul style="list-style-type: none"> ● Review the implementation of attendance app holistically while taking into consideration ground reality and challenges being faced by MGNREGA workers.
<ul style="list-style-type: none"> ● Disparity in wages under MGNREGA in different States/UTs. 	<ul style="list-style-type: none"> ● Notifying a uniform wage rate across the country and linking it to a suitable pricing index.

FINANCE MINISTRY NOTIFIED RULES ENABLING COOPERATIVE SUGAR MILLS TO CLAIM PAST CANE PRICE PAYMENTS

- The notification allowed **payments** to farmers, in **excess of the Centre's Fair and Remunerative Price (FRP) before 2015-16** as **"business expenditure"**.
 - It was done by amending **Section 155 of the Income Tax Act** and expected to provide mills a **relief of almost Rs 10,000 crore.**
 - So far, cooperatives were allowed to claim such payment as **business expenditure for payment made from the 2016-17 assessment year.**
- **FRP is the minimum price** that mill owners are mandated to **pay to sugarcane farmers.**
 - It is governed by the **Sugarcane (Control) Order, 1966** issued under the Essential Commodities Act (ECA), 1955.
 - It is announced at the recommendations of the **Commission for Agricultural Costs and Prices based on the cost of production.**
- Cooperative factories usually pay farmers a **final cane price which is more than the Centre's FRP** due to **State Advised Prices** (usually higher than FRP) and **the demand of farmer unions.**
- **Other issues with FRP:**
 - **Mills are mandated to pay the basic FRP within 14 days of purchase,** failing which mills are to pay **15% per year interest** leading to the default of mills.
 - **Sugar commissioners are empowered to attach properties of errant mills.**

NITI AAYOG RELEASES STRATEGY PAPER ON “REUSE OF TREATED WASTEWATER (TWW) IN URBAN/PERI-URBAN AGRICULTURE IN INDIA”

• Key highlights

- **Indian urban centres**, consuming about **28 BCM of water annually**, discharges **80% of the fresh water supplied**.
 - **Wastewater generation** will increase by about 75% to 80% in the next 25 years.
- Currently **only 1/3rd of the sewage load** is being **treated** (around 70% in high-income countries).
- **About 3% of TWW** and 1% of wastewater generated, is being **reused for some valuable purposes** leading to wastage of resources.
- **Nitrogen and Phosphorus** in TWW gives it an advantage over the raw freshwater, while using for agriculture.

• Challenges in use of TWW:

- **Less penetration of advanced treatment technology for treatment.**
- **Lack of comprehensive policy** is hindering development of **formal market and appropriate technology of TWW.**
- Presence of **high sodium adsorption ratio (SAR)**,
- **Other challenges:** risk of **pathogen** exposure, **Bioaccumulation** of Heavy metals, etc.

• Recommendations

- Forming **quality standards** for reuse of TWW
- **Demand creation** for sustainability
- An integrated approach of **water resource management**
- **Use of GIS tools in planning**

ALSO IN NEWS



Regulation of online advertisement

- **Union Cabinet has assigned the Ministry of Information & Broadcasting (I&B)** as the administrative authority for regulation of online advertisements.
 - It was done by **amendment to Allocation of Business (AoB) Rules, 1961.**
- **Ministry of I&B was already looking at online advertising**, most notably through circulars in 2022 to clear ads from “betting and gambling” firms from TV and OTT.
- Prior to this, regulation of online gaming content and advertisements were primarily **overseen by MeitY and Information Technology Act, 2000.**



Cinematograph (Amendment) Bill, 2023

- Parliament has passed **Cinematograph (Amendment) Bill, 2023** which aims to tackle film piracy.
 - It seeks to amend **Cinematograph Act 1952** which was enacted to make provision for certification of cinematograph films.
- **Bill classifies films on the basis of age group**, instead of the current practice of 'U', 'A', and 'UA'.
- It seeks to bring **about uniformity in categorization of films and content across platforms.**
- Bill considers the **act of piracy as an offense legally and will include even transmitting pirated content punishable.**



Infrastructure Investment Trusts (InvITs)

- Centre is working on a proposal to launch a fresh InvIT for national highways.
- InvITs are **stock-market traded investments regulated by Securities and Exchange Board of India.**
 - **It allows investors to invest directly** and get part **ownership in infrastructure project.**
 - Any dividend or interest income that one can get from an InvIT is completely taxable as per their Income Tax Slab rate.
 - InvITs are **recognized as borrowers under 'Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002'.**



Gross Fixed Capital Formation (GFCF)

- GFCF in the Indian economy has **increased** from Rs. 32.78 lakh crore (constant 2011-12 prices) in 2014-15 to Rs. **54.35 lakh crore in 2022-23** (Provisional Estimates).
- GFCF is the estimate of **net capital expenditure** (acquisitions less the proceeds from disposals) **on fixed assets by both the public and private sectors.**
 - Fixed assets are **purchased assets used in production processes for more than one year.**
- Generally, **the higher the capital formation of an economy, the faster an economy can grow** its aggregate income.

 <p>Gender Inclusion Fund (GIF)</p>	<ul style="list-style-type: none">● National Education Policy, 2020 provides for setting up a GIF.● GIF aims to build capacity to provide equitable quality education for all girls and transgender students.<ul style="list-style-type: none">➤ Fund will be available to States to implement priorities determined by Central government (such as provisions of sanitation and toilets, bicycles, conditional cash transfers, etc.)➤ It will enable States to support community-based interventions that address local context specific barriers to female and transgender children's access to education.
 <p>Worldcoin crypto project</p>	<ul style="list-style-type: none">● A German data watchdog has been investigating the Worldcoin project since late last year due to concerns over its large-scale processing of sensitive biometric data.● Worldcoin is a cryptocurrency and digital identity project co-founded by OpenAI CEO Sam Altman.<ul style="list-style-type: none">➤ Under the project participants' iris pattern is scanned to collect their biometric data to provide them a World ID through the World app.● With the app, scanned participants can collect a cryptocurrency called Worldcoin (WLD) at regular intervals or make transactions with their World ID.
 <p>Paharis and Paddaris Tribe</p>	<ul style="list-style-type: none">● Bill to include "Paddari Tribe" and "Pahari Ethnic Group" in list of Scheduled Tribes (STs) in Jammu and Kashmir is introduced in Lok Sabha.<ul style="list-style-type: none">➤ Both tribes do not constitute a single ethnic group but are a mix of individuals from different castes and religions who speak a particular language.● Paddari tribe lives in the remote Paddar area of the hilly Kishtwar district.<ul style="list-style-type: none">➤ 2011 census recorded their population at 21,548, comprising Hindus, Buddhists, and Muslims.➤ Paddari homeland borders Zanskar (Ladakh) in north and east, Pangi (Himachal Pradesh) in south, and rest of J&K in west.● Pahari tribe are Hindus, Muslims and Sikhs, and include people of Kashmiri origin who settled in districts of Rajouri and Poonch.
 <p>Places in news</p>	<p>Niger (Capital: Niamey)</p> <ul style="list-style-type: none">● Military seized power in Niger.● Political Boundaries<ul style="list-style-type: none">➤ Landlocked western African country.➤ Bounded by Algeria (northwest), Libya (northeast), Chad (east), Nigeria and Benin (south), Burkina Faso and Mali (west).● Geographical features<ul style="list-style-type: none">➤ Highest Peak: Mont Idoukal-n-Taghes in Bagzane Plateau.➤ Longest river: Niger River (3rd-longest river in Africa after the Nile and Congo rivers).➤ Lake Chad (fresh water lake): At west-central African region shared by Chad, Cameroon, Nigeria, and Niger.➤ Climate type: Hot Climate (it is part of West Africa Sahel region).  <p>Malawi (Capital: Lilongwe)</p> <ul style="list-style-type: none">● Parliamentary delegation from Malawi is visiting India.● Political Boundaries<ul style="list-style-type: none">➤ Landlocked country in south-eastern Africa.➤ Bounded by Tanzania (north), Lake Malawi (east), Mozambique (east and south), and Zambia (west).● Geographical features<ul style="list-style-type: none">➤ Highest point: Sapitwa (Mount Mlanje).➤ Lowest point: Junction of Shire River and international boundary with Mozambique➤ Major lakes: Lake Malawi (aka Lake Nyasa in Tanzania) (largest), Lake Chilwa.➤ Major rivers: The Shire River (largest), Lilongwe river, North and South Rukuru, Dwangwa, etc. 