NEWS TODAY

MANUAL ON DISASTER MANAGEMENT PLAN (DMP) FOR DEPARTMENT OF DRINKING WATER AND SANITATION RELEASED BY MINISTRY OF JAL SHAKTI

- Aim is **to ensure uninterrupted supply and minimum loss of Water, Sanitation and Hygiene (WASH) assets** and services; **provide immediate WASH response** to disasters; create a **funding and coordination mechanism** etc.

  - A balanced and integrated WASH approach is essential to preventing and reducing mortality, especially among children during crisis.

- **Under Section 37 of Disaster Management (DM) Act,** 2005 **every Ministry/Department** of Government of India **shall prepare a DMP.**

- **Key features of DMP**

  - It will **apply to all departments responsible** for providing water and sanitation services in rural areas and **each State, district, and village** must also **locally develop a WASH DMP.**

  - **Focuses on four stages** of Disaster management cycle:

    - **Preparedness:** With a focus on capacity building, pre-positioning of supplies and service providers, community engagement, risk assessment, and early warning systems.

    - **Response:** Includes immediate steps taken to restore water supply, correct water quality issues, and provide solutions for sanitation and hygiene.

    - **Recovery and Reconstruction:** Restoration of water, sanitation, and hygiene systems based on **'Build Back Better' approach** to make them less vulnerable to future disasters.

    - **Mitigation:** Includes steps taken to minimize vulnerability of WASH infrastructure and services to future disasters.

RELATED NEWS

- **Department of Drinking water and sanitation** and Echo India (a non-profit organization) **signed MoU to establish Jal Jeevan Mission(JJM) Digital Academy.**

- Academy aims **to build the capacity,** using digital technology, **of various stakeholders associated** with water supply program.

INDIA HOSTED 14TH CLEAN ENERGY MINISTERIAL (CEM14) AND 8TH MISSION INNOVATION (MI-8) MEETING

- **Theme** for CEM-14 / MI-8 **was "Advancing Clean Energy Together".**

	About	Initiatives launched
Clean Energy Ministerial (CEM)	• A high-level **global forum (India is a member) to** advance **clean energy technology** to encourage transition **to a global clean energy economy.**	• **Clean Energy Marine Hubs (CEM-Hubs)** ➢ It is a cross-sectoral **public-private platform to de-risk investments** needed **to produce low- and zero-emission fuels** to be transported by **maritime sector.**

Mission Innovation (MI)	• **Global initiative to make clean energy** affordable, attractive and **accessible to all.**
	
	   ➢ **First phase** was launched alongside **Paris Agreement in 2015.**
	
	   ➢ **Mission Innovation 2.0,** second phase of MI, **was launched in 2021.**
	
	• It **consists of 23 countries** and EU. **India is a founding member.**
	
	• **Clean Hydrogen, Green Powered Future, Zero-Emission Shipping,** Carbon Dioxide Removal, Urban Transitions etc **are covered under MI.**
		• **Funding Opportunity Announcement 2023 for RD&D** (research, development, and demonstration) in Carbon Capture Utilization and Storage (CCUS) under MI 2.0.

POWER SUPPLY TO BANGLADESH FROM 1600 MW ULTRA SUPER-CRITICAL THERMAL POWER PLANT (USCTPP) AT GODDA, JHARKHAND COMMISSIONED

- Godda USCTPP is **India's first commissioned transnational power project** where **100% of the generated power is supplied to another nation.**
  - It is also the first power plant in India to have started operations with **100% flue gas desulphurization, selective catalytic reconverter and zero water discharge.**
- It will give **boost to BIMSTEC Grid Interconnection** to enhance regional energy security.
  - The project will build a **3,000-kilometre-long power grid,** mostly by way of interconnections of existing national or regional grids.
  - It overlaps with the **"One Sun One World One Grid and Green Grids (OSOWOG)" initiative** connecting 140 nations.
    - **OSOWOG is led by India and the UK** in collaboration with the International Solar Alliance (ISA) and the World Bank Group.
    - It entails the **first international network of globally interconnected solar electricity grids.**
- **Significance of the project**
  - **To counter China's growing diplomatic influence** in South Asia and West Asia regions.
  - **Benefit to consumers across countries** due to electricity price rationalization.
  - **Ensure better capacity utilization of energy infrastructure.**
- **Challenges:** Bringing **energy surplus countries on board, most electricity interconnections are bilateral,** infrastructure, etc.

PARLIAMENT PANEL SUBMITS REPORT TITLED 'RESEARCH AND DEVELOPMENT IN FARM MECHANIZATION FOR SMALL AND MARGINAL FARMERS IN THE COUNTRY'

- Report was submitted by the **Standing Committee on Agriculture, Animal Husbandry and Food Processing.**
- Mechanization of agriculture is an essential input that **enhances productivity while reducing human drudgery.**
  - It could save **15-20% of seed and fertilizer,** increase **cropping intensity** (number of crops grown in an area in a year) **5-20% and crop yield to 13-23%.**
- **Current status**
  - In India, only **47% Agriculture Mechanization has been done** and reaching **75-80%** may take another **25 years.**
    - **China** has **59.7%** of farm meachnisation and **Brazil 75%.**
  - In **2017, cropping intensity** reached to **142% and share of tractors** increased to **45.8%.**
- **Challenges**
  - **Machines appropriate for small and marginal farmers** (86% of farmers) are **not available.**
  - **Capital intensive and low economies of scale** in small farms.
  - **Low quality and after sales service.**
  - **Reduced budgetary allocation** for R&D to **0.22% in 2020-21** (0.32% in 2018-19).
- **Recommendations**
  - **Prioritise development of small machines.**
  - Implementation of **strategy suggested by ICAR** on filling State-wise mechanization gaps
  - Need a **concrete policy for interchangeability in the manufacture of Agricultural Implements.**
  - **Reduce GST on Tractor parts and components** (currently 12%).

> **INITIATIVE TO PROMOTE FARM MECHANISATION**
> - **Sub-Mission on Agricultural Mechanization (SMAM)** launched by **Ministry of Agriculture and Farmers Welfare.**
>   - It is a **Centrally Sponsored Scheme.**
>   - **Objectives:** Increasing the reach of farm mechanization, Promoting 'Custom Hiring Centers' Creating awareness, capacity building activities, etc.

SIXTH PERSON (GENEVA PATIENT) LIKELY CURED OF HIV (HUMAN IMMUNODEFICIENCY VIRUS)

- **All the patients** who have **achieved HIV remission** so far **needed stem cell transplantation (SCT)** for treatment.
  - **In the first five cases,** treatment teams **specifically looked for** donors **with CCR5 delta 32 mutation** that is **associated with lower risk of HIV.**
  - However, **Geneva patient received stem cells** from a donor who **does not have CCR5 delta 32 mutation.**
- **HIV mainly attacks CD4 immune cells** (type of white blood cell) **in human body,** thereby **reducing** a person's **ability to fight off secondary infections.**
  - **CCR5 receptors** on surface of CD4 immune cells **act as a doorway for HIV virus.**
- However, **CCR5-delta 32 mutation prevents these receptors** used by HIV virus **from forming on the surface,** effectively removing the doorway.
- **About SCT (also referred to as bone marrow transplant)**
  - A procedure in which a **patient receives healthy stem cells to replace damaged stem cells.**
    - Stem cells are **special human cells** that are able to **replicate and differentiate into many different cell types.**
    - Stem cells **provide new cells and replaces specialized cells** that are damaged or lost.
  - **Types:**
    - **Autologous transplantation** uses the patient's own stem cells.
    - **Allogeneic transplantation** uses stem cells from a donor.

PARLIAMENTARY PANEL ASKS MINISTRY OF LABOUR AND EMPLOYMENT TO IMPLEMENT WELFARE SCHEMES FOR GIG WORKER

- Standing committee on **Labour, Textiles, Skill Development** stated that there is a need of a **scheme exclusive for Gig and Platform workers** of the unorganized sector.
- **Gig workers** are those engaged in **livelihoods outside the traditional employer-employee arrangement.** They include:
  - ➢ **Platform workers** are those whose work is based on **online software apps or digital platforms.**
  - ➢ **Non-platform gig workers** are generally **casual wage workers and own-account workers** in the conventional sectors, working part-time or full time.
- In 2020-21, **77 lakh workers were engaged in the gig economy** and expected to expand to **2.35 crore workers by 2029-30** (NITI Aayog).
- **Challenges**
  - ➢ **No social security** as they do not come under purview of **Employees Provident Funds and Miscellaneous Provisions Act, 1952.**
  - ➢ **Lack job security,** and **unequal bargaining power, Social stigma, etc.**
- **Initiatives**
  - ➢ **Code on Social Security, 2020** provides for **framing of suitable social security schemes for gig workers and platform workers.**
  - ➢ **e-Shram portal for** creation of a Comprehensive National Database of Unorganized Workers.

ALSO IN NEWS

Global Biofuels Alliance (GBA)	• An event on **consultations and recommendations for GBA was organized.** • GBA , one of the priorities under India's G20 Presidency, is aimed at facilitating cooperation and **intensifying the use of sustainable biofuels,** including in the transportation sector. • It will place emphasis on **facilitating global biofuels trade,** development of **policy lesson-sharing** and provision of **technical support for national biofuels programs** worldwide.

African Union	• **India's proposed** to make **African Union a permanent member of the G-20.**
	• **About African Union:**
	  ➢ **HQ:** Addis Ababa, Ethiopia
	  ➢ **Origin:** Officially launched in 2002 as a successor to the Organisation of African Unity.
	  ➢ **Membership:** 55 member states that make up countries of African Continent.
	  ➢ **Objective:**
	    ▪ **To promote unity and solidarity** of African States;
	    ▪ To coordinate and **intensify their cooperation;**
	    ▪ To **defend their sovereignty, their territorial integrity** and independence;

District Mineral Foundation (DMF)	• Comptroller and Auditor General of India reported **under-utilization of DMF funds in Chhattisgarh.** • DMF is a **trust,** setup as a non-profit body in **all mining affected districts.** • It is established under **Mines and Minerals (Development and Regulation) Amendment Act, 2015.** • Mining companies **are required to contribute to DMFs between 10 and 30% of the royalty,** in addition to the royalty paid to state governments. ➢ **Atleast 60% of the fund** needs to be used for **high priority works** such as drinking water health, education etc.
Cannabis	• **Cannabis Research Project** of CSIR-IIIM Jammu is a **first of its kind project** to put substance of abuse for the good of mankind. • Cannabis-based products **come from the dried flowering tops, leaves, stems, and seeds of Cannabis sativa (hemp) plant.** • It contains compounds that **make it useful as a medicinal drug.** It can have **euphoric, pain-relieving, and psychoactive effects,** among others. ➢ **Major psychoactive constituent** in cannabis is **Δ-9 tetrahydrocannabinol (THC).** • Cannabis is by far the **most widely cultivated, trafficked and abused illicit drug.**

Ludwigia peruviana	• **Ludwiga peruviana** an invasive weed, is threatening **elephant habitats** and foraging grounds in Tamil Nadu.
	  ➤ It has **infested the majority of the hill station's swamps,** locally known as vayals .
	• It is popularly called **primrose willow and is a native of Central and South America including Peru.**
	  ➤ It is **used as an ornamental plant for its tiny yellow flowers.**
	  ➤ It grows fast **along water bodies.**
	  ➤ It is among the **22 priority invasive plants in Tamil Nadu.**

Faults	• **GPS time-series data** from various **large earthquakes** suggests the existence of a **precursory phase of fault slip before the earthquake.**
	• Fault is a **fracture or zone of fractures between two blocks of rock.**
	• **Types of faults**
	  ➤ **Strike-slip faults:** Rocks slide past each other **horizontally,** with little to no vertical movement.
	  ➤ **Normal fault:** Two blocks of crust pull apart, **stretching the crust into a valley.**
	  ➤ **Reverse/thrust fault:** One block of **crust slides on top of another.**

Ransomware	• Computer Emergency Response Team (CERT-In) issued **advisory against Akira Ransomware that steals vital personal information** and encrypts data.
	• Ransomware is a **category of malware** that gains access to systems and **makes them unusable** to its legitimate users, either by:
	  ➤ **Encrypting** different files on targeted systems, also known as **Crypto Ransomware.**
	  ➤ **Locking the system's screen** unless a ransom is paid, also known as **Locker Ransomware.**

Fragile X or Martin-Bell syndrome	• Fragile X syndrome (FXS) is a **genetic disorder that causes intellectual disability** and autism.
	  ➤ FXS is **caused by changes in a gene called Fragile X Messenger Ribonucleoprotein 1** (FMR1).
	  ➤ FMR1 usually **makes a protein** called FMRP that is **needed for brain development.**
	• There is **no cure for FXS.** However, **treatment services can help** people learn important skills.

Contribution of Indian soldiers in World War II (WW II)	• Italy has unveiled the **'VC Yeshwant Ghadge Sundial Memorial",** as a tribute to the Indian troops who **fought the WWII.**
	• Indian forces were **dispatcher to major war zones across the globe.**
	  ➤ They fought with **Germany in Africa, Japanese in Burma,** and took part in **the invasion of Italy.**
	  ➤ They also **played a significant part in battles in the Middle East.**
	• Also, 14 million Indian labourers worked round the clock to keep the **war factories and farms running.**
	  ➤ India also provided **Weapons, ammunition, timber, steel and especially food, were transported** in vast quantities **to Europe.**

Places in news	**Spain (Madrid)**
	• Wildfire raged on the **Canary Island of La Palma, Spain.**
	• **Political boundaries:**
	  ➤ **Location:** Located in the **south-western part of Europe in the Iberian Peninsula.**
	  ➤ **Territorial border:** Surrounded by Andorra, France, Portugal, Gibraltar (overseas territory of UK), Morrocco (Ceuta and Melilla).
	  ➤ **Maritime border:** Surrounded by Atlantic Ocean and Mediterranean Sea
	• **Geographical features:**
	  ➤ **Islands:** Includes two archipelagos, **the Balearic Islands** in the **Mediterranean Sea,** and the **Canary Islands in the Atlantic Ocean.**
	  ➤ **Highest point:** Pico de Teide (Tenerife) on Canary Islands
	  ➤ **Rivers:** Tagus (Tajo, Tejo) , Ebro etc.