

NEWS TODAY

WORLD HEALTH ORGANISATION (WHO) RELEASES 'BURDEN OF DISEASE ATTRIBUTABLE TO UNSAFE DRINKING-WATER, SANITATION AND HYGIENE (2019 UPDATE)' REPORT

- **Estimates are based on four health outcomes** – diarrhoea, acute respiratory infections (ARIs), undernutrition (protein-energy malnutrition), and soil-transmitted helminthiasis (STHs).

- **Key Findings**

- **Half of the world's population still does not have adequate access** to safe drinking water, sanitation and hygiene (WASH).
- **At least 1.4 million deaths** and 74 million disability-adjusted life years (DALYs) **could have been prevented by adequate WASH** in 2019.
- **Climate change can impact WASH services** in many ways including damage to water supply and sewerage infrastructure.

- **Observations related to India**

- **India among countries** that increased **safely managed sanitation services by more than 10 percentage points** between 2015 and 2020.
- **Swachh Bharat Mission** could result in averting more than **300 000 deaths and 14 million DALYs** between 2014 and 2019.
- Successful implementation of **Jal Jeevan Mission could reduce diarrhoeal deaths and DALYs by almost half.**

- **Recommendations**

- **Quantifying health gains** associated with higher **WASH service levels.**
- **Promoting hand hygiene for all** (Driven by Hand Hygiene for All initiative, WHO Guidelines on hand hygiene etc).
- **Adapt national monitoring systems** to improve data on population exposure to safely managed services.

EUROPEAN UNION (EU) REACHES POLITICAL AGREEMENT ON EUROPEAN DATA ACT

- Data Act aims to **boost EU's data economy by unlocking industrial data**, optimising its **accessibility and use**, and fostering a **competitive European cloud market.**

- **Data Act, European Data Governance Act (2020) and European strategy for data** (2022) aims to establish a unified market allowing **for data to flow freely within EU and across sectors.**

- It is also consistent with existing **General Data Protection Regulation (GDPR).**

- **Key features of the act**

- Enable **users of connected devices to access data** generated by these devices and by services related to these devices.
- Mechanisms for **public sector bodies to access and use data held by private sector** in cases of public emergencies or when implementing a legal mandate.
- **Protection from unfair contractual terms** that are unilaterally imposed.
- **Customers may switch** between various **cloud data-processing service providers.**

- **Significance of the Act**

- **Ensuring protection of trade secrets** and intellectual property rights.
- Ensure **fairness in allocation of value from data** and stimulate a **competitive data market**
- Open **opportunities for data-driven innovation** and make **data more accessible** to all.

EXAMPLES OF HEALTH IMPACTS LINKED TO UNSAFE WATER, SANITATION AND HYGIENE

INFECTIOUS DISEASES

- Diarrhoeal disease, enteric infections and related sequelae (e.g. undernutrition)
- Neglected tropical diseases
- Vector-borne diseases
- In health care facilities
 - Health care-associated infections
 - Maternal and neonatal sepsis
 - Infections from unsafe health care waste management
 - Antimicrobial resistance

PRESSURES

(e.g. climate change, urbanization, population growth, use of antibiotics etc.)

IMPACTS ON WELL-BEING

- Dignity
- Personal safety (fear, anxiety, stress)
- Injuries/musculoskeletal disorder
- School attendance
- Livelihoods (economic productivity, poverty)
- In health care facilities:
 - Safety, staff morale, healthcare seeking behaviour

HEALTH RISKS FROM CHEMICALS IN DRINKING-WATER

- Non-communicable diseases Arsenicosis, fluorosis
- Emerging risks (e.g. pharmaceuticals, endocrine disruptor chemicals, microplastics)

OTHER INITIATIVES BY EU TO REGULATE BIG TECH AND EMERGING TECHNOLOGIES

Digital Services Act (DSA) and the Digital Market Act (DMA) to create a safer digital space and to establish a level playing field to foster innovation, growth, and competitiveness

Markets in Crypto Act (MiCA) to embrace innovation and new financial technologies.

GDPR: Governs how personal data of individuals in the EU may be processed and transferred.

CORPORATE SOCIAL RESPONSIBILITY (CSR) SPENDING UP, BUT IMPACT LIMITED

- As per Ministry of Corporate Affairs (MCA) data:
 - **CSR spending** stood at ₹26,210 crore in FY21, having **grown 80% from FY16**.
 - **Just ten states** – including Maharashtra, Gujarat, Karnataka and Andhra Pradesh – **got over 44% of the CSR funds in FY21**.
 - **Eight north-eastern states** received a mere **0.91% CSR funds**.
 - **Between FY15 and FY21, education sector** received about **37%** of the total CSR spending, **health sector** received a 30% share.
- **Framework of CSR is provided in Section 135 of Companies Act, 2013** and Companies (CSR Policy) Rules, 2014.
 - It is a commitment by businesses **to integrate social and environmental concerns** in their business operations.
 - It requires **companies with a net worth of ₹500 crore or more, or turnover of ₹1,000 crore or more or a net profit of ₹5 crore or more** during immediately preceding three years **to spend 2% of their average net profit on CSR activities**.
 - **Noncompliance** has been **notified as a civil wrong**.
 - **No specific tax exemptions** extended to CSR expenditure.
 - **Contributions to following admissible** as CSR expenditure: **Swachh Bharat Kosh, Clean Ganga Fund, PMNRF, PM CARES** etc.

RECOMMENDATIONS MADE BY MCA

Enhance the visibility as well as impact of these invested funds.

Ensure that initiatives undertaken become self-sustaining so that the CSR programmes can run seamlessly.

Strike a balance between local area preference with national priorities to avoid any concentration of CSR funds in specific regions.

Companies Act 2013 provides that companies should give preference to areas around which they operate while allocating CSR funds.

MINISTRY OF AGRICULTURE & FARMERS WELFARE REVISES CROP RESIDUE MANAGEMENT GUIDELINES

- Guidelines will **enable efficient ex-situ management of paddy straw** generated in Punjab, Haryana, UP and Delhi.
 - Burning of crop residues **results in emission of gases** such as CH₄, CO, N₂O and NO_x; **particulate matters, loss of plant nutrients** and adversely **affect the environment and soil health**.
- **Key features of guidelines**
 - **Techno-commercial pilot projects** for Paddy Straw Supply Chain **will be established** between Beneficiary/Aggregator (Farmers, rural entrepreneurs, FPOs etc) and Industries.
 - Government shall provide **financial assistance on capital cost of machinery and equipment**.
 - **Government** (jointly by Central and State Governments) **will provide financial support of @ 65% of project cost**.
 - **Industry will contribute 25%** and **Farmers**, rural entrepreneurs, FPOs etc. will contribute the balance 10%.
 - **State Governments shall approve these projects** through project sanctioning committee.
 - **Financial assistance will be extended for machines and equipments** such as Higher HP Tractor, Cutters, Tedder etc.
- **Various options for Ex-situ management of crop residue includes:**
 - **Biomass pellets as a fuel substitution** in thermal power plants.
 - **Production of compressed bio-gas / bio-CNG** from paddy straw
 - **Alcohol production** from paddy straw

91% OF INDIAN FISH STOCK FOUND HEALTHY, SOUTHEAST (SE) COAST BEST

- Findings are part of a **stocks assessment by Central Marine Fisheries Research Institute (CMFRI)** that highlighted:
 - **86.7% stocks were found to be sustainable** (included certain varieties of dolphins, eels, lizardfish and snappers).
 - **8.2% of stocks to be overfished**, including varieties of croakers, catfish, sharks, and lobster.
 - **Southeast coast had highest percentage of healthy stocks**, followed by southwest and **northwest was at the lowest**.
 - **Two-year break** in fishing activity **caused by COVID-19 pandemic seems to have helped** health of fish stocks.
 - **Recommendations:** impose a minimum legal size and change mesh size of nets to reduce catch of juveniles and bycatch, incentives to fishermen to release species like sharks and lobsters back into the sea etc.
- As per **FAO, estimated loss from illegal, unreported and unregulated (IUU) fishing** activities is around **US\$10–23 billion**.
 - **IUU depletes fish stocks, destroys marine habitats, puts fishermen at disadvantage** and impacts coastal communities.
- **Initiatives taken against IUU by India**
 - **National Fisheries Policy** talks about sustaining marine fisheries.
 - **IUU monitoring by Information Management and Analysis Centre (IMAC)**.
 - **Indo-Pacific Maritime Domain Awareness (IPMDA)** of **Quad** (India, Australia, Japan and U.S).

INDIA ADDS 664 ANIMAL SPECIES TO ITS FAUNA DATABASE, 339 TAXA TO ITS FLORA

● List, by **Ministry for Environment, Forest and Climate Change**, also contains both new records (species found in India for the first time) of animals and new distributional records of flora.

➤ Faunal discoveries are compiled by **Zoological Survey of India (ZSI)** and Floral by **Botanical Survey of India (BSI)**.

● **Maximum discoveries** of both flora and fauna were made in Kerala.

● **Key Fauna discovered**

➤ *Miniopterus phillipsi*, a **long-fingered bat**, and *Glischropus meghalayanus*, a **bamboo-dwelling bat from Meghalaya**

➤ *Sela macaque* (*Macaca selai*), discovered in **Arunachal Pradesh (AP)** and named after Sela Pass.

➤ *Macaca leucogenys*, a **white-cheeked macaque** (found in Modog, Tibet) sighted in India for the first time in **AP**.

➤ *Ficedula zanthopygia*, **yellow-rumped flycatcher** (known from Mongolia, China, Korea and Japan) **found in India in Narcondam Island of Andaman**.

● **Key flora discovered**

➤ *Calanthe lamellosa*, an orchid species earlier recorded in China and Myanmar, found in India in **Japfu mountain range in Kohima, Nagaland**.

➤ *Nandadevia Pusalkar*, in the foothills and warm outer valleys of **Uttarakhand Himalayas**.

➤ *Nilgiriella Pusalkar*, endemic to southern **Western Ghats** and distributed in Karnataka, Kerala and Tamil Nadu.

ABOUT ZSI AND BSI

● **ZSI was established in 1916** and traces its origin to **Zoological Section of the Indian Museum at Calcutta in 1875**. It undertakes **exploring, naming, describing, classifying and documenting animals from all over India**.

● **BSI was established in 1890** with the objectives of **exploring the plant resources of the country** and identifying **plant species with economic virtue**.

ALSO IN NEWS



Publication of criminal antecedents

- **Association for Democratic Reforms (ADR) is seeking action against political parties (PPs)** that fail to publish details of criminal antecedents of candidates.
- **Supreme Court in 2018 made it mandatory for PPs to publish details of criminal cases pending against their candidates**, including on their websites, in a format prescribed by Election Commission of India (ECI).
 - SC also ordered that **candidate and PPs have to publish information at least thrice** after filing nomination.
- In pursuance of this, **ECI issued detailed instructions** and prescribed **formats for submitting information**.



India-Myanmar-Thailand (IMT) Trilateral Highway

- **Around 70% construction work on IMT Trilateral Highway has been completed**.
- Highway **will connect Moreh in Manipur, India with Mae Sot in Thailand** via Myanmar.
- India is **undertaking construction of two sections of IMT Highway** in Myanmar namely:
 - **Kalewa-Yagyi road section**.
 - **Construction of 69 bridges** along with approach road on **Tamu-Kyigone-Kalewa section**.
- Also, there is a **proposal to extend IMT highway to Cambodia, Laos and Vietnam**.



Gucchi mushroom

- **Unpredictable weather patterns and early springs** have left gucchi mushroom hunters in distress.
- **Gucchi mushrooms** also known as **Morel Mushrooms**, are the **costliest among fungi** in the world.
 - **Grows in clusters on logs of decaying wood**.
 - Limited to a **few weeks in the spring**.
 - **Found in Himachal Pradesh, Uttarakhand, and Jammu and Kashmir**.
- **Gucchi mushrooms cannot be cultivated commercially** and does not grow at the same spot every time.
- **Health Benefits:** rich in potassium, vitamins (including Vitamin D), copper and antioxidants.



Euclid Mission

- **ESA's (European Space Agency) Euclid mission** lifted off.
- **Euclid aims to investigate cosmic mysteries of dark matter and dark energy**. It will make a **3D-map of the Universe** by observing billions of galaxies.
 - In the current popular model of universe, **~68% of the cosmos is thought to be dark energy, ~27% dark matter, and ~5% normal matter**.
- **Euclid is equipped with a reflecting telescope** that feeds the two instruments: **visible-wavelength camera (VIS)** and **Near-Infrared Spectrometer and Photometer (NISP)**.
 - It will travel **towards Sun-Earth Lagrange point 2**.

 <p>Data Scraping</p>	<ul style="list-style-type: none">● Twitter announced temporary reading limits to combat data scraping.● Data scraping or web scraping is the automated process of extracting large amounts of data from websites or online sources.<ul style="list-style-type: none">➤ It involves using software tools or programming techniques to gather information from web pages.➤ It can be used for academic research, data journalism, or to create innovative applications and services.➤ But it may also lead to copyright infringement, breach of privacy, manipulation and misuse of data etc.
 <p>New-born genome-sequencing</p>	<ul style="list-style-type: none">● Genome sequencing means deciphering the exact order of base pairs in an individual's DNA.<ul style="list-style-type: none">➤ A genome is an organism's complete set of DNA. It includes all chromosomes, which houses DNA, and genes (specific sections of DNA)● New-born genome-sequencing could lead to early diagnosis, increase the effectiveness of treatment, and save an infant from death or disability. It could also enhance the affordability of the treatment.● Ethical concerns: Issues of privacy and psychological impact on families, equitable distribution of benefit etc.
 <p>Heavy water</p>	<ul style="list-style-type: none">● Merck Life Science will soon supply of Heavy Water for production of Deuterium Labelled Compounds to Atomic Energy Commission.● Heavy water contains significantly more than the natural proportions (one in 6,500) of heavy hydrogen (deuterium, D) atoms to ordinary hydrogen atoms.<ul style="list-style-type: none">➤ It is used as a moderator in Pressurised Heavy water reactors because it slows down neutrons effectively and also has a low probability of absorption of neutrons.➤ It is also used for non-Nuclear Application (Metabolism studies, Active Pharmaceutical Ingredients, Semiconductors, etc.).
 <p>Santhal Rebellion</p>	<ul style="list-style-type: none">● June 30 is celebrated as Hul (revolution) Diwas marking the beginning of the Santhal rebellion of 1885.● Santhal rebellion (1855-56) was one of the first expressions of revolt against the British colonial regime.● It is attributed to Permanent Settlement Act of 1790 that led to their displacement from Birbhum and Manbhum regions (present day Bengal) and subsequent exploitation by Zamindars, police and British.<ul style="list-style-type: none">➤ Rebellion took place in Damin-i-Koh region in Rajmahal Hills of Jharkhand.● It was headed by the two brothers- Sidhu and Kanhu Murmu
 <p>Places in news</p>	<p>Mozambique (Capital: Maputo)</p> <ul style="list-style-type: none">● INS Sunayna visited Beira, Mozambique.● Political boundaries<ul style="list-style-type: none">➤ Location: South-eastern coast of Africa, bordering the Mozambique Channel in the Indian Ocean in west.➤ Border countries: Malawi, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe.➤ Shares maritime borders with Comoros, Madagascar, and Mayotte Island (France).● Geographical features:<ul style="list-style-type: none">➤ Climate: Varies from sub-tropical to tropical (south to north).➤ Major rivers: Zambezi river, Limpopo river, Ruvuma river etc.➤ Major lakes: Lake Malawi (Nyasa), Cahora Bassa etc.➤ Highest Point location: Monte Binga 