

NEWS TODAY

LEVELS AND TRENDS IN CHILD MALNUTRITION: JOINT CHILD MALNUTRITION ESTIMATES 2023 RELEASED

- Report was jointly published by **UNICEF, World Health Organisation (WHO) and World Bank Group.**
 - It reveals insufficient progress to reach 2025 World Health Assembly (WHA) global nutrition targets and 2030 **Sustainable Development Goal (SDG) 2.2** (end all forms of malnutrition) **targets.**
- **Key findings**
 - In 2022, **22.3 percent of children under age five** worldwide were affected by **stunting (too short for his/her age).**
 - **India had a stunting rate of 31.7 percent in 2022** (down from 41.6 per cent in 2012).
 - In 2022, an **estimated 45 million children** (6.8 percent) **under five** were affected by **wasting (too thin for his/her height).**
 - In 2020, **18.7 percent of Indian children** were **affected by wasting**, caused by **poor nutrient intake** and/or **recurrent illnesses.**
 - **37 million children** (5.6 percent) **under five are overweight (too heavy for his/her height)** globally.
 - **India had an overweight percentage of 2.8 percent in 2022** (2.2 percent in 2012).
- Malnutrition refers to **deficiencies or excesses in nutrient intake, imbalance of essential nutrients** or impaired nutrient utilization.
- **Indian Initiatives to tackle malnutrition:** Integrated Child Development Schemes (ICDS); Nutritional Rehabilitation Centre; Poshan Abhiyan (National Nutrition Mission) etc.

RAJASTHAN GOVERNMENT PROMOTES MANUFACTURED SAND (M- SAND) AS EASY ALTERNATIVE TO RIVER SAND

- M sand is **produced by crushing rocks**, and quarry stones to a stipulated size of 150 microns. It is different from River Sand. (refer image)
- **Benefits of M- Sand**
 - **More cost-effective** than using natural sand.
 - **Reduce the need for mining natural sand**, which can have negative environmental impacts.
 - **Reduce the amount of water required for construction projects**, as it does not require washing before use.
 - Help maintaining water table.
- **Sand mining in India**
 - Sand is classified as a '**minor mineral**' under **Mines and Minerals (Development and Regulations) Act, 1957**, and **administrative control vests with State Governments.**
 - **Sustainable Sand Mining Management Guidelines 2016**, issued by **Ministry of Environment, Forests, and Climate Change (MoEFCC)**, encourages scientific sand mining and environmentally friendly management method.
 - **Sand Mining Framework, 2018**, prepared by **Ministry of Mines**, envisages **alternative sources of sand in the form of M-Sand from crushed rock fines** (crusher dust), etc.
 - Central Pollution Control Board (CPCB) has published **Environmental Guidelines for Stone Crushing units** that include measures for air pollution control to be followed in stone-crushing units.

| M Sand (Manufactured Sand) | River Sand |
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|  High concrete strength compared to river sand. |  Low concrete strength compared to M sand. |
|  The sand particles of M sand are in cubic form. This makes the bond stronger. |  Bonding is weak as it has highly flaky, sharp and angular grains. |
|  Zero silt content. |  3-20% silt content. |
|  Better quality control from being manufactured in a controlled environment. |  There is no restriction on quality as it occurs naturally. There may be differences in silt contents in the same river bed sand. |

X-RAY POLARIMETER SATELLITE (XPOSAT) MISSION

- **Indian Space Research Organisation (ISRO) is collaborating with Raman Research Institute (RRI), Bengaluru to build the XPoSat that will be launched later in 2023.**
- XPoSat is **India's first dedicated Polarimetry mission** to study various **dynamics of bright astronomical X-ray sources in extreme conditions.**
 - It is **world's second polarimetry mission** (first was NASA's Imaging X-ray Polarimetry Explorer (IXPE)).
- XPoSat will carry **two scientific payloads in a low earth orbit:**
 - Primary payload **POLIX (Polarimeter Instrument in X-rays)** will measure **polarimetry parameters** (degree and angle of polarisation) in **energy range of 8-30 keV (kiloelectron volt).**
 - This is **first payload in medium X-ray energy band** dedicated for polarimetry measurements.
 - **XSPECT (X-ray Spectroscopy and Timing) payload** will give **spectroscopic information** (on how light is absorbed and emitted by objects) in **energy range of 0.8-15 keV.**
 - It observes several types of sources viz, **X-ray pulsars, Black-hole binaries, low-magnetic field neutron star** etc.
- Polarimetry is a technique to **measure the polarisation of light.**
 - It is a tool that allows astronomers to **infer information about celestial objects, from passing comets to distant galaxies.**
 - Polarisation is seen **across all wavelengths in electromagnetic spectrum.**

RICE FORTIFICATION PILOTS IN INDIA SHOW DROP IN ANAEMIA

- According to United Nations report, **India's pilot project on rice fortification had led to a significant drop in prevalence of anaemia** among school- children.
 - **Four large-scale pilots in different parts of country were done** - three in school lunch and one in Integrated Child Development Scheme.
 - After witnessing success and feasibility of pilot project, in 2021 government announced that **all rice distributed through food-based social assistance programmes would be fortified by 2024.**
- **Fortification** is the practice of **deliberately increasing the content of one or more micronutrients** (i.e., vitamins and minerals) in **food or condiments** (supplemental food) to improve **nutritional quality of food supply.**
 - Food fortification is regulated under **Food Safety Standards (Fortification of Foods) Regulation, 2018.**
 - Under Rice fortification, micronutrients such as **iron, Vitamin B12 and folic acid** are added for nutritional boost.
- **Benefits of Rice Fortification**
 - **Combating malnutrition and anaemia in a cost-effective manner** as Malnutrition costs India at least ₹77,000 crore annually in terms of lost productivity, illness and death.
 - **Prevent cretinism, goiter, thyrotoxicosis, brain damage and improves foetal and neonatal health.**

RICE FORTIFICATION IN INDIA

- Various technologies are available to add micronutrients to regular rice, **such as dusting, coating and extrusion.**
- In India, rice is fortified using **extrusion technology** in which milled rice is pulverized and mixed with a premix containing vitamins and minerals.

X RAYS

- They've much **higher energy and much shorter wavelengths than ultraviolet light. Wavelength is very small between 0.03 and 3 nanometers.**

MINISTRY OF HOME AFFAIRS (MHA) RELEASED "THE TREATISE ON INDIAN CENSUSES SINCE 1981" REPORT

- In this report, MHA has **compiled and published the history of all Censuses since 1981.**
- Census is the process of **collecting, compiling, analysing and disseminating** demographic, social, cultural and economic data relating to **all persons in country.**
 - Responsibility of decades census rests with **Office of the Registrar General and Census Commissioner of India (CCI), MHA.**
- **Background of Census**
 - **Earliest literature 'Rig Veda'** reveals that **some kind of Population count** was maintained during **800-600 BC.**
 - In **1872** (period of **Lord Mayo**), **first non-synchronously census was conducted** in different parts of India.
 - In **1881** (period of **Lord Ripon**), **first synchronous enumeration** was attempted for all India.
 - **1881 Census by W.C. Plowden, CCI** was a step towards a **modern census.**
 - Since then, censuses have been undertaken **uninterruptedly once every ten years** (except delayed 2021 census due to COVID-19 pandemic). **Last census was conducted in 2011.**
- **How census 2021 is different from census 2011?**
 - It'll be **first digital Census.**
 - Introduced natural calamities as new option for determining factors responsible for migration. **"natural calamities"** as a new option when asking about the factors responsible for migration.
 - **A question on types and causes of disabilities has been expanded** to include "acid attack, intellectual disability, chronic neurological disease and blood disorder."

ALSO IN NEWS



Appointment of Chief Justice and Judges of High Courts

- Centre has appointed chief justices to five high courts.
- **Chief Justice and Judges of HCs are appointed by President under Article 217 (1) of Constitution. Article 217(1) states that**
 - **Every Judge of a HC shall be appointed by President in consultation with Chief Justice of India (CJI), Governor of State.**
 - **In the case of appointment of a Judge other than Chief Justice, Chief Justice of High Court is also consulted.**
- **For appointments to HCs, SC Collegium consists of only 3 judges –Chief Justice of India and two senior-most judges.**



Centrally Sponsored Scheme

Centrally Sponsored Scheme for Development of Infrastructure Facilities for the Judiciary

- **CSS for Development of Infrastructure Facilities for Judiciary is transforming judicial infrastructure at District and Subordinate Courts level since its operation in 1993-94.**
- **About scheme**
 - **Ministry: Department of Justice, Ministry of Law & Justice**
 - **Tenure:** Extended till 2026.
 - **Objective:** Augment the resources of **State Governments for construction of court buildings and residential quarters for Judicial Officers (JO)** in all States / UTs.
 - **Fund-sharing pattern:** 60:40 (Centre: State), 90:10 for 8 North-Eastern and 2 Himalayan States & 100% central funding for Union Territory.



Snowball effect

- World Economic Forum (WEF) President stated that India's economy is witnessing a **"snowball effect"**.
- **About Snowball effect:**
 - When a **small snowball travels down a snow-covered slope**, it gets bigger by **gathering more snow around its core**. Eventually, it may get so big that it **starts an avalanche**.
 - In Indian context, experts suggest that **growth of Indian economy** will lead to **more investments and more jobs**.
 - It'll be an **exponential growth** in coming years and a situation will arise where more **poverty is eradicated and more opportunities emerge** for young people.



Mumbai Trans Harbour Link (MTHL)

- MTHL is **India's longest sea bridge (World's 10th longest sea bridge)**, expected to be completed by end of year 2023.
- **Features of MTHL**
 - It has a **length of 22 km, with a 6-lane sea bridge**.
 - It is the 1st project in India with Open Road Tolling (ORT) system and Orthotropic steel deck technology.
 - It'll allow commuters to drive past the toll booth at speeds of up to 100kmph without slowing down to pay the toll charge.
 - It'll save fuel, transportation cost and travel time.



Indian Naval Sailing Vessel (INSV) Tarini

- **INSV Tarini returned to India** after completing a **trans-ocean inter-continental voyage**.
 - 188-day voyage was from Goa to Rio de Janeiro via Cape Town and back.
- It is part of **run up towards the Navy's next big project to send a woman to circumnavigate the globe – Solo**.
- INSV Tarini is **known for 2017 expedition 'Navika Sagar Parikrama'**, first-ever Indian circumnavigation of the globe by an all-women crew.



SAMARTH campaign

- SAMARTH campaign is an **initiative launched by the Ministry of Rural Development**.
- Its aim is to **promote digital transactions at the Gram Panchayat level** in rural areas.
- It seeks to **empower rural communities participation in the digital economy** and access the benefits of digital transactions.

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|  <p>Atal Bhujal Yojana (ABY)</p> | <ul style="list-style-type: none">● National Level Steering Committee (NLSC) has decided that ABY should be taken up for continuation for another two years beyond 2025 i.e., till 2027.● ABY is a Central Sector Scheme, launched in 2020, under Ministry of Jal Shakti.<ul style="list-style-type: none">➤ It demonstrates community-led sustainable groundwater management which can be taken to scale.➤ It improves the management of groundwater resources in select water-stressed areas in identified states viz. Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, and Uttar Pradesh.➤ Funding: 50:50 between Government of India and World Bank. |
|  <p>India's Antarctic research stations</p> | <ul style="list-style-type: none">● Union Minister for Earth Sciences engaged virtually with scientists stationed at Bharati Station in Antarctica.● India's research stations in Antarctic<ul style="list-style-type: none">➤ Dakshin Gangotri, first permanent research station established in 1983 over Ice shelf in Central Dronning Maud Land region. (abandoned in 1990)➤ Maitri and Bharati (Currently operational)<ul style="list-style-type: none">■ Maitri, located in Schirmacher Oasis, was opened in 1989.■ Bharati, located between Thala Fjord & Quilty bay, east of Stornes Peninsula, is operational since 2012. |
|  <p>Lakes in news</p> | <p>Chilika Lake</p> <ul style="list-style-type: none">● 88 Bird species were found in lake during annual summer survey of birds conducted by Chilika wildlife division of Odisha.● Chilika is Asia's largest brackish water and world's second largest coastal lagoon.<ul style="list-style-type: none">➤ Chilika Lake was first Indian Wetland of International Importance (WII) to be designated under Ramsar Convention in 1981.➤ It was first site in Asia which was removed from Montreux Record (MR) in 2002.<ul style="list-style-type: none">■ MR is register of WII where changes in ecological character have occurred or are likely to occur due to human intervention..➤ Kalijai temple is situated on an island in Chilika Lake.➤ Major attraction: Irrawaddy dolphin (Endangered -IUCN Red List). <p>Dal Lake</p> <ul style="list-style-type: none">● Thousands of dead fish float on Dal Lake due to temperature variations at different depths of lake.● Dal Lake, situated in Srinagar, Jammu and Kashmir, is called "Srinagar's Jewel". It was formed due to flood spillage from Jhelum River.<ul style="list-style-type: none">➤ It has floating gardens, known as "Raad" in Kashmiri. The houseboats called Shikhara are closely associated with Dal Lake. |
|  <p>International Booker Prize (IBP)</p> | <ul style="list-style-type: none">● Bulgarian writer Georgi Gospodinov and translator Angela Rodel won the IBP for novel Time Shelter.● IBP is awarded annually for the finest single work of fiction from around the world which has been translated into English and published in the UK and Ireland.● In 2022, Hindi author Geetanjali Shree became the first Indian to win this award for her book 'Tomb of Sand (Ret Samadhi)'. |
|  <p>Dancing Girl</p> | <ul style="list-style-type: none">● Mascot of International Museum Expo 2023 was inspired by Dancing Girl Sculpture.● Sculpture of dancing girl was excavated from Mohenjodaro in 1926, by British archaeologist Ernest McKay.<ul style="list-style-type: none">➤ It is named the 'Dancing Girl' owing to her posture, with her right hand on back of her hip and left hand resting on her left thigh.➤ It is made of bronze, dates back to circa 2500 BCE.➤ It was made using 'Lost Wax' method (molten wax is poured into a mould to create a model). |