

FOR THE FIRST TIME, DEFENSE ACQUISITION COUNCIL (DAC) APPROVES PROCURE-

MENT UNDER IDEX

 For the first time, DAC has cleared the procurement of 14 items worth Rs 380 crore from Innovations for Defence Excellence (iDEX) start-ups and MSMEs. These items will be procured by Indian Army, Navy and Air Force.

- The iDEX was launched in 2018 with the objective of incorporating cutting-edge and disruptive technologies in the Armed Forces in a quick time-frame by emphasizing on the startup ecosystem and ensuring self-reliance and indigenization.
 - > iDEX is funded and managed by a "Defence Innovation Organisation (DIO)" formed as a "not for profit" company as per Section 8 of the Companies Act 2013 for this purpose.
- To boost 'Atmanirbhar Bharat', these proposals have been approved under 'Buy (Indian IDDM- (Indigenously Designed, Developed and Manufactured))' category part of the initial Defence Procurement Procedure-2016. The procedure was further updated in 2020.
- About DAC
 - > It is the highest decision-making body in the Defence Ministry for deciding on new policies and capital acquisitions for the three services (Army, Navy and Air Force) and the Indian Coast Guard.
 - > Minister of Defence is the Chairman of the Council.
- Other Government initiatives for Arm procurement
 - ➤ Indigenisation portal- SRIJAN to provide development support to MSMEs/Startups/Industry.
 - > Defence Industrial Corridors in Uttar Pradesh and Tamil Nadu.
 - ➤ Defence Investor Cell: To provide information including addressing queries related to investment opportunities, procedures and regulatory requirements.
 - > FDI in Defence sector.

MATERNAL MORTALITY RATIO (MMR) OF INDIA DECLINES BY 10 POINTS

- In a significant achievement, MMR of India has declined by 10 points- from 113 in 2016-18 to 103 in 2017-19- as per Special Bulletin on MMR released by Registrar General of India.
- Key findings:
 - > With this steady decline, India is on verge of achieving National Health Policy (NHP) target of 100/lakh live births by 2020 and certainly on track to achieve the SDG target of 70/ lakh live births by 2030.
 - > Kerala, Maharashtra, Telangana, Tamil Nadu, Andhra Pradesh, and Jharkhand have already achieved the SDG target, with the number of deaths as low as 30 in some states.
 - > However, rise in MMR in West Bengal, Haryana, Uttarakhand and Chhattisgarh have emerged as a cause of concern.
- Major causes for maternal mortality are early pregnancy (15 -19 years of age), severe bleeding, infections, high blood pressure during pregnancy, anaemia, complications from delivery, unsafe abortions, and lack of necessary medical care.
- Steps taken:
 - Janani Suraksha Yojana (JSY).
 - > Janani Shishu Suraksha Karyakram (JSSK).
 - Pradhan MantriSurakshitMatritvaAbhiyan (PMSMA).
 - 'LaQshya Labor room Quality improvement Initiative'.
- OMMR is defined as number of maternal deaths during a given time period per 100,000 live births during the same time period.
 - ➤ Maternal mortality is a measure of reproductive health of women in an area.





Washbasin

Soaps, toothpaste, body

Care products, cosmetics Hair, shaving waste, etc

Light Greywater

Bathroom Soaps, Shampoos, body Care products, Hair, body

fats, Lint, shed skin, urine

Greywater



Dark Greywater

Laundry, Toilet

solvents, Non bio-degradable Fibers, clothing,

cleaning chemicals

Kitchen sink

Cooked food residue, Fat

oil, grease (FOG), dish

shing Detergents, fruits & vegetable peels

CENTRE LAUNCHES WATER REUSE PROJECT

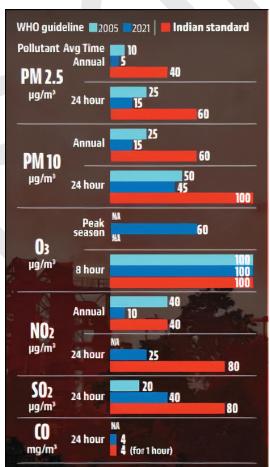
- On World Water Day, Union minister for Jal Shakti launched a 'Sujalam 2.0' grey water recycling project.
 - > A staggering **31,000 million tonne of grey water** a day is discharged by rural India alone, which is enough to tide over drought if evenly stored across the country.
- About World Water Day:
 - > Held on 22nd March every year since 1993, it focuses on the importance of freshwater.
 - 2022 theme is "Groundwater, making the invisible visible".
- Grey water is defined as the wastewater that includes water from baths, showers, hand basins, washing machines, dishwashers and kitchen sinks, but excludes streams from toilets.
 - > More than 70 percent of freshwater across rural households in India gets converted to greywater.
- Significance of grey water recycling:
 - > Can prevent **potential harm** to the environment.
 - > Can reduce the demand for freshwater.
 - > Reliable water resource as unlike rainwater harvesting, grey water is not dependent on unpredictable and variable rainfall.
 - > High nitrogen and phosphorus content when used in irrigation can make a good nutrient or fertiliser source.

EVERY COUNTRY EXCEEDS NEW PM2.5 ANNUAL LIMIT SET BY WHO: REPORT BY IQAIR

- Findings are based on the country's Particulate Matter 2.5 (PM2.5, airborne particles with less than 2.5 microns in diameter) annual average.
- Report highlights:
 - > No country in 2021 met the updated air quality guidelines (AQG) defined by the WHO.
 - > Concentration of PM 2.5 was found to be within AQG in **only 222 out** of 6,475 cities covered.

• India specific findings:

- > India's annual average PM2.5 levels reached **58.1 µg/m3** in 2021.
- > Home to 11 of the 15 most polluted cities in Central and South Asia.
- > No cities in India met the WHO AQG of $5 \mu g/m3$.
- > 48% of India's cities exceeded 50 µg/m3 (more than 10 times the guideline).
- **About AQG:**
 - > AQGs are an evidence-informed tool for policy-makers to guide legislation and policies to reduce levels of air pollutants.
 - > Since 1987, WHO has periodically issued health-based AQG.



- > These guidelines are **not legally binding.**
- Sources of air pollution: Vehicular emissions, power generation, biomass combustion for cooking, crop burning etc.
- Steps taken: National Clean Air Program (NCAP), Bharat Stage emission standards etc.

COMMISSION FOR AIR QUALITY MANAGEMENT (CAQM) REVIEWS PROGRESS OF BIOMASS CO-FIR-**ING /TENDERING IN TPPS**

- In September 2021, 11 Thermal Power plants were given directions by CAQM to begin co-firing of biomass pellets up to 5 to 10% of the total coal requirements so as to ensure ex-situ utilization of paddy straw eventually with the long term objective of controlling stubble burning.
 - > However according to the review, out of 11 TPPs, co-firing has begun only in 07.
- About Biomass Co-firing
 - > Co-firing biomass consists of **burning** biomass in coal-fired power plants along with coal.
 - > Three different concepts for co-firing
 - > Direct co-firing: The biomass and the coal are burned in the same furnace.
 - > Indirect co-firing: In this concept, the solid biomass is converted to a clean fuel gas, using a biomass gasifier. The gas can be burnt in the same furnace as the coal.
 - > Parallel co-firing: It is also possible to install a completely separate biomass boiler in addition to the conventional
 - > Its advantages include lower capital costs, higher efficiency, increased economies of scale, and lower electricity costs due to the larger size and superior performance of conventional coal power plants.
- O Initiatives to reduce air pollution from coal based TPPs
- ➤ National Mission on use of biomass in thermal power plants, 2021.
- ➤ Installing Flue Gas Desulphurization (FGD) units.
- > Advanced ultra-super critical technology research and development project.
- > Revised stringent emission standards for coal based



GOVT RECAPITALIZATION OF BANKS NEEDS TO WEIGH TRADE-OFFS, SAYS RBI PAPER Paper provides a cautious approach to recapitalization of banks in the backdrop of Black Swan events.

- > Black Swan is an unpredictable event that is beyond what is normally expected of a situation and has potentially severe consequences. E.g. Covid 19 pandemic.
- Bank recapitalisation, means infusing more capital in state-run banks so that they meet the capital adequacy norms In compliance with RBI guidelines which are further based on Basel norms.
 - > Under this process, government which is also the biggest shareholder in public sector banks infuses capital in banks by either buying new shares or by issuing bonds.
 - > As the state-run banks were struggling to deal with burgeoning NPAs, the government from time-to-time kept on announcing recapitalisation to keep the banks afloat.
 - > Previously, in October 2017 and 2019, bank recapitalisation programmes were announced.
- Key findings of paper indicate that though firms may benefit from improved discounted lifetime profits from these packages, but households may be worse off because of lower government expenditure in social sectors. Therefore, public policy may need to balance this trade-off.

ALSO IN NEWS



Sedition and UAPA cases decline

- According to data from Ministry of Home Affairs, total sedition cases declined for the first time in six years by 35 % (73 in 2020 from 93 in 2019).
 - > Sedition is defined under Section 124 A, IPC which punishes for actions that excite disaffection towards government. It is a non-bailable offence.
- As for offences under **Unlawful Activities Prevention Act**, The number of registered cases fell to 796 in 2020 from 1226 in 2019.
 - > UAPA is an anti-terror law that designate individuals as terrorists on certain grounds provided in the Act.



Finlandization

- French President suggested Finlandization can be a way to ease tensions over Ukraine.
- It refers to the policy of strict neutrality between Moscow and the West that Finland followed during decades of Cold War.
 - > Principle of neutrality was rooted in Agreement of Friendship, Cooperation, and Mutual **Assistance** that Finland signed with USSR in 1948.
 - > 1948 treaty formed the basis of Helsinki-Moscow relations until 1992, when Finland signed a new agreement with post-Soviet Russia.



BRICS Vaccine R&D Centre

- Union health minister launched the BRICS Vaccine R&D Center and Workshop on Vaccine Cooperation through video-conference.
 - > Centre was proposed to be established in 2018 Johannesburg Declaration.

Significance

- > Will help to **pool together complementary advantages** of BRICS countries in vaccine research and development.
- > Will support endeavours to achieve the WHO's laid target of vaccinating 70% of the world's population with COVID-19 vaccines by mid-2022.



Shyama Prasad Mukherji **Rurban Mission (SPMRM)**

- It was launched by Ministry of Rural Development in 2016 to deliver catalytic interventions to rural areas on the threshold of urban growth.
- > It focuses on cluster-based integrated development through Spatial Planning.
- Rurban clusters are identified across the country's rural areas showing increasing signs of urbanization i.e. increase in population density, high levels of non-farm employment etc.
 - > 300 Rurban clusters with thematic economic growth points are being developed across the country under this mission.



Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY)

- Parliamentary standing committee has asked the Food Ministry to study scope of extending PMGKAY scheme.
- **About PMGKAY:**
- > Launched to supply free food grains to migrants and poor who faced hardship on account of economic disruption caused by COVID-19.
- > Under PMGKAY, 5 kg free wheat/rice per month is provided to 80 crore beneficiaries registered under the National Food Security Act (NFSA).
- Though initially announced only for a period of three months, later it was extended under different phases.



Marine biological diversity of areas beyond national jurisdiction (BBNJ)

- UN is negotiating an international legally binding "instrument" to bring marine areas beyond national jurisdiction under common global management and monitoring.
- Significance
 - > Areas beyond national jurisdiction comprise 95% of the ocean and provide invaluable ecological, economic, social, cultural, scientific and food-security benefits.
 - > According to IUCN, these areas account for almost half of the Earth's surface.
 - > These areas are least understood or explored for its biodiversity.



Recycling heat generated by datacentres

- A datacentre is a physical facility that organisations use to store their critical applications and data, process data and disseminate them to users.
 - > The temperatures recorded in the hot aisles of a datacentre hover between 80 and 115 degrees Fahrenheit.
 - > As a solution to the large carbon footprint of data centres, excess heat generated by data centres can be captured and clean heat from the server cooling process can be transferred to the district heating system.
 - > Helps to combat climate change.
- For this Microsoft has partnered to begin the first project in Finland.



EX-DUSTLIK

• The third edition of the **India - Uzbekistan exercise** is being conducted in Uzbekistan.



Naga Mircha

- The chilli from Nagaland is also referred as Bhoot Jolokia and Ghost pepper, got Geographical Indications (GI) certification in 2008.
 - > It belongs to genus Capsicum of family Solanaceae.
 - > It has been considered as one of the world's hottest chilli and is constantly on top five in the list of the world's hottest chilies based on the SHUs (Scoville Heat Units).
 - > SHU measures pungency (spiciness or "heat") of chilli peppers, and number of times capsaicin needs to be diluted by sugar-water.
- It was used as chilli grenades to immobilize terrorists and other criminal suspects.



Personalities in News

- Shaheed Bhagat Singh
 - > Nation pays homage to revolutionary freedom fighter on the Sheed Divas.
 - > Contributions-In 1924, he became a member of Hindustan Republican Association of Sachindranath Sanyal, founded Naujawan Bharat Sabha in 1925-26 and co-founded Hindustan Socialist Republican Association (HSRA), 1928.
 - > He was associated in **central assembly bombing case** and was tried in Lahore conspiracy case.
 - He penned 'Why am I an atheist'.
 - > Bhagat Singh was charged in Saunders murder case, along with Rajguru and Sukhdev. The trio were hanged on March 23, 1931.
 - > Value- Leadership, Valour, etc.



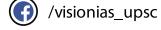


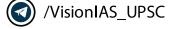




























DELHI LUCKNOW **JAIPUR**

HYDERABAD

PUNE

AHMEDABAD CHANDIGARH

GUWAHATI