

### NEWSPAPER HIGHLIGHT

The Cabinet has given its approval to extend its umbrella scheme for irrigation, water supply, ground water and watershed development projects for another five years. Less than half of the identified irrigation projects have been completed since the scheme — Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) — began in 2015, according to Jal Shakti Minister Gajendra Singh Shekhawat. The extension of PMKSY till 2026 will cost ₹93,068 crore, benefit 22 lakh farmers and fund dams critical for water supply to Delhi and five other States in the upper Yamuna basin, said an official statement from the Cabinet Committee for Economic Affairs.

The Union Cabinet approved a ₹76,000 crore scheme to boost semiconductor and display manufacturing in the country, taking the total amount of incentives announced for the electronics sector to ₹2.3 lakh crore, the government said in a statement. The comprehensive programme for the “development of sustainable semiconductor and display ecosystem in the country” was aimed at making India a global hub of electronic system design and manufacturing, the government added.

India needs to actively pursue free-trade agreements (FTAs) with major export destinations like the EU and the U.S. to push apparel shipments amid increasing competition from Bangladesh and Cambodia that enjoy tariff concessions, as per an RBI article. India has traditionally enjoyed a comparative advantage in the textile sector, including apparels, and they constitute a major chunk of export basket.

The Supreme Court told Kerala and Tamil Nadu to not approach the court for every issue regarding the Mullaperiyar dam, urging them to behave like normal litigants and not use the court as a platform to score political brownie points. A Bench led by Justice A.M. Khanwilkar said the States should approach the Mullaperiyar issue in a dispassionate manner and take decisions in a consensual manner. It reminded the two neighbours that the Supreme Court should not be compelled into the day today management of the dam.

The Union Cabinet is learnt to have

### M-SAND AND P-SAND

1.TN M-Sand Manufacturers' Welfare Association has filed a writ petition to declare the TN Prevention of Illegal Mining, Transportation and Storage of Minerals & Mineral Dealers Rules of 2011 illegal and unconstitutional. Manufactured Sand (M-Sand) is artificial sand produced from crushing hard granite stones into sand sized angular shaped particles, washed and finely graded to be used as construction aggregate.

**2.M-Sand is the most effective and efficient substitute for river sand as it is the most robust sand. The size of M-Sand is less than 4.75mm.** M-Sand is used for the production of concrete for construction purpose. The demand for M-Sand is high due to the depletion of river sand and fast-growing construction industries.

**3.P-Sand Plastering M Sand (P Sand) is a very fine grade of sand. It is free of silt and clay particles and has denser particle packing than natural sand.** It is used for wall plastering and brickwork purpose. It will provide plastering strength to the construction structure. The proper and fine quality of sand material is a must when it comes to providing strength to any sort of building and construction structure.

4.Plastering M Sand is produced from hard granite stone which is cubically in shape with round edges washed and graded with consistency. P Sand is used as a substitute for river sand which is used for preparing concrete, plastering and also other non-concrete constructions like flooring works, etc.

### ANIMAL HUSBANDRY INFRASTRUCTURE FUND

1.This Fund has been set up by the Government as MSMEs & Private companies need to be promoted and incentivized for their involvement in processing and value addition infrastructure. The fund is Central Sector Scheme that had been proposed as part of the Aatmanirbhar Bharat.

**2.Beneficiaries - Farmer Producer Organizations (FPOs), MSMEs, Section 8 Companies, Private Companies and individual entrepreneurs.** Benefits - The beneficiaries are to contribute a minimum of 10% margin money as investment. The balance 90% would be the loan component to be made available by scheduled banks.

3.The Government of India will provide 3% interest subvention to eligible beneficiaries. There will be 2 years moratorium period for principal loan amount and 6 years repayment period thereafter.

4.From the Credit Guarantee Fund, Credit guarantee would be provided to those sanctioned projects which are covered under MSME defined ceilings. Guarantee Coverage would be upto 25% of Credit facility of borrower.

### NATIONAL MISSION FOR SUSTAINABLE AGRICULTURE

1.Department of Agriculture and Farmers Welfare in implementing the National Mission for Sustainable Agriculture (NMSA) as one of the Missions under the National Action Plan on Climate Change.

**2.NMSA has been formulated for enhancing agricultural productivity especially in rain-fed areas focusing on integrated farming, water use efficiency, soil health management & synergizing resource conservation.** The Activities of the NMSA includes components to minimize the carbon footprint of agricultural activities. NMSA includes programmatic interventions like, Soil Health Card (SHC), Paramparagat Krishi Vikas Yojana (PKVY), Mission Organic Value Chain Development for North-Eastern Region (MOVCNDR), Rain-fed Area Development (RAD), National Bamboo Mission (NBM) and Sub-mission on Agro Forestry (SMAF).

3.These and other programmes including Prime Minister Krishi Sinchayee Yojana (PMKSY). NMSA aims to evolve and implement strategies to make Indian Agriculture more resilient to the changing climate. The progress of the 10 identified deliverables is being monitored regularly. The deliverables include, Area under organic farming; Production of Bio-fertilizers; Precision Irrigation; SRI / Direct Seeded Rice from Transplantation;

cleared a Bill on electoral reforms, including the one to link electoral roll with Aadhaar on a voluntary basis to root out multiple enrolments. The Bill is likely to be introduced in the ongoing winter session. According to the Bill, the electoral law will also be made "gender neutral" for service voters. An Army man's wife is entitled to be enrolled as a service voter, but a woman Army officer's husband is not, according to provisions in the electoral law. But this may change once the Bill gets Parliament's nod.

In a symbolic gesture, President Ram Nath Kovind will inaugurate a famous Hindu shrine that was destroyed by the Pakistani forces during the war of 1971. Foreign Secretary Harsh Vardhan Shringla said in Dhaka on Wednesday that President Kovind held a wide ranging discussion with the leadership of Bangladesh during the first day of his 3 day visit and assured them that travellers from Bangladesh will be able to get Indian visa almost "immediately". "On December 17, President Ram Nath Kovind will inaugurate the renovated Sri Ramna Kali Mandir, which was completely destroyed by Pakistani forces during heinous Operation Searchlight in 1971," said Mr. Shringla.

The indigenous Medium Altitude Long Endurance (MALE) Unmanned Aerial Vehicle (UAV) development programme by the Defence Research and Development Organisation (DRDO) has crossed a milestone by reaching an altitude of 25,000 feet and an endurance of 10 hours, Secretary R&D and DRDO Chairman Dr. Sateesh Reddy said.

The Supreme Court said the law negated a caste census and "the Constitution believes in population and not in caste or religion" even as the Centre insisted that data collated during a Socio-Economic Caste Census (SECC) in 2011 was "fraught with mistakes and unusable" for any purpose whatsoever.

Russia and China should stand firm in rejecting Western interference and defending each other's security interests, Presidents Vladimir Putin and Xi Jinping agreed in a video call on Wednesday. Their conversation, eight days after Mr. Putin spoke to U.S. President Joe Biden in a similar format, underscored how shared hostility to the West is bringing Moscow and Beijing closer together.

Reserve Bank of India Deputy Governor Rajeshwar Rao said while the RBI would examine the pros and cons of giving banking licences to large industrial houses, the fact that banking was a highly leveraged

Crop diversification; Additional Area under plantation in Arable land; Climate Resilient Varieties (CRV) Identified/ Released; 4. Identification of genotypes of crops with enhanced CO2 fixation potential and less water consumption & Nutrients; Climate Resilient genotypes with greater adaptation to drought, flood, salinity and high temperature; Coverage of milch animals under ration balancing programme; Establishment of bypass protein feed making unit. ICAR has launched a flagship network project 'National Innovations in Climate Resilient Agriculture' (NICRA) in 2011.

#### **SUPERSONIC MISSILE ASSISTED TORPEDO SYSTEM**

1. Defence Research and Development Organisation (DRDO) developed Supersonic Missile Assisted Torpedo (SMART) System gets successfully launched from Wheeler Island in Odisha. The SMART system is a next generation long-range missile-based standoff torpedo delivery system. [A torpedo is an underwater ranged weapon launched above or below the water surface, self-propelled towards a target, and with an explosive warhead designed to detonate either on contact with or in proximity to the target.]

2. **The SMART system has been designed to enhance anti-submarine warfare capability far beyond the conventional range of the torpedo.** This canister-based missile system consists of advanced technologies viz. 2- stage solid propulsion, electro-mechanical actuators and precision inertial navigation.

3. The missile can cover a range of distances. Wheeler Island Dr. Abdul Kalam Island, formerly known as Wheeler Island, is an island off the coast of Odisha, India, around 150 kms east of Bhubaneswar. The island was originally named after English commandant Lieutenant Hugh Wheeler.

4. Odisha government has formally renamed it as APJ Abdul Kalam island as a tribute to the former President of India on his 2nd death anniversary (2017). The Integrated Test Range missile testing facility is located on the island, and serves as the test facility for most of India's missiles.

#### **BLACK BOX OF THE EARTH**

1. A steel vault that will record the Earth's warming weather patterns is being built in Tasmania Australia, an Australian island state off the south coast. This vault is dubbed as the 'Black Box of the Earth', is a 33-foot-long box made of 3-inch-thick steel.

2. **The Earth's Black Box will operate much like a plane's Black Box, which records an aircraft's final moments before crashing. It will listen to what we say and do.** It will create an archive that could be critical to piecing together the missteps that should humanity be destroyed by climate change. Data - The box will record leaders' actions (or inaction) by scraping the internet for keywords relating to climate change from newspapers, social media and peer-reviewed journals.

3. It will collect daily metrics - average oceanic and land temperatures, atmospheric carbon dioxide concentration and biodiversity loss. Eventually, the data will be stored on a giant, automated, solar-powered hard drive with a capacity to collect information for about 50 years. 4. Tasmania was chosen for its relative geopolitical and environmental safety. The vault will be designed to be resilient against threats including cyclones, earthquakes and, with its sloped walls, attacks by vandals.

#### **FLORES SEA**

1. A 7.3-magnitude earthquake struck eastern Indonesia. **The epicentre was in the Flores Sea, north of East Nusa Tenggara province.** Why Indonesia is vulnerable to earthquakes? Indonesia sit along the Ring of Fire region, an area where most of the world's volcanic eruptions occur. The Ring of Fire has seen a large amount of activity in recent days, but Indonesia has been hit hard due to its position on a large grid of tectonic plates. Indonesia is at the meeting point of three major continental plates - the Pacific, the Eurasian and the Indo-Australian plates - and the much smaller Philippine plate. As a result, several volcanoes on the Indonesian islands are prone to erupting. Indonesia is home to roughly 400 volcanoes, out of which 127 are currently active, accounting for about a third of the world's active volcanoes.

2. The Ring of Fire is a Pacific region home to over 450 volcanoes, including three of the world's four most active volcanoes - Mount St. Helens in the USA, Mount Fuji in Japan and Mount Pinatubo in the Philippines. It is also sometimes called the circum-Pacific

**business dealing with public money meant it 'made sense' to keep industry and banking separate.**

belt. Around 90% of the world's earthquakes occur in the Ring of Fire, and 80% of the world's largest earthquakes.

**3.The Ring of Fire is the result from subduction of oceanic tectonic plates beneath lighter continental plates.** The area where these tectonic plates meet is called a subduction zone.