

### NEWSPAPER HIGHLIGHT

Ad man Gerson da Cunha, a multi-faceted personality very passionate about civic activism died. Da Cunha, who started his career as a journalist working for the Press Trust of India then jumped into advertising, was associated with a slew of platforms engaged in civic activism, including AGNI (Action for Good Governance and Networking in India).

A sustainable natural farming system adopted in southern Rajasthan's Banswara district, which has created new livelihood sources and brought food security to indigenous tribal communities, has impressed the Chief Minister's Economic Transformation Advisory Council. The model is being considered for replication elsewhere in the State. A 20 member team of the Council visited Banswara district's Amlipara village earlier this week to study the techniques and innovations which have enabled the farmers to meet their daily food necessities by growing fruits and vegetables at a low cost. The integrated system has also reduced the tribals' dependence on market and improved nutritional status of the local population.

India's gross domestic product (GDP) is expected to grow by 9.2% in the current financial year following last fiscal's 7.3% contraction, the National Statistical Office (NSO) said in its first advance estimates of economic output released, amid concerns over the likely impact of a third wave of the COVID19 pandemic. The NSO, however, made clear that these were "early projections" that did not factor in actual performance of various indicators as well as measures that may be taken to contain the spread of the pandemic. "GDP at constant prices (2011-12) in the year 2021-22 is estimated at ₹147.54 lakh crore, as against the provisional estimate of GDP for the year 2020-21 of ₹135.13 lakh crore.

India is likely to overtake Japan as Asia's second largest economy by 2030 when its GDP is also projected to surpass that of Germany and the U.K. to rank as the world's No.3, IHS Markit said in a report on Friday. Currently, India is the sixth largest economy, behind the U.S., China, Japan, Germany and the U.K.

The Ministry of Home Affairs (MHA) on Friday restored the FCRA registration of Missionaries of Charity (MoC), the Catholic religious

### INVASION OF WATERBODIES BY WATER HYACINTH

1. Ernakulam Krishi Vigyan Kendra (KVK) has stepped in to create awareness on water hyacinth (*Eichhornia crassipes*) invasion of waterbodies. Normally, water hyacinths dominate the water bodies during the July-August period in tandem with the monsoon run-off water and begin to decay as salinity levels in the backwaters increase. Unlike the usual trend of water hyacinths decaying by October, the aquatic plant is still seen rampant in the backwaters now, following extended monsoon and release of water from dams.

2. The plant emerges as a threat mostly to cage aquaculture as it reduces water flow in fish cages installed in the backwaters. Reduced water flow results in reduction in oxygen levels, leading to fish kill. Water hyacinth also acts as a breeding ground for parasites and other hazardous organisms that spread diseases among fish.

3. **Water Hyacinth-Water hyacinth is a free-floating and flowering invasive aquatic plant originated from Amazon Basin, South America. It has spread mainly to the tropics and subtropics since the 1800s.** By the end of the 18th century, Water Hyacinth was introduced in India by Lady Hastings, the wife of the First British Governor-General. Water hyacinth grows in all types of freshwaters environments. Known as the "German weed" (Bangladesh), the "Florida Devil" (South Africa), the "Terror of Bengal" (India) and the "Japanese Trouble" (Sri Lanka), the plant grows very fast - doubles its population in 2 weeks.

4. The reproduction systems of water hyacinth are both sexual and asexual reproduction. Sexual reproduction by producing seeds through flowers and Asexual reproduction by budding through vegetative reproduction systems. The most favorable conditions for the optimum growth of water hyacinth are nutrient-rich water, temperature ranges from 28°C to 30°C, pH value 6.5 - 8.5, salinity < 2%, 20 mg/L N, 3 mg/L P, and 53 mg/L K.

### MAHAKALI RIVER

1. The Union Cabinet of India has approved the MoU between India and Nepal for construction of bridge over Mahakali River at Dharchula (India) - Dharchula (Nepal). River Mahakali is a trans-boundary/international river between India and Nepal.

2. **Also known as Kali, Sarda along its course, River Mahakali is a Himalayan catchment of Ghagra sub basin of the large Ganga Basin.** Originating at Kalapani in the Trans Himalayan region, this River ultimately drains the region through the Tarai plains of Uttar Pradesh.

3. The large part of catchment area of Mahakali lies in Uttarakhand and rest lies in Nepal. It joins Ghaghra River, a tributary of the Ganges. River Mahakali offers potential for hydroelectric power generation. The river is also proposed as source for one of the many projects in the Himalayan component of the Indian Rivers Inter-link project.

### ANAMALAI TIGER RESERVE

1. Anamalai Tiger Reserve (ATR) Official lauds ICAR-Sugarcane Breeding Institute for its tribal - empowerment interventions. Initially christened as the Anamalai Wildlife Sanctuary, it was changed as Indira Gandhi Wildlife Sanctuary and National Park, before it became the Anamalai Tiger Reserve when Project Tiger was launched in 2008.

2. **ATR is carved out of the Tamil Nadu portion of the Anamalais (in Kerala and Tamil Nadu). The Tamil Nadu part of the reserve is called as ATR. It lies South of the Palakkad gap in the Southern Western Ghats.** The forest type varies from the dry deciduous to the semi-evergreen, evergreen and the wet temperate.

3. Annual Rainfall - 500 mm to 5000 mm, least rainfall is on the eastern slopes and most rainfall is on western slopes. Animal Species - Elephant, Gaur, Water Buffalo, Tiger, Panther, Sloth Bear, Pangolins, Black Headed Oriole, Crocodile, Green Pigeons, Civet Cats, Dhole, Sambar, 31 groups of endangered wildlife macaques.

**congregation set up by Nobel laureate Mother Teresa. The Foreign Contribution Regulation Act (FCRA) registration is mandatory to receive foreign donations.**

**More than 100 veterinarians across the country have petitioned Parshottam Rupala, Minister for Fisheries, Animal Husbandry and Dairying, for notifying rules to prohibit the use of animals in circuses. The draft of these rules had been pending since 2018, prolonging the cruelty, pain and suffering endured by circus animals, the People for the Ethical Treatment of Animals (PETA) said.**

**Reacting to a news report that an Tek Fog app is being used to spread misinformation, make hate speeches and manipulate social media trends, Trinamool Congress leader in the Rajya Sabha Derek O'Brien on Friday demanded the Parliamentary Standing Committee on Home Affairs take up the matter as such apps posed "severe danger" to national security.**

**India sent a large consignment of medicines to Afghanistan. The humanitarian assistance consisting of two tons of "essential life saving" medicines was handed over to the Indira Gandhi Children Hospital in Kabul. "India stands committed to continue our special relationship with the people of Afghanistan and provide them humanitarian assistance," said the Ministry of External Affairs in a press statement.**

**The Special Task Force (STF) of Odisha Police's Crime Branch has seized four leopard skins in the past ten days, and 25 since 2020. The seizures made by the STF alone indicate multiple big networks of wildlife laws offenders may be operating in the State's forests. If the State Forest and Environment Department's seizures are taken into account, the number of leopards killed, and the average numbers poached, would be significantly higher. In October 2021, the Odisha Forest and Environment Department confiscated nine leopard skins in one case in Kalahandi.**

**Japan moved ahead with an expansion of support to U.S. troops as the allies held top level talks on Friday over tensions with China and North Korea. U.S. Secretary of State Antony Blinken announced the two nations were signing a five year extension of the support package provided by Japan for the hosting of around 50,000 U.S. troops on its soil.**

**India will become the largest global**

**4. Bird Species - Pied Hornbill, Red Whiskered Bulbul and Dronko. Anaimalais is worth to be designated as 'Anthropological Reserve' as it supports 6 indigenous people viz. Malasar, Malai malasars, Kadars, Eravallars, Pulayars and Muduvars.**

#### **NAI TALIM**

**1. The Vice President of India said that the New Education Policy follows the 'Nai Talim' of Mahatma Gandhi by giving importance to the mother tongue as the medium of instruction at school level. In 1937, Gandhiji seeded an important idea to revamp the education system, at a conference in Wardha, Maharashtra through Nai Talim.**

**2. He labelled it as Nai Taleem- a New Education for a New India that would enable every Indian to participate in building a 'good society'.**

**3. The three pillars of Gandhi's pedagogy were Its focus on the lifelong character of education, Its social character and Its form as a holistic process.** For Gandhi, education is 'the moral development of the person', a process that is by definition 'lifelong'.

#### **e-DNA TECHNIQUE**

**1. Two independent studies have found that the DNA floating in the air can boost biodiversity conservation efforts across the world. Animals shed DNA through their breath, saliva, fur or faeces into the environment. These DNAs floating in the air. These airborne DNAs are called environmental DNA (e-DNA).**

**2. Tracking animals through e-DNA isn't a new idea. Biologists have observed aquatic organisms by sequencing e-DNA from water samples.** Similarly, the two teams filtered e-DNA from the air by using sensitive filters attached to vacuum pumps. After extracting DNA from the air, the teams made copies using polymerase chain reaction (PCR).

**3. The last step was DNA sequencing. They then compared the sequencing results with known sequences to identify the animal. These e-DNAs can be used to potentially identify and monitor terrestrial animals.**

**4. Their findings could help understand the composition of animal communities and detect the spread of non-native species. But in its current form, the e-DNA technique cannot provide accurate data for population census. But it will in the future.**

#### **DOMESTICALLY SYSTEMATICALLY IMPORTANT BANKS(D-SIBs)**

**1. Reserve Bank of India has released its list of Domestic Systemically Important Banks (D-SIBs) in 2021. It has identified the state-owned lender State Bank Of India and the private lenders ICICI Bank and HDFC Bank as systemically important banks, which are perceived as banks, 'too big to fail'.**

**2. D-SIBs-**The system of D-SIBs was adopted in the aftermath of the 2008 financial crisis where the collapse of many systemically important banks across various regions further fueled the financial downturn. D-SIBs are important for the country's economy. In events of distress, the government supports such banks and if such a bank fails, it would lead to disruption of the country's overall economy. RBI finalizes such banks after considering factors like size, complexity, lack of substitutability and interconnectedness of the banks, state reports.

**3. How are D-SIBs determined?** Since 2015, the RBI has been releasing the list of all D-SIBs. They are classified into five buckets, according to their importance to the national economy. In order to be listed as a D-SIB, a bank needs to have assets that exceed 2 percent of the national GDP. The banks are then further classified on the level of their importance across the five buckets.

**4. What regulations do these banks need to follow? Due to their economic and national importance, the banks need to maintain a higher share of risk-weighted assets as tier-I equity. SBI, since it is placed in bucket three of D-SIBs, has to maintain Additional Common Equity Tier 1 (CET1) at 0.60 percent of its Risk-Weighted Assets (RWAs).**

#### **SEA DRAGON EXERCISE**

**1. India is among the six Indo-Pacific nations participating in Sea Dragon Exercise- a multi-lateral anti-submarine warfare exercise in the Pacific Ocean.**

**2. Participants: Navies of the US, India, Australia, Canada, Japan and South Korea. Sea Dragon is a US-led multi-national exercise designed to practice and discuss Anti-**

**hub for COVID19 antiviral generic drug production after the drug controller granted emergency use authorisation to several pharmaceutical companies in the country to manufacture and market generic versions of molnupiravir, Fitch Solutions said.**

**submarine warfare tactics** to operate together in response to traditional and non-traditional maritime security challenges in the Indo-Pacific region.

