

NEWSPAPER HIGHLIGHT

A butterfly survey at the Peechi-Vazhani wildlife division has recorded a remarkable increase in the species' numbers. Southern Birdwing, the largest butterfly in India, and Grass Jewel, the smallest, were found during the survey. Buddha Peacock, the State butterfly of Kerala, was also recorded. The PeechiVazhany, Chimmony, and Chulannur Wildlife Sanctuaries were surveyed. The survey marks the beginning of a series of biodiversity assessments to prepare a new management plan for the region. It has a specific section targeting invasive species that are a threat to the indigenous biodiversity. The division had 23 species of butterflies red listed by the IUCN. Sixtythree species were protected under the Indian Wildlife Protection Act 1972. The survey teams also recorded birds, odonates, reptiles, amphibians, and spiders — 152 bird species were recorded in Peechi-Vazhany, in Chimmony and 77 in Chulannur.

A whopping 1,160 elephants were killed in the country for reasons other than natural causes in the 10 years up to December 31, 2020, according to the Union Ministry of Environment, Forest and Climate Change (MoEFCC). While electrocution claimed the lives of 741 elephants, train hits led to the death of 186 pachyderms, followed by poaching (169) and poisoning (64), a document accessed from the Ministry through the Right to Information (RTI) Act revealed. A Permanent Coordination Committee has been constituted between the Ministry of Railways and the MoEFCC for preventing elephant deaths due to train hits.

Winter in northern India will unlikely be harsh with the India Meteorological Department (IMD) forecasting "normal to above normal" minimum temperatures for December-February. These elevated temperatures are likely to be prevalent not only in northwest India but also south and northeast India and parts of the Himalayan foothills. The IMD, however, did not provide by how many degrees, on average, would temperatures be elevated. Overall, winter temperatures have been on the rise. The IMD which started issuing winter forecasts in 2016, except for 2017, had forecast warm winters for all years since then. Warm winters, experts say, are a sign of global warming. India on an average is 0.5 degree Celsius warmer than 50 years

FISHING CAT

1. The Children for Fishing Cat project of Andhra Pradesh recruits children as ambassadors for conservation to save the predator and its home. The Children for Fishing Cat project is part of the Godavari Fishing Cat Project, which focuses on community-based conservation of this in the coastal habitats of the region. Fishing cat is a wild cat species that is bigger than a domestic cat. They are nocturnal. They can easily wade through water and survive in wet landscapes. As they have webbing between their toes that helps to catch fish efficiently, their diet is dominated by fish.

2. Habitat - They abound in estuarine floodplains, tidal mangrove forests and also inland freshwater habitats. They are scattered along the Eastern Ghats. They are also found in the foothills of the Himalayas along the Ganga and Brahmaputra river valleys and in the Western Ghats. They inhabit the Sundarbans (West Bengal), Chilika lagoon and the surrounding wetlands (Odisha), Coringa and Krishna mangroves (AP).

3. Threats - **Loss of its preferred wetland habitats; Depletion of its main prey-fish due to unsustainable fishing practices; Occasional poaching for its skin; shrimp farming; trapping, snaring and poisoning.**

STUDY ON FLASH DROUGHTS

1. A recent study has identified India among the global flash drought hotspots from 1980-2015. About 10-15% areas under cultivation of rice and maize were affected by flash droughts during the monsoon seasons in India from 1951-2018. It predicted that by the end of the 21st century, the frequency of concurrent hot and dry extremes in India will rise by about five-fold. This can cause approximately a seven-fold increase in flash droughts. India could experience more flash droughts during the monsoon season than the non-monsoon season.

2. The study has also identified the flash drought hotspots, Corn belt across the mid-western United States, Barley production in the Iberian Peninsula, Wheat belt in western Russia, Wheat production in Asia Minor, Rice-producing regions in India and the Indochina Peninsula, Maize production in north-eastern China and Sorghum production across the Sahel.

3. **Flash drought-Flash drought is the rapid onset or intensification of drought and is set in motion by lower-than-normal rates of precipitation, accompanied by abnormally high temperatures, winds, and radiation.**

Together, these changes in weather can rapidly alter the local climate. Flash droughts can either be short-lived yet severe event where soil moisture completely depletes or a multi-week period of rapid intensification toward drought. Unlike conventional drought, which can happen anywhere and at any time, flash drought typically occurs during warm seasons. Causes - Rapid drought intensification occurs due to two key drivers: A critical lack of precipitation accompanied by abnormally high temperatures, high winds, and/or changes in radiation and Increased evaporative demand, which is a measure of the extent to which the environment 'tries' to evaporate water.

4. **Geographic differences and climate patterns also impact the development of flash drought. In contrast with conventional drought - that occurs throughout the year at any location - flash drought typically occurs during warm seasons.** Impacts - As flash droughts can develop in only a few weeks, they create impacts on agriculture that are difficult to prepare for and mitigate. Higher temperature increases evapotranspiration and further lowers soil moisture, which decreases rapidly as drought conditions continue. [Evapo-transpiration is the process by which water is transferred from the land to the atmosphere by evaporation from the soil and by transpiration from plants.]

RIFT VALLEY LAKES

1. **A report has found that the water levels of lakes in Kenya's Great Rift Valley increased significantly, due to climate change, human activities and an active tectonic belt. Rift**

ago.

Moving forward on the Prime Minister's promise to set up a committee to discuss minimum support prices (MSP) for crops among other issues, the Centre has informally asked protesting farm unions to suggest five names to be part of the panel. However, the leaders of the Samyukt Kisan Morcha (SKM), a joint platform of the unions, say no formal written communication has yet been received. The move came a day after Parliament repealed the three contentious farm reform laws as had been demanded by the protesting unions. Their other key demand is for a legal guarantee that all farmers will receive remunerative prices, one and a half times the comprehensive cost of production, for all their crops.

India joined the G20 'Troika'. With this move, India has started the procedure for taking over the G20 presidency next year. Troika refers to the top grouping within the G20 that consists of the current, previous and the incoming presidencies — Indonesia, Italy and India. "India will assume the G20 presidency on December 1, 2022 from Indonesia, and will convene the G20 Leaders' Summit for the first time in India in 2023," the Ministry of External Affairs said in a statement. Italy hosted the G20 summit during October 30-31 that was attended by Prime Minister Narendra Modi where India had raised the issue of Afghanistan's future following the takeover by the Taliban. As a Troika member, India will work closely with Indonesia and Italy to ensure consistency and continuity of the G20's agenda," the Ministry of External Affairs said.

Observing that social media platforms have placed journalism in the hands of citizens, a Parliamentary panel asked the Government to ensure a code of ethics is followed in the digital media space while preserving the right to freedom of expression. The Parliamentary Standing Committee on Communications and Information Technology in its 27th report on 'Ethical Standards in Media Coverage', presented in Parliament, impressed upon the Ministry of Information and Broadcasting (MIB) "to ensure that adequate consultations take place with all stakeholders" and that monitoring of digital media may be exercised while fully preserving the right to freedom of expression. The panel observed that social media platforms, such as Facebook, WhatsApp, Instagram and Twitter, have placed journalism in the hands of the citizens. Citizens use their personal recording devices including cellphones to capture

Valley Lakes are a series of lakes in the East African Rift valley that runs through eastern Africa from Ethiopia in the north to Malawi in the south. These include the African Great Lakes (Victoria, Tanganyika and Malawi) as well as Turkana, Albert, Edward, Kivu and other lakes.

2. Lake Victoria is the second largest freshwater lake in the world after Lake Superior in the US. Lake Tanganyika is the longest lake in the world. Rift Valley lakes are well known for the evolution of at least 800 cichlid fish species that live in their waters. Threats - Deforestation, pollution from agricultural and industrial activities, run-off from urban areas and overfishing threaten the health of many of the lakes and their water basins.

3. Rift Valley - A rift valley is a lowland region that forms where Earth's tectonic plates move apart, or rift. Rift valleys are found both on land and at the bottom of the ocean, where they are created by the process of seafloor spreading. Rift valleys differ from river valleys and glacial valleys in that they are created by tectonic activity and not the process of erosion.

CENTRAL BANK DIGITAL CURRENCY (CBDC)

1. The Reserve Bank of India has been working on a phased implementation strategy for a CBDC and the pilot may be launched by the end of this year. The financial advisory services firm has listed four major use cases of CBDC in the Indian context. This includes: 'Fit-for-purpose' money used for social benefits and other targeted payments in a country. For such cases, the central bank can pay intended beneficiaries pre-programmed CBDC, which could be accepted only for a specific purpose.

2. CBDCs could be used for faster cross-border remittance payments. International collaboration among the major economies of the world, including India, could help create the necessary infrastructure and arrangements for CBDC transfer and conversion. Payment instruments could be made available for payment transactions to be made via CBDC. Furthermore, universal access attributes of a CBDC could also include an offline payment functionality. Instant lending to micro, small, and medium enterprises (MSMEs) in India can be possible with the help of CBDC.

3. **Need for CBDC:** An official digital currency would reduce the cost of currency management while enabling real-time payments without any inter-bank settlement. India's fairly high currency-to-GDP ratio holds out another benefit of CBDC — to the extent large cash usage can be replaced by CBDC, the cost of printing, transporting and storing paper currency can be substantially reduced. The need for inter-bank settlement would disappear as it would be a central bank liability handed over from one person to another.

4. **What is the CBDC or National Digital currency?** A Central Bank Digital Currency (CBDC), or national digital currency, is simply the digital form of a country's fiat currency. Instead of printing paper currency or minting coins, the central bank issues electronic tokens. This token value is backed by the full faith and credit of the government.

5. **SC Garg Committee recommendations (2019):** Ban anybody who mines, holds, transacts or deals with cryptocurrencies in any form. It recommends a jail term of one to 10 years for exchange or trading in digital currency. It proposed a monetary penalty of up to three times the loss caused to the exchequer or gains made by the cryptocurrency user whichever is higher. However, the panel said that the government should keep an open mind on the potential issuance of cryptocurrencies by the Reserve Bank of India.

6. **Challenges in rolling out National Digital Currency:** Potential cybersecurity threat. Lack of digital literacy of the population. Introduction of digital currency also creates various associated challenges in regulation, tracking investment and purchase, taxing individuals, etc. Threat to Privacy: The digital currency must collect certain basic information of an individual so that the person can prove that he's the holder of that digital currency.

INFORMATION MANAGEMENT AND ANALYSIS CENTRE (IMAC):

1. It is the nodal agency for maritime data fusion.
2. It was set up after the 26/11 Mumbai terror attacks.
3. Approved by the Defence Acquisition Council in 2012. Became operational in 2014 and is located in Gurugram.
4. **It is the nodal centre of the National Command Control**

events and post them on the Internet, it noted. The panel also considered the issue of unregulated content made available through online and OTT (over the top) platforms “which had hitherto escaped any architecture of regulation”. The committee is conscious that the information and content portrayed on such platforms can impact viewers, including minor children,” it said. “At the same time, the committee acknowledges that OTT platforms offer freedom to the individual user to decide what to watch, a freedom that should not be abridged by the heavy hand of Government,” the panel said.

The European Commission announced a plan to mobilise €300 billion (\$340 billion) in public and private infrastructure investment around the world, a move seen as a response to China’s Belt and Road strategy. “Global Gateway will aim at mobilising investments of up to 300 billion euros between 2021 and 2027... bringing together resources of the EU, member states, European financial institutions and national development finance institutions,” a commission document said.

Communication and Intelligence System (NC3I), which was established to link the operational centres and lower echelons of the Navy and the Coast Guard spread across the country’s coastline, including the island territories.