The Hindu

Front Page

Ahead of FATF visit, Pak. doubles efforts to 'trace' Masood (Page no. 1) (GS Paper 2, International Relation)

As Pakistan enters the final stages of its efforts to be taken off the Financial Action Task Force's (FATF) 'grey list' this year, all eyes are on action against Jaish-e-Mohammad (JeM) founder Masood Azhar, and his brother Abdul Rauf Asghar, two of the men most wanted by India for their role in many terror attacks, including the IC 814 aeroplane hijack in 1999 and Parliament attack in 2001.

While Rauf Asghar was taken into custody along with 44 JeM members in 2019, officials say Pakistani law enforcement agencies are now in the process of "assessing" Masood Azhar's whereabouts, including on whether he is in Pakistan.

The Pakistani law enforcement agencies have discussed tracking Azhar's possible move to Afghanistan with the Taliban regime as well, the officials said.

The Pakistani search for Azhar is being speeded up with some urgency, officials confirmed, as a senior FATF team is expected to visit Islamabad and other cities for an "on-site visit" from August 28-September 2, to verify whether Pakistan has carried out all the actions on its 34-point task list handed after it was put on the 'grey list' in 2018.

If the team is satisfied by its findings, Pakistan is expected to be formally taken off the "increased monitoring" list, as the 'grey list' is known, during the FATF's next plenary session in October this year.

According to submissions by the Pakistani government, its National Counter Terrorism Authority (NACTA) held a meeting in early March to coordinate the hunt for Masood Azhar, who agencies claim is on the run, and the process to declare Azhar a "proclaimed offender" is under way.

A terror financing case was also lodged against Azhar in March 2021, and more investigations are "contingent upon the arrest of Masood Azhar", the submissions said. Pakistani investigations appear to conclude that Azhar is now either in Afghanistan, where the JeM has several training camps, or in Pakistan's Khyber Puktunkhwa and Balochistan along the border, after a number of search operations in Pakistani Punjab were reportedly unsuccessful.

Amid protests, Gotabaya agrees to quit (Page no 1) (GS Paper 2, International Relation)

Sri Lankan President Gotabaya Rajapaksa will resign on July 13, the country's Parliamentary Speaker said after protesters stormed the Presidential Secretariat, official and private homes of Mr. Gotabaya and Prime Minister Ranil Wickremesinghe, in a show of striking public fury over the country's worsening economic crisis.

An angry mob set Mr. Wickremesinghe's private residence on fire, despite military security. The PM or his family was not at the residence at the time, his office said, adding there were no known casualties so far.

President Rajapaksa, according to top defence sources, left his official residence on Friday night "as a precaution". "He is under the protection of the military at a safe location in the country," a senior official, requesting anonymity, told The Hindu, while some media reports said he was evacuated by the Navy just hours before the incident.

Tens of thousands of citizens took out a massive rally on Saturday, as part of a fresh wave of protests in the island, reiterating their call for the President and Prime Minister to resign immediately, for failing to arrest the crushing economic downturn that has left citizens scrambling for essentials.

20 red pandas to make a home in the forests (Page no 1) (GS Paper 3, Environment)

The Singalila National Park, the highest protected area in West Bengal, will soon get new denizens. A zoo in the picturesque Darjeeling Hills has started an ambitious programme to augment the wild red panda population.

In the first re-wilding programme of red pandas (Ailurus fulgens) in India, the Padmaja Naidu Himalayan Zoological Park has started an ambitious programme to release 20 of these furry mammals in about five years to the forests.

The number of red pandas has been declining in the wild, even in the Singalila and Neora Valley National Parks, the two protected areas where the endangered mammal is found in the wild in West Bengal. Recent studies estimate that there are 38 of them in Singalila and 32 in Neora.

Basavaraj Holeyachi, Director of zoological park who is at the centre of the Red Panda Augmentation Programme, says conservation breeding of red pandas is only one part of the programme. Selection of animals to be released in the wild,

breaking their food association with humans and tagging the animals released in the wild are crucial factors in re-wilding of the red panda population, he adds.

The Padmaja Naidu park, at a height of about 2,000 metres above the sea level, is one of the high-altitude zoos in the country and has been quite successful in captive breeding of the furry mammals.

With the birth of a couple of cubs a few weeks ago, the number of red pandas at the Darjeeling zoo has increased to 27. It was the coordination zoo for conservation breeding of red pandas in the country with decades of experience. He said most other high-altitude zoos were participatory zoos that have animals given by it.

City

MHA sets up panel for delimitation of municipal wards (Page no 2) (GS Paper 2, Polity and Governance)

The Ministry of Home Affairs (MHA) has formed a three-member committee to carry out a delimitation exercise of municipal wards in the Capital, the Municipal Corporation of Delhi (MCD). The delimitation exercise will pave the way for the city's first civic polls after the MCD's reunification.

Taking a step forward in the direction of holding municipal elections, the Ministry of Home Affairs has constituted a delimitation commission to assist Central government in delimitation of wards and carrying out other functions related to it.

Chief Minister Arvind Kejriwal, who recently threatened to drag the BJP-led Centre to court for deferring the civic polls, welcomed the development.

While welcoming the constitution of the committee, Mr. Kejriwal also raised a question on how the committee would function without clarity on the number of civic wards the city would now have.

We are happy that the Central government has constituted a committee for the delimitation of MCD wards. But it did not specify how many wards there will be in Delhi. How will this committee function?" the Chief Minister tweeted.

According to the MCD, the delimitation panel will have three members and will be chaired by Vijay Dev, the State Election Commissioner.

The other two members of the panel will be Pankaj Kumar Singh, Joint Secretary in the Union Ministry of Housing and Urban Affairs, and Randhir Sahay, Additional Commissioner, MCD. The panel is expected to submit its report within four months.

Reacting to the development, AAP MLA Atishi called the constitution of the panel by the Centre, without a decision on the number of wards in the city, a tactic to delay the civic polls.

States

Ancient Buddhist site finally in focus (Page no 6) (GS Paper 1, Culture)

Left almost unattended to for 20 years after it came to light through the excavation by the Archaeological Survey of India (ASI) between 1994 and 2001, the ancient Buddhist site on the bank of Bhima river near Kanaganahalli (forming part of Sannati site) in Kalaburagi district, has finally got some attention.

The ASI has now come up with a plan for the conservation of the site at a cost of ₹3.5 crore and work has just begun. ASI Regional Director (South) D. Maheshwari and Circle Superintendent (Hampi) Nikhil Das are camping at the site monitoring work.

Till now, some items of antiquity found during excavation were kept in three tin sheds in the same site, while many remained scattered in the open.

The conservation project taken up now envisages the resetting of the remains of Maha Stupa retrieved in the excavation to their original positions without much ornamentation and reconstructing of fallen portions of the Ayaka platforms using newly-fabricated bricks of the same size, shape and texture.

The stupa was built with locally available limestone. Most of the dome slabs, drum slabs, inscribed sculptures and other structural remains were in a broken state when they were retrieved.

The work start with the removal of core filling from the drum portion and then proceed to reset stone blocks to their original position. Once the consolidation of the entire stupa is done, we will go for railings and other peripheral work.

News

North Zonal Council discusses security (Page no 7)

(GS Paper 2, Governance)

The Northern Zonal Council deliberated on the issues of internal security, road, transport, industries, water, power, cyber crime and other subjects of common interests for eight northern States and Union Territories at its 30th meeting. Union Home Minister Amit Shah, who heads the Council, presided over the meeting.

The Chief Ministers, Lt. Governors and other functionaries representing the States and Union Territories highlighted the need for mutual coordination in the spirit of cooperative federalism to deal with the emerging threats to internal security. Mr. Shah laid emphasis on an effective cooperation among all States to control organised crime.

In addition to Rajasthan Chief Minister Ashok Gehlot, Chief Ministers Manohar Lal Khattar and Jai Ram Thakur of Haryana and Himachal Pradesh respectively, Lt. Governors Vinai Kumar Saxena and Radha Krishna Mathur of Delhi and Ladakh respectively, and Punjab Governor and administrator of Chandigarh Banwarilal Purohit attended the meeting. Senior officers from these States were also present.

Delhi Chief Minister Arvind Kejriwal and his Punjab counterpart Bhagwant Mann skipped the meeting. A government official said that Mr. Mann had confirmed his participation but was represented by Finance Minister Harpal Singh Cheema instead. Apart from the Delhi Lt. Governor, Deputy CM Manish Sisodia represented the National Capital Territory.

No official from Jammu and Kashmir attended the meeting because of the flash floods on the Amarnath Yatra route which have claimed more than a dozen lives so far.

Glaciers in Drass are receding fast, says study (Page no 9) (GS Paper 3, Environment)

The decadal pace at which glaciers are receding in Ladakh's Drass region, a key battleground during the 1999 Kargil war, indicates a grave threat to Himalayan glaciers.

A recent study attributes this to the growing vehicular traffic in the region, which is also witnessing a massive build-up of military on both the sides of Line of Actual Control (LAC) since 2020.

The study published by the journal Environmental Science and Pollution Research is based on satellite images of 77 glaciers observed over two decades, from 2000 to 2020, in the Drass basin of western Himalaya.

The glaciers studied ranged in size from 0.27 sq. km. to 14.01 sq. km, with an average size of 2.30 sq. km. The study reports that the glacier area decreased from 176.77 sq. km. in 2000 to 171.46 sq. km. in 2020, which is about 3% of the total glacier area.

The pace of glacial recession varies greatly among glaciers ranging from 0.24% to 15%. The snout retreat for the period ranged from 30 to 430 meters.

Debris cover had a significant impact on glacier melting, with clean glaciers losing 5% more than debris-covered glaciers. The average thickness change and mass loss of glaciers have been 1.27 to 1.08 meters," the study pointed out.

The analysis shows that glaciers at lower elevations receded by 4.10% whereas glaciers at mid- and higher elevations receded by 3.23% and 1.46% over the period observed.

The study found that heavy vehicular movement is the main cause for the rapid pace at which glaciers are receding in the region. Black carbon concentration ranged from 287 to 3,726 nanograms per cubic metre, with an average of 1,518 nanograms per cubic metre, "which is markedly higher compared to the black carbon concentration reported from other high-altitude locations in the Hindu Kush Himalayas.

World

Xi hails Abe's contribution to ties (Page no 10)

(GS Paper 2, International Relation)

China's President Xi Jinping on Saturday sent a message of condolence to Japanese Prime Minister Fumio Kishida in the wake of the death of former Prime Minister Shinzo Abe.

Mr. Xi "pointed out that former Prime Minister Shinzo Abe made efforts to improve China-Japan relations when he was in office and contributed positively to this endeavour", the Chinese Ministry of Foreign Affairs said, adding that he "noted that he had reached important common understanding with Abe on building a China-Japan relationship that meets the need of the new era".

Xi also noted that he deeply regrets Abe's sudden passing and stands ready to work with Prime Minister Kishida to continue to develop a China-Japan relationship of good-neighbourliness, friendship and cooperation in accordance with the principles of the four China-Japan political documents.

Mr. Xi's message followed a day of wide attention on Chinese social media on Mr. Abe's death. Thousands of messages posted by Chinese social media users celebrated the assassination, while one essay that expressed alarm and revulsion

at those messages, and pointed to the impact of decades of anti-Japanese state propaganda, went viral before being censored on WeChat.

The radical nationalism on show has damaged China's image internationally and may complicate Beijing's efforts to improve relations with other countries," the Hong Kong-based South China Morning Post quoted commentators as saying, noting that many on Chinese social media saw Mr. Abe "as representative of a Japanese right-wing in denial about the country's war crimes" and hit out at his visits to the Yasukuni shrine that includes honours for war criminals.

Science and Tech

Study finds three asymptomatic monkeypox cases (Page no 11) (GS Paper 3, Science and Tech)

Monkeypox is transmitted by close contact with people who have symptomatic infection, and all those infected are assumed to show symptoms.

But a recent study has found that people can be infected with monkeypox without showing any of the typical or atypical symptoms. The preprint has been posted in medrXiv server, which is yet to be peer-reviewed.

The study found three men tested positive for monkeypox but have no symptoms whatsoever. "All three men denied having had any symptoms in the weeks before and after the sample was taken.

None of them reported exposure to a diagnosed monkeypox case, nor did any of their contacts develop clinical monkeypox," the preprint notes.

Similar to smallpox, everyone who is infected with monkeypox is expected to develop symptoms, and the virus is considered to spread through close contact with people who show symptoms. Since every individual infected with monkeypox is assumed to develop symptoms, and since close contact is most often needed for the virus to spread, it is considered that staying away from infected people and maintaining simple hygienic measures can halt the spread of monkeypox virus, as observed in several outbreaks in endemic regions.

But asymptomatic transmission can change and challenge the efforts to contain the monkeypox outbreak, which till July 4 has been reported in 6,027 people across 59 countries, including those in endemic countries in Africa.

According to the World Health Organization (WHO), the "extent to which asymptomatic infection may occur is unknown".

Easing learning for children with ASD using robots (Page no 11) (GS Paper 3, Science and Tech)

Teaching children with Autism Spectrum Disorder poses many challenges for special educators working in this area. One of these challenges is that the interventions needed are highly specific to each child.

In a class, therefore, when handling more than one child, the teacher may benefit from support offered by robotic assistants — the commercially available robots. There is a need to research this aspect and provide cost-effective solutions.

This is the area of work in a pilot study carried out in the lab of Chiranjib Bhattacharya of Indian Institute of Science (IISc), Bengaluru, with the support of Jayashree Ramesh of the Academy for Severe Handicaps and Autism (ASHA), Bengaluru. Dr. Bhattacharya and his team studied the use of toy robots — small in size and not necessarily humanoid — in assisting learning for children with autism spectrum disorder.

Their work and results have been published in a paper in 2021 IEEE International Conference on Robotics and Automation.

With the aim of understanding the role of Artificial Intelligence (AI) and toys in the learning process of children with neurodevelopmental challenges, the team approached ASHA, for a collaboration.

The founder, Ms. Jayashree Ramesh, was very supportive. She helped us identify which children to work with, the challenges to target and what their education is like.

One part of the work was to study the effectiveness of interventions using a toy robot, Cozmo; the other part was to try and use drones to help children with motivational issues — for instance, motivating them to exercise if they were not inclined per se to do so (for instance, with hypotonia).

Exercise keeps your brain young (Page no 11) (GS Paper 3, Science and Tech)

The human brain reaches adult size by the age of 10; but its wiring and its abilities continue to change through a lifetime.

After the age of 40, the brain begins to shrink in volume. Less blood flows through the brain, and hormone and neurotransmitter levels go down. Ageing leads to slowing down in some functions such as the learning of new tasks.

Learning requires the formation of new connections in the brain, a property called neuroplasticity. Your brain is a dynamic entity that is constantly remodelling itself in response to new experiences.

Some brain structures show greater plasticity and rewiring than others. Ageing affects them more extensively than others. One such structure is the hippocampus.

Located between the ears, it plays a key role in the formation and consolidation of new and lasting memories, and thus of learning and experience. It also creates mental maps of your surroundings, enabling you to find your way home.

Experiments have shown that the brains of older mice have fewer connections, called synapses, between their nerve cells and perform poorly in finding their way through mazes — indicating deficiencies in spatial learning.

MRI studies on the brains of London taxi drivers show that they have an enlarged hippocampus — the city's roads have been 'mapped' in the hippocampus, and this 'map' readily expands as experience is gained.

Human studies in this area, however, are confounded by large differences between individuals — some "Super Agers" can even compete with much younger people in memory tests.

The brain's capacity for rewiring and change is seen in the case of brain injuries resulting from trauma or from a stroke. A large number of brain cells die in such events, leading to a loss of some abilities.

Yet over time, the brain remodels itself, leading to a full or partial restoration of lost abilities. This can be accelerated by medications, stem cell therapy and psychological interventions.

FAQ

Who is responsible for the Manipur landslide? (Page no 12) (GS Paper 1, Geography)

Landslides have killed at least 125 people across four north-eastern States this year after the onset of rainfall in April. Almost half of them — 49 confirmed and 12 others missing with little chance of survival — died working on a railway project at the Tupul substation in Makhuam village of Manipur's Noney district on June 30.

The Railways have reportedly blamed jhum or shifting or slash-and-burn cultivation on hill slopes for the tragedy, sparking debates on the tendency to overlook geological challenges and not factor in climate change while executing major developmental projects.

Sanctioned in February 2005 as a national project, the 110.625 km Jiribam-Imphal line is considered a vital segment of the Trans-Asian Railway envisaged as an integrated freight railway network across Europe and Asia.

The broad-gauge project entails connecting Manipur's Jiribam, a town on the border with Assam, and State capital Imphal mostly across the fragile hills of Noney district, is expected to reduce the travel time from the existing 10-12 hours to three hours.

More than 65% of this project with an anticipated cost of ₹14,322.79 crore has been completed and goods trains reached the Khongsang railway station, 68.605 km from Jiribam, in March.

The railways have tagged this project, expected to be functional by December 2023, as its most ambitious and challenging endeavour.

The project involves 46 tunnels with a total length of 61.398 km, 16 road overbridges and under-bridges, and 140 major and minor rail bridges.

Tunnel number 12 on this line is India's longest railway tunnel at 11.55 km and one of the rail bridges near Noney is being built at a pier height of 141 metres, the world's tallest.

Altering green laws (Page no 12)

(GS Paper 3, Environment)

On July 1, the Ministry of Environment, Forest and Climate Change put out a note, proposing amendments in the Environment (Protection) Act, 1986.

The EPA establishes the "framework for studying, planning, and implementing long-term requirements of environmental safety and laying down a system of speedy and adequate response to situations threatening the environment."

In its note, the Environment Ministry has proposed legislation which scales down punishment for some environmental violations. Stakeholders — citizens, State governments, Union Territories and others concerned — have till July 21 to respond with suggestions.

Besides changes in the EPA, the Ministry, in a set of notifications, also proposed amendments to three other legislations. The Environment Ministry has proposed amendments in four key legislations: The Environment (Protection) Act, 1986, the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 and the Public Liability Insurance (PLI) Act, 1991.

These are the cornerstone environmental laws that led to the setting up of the Central Pollution Control Board (CPCB), empowering it to take action against individuals and corporate bodies who pollute air, water and land.

The clutch of laws currently empowers the CPCB to either shut down a polluting industrial body or imprison executives of an organisation found to be environmental violators.

Profile

G-20 A multilateral platform in a polarised world (Page no 13) (GS Paper 2, International Relation)

In a world where multilateralism appears to be gasping for breath, the G-20 Foreign Minister's meeting in Bali dealt a few more blows. "We cannot deny that it has become more difficult for the world to sit together," said Retno Marsudi, Indonesian Foreign Minister who hosted the meeting this week, even as G-7 countries skipped a welcome reception and concert to protest the presence of Russian Foreign Minister Sergey Lavrov.

Mr. Lavrov walked out of one meeting over comments made by Western countries about the war in Ukraine, and another, just before the Ukrainian Foreign Minister, a special invitee to the session on food security, began to speak.

It seems the road between the Foreign Ministers' meeting, expected to be followed by an equally acrimonious G-20 Finance Ministers' meeting on July 15-16, which will finalise the agenda, can only lead to an even more contentious G-20 summit four months later, on November 15-16, where Russian President Vladimir Putin has been invited and Ukrainian President Volodymyr Zelensky is expected to address the gathering as a special invitee.

The U.S. has already demanded Mr. Putin be disinvited, or U.S. and European countries would boycott his address.

Sensing the difficulties, Indonesian President Joko Widodo, who attended the G-7 summit in Germany as a special invitee, also travelled to Kyiv and Moscow last month, and met with both leaders in the hope of keeping the G-20 together, as it faces what is probably its greatest organisational challenge in 23 years of its existence.

India, which will assume the Presidency of the G-20 in December, will have to bear the burden of ensuring the G-20's continued existence in a globally polarised world through 2023.

In many ways, (minus the Russia-Ukraine war), the present moment reflects many of the crises that led to the creation of the G-20 in the first place in 1999.

At the time, the geo-economic multilateral order was dominated by the G-8 countries (now the G-7, after the ouster of Russia), and it was clear that they were ineffective in dealing with the Mexican, Asian and Russian Financial Crises of 1997-98.

Business

RBI to remain flexible while aiming to tame inflation: Das (Page no 14) (GS Paper 3, Indian Economy)

Reserve Bank of India will continue calibrating policy to preserve and foster macroeconomic stability while bringing down inflation and will remain flexible in its approach.

The global economy is going through an uncertain time and concerns around growth and inflation persist, but the central bank believes that there could be some respite from rising prices in the coming months, Mr. Das told an economic forum in New Delhi.

The current assessment is that inflation may ease gradually in the second half" of the fiscal year to March, given a favourable supply outlook and "high frequency indicators pointing to resilience of the recovery" during the three months to June.

Retail inflation eased marginally in May, after touching an eight-year high of 7.79% in April, but remained above the central bank's tolerance band of 2% to 6% for a fifth month.

The Reserve Bank of India raised its inflation projection for this fiscal year to 6.7% from 5.7% earlier. Mr. Das said it will likely remain above the bank' upper tolerance band in the first three quarters of the financial year.