

NEWSPAPER HIGHLIGHT

The National Disaster Management Authority is working with 23 out of 28 heat prone States to develop Heat Action Plans (HAP) that stress changes in the built environment: using material that keeps the indoors cooler, having an early warning system about heatwaves and improving health infrastructure to treat heat stroke patients. However, much remains in terms of reaching out to rural India as well as governments taking steps to plan infrastructure and housing in ways that recognise the dangers from a warming environment. It is time that India includes financial incentives, preferably via Budget outlays, for effective cooling plans. Adapting to and mitigating this most visceral challenge is the need of the hour.

India's defence exports for 2021-22 were estimated at ₹13,000 crore, the highest ever, Sanjay Jaju, Additional Secretary in the Defence Ministry, said here on Friday. The U.S. was a major buyer, as also nations in Southeast Asia, West Asia and Africa. "The private sector accounted for 70% of the exports, while public sector firms accounted for the rest," Mr. Jaju said.

The State Emblem on top of the new Parliament building that is under construction is likely to be unveiled by PM Narendra Modi on July 11, according to reliable sources. The building is on course to be completed by the deadline in October, said an official. The emblem was created by sculptors Sunil Deore and Laxman Vyas, and the fabrication done in Aurangabad, Jaipur and Delhi, said another official.

Former Prime Minister Shinzo Abe, Japan's longest serving leader, died on Friday after being shot while campaigning for a parliamentary election. It was the first assassination of a sitting or former Japanese Premier since the days of prewar militarism in the 1930s. In 2021, India awarded Mr. Abe the Padma Vibhushan, the country's second highest civilian honour.

Divisions between the U.S. and Russia dominated the G20 Foreign Ministers' Meeting in Bali on Friday. External Affairs Minister S. Jaishankar met with U.S. Secretary of State Antony Blinken and Russian Foreign Minister Sergey Lavrov

DERECHO

1.States of Nebraska, Minnesota and Illinois in the United States of America were hit by 'derecho' storm system. As the storm hit, it turned the skies green. A derecho is a widespread, long-lived, straight-line windstorm that is associated with a "band of rapidly moving showers or thunderstorms". Derechos or straight-line storms are those in which thunderstorm winds have no rotation unlike a tornado or hurricane.

2.Characteristics - For a storm to be classified as a derecho, it must have wind gusts of at least 93 km per hour; wind damage swath extending more than 400 km. The time gap between successive wind damage events should not be more than 3 hours. Occurrence - Being a warm-weather phenomenon, a derecho generally - not always - occurs during summertime beginning May, with most hitting in June and July.

3.However, they occur rarely as compared to other storm systems. The derechos mostly occur across central and eastern parts of the USA. Derechos have also been documented in Russia, Germany, Finland, Bulgaria and Poland. Sky turned green - Severe thunderstorms result in a 'green sky' due to light interacting with the huge amount of water they hold.

4.The big raindrops and hail scatter away all but the blue wavelengths due to which primarily blue light penetrates below the storm cloud. This blue then combines with the red-yellow of the afternoon or the evening sun to produce green, the report said.

5.Three types of derechos - A progressive derecho is associated with a short line of thunderstorms that may travel for hundreds of miles along a relatively narrow path. It is a summer phenomenon. A serial derecho, on the other hand, has an extensive squall line - wide and long - sweeping across a large area. It usually occurs during spring or fall. Hybrid ones have the features of both progressive and serial derechos.

G7 CLIMATE CLUB

1.At the 48th G7 summit, hosted by Germany, the leaders decided to form an international "climate club" for nations that want to take more decisive climate action and combat global warming. The Group of Seven (G7) group of developed nations are the US, the UK, Canada, France, Germany, Italy and Japan.

2.Origin - The concept of a climate club was developed by Yale economist William Nordhaus in 2015. The club he proposed would exempt its members from climate-related trade tariffs to which non-members will be subjected. G7's Climate Club - The G7's Climate Club is expected to be established by the end of the year 2022. It will be an intergovernmental forum of high ambition that will be "open and inclusive in nature" to those committed to follow the Paris climate agreement 2015.

3.The Paris Climate Accord aims to limit global warming to below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels. The club will aim to promote collaboration, help maintain competitiveness and make climate protection a competitive advantage.

4.Pillars - The climate club will be built on three pillars, Focus on advancing transparent policies to achieve climate neutrality (reducing all greenhouse gases as much as possible), Transforming industries to accelerate decarbonisation, and Facilitating partnerships and cooperation to encourage climate action and unlock socio-economic benefits of climate cooperation.

5.Implementation - This open, collaborative club will set joint minimum standards, drive climate action that is internationally coordinated. This will ensure that climate action makes a country more competitive at the international level.

LASER INTERFEROMETER GRAVITATIONAL-WAVE OBSERVATORY

1.The Laser Interferometer Gravitational-wave Observatory is scheduled to begin its fourth run of operations in March 2023

on the sidelines of the meeting.

An influential women's group in Assam has opposed the Railway Ministry's proposal for an alternative to a hill railway system that suffered extensive damage because of heavy rainfall and landslips in April. The Dimasa Mothers' Association (DMA) demanded the revocation of the decision to survey the Lanka Silchar route and said the new route could lead to another manmade disaster causing more damage to the hills.

A rights group has asked the Centre to sanction the prosecution of the Army personnel found involved in the killing of civilians in Nagaland's Mon district in 2021. They have also asked to make the findings of the special investigation team (SIT) public. Soldiers of an elite unit of the Army had on December 4, 2021, gunned down 13 civilians near Oting village in a botched ambush. The SIT had named 30 Army personnel in its chargesheet.

The Environment Ministry, tasked with safeguarding India's forests and its environmental assets, proposes to amend sections of key environmental legislation and make them less threatening to potential violators. India has eight cornerstone pieces of legislation that define a regulatory framework to ensure that natural resources are not wantonly exploited, acts of pollution are apprehended and there is a mechanism to punish and deter violators. Under provisions in the existing legislation, violators are punishable with imprisonment up to five years or with a fine up to one lakh rupees, or with both. Were violations to continue, there is an additional fine of up to ₹5,000 for every day during which such failure or contravention continues after the conviction.

During the recent celebration of Pride month (June) globally and in India, we witnessed an incredible social media presence filled with striking images and stories. It would not have been amiss to also pause and reflect momentarily on the state of mental health of LGBTQIA++ communities in India. The reflection would undoubtedly have been a sobering one.

Multiple factors such as water scarcity in Punjab and increase in fertilizer prices are considered the reasons for a 27% decrease in paddy sowing till July 1 during this kharif season. Though recently, Union Food Minister Piyush Goyal had urged the States to encourage farmers to sow paddy in more areas,

after over two years of maintenance work and upgrades. The Laser Interferometer Gravitational-wave Observatory (LIGO) is the world's largest gravitational wave observatory.

2.It comprises of two massive laser interferometers that are located about 3,000 km apart - Hanford (Washington) and Livingston (Louisiana). It is used to detect and understand the origins of gravitational waves. Interferometers can calculate very small measurements that cannot be done using conventional equipment. During its latest operational run, LIGO and its two detectors will work in tandem with the Virgo Interferometer (Italy) and KAGRA observatory (Japan). With its latest upgrades, LIGO is calibrated to be sensitive enough to detect gravitational waves from two neutron stars colliding over 619 million light-years.

3.LIGO is designed to detect the gravitational waves released when two neutron stars or black holes spiral into each other or when a stellar core collapses and causes a Type II supernova. Gravitational Waves Gravitational waves are space-time ripples caused by the most explosive and energetic processes in the universe.

4.Their existence was initially predicted by Albert Einstein in 1916 in his general theory of relativity. According to the General Theory of Relativity, the curvature of space-time is determined by the distribution of masses, while the motion of masses is determined by the curvature.

5.The theory posits that massive accelerating objects like neutron stars would disrupt the space-time continuum and send 'waves' in all directions. These gravitational waves would travel at the speed of light and they would also carry information about what caused them, along with information that could help scientists understand the nature of gravity.

GENDER BUDGETING ACT

1.Development, Monitoring and evaluation office (DMEO) (an attached office of Niti Aayog) has pitched in for the Gender Budgeting Act to the mainstream of gender-based budgeting across all ministries. According to the report, gender budgeting is not practised in most states and is also not captured for many schemes in different sectors.

2.Recommendations by DMEO Improve social acceptance of transgenders: Under report titled 'Gender Mainstreaming in Governance' also said there is a need to improve social acceptance of transgender persons in society. More allocation of funds: The report recommended that the Ministry of Women & Child Development (MWCD) should encourage state governments to increase their budgetary allocation towards women and child development, protection and welfare schemes Policy on women: There is a need to 'finalise the National Policy for Women with revision in 2016 draft policy'. Provide gender-disaggregated data: absence of such data makes it difficult to measure the true impact of the schemes resulting in poor strategy design.

3.Gender budgeting means preparing budgets or analyzing them from a gender perspective. Also referred to as gender-sensitive budgeting, this practice does not entail dividing budgets for women. Gender Budgeting is a powerful tool for achieving gender mainstreaming so as to ensure that benefits of development reach women as much as men.

4.Facts related to Gender budgeting in India: India has a gender budget component since 2005-06 wherein schemes having allocations at least 30% for women is highlighted. Beijing declaration and platform for action 1995: Recommended Gender. Budgeting Influenced both expenditure and revenue policies: India's gender budgeting efforts is unique because they have not only influenced expenditure but also revenue policies (like differential rates for men and women in property and Income tax rates).

CYCLE IAS

1.Affectionately known as 'Cycle IAS' Sandeep GR, the current collector of Chhatarpur is transforming districts of Madhya Pradesh with his pro-people initiatives. The idea is to look at what the citizens go through in terms of the services that are provided for that he prefers riding a bicycle everywhere.

2.Sustainable solutions/ Pro-people Initiatives: Restructuring hospital-like waiting areas in maternity wards. Planting of a fruit forest to help with the concept of food security Women's safety and cleanliness – Installing LED lights throughout the city and having a centrally controlled monitoring system (CCMS).

the Union Agriculture Ministry believes that it is too early to assess any decrease in the acreage of cultivation as the monsoon is not yet active in North India. Farmers' organisations, however, have claimed that the situation is worrisome as farmers in many places have decided not to sow paddy due to unavailability and high prices of essential fertilizers.

3.A place that's well lit automatically ensures lesser criminal activity and discourages garbage dumping. Solve problems of cleanliness and road safety – ensuring garbage vehicles follow a route on time, he's reduced the city's garbage vulnerable points (GVPs).