

My Notes....

NATIONAL

VIZAG GAS LEAK

Styrene gas from LG Polymers factory on the outskirts of Visakhapatnam in Andhra Pradesh leaked in the wee hours of 7 May 2020. The gas leak from the factory located at RRV Puram near Gopalapatnam, about 15 kms from Visakhapatnam, affected at least 2,000 residents in five villages located around the factory.

What

1. The LG Polymers factory was originally established in 1961 as Hindustan Polymers to manufacture polystyrene.
2. It was merged with MCDowell & Co of the UB Group in 1978 and was taken over by South Korea-based LG Chem in 1997 which renamed it as LG Polymers.
3. The factory manufactures general purpose polystyrene and high impact polystyrene, expandable polystyrene, and engineering plastics compounds.
4. The factory was to reopen on 7 May 2020 after the lockdown. The workers were preparing to restart the work when the gas started leaking in the wee hours.
5. An official of LG Polymers issued a statement that there was 1800 tonnes of styrene in the storage tank.
6. The National Human Rights Commission (NHRC) on 7 May 2020 issued notices to the Central and Andhra Pradesh governments on the gas leak in Visakhapatnam that left at least over 10 people dead and scores ill as of afternoon.
7. The NHRC took suo motu cognisance of media reports of the incident at LG Polymers early on 7 May 2020 morning. The leak affected people in a radius of about 3 km of the plant, leaving them with difficulty in breathing and skin rashes.

What is styrene?

1. The company makes products used in manufacturing electric fan blades, cups and cutlery and containers for cosmetic products such as makeup.
2. The plant uses raw material styrene to make its products. Styrene is highly flammable and releases a poisonous gas when burnt.
3. If a person inhales styrene, it can have an adverse impact on the nervous system, changes in colour vision, tiredness, feeling drunk, slowed reaction time, concentration problems, and balance problems.
4. The Department of Health and Human Services (DHHS), National Toxicology Program (NTP) listed styrene as "reasonably anticipated to be a human carcinogen" in the Report on Carcinogens, Twelfth Edition, released on June 10, 2011.
5. The International Agency for Research on Cancer (IARC) has determined that styrene is a possible carcinogen.

INDIA LODGES PROTEST ON GILGIT-BALTISTAN

India has conveyed its strong protest to Pakistan **over its efforts to bring "material change" to territories under its "illegal and forcible" occupation after the country's top court allowed holding of elections in Gilgit-Baltistan.** The Ministry of External Affairs said a demarche was issued to a senior Pakistani diplomat lodging a strong protest over the court ruling and clearly conveying that the entire union territories of Jammu and Kashmir and Ladakh, including the areas of Gilgit and Baltistan, are an integral part of India.

What

1. It was further conveyed that such actions can neither hide the illegal occupation of parts of Union Territories of Jammu and Kashmir and Ladakh by Pakistan nor the grave human rights violations, exploitation and denial of freedom to the people residing in Pakistan occupied territories for the past seven decades.
2. In a recent ruling, the Pakistan Supreme Court allowed Islamabad to amend a 2018 administrative order to conduct general elections in the region.
3. India demarched senior Pakistan diplomat and lodged a strong protest to Pakistan against Supreme Court of Pakistan order on the so-called 'Gilgit-Baltistan', the MEA said in a statement.
4. The MEA said the government of Pakistan or its judiciary has no locus standi on territories "illegally and forcibly" occupied by it.
5. India completely rejects such actions and continued attempts to bring material changes in Pakistan occupied areas of the Indian territory of Jammu and Kashmir.
6. The MEA said Pakistan's recent actions can neither hide the "illegal occupation" of parts of union territories of Jammu and Kashmir and Ladakh by it nor the "grave human rights violations, exploitation and denial of freedom" to the people residing in these areas for the past seven decades.
7. **India's position in the matter** is reflected in the resolution passed by the Parliament in 1994 by consensus.

Flashback

1. Gilgit-Baltistan is a region administered by Pakistan as an administrative territory, and constituting the northern portion of the larger Kashmir region which has been the subject of a dispute between India and Pakistan since 1947 and between India and China from somewhat later.
2. It is the northernmost territory administered by Pakistan. It borders Azad Kashmir to the south, the province of Khyber Pakhtunkhwa to the west, the Wakhan Corridor of Afghanistan to the north, the Xinjiang region of China, to the east and northeast, and the Indian-administered union territories Jammu and Kashmir and Ladakh to the southeast.

What is Gilgit-Baltistan Order-2018?

1. Pakistan had changed the legal status of Gilgit-Baltistan first in 2009 by introducing Gilgit Baltistan Empowerment and Self-Governance Order-2009 which changed its name from Northern Areas to Gilgit-Baltistan.
2. Under this arrangement, it was given a province-like status with the appointment of a chief minister and governor for self-rule. Thus, constitutionally it still remained out of Pakistan.
3. In May 2018, the Gilgit-Baltistan Order-2018 was passed, replacing the earlier order. This was seen as yet another attempt by the Pakistan government towards incorporating the disputed region as its fifth province.

MISSION SAGAR

Indian Navy ships carrying medicines and essential food items including grains are moving towards countries in the Indian Ocean Region (IOR) including Maldives, Mauritius, Madagascar, Comoros and Seychelles. There is a consignment of 600 tonnes of grains for the Maldives and a special consignment of Ayurvedic medicines for Mauritius. Also on board are Medical Assistance Teams, which will extend a helping hand to the local doctors in those countries and share best practices and guidance on how to control the spread of the pandemic. In Comoros, the medical team will also guide the authorities on how to deal with Dengue.

What

1. Madagascar and Comoros will receive their consignment of Hydroxychloroquine

- tablets and countries like Mauritius, Maldives and Seychelles have already received them.
2. According to the Ministry of External Affairs (MEA) these countries had requested for **India's assistance in dealing with the global pandemic COVID-19** and the INS Kesari has sailed off towards these countries.
 3. The route of the ship which is going to sail from Mumbai port is going to be through Seychelles, Mauritius, Madagascar and finally to Comoros Island.
 4. Maldives was the first country in the IOR where India had sent RRT team from the armed forces at the request of that government.
 5. It was a team of five doctors and paramedics and they were there to help the local government in setting up testing facilities and sharing best practices on how to deal with the spread of the global pandemic.
 6. In March this year, India had sent humanitarian aid on INS Shardul carrying 600 tonnes of rice to Madagascar, which was affected by Cyclone Diane in January this year. It was the largest ever humanitarian aid to Madagascar from India.

Flashback

1. The Indian Ocean Rim Association (IORA) is a dynamic inter-governmental organisation aimed at strengthening regional cooperation and sustainable development within the Indian Ocean region through its 22 Member States and 10 Dialogue Partners.
2. The vision for IORA originated during a visit by late President Nelson Mandela of South Africa to India in 1995.
3. The rationale underpinned the Indian Ocean Rim Initiative in March 1995, and the creation of the Indian Ocean Rim Association (then known as the Indian Ocean Rim Association for Regional Cooperation) two years later, in March 1997.
4. The IORA is a regional forum, tripartite in nature, bringing together representatives of Government, Business and Academia, for promoting co-operation and closer interaction among them.

INDIA REJECTS NEPAL CLAIM

India on 9 May 2020 **rejected Nepal's claim that the recently inaugurated link road in Uttarakhand passes through its territory**, saying the region lies completely within Indian borders. The high-altitude road from Dharchula to Lipulekh near the China border, which cuts travel time to Mansarovar, was inaugurated by Defence Minister **Rajnath Singh on 8 May 2020**. **Nepal's Foreign Ministry issued** a statement saying: The government of Nepal has learnt with regret about the inauguration by India of a link road connecting to Lipulekh (Nepal) passing through it.

What

1. The unilateral act runs against the understanding reached between the two countries **including at the Prime Ministers' level that a solution to the boundary issue would be sought through negotiation**.
2. The recently inaugurated road section in Pithoragarh district in Uttarakhand lies completely within the territory of India. The road follows the pre-existing route used by the pilgrims of the Kailash Mansarovar Yatra.
3. Under the present project, the same road has been made pliable for the ease and convenience of pilgrims, locals and traders.
4. The news of the inauguration of the road prompted protests by students in Kathmandu, including one in front of the Indian Embassy and another in the Maitighar Mandala area, within a half-km radius of the Central Secretariat and the Parliament building.
5. **The statement from Nepal said:** "The government of Nepal remains committed to seek diplomatic solution to the boundary issues on the basis of historical treaty,

documents, facts and maps in keeping with the spirit of close and friendly ties between the two countries.”

6. **India’s response** echoed this statement. “The boundary delineation exercise with Nepal is ongoing. India is committed to resolving outstanding boundary issues through diplomatic dialogue and in the spirit of our close and friendly bilateral relations with Nepal, the MEA spokesperson said.

7. Both sides are also in the process of scheduling Foreign Secretary level talks which will be held once the dates are finalised between the two sides after the two societies and governments have successfully dealt with the challenge of COVID 19 emergency.

8. The Nepal government said it has consistently maintained that as per the Sugauli Treaty of 1816, all territories east of Kali (Mahakali River) including Limpiadhura, Kalapani and Lipulek belonged to Nepal and this claim has been made known to the Indian government.

Flashback

1. The Kalapani region lies in a junction bordering three countries - India, Nepal and China.
2. Nepal and India both claim this region as part of their respective territories; India as part of Uttarakhand and Nepal as part of Darchula district.
3. Complicating the matter is the Sugauli Treaty - signed between the East India Company and Nepal in 1816 - which marks the Mahakali river as the western border of Nepal.
4. Subsequently, a number of British surveyors showed a different point-of-origin for the Mahakali river.
5. While India maintains that the river begins in the village of Kalapani, Nepal claims that it begins from Lipulekh Pass.
6. The contention here is that if the Mahakali river - considered the border between India and Nepal - had a different point-of-origin, the areas under the **countries’ respective borders would be skewed.**
7. If the river began at the point Nepal claims - the Lipulekh Pass - then the Kalapani river would stretch longer, thereby affording a lengthier border between India and Nepal and **giving India’s** neighbour rights over the village of Kalapani.
8. India claims the ridge line towards the east of the Kalapani territory, and hence includes it in the Indian Union.

INDIA IN GLOBAL ENERGY TRANSITION INDEX

India has moved up two positions to rank **74th on a global ‘Energy Transition Index’** with improvements on all key parameters of economic growth, energy security and environmental sustainability, the World Economic Forum (WEF) said on 13 May 2020. Releasing the annual rankings, the Geneva-based international organisation for public-private cooperation said COVID-19 will compromise the transition to clean energy without an urgent stakeholder action as unprecedented disruptions due to the pandemic threaten this transition.

What

1. In its report, the WEF said its study measuring readiness for clean energy transition in 115 economies showed that 94 have made progress since 2015, but environmental sustainability continues to lag.
2. Sweden has topped the Energy Transition Index (ETI) for the third consecutive year and is followed by Switzerland and Finland in the top three.
3. Surprisingly, France (ranked 8th) and the UK (7th) are the only G20 countries in the top ten.
4. **The WEF said the “emerging centres of demand” such as India (74th) and China (78th) have made consistent efforts to improve the enabling environment, which**

- refers to political commitments, consumer engagement and investment, innovation and infrastructure, among others.
5. **In China's case, problems of air pollution have resulted in policies to control emissions, electrify vehicles, and develop the world's largest capacity for solar photovoltaic (PV) and onshore wind power plants.**
 6. For India, gains have come from a government-mandated renewable energy expansion programme, now extended to 275 GW by 2027.
 7. India has also made significant strides in energy efficiency through bulk procurement of LED bulbs, smart meters, and programs for labelling of appliances. Similar measures are being experimented to drive down the costs of electric vehicles, the WEF said.
 8. India is one of the few countries in the world to have made consistent year-on-year progress since 2015.
 9. **India's improvements have come across all three dimensions of the energy triangle — economic development and growth, energy access and security, and environmental sustainability.**
 10. It indicates a strong positive trajectory, driven by strong political commitment and an enabling policy environment.
 11. The WEF said the coronavirus pandemic risks cancelling out recent progress in transitioning to clean energy, with unprecedented falls in demand, price volatility and pressure to quickly mitigate socioeconomic costs placing the near-term trajectory of the transition in doubt.
 12. Policies, roadmaps and governance frameworks for energy transition at national, regional and global levels need to be more robust and resilient against external **shocks, according to the latest edition of WEF's Fostering Effective Energy Transition 2020 report.**
 13. COVID-19 has forced companies across industries to adapt to operational disruption, changes in demand and new ways of working, and governments have introduced economic recovery packages to help mitigate these effects.
 14. If implemented with long-term strategies in mind, they could also accelerate the transition to clean energy, by helping countries scale their efforts towards sustainable and inclusive energy systems.
 15. The coronavirus pandemic offers an opportunity to consider unorthodox intervention in the energy markets and global collaboration to support a recovery that accelerates the energy transition once the acute crisis subsides, said Roberto Bocca, Head of Energy and Materials, WEF.

CO-OPERATIVE BANKS CAN INVOKE SARFAESI ACT

In a landmark judgment, a Supreme Court five-judge Constitution Bench on 5 May 2020 ruled that cooperative banks can use the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act for recovery of debts from its defaulters and can seize and sell their assets to recover dues. Holding that cooperative banks, registered under state-specific acts and multi-state level cooperative societies registered under the Multi State Cooperative Societies Act, come under the SARFAESI Act 2002, a bench led by Justice Arun Mishra, unanimously ruled **that Parliament has legislative competence** under to provide additional procedures for recovery (of debts) under SARFAESI Act with respect to co-operative banks.

What

1. The SARFAESI Act, which is now rarely being used after the Insolvency and Bankruptcy Code has come into existence since 2016, allows banks to seize, take control, manage and sell assets of defaulting borrowers without the intervention of any court/tribunal and also ensures speedy recovery.
2. **SC lawyer Vikas Mehta, who appeared for some defaulters, told that 'too much power has been allowed to the cooperative societies who would now be able to recover loans**

- both under the state law and also the central law viz. SARFAESI.
3. Whereas under Lists I and II, the Constitution provides for distinct fields of legislative entries for the state legislature and Parliament and once there is already a valid law made by the state referring to its own field, there should not be a parallel parliamentary law on the same topic.
 4. Upholding the central government notification of January 28, 2003 which brought co-operative societies within the purview of the Act, the bench held that co-operative banks are **'banks' for the purposes** of Section 2(1)(c) of the SARFAESI Act and the recovery procedure is also applicable to such banks and there is no clash with the Banking Regulation Act, 1949.
 5. According to the judges, **'the Cooperative banks are involved in banking activities and they accept money from the public, repayable on demand or otherwise and withdrawal by cheque, draft, order or otherwise. Merely by the fact that lending of money is limited to members, they cannot be said to be out of the purview of banking.**
 6. They perform commercial functions. A society shall receive deposits and loans from members and other persons. They give loans also, and it is their primary function. **Thus, they are covered under 'banking' in Entry 45 of List I."**
 7. The apex court rejected the stand of defaulters that Parliament lacks legislative competence to regulate financial assets related to the non banking activity of a co-operative society as they are expressly excluded from the purview of Entry 43 of List I.
 8. They had argued Sarfaesi Act, which is the central legislation, was not applicable to cooperative banks formed under state law, as there already was a mechanism for recovery under those **state legislations. Also, the Act was applicable to 'a company engaged in banking, and not a cooperative society engaged in banking'.**

Flashback

1. The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002 is a legislation that helps financial institutions to ensure asset quality in multiple ways.
2. This means that the Act was framed to address the problem of NPAs (Non-Performing Assets) or bad assets through different processes and mechanisms.
3. The SARFAESI Act gives detailed provisions for the formation and activities of Asset Securitization Companies (SCs) and Reconstruction Companies (RCs).
4. Scope of their activities, capital requirements, funding etc. are given by the Act. RBI is the regulator for these institutions.
5. As a legal mechanism to insulate assets, the Act addresses the interests of secured creditors (like banks). Several provisions of the Act give directives and powers to various institutions to manage the bad asset problem.

MHA RECONSTITUTES EMPOWERED GROUPS

The eleven empowered groups of officers created by the Central government to implement COVID-19 containment measures in the country have been reconstituted, an official spokesperson said on May 2. The reconstitution of the groups, first created on March 29 under the Disaster Management Act, was necessitated as some members either retired, appointed or were transferred from their earlier posting.

What

1. An order for reconstituting the empowered groups was issued by Union Home Secretary Ajay Bhalla on May 1, the spokesperson said.
2. **"Empowered groups under Disaster Management Act, 2005, reconstituted for planning and ensuring implementation of COVID-19 activities,"** the spokesperson added.
3. Coronavirus, May 2 updates | State-wise tracker for coronavirus cases, deaths and

testing rates

4. Their terms and conditions will remain the same, according to the order.
5. The stated object and purpose of the DM Act is to manage disasters, including preparation of mitigation strategies, capacity-building and more.
6. In the popular imagination, a disaster is usually associated with a natural calamity such as a cyclone or an earthquake.
7. **Even the definition of a “disaster” in Section 2 (d) of the Disaster Management Act states that a disaster means a “catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man made causes”.**
8. To address the current epidemic outbreak, the Central government has included the Covid-19 outbreak as “Notified Disaster” as a **“critical medical condition or pandemic situation”**.
9. COVID-19 is the first pan India biological disaster being handled by the legal and constitutional institutions of the country.

INLCU L57 WARSHIP COMMISSIONED

A Landing Craft Utility (LCU) Mark IV warship built by the Garden Reach Shipbuilders and Engineers Limited (GRSE) was commissioned into the Indian Navy at Port Blair on 15 May 2020 by Lt. General P S Rajeshwar, the commander-in-chief of the Andaman and Nicobar Command.

What

1. The warship, INLCU L57, is the seventh LCU Mark IV to be inducted into the Indian Navy, the government-run GRSE said.
2. LCU Mark IV is an amphibious ship with its primary role being transportation and deployment of main battle tanks, armoured vehicles, troops and equipment from ship to shore.
3. The first ship of the Mark IV LCU Vessels INLCU L51 was commissioned into Indian Navy in March 2017.
4. The entire design of these LCU Mark IV ships has been developed in-house by GRSE as per requirements specified by the Navy.
5. The seventh of the eight Landing Craft Utility (LCU) ship INLCU L57, built at GRSE, Kolkata, a Mini Ratna Category 1 and leading shipyard of the country, was commissioned at May 15 at Port Blair by Lt. General PS Rajeshwar.

Flashback

1. In October 1997, the Government decided to grant enhanced autonomy and delegation of financial powers to some other profit making companies (other than the Navratnas) subject to certain eligibility conditions and guidelines to make them efficient and competitive. These categories were Category I and Category II.
2. Category I CPSEs should have made profit in the last three years continuously, the pre-tax profit should have been Rs. 30 crore or more in at least one of the three years and should have a positive net worth.
3. Category II CPSEs should have made profit for the last three years continuously and should have a positive net worth.

DTIS APPROVED

To provide private sector defence and aerospace companies affordable facilities to test and validate weaponry they are designing, Defence Minister Rajnath Singh approved on 15 May 2020 a Defence Testing Infrastructure Scheme (DTIS) with an outlay of Rs 400 crore. Over decades, the Defence Research & Development Organisation (DRDO), the 41 Ordnance Factories (OFs) and eight Defence Public Sector Undertakings (DPSUs) have created sophisticated and costly testing facilities for firearms, ammunition, electronics and

radar at government expense. The private sector will have access to such facilities too.
What

1. This is directed towards promoting indigenous defence capability, specifically amongst micro, small and medium enterprises (MSMEs) and start-ups.
2. Defence Testing Infrastructure is often capital intensive requiring continuous upgradation, and it is not economically viable for individual defence industrial units to set up in-house testing facilities.
3. The Scheme aims at setting up of Greenfield Defence Testing Infrastructure... as a common facility under private sector with government assistance, mainly in DICs (Defence Industrial Corridors), state the DTIS guidelines.
4. While majority of test facilities are expected to come up in the two DICs (one in Tamil Nadu and the other in Uttar Pradesh), the scheme is not limited to setting up test facilities in the DICs only, a defence ministry release clarified.
5. The DTIS scheme, which will run for five years, envisages setting up six to eight test facilities in partnership with private industry.
6. Each such project will receive 75 per cent of its cost as government funding, while the remaining 25 per cent will be borne by a Special Purpose Vehicle (SPV) composed of Indian private entities and concerned state governments.
7. The SPVs, which will be registered under the Companies Act 2013, will be mandated to operate and maintain all the testing facilities, in a self-sustainable manner by collecting user charges. The equipment/systems tested will be certified as per appropriate accreditation.
8. The DTIS guidelines specify the establishment of testing facilities for drones and Unmanned Aerial Vehicles (UAVs), radar, electronics/telecom equipment, rubber testing, noise and shock testing, specialised driving tracks, ship motion testing, ballistics and blast testing, and environmental test facilities.

INTERNATIONAL

PM AT NAM SUMMIT

In his first address to the Non-Aligned Movement (NAM) summit since assuming office in 2014, Prime Minister Narendra Modi on 4 May 2020 flagged the issues of **“terrorism” and “fake news”**, calling them “deadly viruses” at a time when the world fights the novel coronavirus. Modi said they should develop a platform for NAM countries to pool their “experiences, best practices, crisis-management protocols, research, and resources”. NAM should call upon the international community and the WHO to focus on building health-capacity in developing countries. We should ensure equitable, affordable and timely access to health products and technologies for all.

What

1. Even as the world fights COVID-19, some people are busy spreading other deadly viruses. Such as terrorism. Such as fake news, and doctored videos to divide communities and countries.
2. This was the first time Modi participated in a NAM summit — he had become the first Indian Prime Minister to skip the NAM summit in 2016 and in 2019 too.
3. The NAM leaders announced creation of a task force to identify requirements of member countries through a common database reflecting their basic medical, social and humanitarian needs in the fight against COVID-19.
4. **Calling it the “most serious crisis” humanity has faced in decades, Modi underlined that at this time, NAM can help promote global solidarity. NAM has often been the world’s moral voice. To retain this role, NAM must remain inclusive.**
5. The **online NAM Contact Group Summit on “United against COVID-19”** was hosted by current NAM Chairman and Azerbaijan President Ilham Aliyev.
6. Over 30 Heads of State and other leaders joined the summit. The Summit was

also addressed by UN General Assembly president Prof Tijjani Muhammed Bande, UN Secretary General Antonio Guterres, African Union chairperson Musa Faki Mahamat, EU High Representative Josep Borrell, as well as WHO chief Tedros Ghebreyesus.

7. Following the Summit, leaders adopted a Declaration underlining the importance of international solidarity in the fight against COVID-19.
8. Leaders also announced the **creation of a 'Task Force' to identify needs and requirements of member States...**, a statement by the Ministry of External Affairs said.

IRAQ CHOOSE NEW PM

Iraq's Parliament chose an American-backed former intelligence chief as the new prime minister early on 7 May 2020 morning, giving the country its first real government in more than five months as it confronts an array of potentially crippling crises. The prime minister, Mustafa al-Kadhimi, 53, who has a reputation for pragmatism, was also seen as an acceptable choice to Iran, the other major foreign power competing for influence in Iraq. Mr. al-**Kadhimi is Iraq's first real prime minister** since the last one resigned in November in the face of persistent anti government protests.

What

1. He has already promised to take a new approach to the social unrest, meeting protesters and **consulting with them rather than backing the previous government's** sporadic efforts to crush or ignore the turmoil.
2. But the protest movement that arose over government corruption and persistent **joblessness last fall is no longer the government's most pressing crisis**. The coronavirus has frozen the economy. **Oil and gas revenues, the government's main source of income, are historically low.**
3. Simmering tensions between the United States and Iran have played out in skirmishes on Iraqi soil that could turn into a wider war.
4. **Plummeting energy prices have nearly halved Iraq's operating revenue, making it likely Mr. al-Kadhimi will have to either cut salaries for government workers or drastically reduce their numbers in the next few weeks.** Either way, with the government as **the country's largest employer, the decision would have dramatic consequences.**
5. It will also fall to Mr. al-Kadhimi and his advisers to determine when and how to **reopen the economy and lift the curfews that have silenced the country's cities in an effort to curb the spread of the coronavirus.**

AIIB APPROVES LOAN TO SUPPORT INDIA'S COVID-19

The **Asian Infrastructure Investment Bank's (AIIB)** approved a \$500 million loan **to support India's Covid-19** operations, according to a release on 8 May 2020. Co-financed by the World Bank, the funds were aimed at enabling the government to scale up its containment efforts and to strengthen the health system to manage future outbreaks as well. Building a resilient health system that can effectively treat COVID-19 patients and prevent its spread is the immediate priority.

What

1. This funding will address this need and **strengthen India's capacity to effectively manage future disease outbreaks**, said AIIB vice president of investment operations.
2. The India COVID-19 Emergency Response and Health Systems Preparedness Project comprised six components.
3. Apart from the mentioned objectives, it will also support research in collaboration with the Indian Council of Medical Research (ICMR) and community engagement and risk communication strategies.
4. On April 17, the AIIB had doubled its initial COVID-19 Crisis Recovery Facility to \$10 billion from \$5 billion earlier, which made funds available to its members for urgent

economic, financial and public health pressures and quick recovery from the crisis.

5. **Previously, the AIIB's board of directors approved \$355 million funding to China** as part of an emergency health project.
6. The Asian Infrastructure Investment Bank (AIIB) is a multilateral development bank that aims to support the building of infrastructure in the Indo-Pacific region.
7. The bank currently has 78 members as well as 24 prospective members from around the world.
8. The bank started operation after the agreement entered into force on 25 December 2015, after ratifications were received from 10 member states holding a total number of 50% of the initial subscriptions of the Authorized Capital Stock.
9. The United Nations has addressed the launch of AIIB as having potential for "scaling up financing for sustainable development" and to improve the global economic governance.
10. The starting capital of the bank was \$100 billion, **equivalent to 2/3 of the capital of the Asian Development Bank** and about half that of the World Bank.
11. The bank was proposed by China in 2013 and the initiative was launched at a ceremony in Beijing in October 2014.
12. It received the highest credit ratings from the three biggest rating agencies in the world, and is seen as a potential rival to the World Bank and IMF.

CHINA'S NEW LARGE ROCKET MAKES MAIDEN FLIGHT

China's new large carrier rocket Long March-5B made its maiden flight on 5 May 2020, sending the trial version of the country's new-generation manned spaceship and a cargo return capsule for test into space. The white large rocket blasted off from the Wenchang Space Launch Centre on the coast of southern China's island province of Hainan. About 488 seconds later, the experimental manned spacecraft with no crew, together with the test version of the cargo return capsule, separated with the rocket and entered the planned orbit.

What

1. The successful flight inaugurates the "third step" of China's manned space program, which is to construct a space station.
2. Specially developed for China's manned space program, Long March-5B will be mainly used to launch the modules of the space station.
3. The Long March-5 integrates top space technologies, including non-toxic environmentally friendly fuel and a highly stable control system.
4. After the launch of the Long March-5, China will launch a series of 20-ton rockets, including the Long March-5, 6 and 7, Wang Xiaojun, commander-in-chief of the Long March-7 said.
5. The rocket will help carry the core module and experiment modules to China's space station.
6. China initiated the manned space program in 1992. Designed as the country's strongest carrier rocket, the Long March-5 has a payload capacity of 25 tonnes to low Earth orbit, or 14 tonnes to geostationary transfer orbit.

PERSEVERANCE ROVER HAS SUPERHUMAN VISION

NASA's 2020 Mars rover Perseverance, a part of NASA's Mars Exploration Program, is scheduled to launch between July 17 and August 5 to hunt for evidence of extraterrestrial life on the red planet. To help it achieve its objective, the new rover will **have the most advanced pair of "eyes" ever sent to Mars**. Its Mastcam-Z instrument packs a next-gen zoom capability that will help the mission make 3D imagery more easily, NASA said in a press release. Rover operators, who plan driving routes and movements of its robotic arm, will view these stereo images through 3D goggles.

Perseverance's Mastcam-Z

1. The Mastcam-Z is located on Perseverance's head. NASA said that it is a more advanced version of the Mastcam that helped the Curiosity Mars rover to produce panoramas of the Martian surface.
2. The Mastcam-Z will not only produce images that enable the public to follow the rover's daily discoveries, but it will also provide key data to help engineers navigate and scientists choose interesting rocks to study.
3. **Curiosity's Mastcam** also used to perform these tasks but the difference is that Perseverance's Mastcam-Z can zoom as well. The Z in Mastcam-Z stands for 'zoom'.

What can the new camera do?

1. **Curiosity's Mastcam has one telephotos lens** and one wide-angle lens that take images and then combine to produce stereo views. However, since the wide-angle lens takes in far more landscape in a single shot than the telescopic one, it requires up to nine telescopic pictures to match.
2. **Perseverance's Mastcam-Z** simplifies matters in this area. It zooms-in both lenses until they match to make a single 3D image.
3. This is both easier and requires sending fewer images and lesser data to Earth. Mastcam-Z will provide a stereo view to help drivers choose the safest path.
4. It will also help geologists choose scientific targets and better understand the landscape that rock samples are found in.
5. Mastcam-Z will provide 'superhuman vision' to view the landscape in a variety of colours (wavelengths of light), including some that can't be detected by the human eye, NASA said.
6. The instrument isn't a spectrometer, but it can provide mineral clues that other instruments will follow up on, using its ultraviolet or infrared vision to reveal metal meteorites.
7. The camera system can observe the Sun and sky, watching for transits of Mars' moons across the Sun and measuring how dust storms and cloud formations change over the seasons.

Why Curiosity couldn't have a zoom camera

1. While **Curiosity's Mastcam** was also initially designed to be zoomable, it proved difficult to achieve at the time in such a small instrument in 2011.
2. The original plan was for Curiosity to have a zoom camera that could go out to an extreme wide-angle like a spaghetti western view.
3. It would have been an amazing panoramic perspective but proved really hard to build at the time.

ECONOMY

ATMANIRBHAR BHARAT ABHIYAN ANNOUNCED

Prime Minister Narendra Modi announced an economic package totaling Rs 20 lakh crore to tide over the Covid-19 crisis under 'Atmanirbhar Bharat Abhiyan'. **The Rs 20 lakh crore package includes the government's recent announcements** on supporting key sectors and measures by Reserve Bank of India. PM Modi said the economic package would be around 10 percent of the GDP. This will play an **important role in the 'Atmanirbhar Bharat Abhiyan'**.

What

1. The mega Rs 20 lakh crore stimulus package announced on 12 May 2020 includes previously announced measures to save the lockdown-battered economy, and focuses on tax breaks for small businesses as well as incentives for domestic manufacturing.
2. The combined package works out to roughly 10 per cent of the GDP, making it among the most substantial in the world after the financial packages announced by

- the United States, which is 13 per cent of its GDP, and by Japan, which is over 21 per cent of its GDP.
3. The Rs 20 lakh crore package includes Rs 1.7 lakh crore package of free foodgrains to poor and cash to poor women and elderly, announced in March, as well as the Reserve Bank's liquidity measures and interest rate cuts.
 4. While the March stimulus was 0.8 per cent of GDP, RBI's cut in interest rates and liquidity boosting measures totalled to 3.2 per cent of the GDP (about Rs 6.5 lakh crore).
 5. The package is seen as a government attempt to check the world's fifth-largest economy hurtling towards its first full-year contraction in four decades.
 6. According to estimates, lockdown may have led to 12.2 crore people losing jobs in April and consumer demand evaporating.
 7. As part of the Rs 1.70 lakh crore Pradhan Mantri Garib Kalyan Package (PMGKP), the government announced free wheat or rice plus pulses to poor as well as a cash payment to women and poor senior citizens and farmers over a period of three months till June.
 8. According to the latest government data, Rs 34,800 crore financial assistance using digital payment infrastructure were provided to about 39 crore beneficiaries.
 9. Under the Pradhan Mantri Garib Kalyan Ann Yojana 67.65 lakh MT of foodgrains have been lifted by 36 states/UTs for April 2020. Around 16 LMT of foodgrains have been distributed, covering 60.33 crore beneficiaries by 36 states/UTs for April 2020.
 10. The special economic package would focus on land, labour, liquidity and laws, it would benefit labourers, farmers, honest tax payers, MSMEs and cottage industry. Finance Minister will announce details of special economic package.
 11. The prime minister said the goal of the country would be to become self-reliant, and identified economy and infrastructure as key drivers for it. He said making the country self-reliant was only way to make 21st century belong to India.
 12. **India's self-reliance** will be based on five pillars — economy, infrastructure, technology driven system, vibrant demography and demand.

Atma-nirbhar Bharat Abhiyan ranks among the biggest in world

1. Atma nirbhar bharat economic package is the largest economic stimulus package announced by nations around the world.
2. Atma-nirbhar Bharat Abhiyan or Self-reliant India Mission is about 10 percent of India's GDP in 2019-20 and would rank behind Japan, the US, Sweden, Australia and Germany.
3. But unlike the most relief packages announced globally, Rs 20 lakh crore is not entirely in new spending and includes Rs 1.7 lakh crore package the government had announced in March as well as the steps taken by the Reserve Bank of India (RBI) such as liquidity enhancing measures and interest rate cuts.
4. The US has committed to the largest rescue package by any country in pure dollar terms of USD 2.7 trillion but as a percentage of GDP it trails behind Japan, according to data compiled by economist Ceyhun Elgin in the COVID-19 Economic Stimulus Index (CESI).
5. Japan has announced a package equivalent to 21.1 percent of its GDP. It has outlined USD 1.1 trillion recovery package and plans for further spending. The US measures work out at an estimated 13 per cent of GDP.
6. It is followed by Sweden with a stimulus equal to 12 per cent of its GDP and Australia (10.8 per cent). Germany has announced a spending of around USD 815 billion, equal to 10.7 percent of its GDP.
7. Italy, which endured a devastating coronavirus outbreak, has announced an Euro 750 billion (around USD 815 billion) package.
8. India's stimulus value in dollar terms is higher than the GDP of 149 countries such as Vietnam, Portugal, Greece, New Zealand and Romania. It almost equals Pakistan's annual GDP of USD 284 billion.
9. Also, the stimulus is 1.8 times bigger than USD 147 billion in fortune of the 10 top wealthiest Indians. The amount is five times the personal wealth of richest Indian Mukesh Ambani.

FIRST TRANCHE OF AATMA NIRBHAR BHARAT PACKAGE

Finance minister Nirmala Sitharaman on 13 May 2020 shared the first instalment of the mega Rs 20 lakh crore package with the focus on the relief to the MSME sector. The focus will be on factors of production: Land, Labour, liquidity and Laws. The intention is to make local brands global.

KEY TAKEAWAYS:

Major steps for the revival of the MSME sector

1. Collateral free loan of Rs 3 lakh crores for MSMEs. This will benefit 45 lakh units so that they can resume work and save jobs.
2. For stressed MSMEs, Subordinate debt provision of Rs 20,000 cr has been announced for 2 lakh MSMEs. It will benefit those which are NPAs or stressed MSMEs.
3. Rs 50,000 crore equity infusion through Mother fund-Daughter fund for MSMEs that are viable but need hand holding. A fund of funds with corpus of Rs 10,000 crore will be set up to help these units expand capacity and help them list on Markets if they choose.
4. Definition of MSMEs has been revised to allow MSMEs to aim for expansion and not lose benefits. Also, there'll be no distinction between manufacturing & services sector MSMEs.
5. New definition: Micro units with investment till Rs 1 cr, turnover up to Rs 5 crore. Small units with investment till Rs 10 cr, turnover up to Rs 50 cr. Medium units with investment till Rs 20 cr, turnover up to Rs 100 crore.
6. Global tenders will be disallowed up to Rs 200 crore for government contracts.
7. Will ensure e-market linkages are provided across the board in the absence of non-participation in trade fairs due to Covid. Govt of India and PSUs will clear all the receivables in next 45 days.

For Employees

1. A liquidity relief of ₹2,500 crore EPF support is being given to all EPF establishments, EPF contribution will be paid by Govt. of India for another 3 months till August and will benefit more than 72 lakh employees.
2. Statutory EPF contribution for all organisations and their employees covered by EPFO has been reduced to 10% from 12% earlier. This doesn't apply to govt organisations. This will infuse Rs 6,750 cr liquidity into these organisations.

For NBFCs/HFCs/MFIs

1. Rs 30,000 crore special liquidity scheme for investing in investment grade debt paper of NBFCs, HFCs and MFIs. These NBFCs are those that are also funding MSMEs. These will be fully guaranteed by the government of India.
2. Rs 45,000 crore partial credit guarantee scheme 2.0 for NBFCs. The first 20% loss will be borne by the guarantor that is government of India.
3. For Discoms, a one-time emergency liquidity injection of Rs 90,000 crore against all their receivables. The states will guarantee it.

Other Details

1. An extension of up to 6 months (without costs to contractor) to be provided by all Central Government Agencies like Railways, Ministry of Road Transport & Highways, Central Public Works Dept.
2. On real estate, the urban development ministry will issue advisory to states/UTs so that the regulators can invoke force majeure. The regulators can suo moto extend completion/registration dates for six months for projects expiring on or after March 25, 2020.
3. A reduction of 25% of existing rates of Tax Deducted at Source (TDS) & Tax Collection at Sources (TCS) from tomorrow till March 31, 2021. This will release Rs 50,000 crores.
4. Due date of all IT Return filings extended from July 31 to November 30. Vivaad

se Vishwas scheme extended till December 31,2020. Date of assessments getting barred as on Sep 30, 2020 extended to December 31, 2020. Date of assessments getting barred as on March 31, 2021 extended to September 30, 2021.

5. All pending refunds to charitable trusts and non-corporate businesses & professions including proprietorship, partnership, LLP and Co-operatives shall be issued immediately.

SECOND MEASURES OF ATMA-NIRBHAR ECONOMIC PACKAGE

Finance Minister Nirmala Sitharaman announced a second set of measures as part of the 'Atma-nirbhar Bharat Mission' economic package. The second set of announcements focus on migrant workers, street vendors, small farmers, self-employed individuals. Finance Minister Nirmala Sitharaman on 14 May 2020 announced a second set of measures that are part of a Rs 20 trillion fiscal and monetary package announced by Prime Minister Narendra Modi **to support India's economy**, which has been battered by a 51-day lockdown to curb the coronavirus outbreak. She listed nine steps for these sections of the society.

Free food grain for migrant workers

1. Free food grain supply to all migrant workers, even non-card holders, for the next two months: 5 kg wheat/rice per individual and kg chana per family every month.
2. "One nation, one ration card " will be implemented. In 23 states, 67 million beneficiaries (83% of all PDS beneficiaries) already covered. 100% coverage by March 2021.
3. Rs 3,500 crore to be spent on this over the next 2 months
4. State governments to be implementing agency for this. 80 million migrant workers to benefit

For farmers

1. Interest subvention on small loans for farmers at low rates extended to May 31, 2020
2. Rs 30,000-cr working capital facility, in addition to the Rs 90,000 crore already provided by NABARD
3. States to be given this fund via SSBs, RRBs
4. Funds to be released immediately for post-rabi harvest work and kharif preparation of small and marginal farmers

Credit for farmers

1. Rs 2 trillion worth of concessional credit to be extended to 25 million farmers
2. To be provided through Kisan credit cards
3. Animal husbandry and fisheries to be eligible for this scheme

Housing for migrant workers/urban poor

1. Special scheme for rental housing under Pradhan Mantri Aawas Yojana
2. Manufacturing units will be incentivised to build affordable rental housing complexes
3. Also converting government-funded houses into rental housing complexes
4. Steps under Mudra Shishu loans (Rs 50,000 or less)
5. Interest subvention support of 2% for 12 months at the cost of Rs 1,500 crore
6. Rs 1,62,000 crore given out under this type of loan so far. 30 million people to benefit
7. Credit-linked affordable housing subsidy scheme for the middle income group (with Rs 6 lakh to Rs 18 lakh annual income) extended to March 31, 2021

For street vendors

1. Special credit facility scheme at the cost of Rs 5,000 crore

2. Easy access to credit to be available for all street vendors (about 5 million in total)
3. Each vendor can take up to Rs 10,000 as loan

Steps for employment generation

1. Rs 6,000-crore CAMPA funds to be used for afforestation and similar projects
2. Proposals have come from states
3. Move to generate employment for tribal and rural people

THIRD TRANCHE 'SELF RELIANT INDIA'

Finance minister Nirmala Sitharaman on 15 May 2020 unveiled the third tranche of government's Rs 20 lakh crore economic package in a bid to revive the Indian economy that has taken a slump due to ongoing nationwide lockdown to curb the spread of the coronavirus pandemic. As part of Prime Minister Narendra Modi's campaign for a 'self-reliant' India, over the past two days, the finance minister has announced special measures like free foodgrains for migrant workers, concessional credit for farmers, working capital incentives for street vendors, collateral-free loans for businesses including MSMEs and liquidity facility for NBFCs, among other initiatives.

Key highlights of third tranche

1. The Essential Commodities Act will be amended to enable better pricing for farmers, agriculture products including cereals, edible oils, oil seeds, pulses, onion and potatoes will be deregulated.
2. Under the amended Essential Commodities Act, stock limit will be imposed under exceptional circumstances like national calamities, famine with surge in prices. The stock limit shall apply to processors or value chain participants subject to their installed capacity or to any exporter subject to the export demand.
3. In a move to strengthen infrastructure in agriculture, financing facility of Rs 1 lakh crore will be provided for funding Agriculture Infrastructure Projects at farm-gate & aggregation points.
4. Government to bring in law to implement agriculture marketing reforms to provide marketing choices to farmers; law will provide adequate choices to farmer to sell produce at attractive price.
5. A facilitative legal framework will be created to enable farmers engage with processors, aggregators, large retailers, exporters in a fair and transparent manner.
6. TOP to TOTAL: Operational greens will be extended from Tomatoes, Onion and Potatoes (TOP) to all fruits and vegetable (TOTAL). This is expected to give better price to farmers, reduce wastages and improve affordability of products for consumers.
7. Rs 500 crore will be allocated for beekeeping initiatives and this will benefit 2 lakh beekeepers in the rural areas.
8. As part of **PM's vision of 'Vocal for Local** with Global outreach', a **scheme will be** launched to help 2 lakh Micro Food Enterprises; improved health and safety standards, integration with retail markets and improved incomes to be key focus areas. This will support existing micro food enterprises, farmer producer organisations, self-help groups and cooperatives.
9. Funds transfer worth Rs 18,700 crores has been done under PM KISAN in past 2 months and PM Fasal Bima Yojana claims worth Rs 6,400 crores released in past 2 months.
10. Government commits Rs 4000 crore for herbal cultivation in India. The move aims to cover 10 lakh hectare under herbal cultivation in 2 years; corridor of medicinal plants to come up across banks of Ganga.
11. National animal disease control programme for foot and mouth disease of animals has been launched with a total outlay of Rs 13,343 crore. It will focus on 100 per cent vaccination of cattle, buffalo, sheep, goat and pig population in India.
12. Government announces an Animal Husbandry Infrastructure Development Fund worth Rs 15,000 crore to support private investment in Dairy Processing, value

- addition and cattle feed infrastructure.
13. Government to launch Pradhan Mantri Matsya Sampada Yojana for integrated, sustainable, inclusive development of marine and inland fisheries to plug critical gaps in fisheries value chain. The move will provide employment to over 55 lakh people and double exports to Rs 1 lakh crore.
 14. During the lockdown period, demand for milk reduced by 20-25%. A new scheme to provide interest subvention at 2% per annum to dairy cooperatives for 2020-21. The scheme will unlock Rs 5,000 crore additional liquidity, benefit to 2 crore farmers.
 15. It goes to the credit of the farmers who have always stood up to various challenges and has made India reach certain global benchmarks.
 16. To help Fisheries sector, operations of Marine Capture Fisheries and Aquaculture has been relaxed to cover Inland Fisheries.
 17. India is the largest producer of milk, jute, pulses; 2nd largest in sugarcane, cotton, groundnut, fruits, vegetables and fisheries and 3rd in cereal.
 18. The third set of announcements is focussed on agriculture, fisheries, animal husbandry and allied activities.
 19. In the last 2 months, number of measures taken to support farmers.

SCIENCE AND TECHNOLOGY

WHAT IS SERO SURVEY

The ministry of health and family welfare decided to conduct a population-based 'sero survey' in select districts of the country with an aim to monitor the trend in the prevalence of SARS-CoV-2 virus which causes the Covid-19 disease.

What is sero-survey?

1. A sero-survey involves testing of blood serum of a group of individuals and this will be used to monitor trends in prevalence of the novel coronavirus, or SARS-COV-2, infection at the district level.
2. The surveillance will be conducted by the Indian Council of Medical Research and the National Centre for Disease Control in collaboration with key stakeholders and state health departments.
3. The facility-oriented surveillance is an expansion of the testing of flu and serious respiratory cases in hospitals being carried out by the government.

Why sero-testing?

1. A more focused population-based sero-survey of high and low-risk groups in select districts will be in addition to routine testing.
2. The move will not only help the government and its agencies monitor Covid-19 trends but also check for community transmission in any part of the country.
3. The health ministry has so far maintained that there is no evidence yet of community transmission in the country.
4. There are large outbreaks in some clusters but the sharp exponential rise in cases as in community transmission has not happened.

How will it be conducted?

1. The enhanced exercise will see 10 health facilities — six public and four private — from each district being tested.
2. For the sero-survey, population groups will consist of low- as well as high-risk populations.
3. The low-risk group will include outpatient attendees (non-ILI patients) and pregnant women, while healthcare workers will be surveyed among the high-risk population.
4. The survey will include a total of 200 samples per week and 800 samples per month.
5. This will include at least 100 samples per week and 400 per month from the selected

districts from the high-risk population.

6. For the low-risk population, 50 samples per week and 200 per month are to be collected from outpatient attendees (non-ILI patients).

Using a combination of RT-PCR and Elisa kits

1. The agencies will use a combination of RT-PCR and Elisa antibody kits for these surveys.
2. Throat and nasal swabs will be collected for RT-PCR tests and samples tested in a one-time pool of 25. However, the results of this sample pooling are only for surveillance purposes and not for diagnosis of individual patients.
3. In addition to RT-PCR tests, blood samples will be collected for detecting IgG antibodies for Elisa testing. In subsequent rounds, IgG Elisa-based testing of serum samples will replace RT-PCR based testing for surveillance purposes.

Elisa testing kit to replace rapid antibody test kits from China

1. The Elisa testing kit has been developed by National Institute of Virology in Pune along with Zydus Cadila.
2. The kit is expected to play a critical role in surveillance of a proportion of the population exposed to the infection, after rapid antibody test kits from China failed the ICMR quality tests. Elisa kits have specificity of 97% and sensitivity of 92%.

UV DISINFECTION TOWER DEVELOPED

The Defence Research and Development Organisation has developed an ultraviolet (UV) disinfection tower for rapid and chemical-free sanitisation of areas that are highly prone to the coronavirus (COVID-19) infection, the Defence Ministry said on 4 May 2020. For a room of about 12x12 feet dimension, the disinfection time is about 10 minutes, the Ministry said, adding a 400 sqft area can be sanitised within 30 minutes if the device is positioned at different places within the room.

What

1. The disinfection tower can be used remotely through laptop or mobile phone using a WIFI link. It has six lamps each with 43 watts of UVC power at 254 nanometre wavelength for 360 degree illumination.
2. The device – **named** “UV blaster” – is designed and developed by Laser Science & Technology Centre, the Delhi-based premier laboratory of the DRDO, with the help of Gurugram-based New Age Instruments and Materials Private Limited.
3. The UV Blaster is useful for high-tech surfaces such as electronic equipment, computers and other gadgets in laboratories and offices that are not suitable for disinfection with chemical methods.
4. The device is also effective for areas with large flow of people such as airports, shopping malls, metros, hotels, factories, offices, etc.
5. India has been under coronavirus lockdown since 25 March to curb the spread of the coronavirus, which has infected around 42,500 people and killed more than 1,370 people in the country.

What will this do?

1. According to DRDO, the UV Blaster will be useful for sanitizing hi-tech surfaces including: computers, electronic equipment and other gadgets in laboratories. And also those offices which may not be suitable for disinfection using chemical methods.
2. This can also be used in areas with where there is going to be huge flow of people like the airports, factories, hotels, offices, shopping malls and metros.

More about the UV Blaster

1. This UV based sanitiser can be operated by remote operation using wifi link through laptop/mobile phone.
2. There are six lamps each with 43 watts of UV-C power at 254 nm wavelength for 360 degree illumination.

3. Positioning the equipment at different places within the room, disinfecting an area of around 12 x 12 feet dimension, it will take about 10 minutes and 30 minutes for 400 square feet area.

Safety Feature

1. This system switches off on accidental opening of room or if there is a human intervention. And another salient feature of the product is the key to arm operation.
2. The Defence Institute of Physiology & Allied Sciences (DIPAS) and Institute of Nuclear Medicine & Allied Sciences (INMAS), two premier laboratories under DRDO have already designed & developed Ultraviolet C Light based sanitization box and hand held UV-C device.

More about the UV-C Box

1. This consists of a shorter, more energetic wavelength of light and can destroy genetic material in COVID-19.
2. It is environment friendly and is contact free effective method of sanitization. The UV-C box is designed for disinfecting personal belongings like mobile phones, ipads, tablets, currency, office file covers etc.

SPACE FORCE UNVEILS FLAG

The US Space Force, the newest branch of the armed services, now has its own flag. Defense Department officials presented President Donald Trump with the Space Force flag during a short Oval Office event on 15 May 2020. The dark blue and white flag includes elements intended to evoke the vast recesses of outer space. The Space Force which was officially established in December is the first new military service since the US Air Force was established in 1947.

What

1. The 16000 airmen and civilians that make up the Space Force technically remain part of the Air Force which previously oversaw offensive operations in space. But Trump has made clear he sees the newest service as critical to the future of American defense.
2. The president said during ceremony that the US is building a superduper missile that can travel 17 times faster than what we have right now.
3. The flag includes a Delta Wing long a symbol in the Air Force meant to signify change and innovation Dark and light shades of gray within the delta were incorporated in a nod to the 247 nature of the Space Forces work.
4. The flag also features a globe for the Space Force fighters home turf and an elliptical orbit around the globe was incorporated to signify the forces mission to defend and protect from adversaries and threats emanating in space.
5. This flag was produced by artists and crafts people at the Defense Logistics Agency flag room in Philadelphia from a design finalized and documented by the Departments Institute of Heraldry at Fort Belvoir Virginia.

ICAR FUSICONT DEVELOPED

The farm scientists from the Central Soil Salinity Research Institute (CSSRI) and the Central Institute for Subtropical Horticulture (CISH) together have developed a **bioformulation called 'ICAR-FUSICONT' to fight the fungus**, the lockdown has limited the scale of production. The production was happening on a small scale earlier but it came to a halt due to the COVID-19 crisis. However, we took special permission and began production. Our scientists are braving all odds to come for work during the lockdown period, ICAR-Central Institute for Subtropical Horticulture (CISH) Director Shailendra Rajan said.

What

1. The CISH director developed the bioformulation along with CSSRI Principal Scientist T Damodaran. They are awaiting regulatory approval for commercial production, though parent body ICAR has asked them to scale up the output to ensure its

- availability to farmers at a cheaper rate.
2. Stating that it was necessary to put into motion the production of this product in this lockdown, Damodaran said because it has to be applied before the banana planting begins from June in these two states. Its application during May is of utmost important.
 3. The disease is highly transmissible and easily spreads through the exchange of planting materials (banana suckers), water, and movement of people and equipment. About 50 per cent crop has been lost to this disease in the last two years, hitting the farmers income.
 4. Since the lockdown limited direct interaction with farmers, Damodaran said the CSSRI-CISH scientists began using an online Zoom App to hold meetings with banana growers and support them in crop management.
 5. In Uttar Pradesh, Maharajganj, Gorakhpur, Ayodhya, and Sant Kabir Nagar are four highly infected districts. The secondary infection has spread to other three districts of Ambedkar Nagar, Sitapur and Barabanki.
 6. In Bihar, the disease spread first from Katihar to Purnia, Bhagalpur, Hazipur and Naugachia districts. The secondary transmission has taken place in Sitamarhi district.
 7. Many farmers are demanding the government to improve the supply of this new product ICAR-FUSICONT', **which can help them save the crop and reduce losses.**
 8. The production has been undertaken right now for meeting the demand of growers in highly infected areas of the two states.
 9. The CSSRI-CISH are producing 1,000 kg a month, against the requirement of 1,500 kg. So far, 800 kg has been supplied to Uttar Pradesh only. No supply could be made to Bihar due to hurdles in inter-state movement of goods.
 10. India is the largest producer of bananas and accounts for 29.1 per cent of the global output.

EMERGENCY USE OF ANTIGEN TEST

The US Food and Drug Administration (FDA) has authorised the use of antigen test for the first time to detect and treat Covid-19 infection. The US Food and Drug Administration has issued the first emergency use authorization (EUA) for a Covid-19 antigen test, a new category of tests for use in the ongoing pandemic, the FDA said in a statement. The new type of test has been manufactured by Quidel Corp. It was given emergency authorization by the US Food and Drug Administration.

What

1. One of the main advantages of an antigen test is the speed of the test, which can provide results in minutes, the agency added.
2. Quidel Corp. said that its test, called the Sofia 2 SARS Antigen FIA, can produce results within 15 minutes.
3. The FDA said that antigen tests are cheaper to produce, simpler to conduct and easier to implement at scale than the current testing apparatus.
4. It is conducted by a nasal swab and immediately tested in the doctor's office or other point-of-care location, producing diagnostic results within minutes by quickly detecting proteins found on or within the virus.
5. At the same time, antigen tests are not as sensitive to the virus as molecular PCR tests.
6. This means that positive results from antigen tests are highly accurate, but there is a higher chance of false negatives, so negative results do not rule out infection.
7. With this in mind, negative results from an antigen test may need to be confirmed with a PCR test prior to making treatment decisions or to prevent the possible spread of the virus due to a false negative.

CLOSEST BLACK HOLE FROM EARTH

The nearest black hole from Earth has just been discovered, thanks to a team of astronomers led by the European Southern Observatory (ESO), reported Universe on 11 May 2020. Using the La Silla Observatory of the ESO in Chile, the team discovered this black hole in a triple structure located just 1,000 light-years from Earth. This black hole has been named as HR 6819. ESO scientist Thomas Rivinius led the research that explains their observations, which has recently appeared in the journal *Astronomy & Astrophysics*. Other team members included Spanish and German ESO physicists, the **Czech Academy of Sciences Astronomical Institute, and Georgia State University's CHARA Collection**.

What

1. Unlike the few hundreds of mass black holes that have been detected in our galaxy to date, HR 6819 is one of the very first to be found that does not actively interfere with their surroundings.
2. The team has been able to distinguish its existence and measure its mass on the basis of the impact it has on the orbit of the binary's inner stellar companion.
3. In almost all previous cases, the black holes were actively interacting with their surroundings, which was apparent from the powerful release of X-ray bursts.
4. This interaction occurred as part of a binary black hole, where a black hole was drawing material from a companion star. This material will fall into a disk around the event horizon of the black hole and then slowly create onto its surface, releasing radiation in the process.
5. Black holes are invisible to the naked eye, have no locally observable characteristics, and yet their effect on their presence makes them the ideal laboratory for physics research under intense conditions.
6. Especially, they provide an opportunity for astronomers to check **Einstein's Theory** of General Relativity, which postulates that the space-time curvature is altered by the existence of gravity.

Flashback

1. A black hole is a place in space where gravity pulls so much that even light can not get out.
2. The gravity is so strong because matter has been squeezed into a tiny space. This can happen when a star is dying.
3. Because no light can get out, people can't see black holes. They are invisible. Space telescopes with special tools can help find black holes. The special tools can see how stars that are very close to black holes act differently than other stars.
4. Black holes can be big or small. Scientists think the smallest black holes are as small as just one atom. These black holes are very tiny but have the mass of a large mountain. Mass is the amount of matter, or "stuff," in an object.
5. Another kind of black hole is called "stellar." Its mass can be up to 20 times more than the mass of the sun. There may be many, many stellar mass black holes in Earth's galaxy. Earth's galaxy is called the Milky Way.

MISCELLANEOUS

LABOUR DAY CELEBRATED

The world celebrates **May 1st as the international labour's** day commemorating the struggle and role of the workers in the previous centuries. The history of May dates back to the events that unfolded in the late 19th century that led the socialists and pro-labour organisations to declare **May day as the international labour's** day. May 1 has the oldest connection with the country which is identified as the most potent symbol of capitalism- the United States.

What

1. In 1886, a peaceful rally of workers demanding better working conditions and opposing exploitation led to violent clashes between police and the labourers in Chicago city.
2. The clashes resulted in the death of four civilians and seven police officials. Thousands of labourers who were part of the rally were given harsh sentences including death and long imprisonment sentences.
3. From there on, the labourers who got killed in the clashes and punished by the **government were hailed as the “Haymarket Martyrs”**. **The Haymarket incident** is considered to have given a big impetus to the labour movement across the world.
4. In 1889, The Second International, a motley socialist organisation created by the Socialist and labor parties, **celebrated May 1st as the international labour’s day** for the first time.
5. The labour movement steadily progressed towards demanding eight working hours a day in all countries across the world and better working conditions for the workers.
6. In 1904, the International Socialist Congress exhorted all the workers of the world to demand eight working hours a day through a statute and asked the labourers to stop all their work on May 1 in support of their demands.
7. After the Bolshevik revolution in Russia in 1917 and the establishment of the United Soviet Socialist Regime (USSR), **the labour’s day started getting celebrated** in many East European and Asian countries.
8. In India, the **first concrete memory of the celebration of labour’s day goes back** to May 1, 1923 when Comrade Singaravelar, who was one of the important leaders of the Self Respect movement in the southern state of Madras helmed the celebrations.
9. A resolution was also passed on the day demanding the British government a national holiday on May 1.

NEW POLICY FOR SATELLITE TV CHANNELS

To overhaul its nine year-old uplink and downlink policy for private satellite TV channels, the Information and Broadcasting Ministry has issued draft guidelines with stringent provisions for any violations with an additional clause that the Ministry of Home Affairs can step in to revoke the security clearance in case of repeated violations. The **Ministry said a review was prompted by the “fast evolving broadcasting technology” and “changes in the market scenarios”**. **It has called for suggestions from the stakeholders in the next 15 days.**

What

1. An industry source said the policy is a **“half measure”** and there are concerns about “too much reference to the Ministry of Home Affairs” **which earlier too had a key role to play. “Given its political nature, the amount of reference to MHA will discourage investors”**.
2. What has changed in this policy is that the Ministry in black and white has listed out 11 violations. These violations include:

Flashback

1. Satellite television is a service that delivers television programming to viewers by relaying it from a communications satellite orbiting the Earth directly to the viewer's location.
2. The signals are received via an outdoor parabolic antenna commonly referred to as a satellite dish and a low-noise block downconverter.
3. A satellite receiver then decodes the desired television programme for viewing on a television set. Receivers can be external set-top boxes, or a built-in television tuner.
4. Satellite television provides a wide range of channels and services. It is usually the only television available in many remote geographic areas without terrestrial television or cable television service.

3. Delay or non-intimation to the Ministry about change in the shareholding pattern of the company
4. Appointment of a Director without prior permission of the Ministry
5. Non-removal of a Director who has been denied security clearance or showing dual logo/logo or name not permitted by the Ministry.
6. For any of the 11 violations, the penalty ranges from warning, prohibition to broadcast up to 10 days and even cancellation of permission.
7. All channels have to take security clearance from the Ministry of Home Affairs, which was the case earlier too. Once granted, the clearance is valid for 10 years. However, the guidelines also mention that the MHA can withdraw the clearance which would mean that the permission to uplink would stand terminated automatically.
8. A welcome change is the relaxation offered for non-news category channels to broadcast live events. **A broadcaster, who didn't want to be named, said all sports channels had to take separate permission 15-days before telecasting a live event.**
9. This process has been streamlined. Instead of seeking permission, now the channel merely has to register online at Broadcast Seva with the necessary document five days prior to the telecast.
10. However, there is still no clarity on whether permissions required from other Ministries will also be granted through this portal.

INDIAN PHOTOJOURNALISTS WIN PULITZER 2020

Three photojournalists from Jammu and Kashmir are among the 2020 Pulitzer Prize winners. The awards were announced virtually on 5 May 2020 night owing to the coronavirus outbreak. Mukhtar Khan, Yasin Dar and Channi Anand - working with the Associated Press (AP) - won the top honours for their work in the region after massive restrictions were put in place by the government following the move to end Jammu and Kashmir special status and split it into two union territories - Jammu and Kashmir and Ladakh.

What

1. The Pulitzer Prizes, the most prestigious awards in American journalism, have been handed out since 1917, when newspaper publisher Joseph Pulitzer established them in his will.
2. The New York Times picked up the most awards this year, collecting three awards, including the international reporting prize for a series of stories on Russian President Vladimir Putin's regime.
3. News agency Reuters won the breaking news photography award for pictures of the Hong Kong protests. The explanatory reporting prize was awarded to the staff of The Washington Post for a series that showed the effects of extreme temperatures on the planet.
4. Pulitzer Prize board administrator Dana Canedy declared the winners from her living room via a livestream on YouTube rather

First Indian to win Pulitzer

1. In 1937, Gobind Behari Lal became the first Indian to win a Pulitzer.
2. He won the award in the reporting category, along with four others, for **"coverage of science at the tercentenary of Harvard University"**.
3. **Gobind Behari Lal's father was the Governor** of the princely state of Bikaner. Lal was also **part of India's freedom struggle and even** edited a newspaper that campaigned for independence. He went to the United States in 1912 as a research fellow at the University of California in Berkeley.
4. Lal was among the first few science writers, and he interviewed people like Albert Einstein. He had interviewed Gandhi too. Gobind Behari Lal was also awarded the Padma Bhushan in 1969.

than at a ceremony at New York's Columbia University.

5. The announcement was postponed for two weeks because some journalists on the 18-member Pulitzer board are busy covering the coronavirus pandemic.

EIA NOTIFICATION 2020 EXTENDED

After receiving numerous representations for extending the notice period of the draft Environment Impact Assessment notification 2020, the Ministry of Environment, Forest and Climate Change on 7 May 2020 announced that the notice period has been extended to June 30. The deadline for sending in objections and suggestions to the draft notification was to end on May 22. The ministry had published the draft notification on March 23 and soon after, the lockdown to curb COVID-19 came into force. Representations from environmental and policy research groups, civil society organisations and members of parliament, including former environment minister Jairam Ramesh, had requested for an extension. They had argued that the lockdown restricted the consultation process of the public and stakeholders, many of **whom don't have access to** the internet.

What

1. The draft is a review of the 2006 EIA notification and has drawn criticism from **environmentalists, who have said it is a "dilution of existing environmental norms"**.
2. These are new regulations being brought in after 14 years and yet it does not address the challenges that we face. We are a signatory of the Paris Agreement and yet this EIA draft is fundamentally faulty – there is no proposed action which actually protects the environment.
3. On the contrary, we find environmental regulations are being further relaxed. One of the fundamental issues is that projects with violations, especially construction, can now receive post facto clearance, said environmental lawyer Rwitick Dutta.
4. Centre for Policy Research pointed out that waterway projects have also been included in the **EIA's B2 category** and will "not require prior environmental clearance".
5. For instance, the gas leak that occurred in Visakhapatnam today; while this is an accident, there will now have to be an investigation to see whether this was a lapse.
6. **To ensure that violations leading to such incidents don't take place, laws have to be more stringent.** Such lapses adversely affect the economy.
7. The Central government, in exercise of the powers conferred under Environment

Flashback

1. Government of India's **environment ministry** has proposed a new set of rules to govern **the country's environment clearance** regime for industrial projects like dams, mines, airports, highways etc on March 2020.
2. The draft Environment Impact Assessment (EIA) notification 2020, which was unveiled last week, proposes to ease processes for business, does away with the public hearings for many projects, ease rules for expansion of projects among other things.
3. Environmentalists and researchers who analysed the draft, point out that the draft EIA 2020 legitimises violations by those who start projects without environment clearance, weakens the public consultation process and gives a lot of discretionary powers to authorities.

- (Protection) Act, 1986 published the draft notification namely, Environment Impact Assessment Notification, 2020 dated March 23, 2020 in the official gazette on April 11, 2020.
8. This was for the information of the public likely to be affected thereby and for making any objections or suggestions on the proposal contained in the draft notification within 60 days from the date on which copies of the Gazette containing said draft notification were made available to the public.
 9. An online petition was moved asking the Environment Ministry to withdraw the draft EIA notification, 2020 in the light of the Covid-2019 pandemic.
 10. The petition for which 11,060 people have given their inputs, includes a letter to Environment Minister Prakash Javadekar. The Environment Ministry has put out a draft EIA notification, 2020 on March 12, and sought comments from the public within 60 days from this date.
 11. Since 1994, this notification has been an important tool for the legal assessment of social and environmental impacts of development projects and for organising public participation before the setting up or expansion of industrial and infrastructure projects in the country.

LOCKDOWN PERIOD NOT TO BE COUNTED OF NRIS

Providing a relief to NRIs and foreign nationals stuck in India due to lockdown, the government said their stay in the country during the period will not be counted for the purpose of determining their residency status for taxation purposes. The nationwide lockdown since March 25 and cancellation of international flights to contain the spread of COVID-19 has forced non-resident Indians (NRI) and foreign nationals to prolong their stay in India. There were apprehensions that this extended stay could lead to these individuals becoming Indian residents as per Section 6 of the Income Tax Act.

What

1. Considering various representations received from people who had to prolong their stay in India due to lockdown and suspension of international flights, expressing concerns that they will be required to file tax returns as Indian residents, Finance Minister Nirmala Sitharaman allowed discounting of prolonged stay period in India for the purpose of determining residency status, an official statement said.
2. The Ministry further stated that as the lockdown continues during the financial year 2020-21 and it is not yet clear as to when international flight operations would resume, a circular excluding the period of stay of these individuals up to the date of normalisation of international flight operations, for determination of the residential status for the financial year 2020-21 shall be issued after flights are resumed.
3. In a circular, the Central Board of Direct Taxes (CBDT) said in order to avoid genuine hardship in such cases, for the purposes of determining the residential status for 2019-20 of an individual who has come to India on a visit before March 22, 2020, and has been unable to leave India on or before March 31, 2020, his period of stay in India from March 22 to March 31, 2020, shall not be taken into account.
4. In cases where such individuals have been quarantined in India due to COVID-19 on or after March 1, 2020 and has departed on an evacuation flight on or before March 31, 2020 or has been unable to leave India on or before March 31, 2020, his period of stay from the beginning of his quarantine to his date of departure or March

- 31, 2020, as the case may be, shall not be taken into account for determining residency status.
5. Where the individual has departed on an evacuation flight on or before March 31, 2020, his period of stay in India from March 22, 2020 to his date of departure shall not be taken into account.
 6. The status of an individual whether he is resident in India or a non-resident or not ordinarily resident, is dependent, inter-alia, on the period for which the person is in India during a year.
 7. As per I-T laws, for 2019-20 fiscal, individuals staying in India for 182 days or more in a fiscal or 60 days or more in a fiscal and at least 365 days in the past 4 fiscals will be considered as resident of India for taxation purpose and accordingly his/her global income becomes taxable.
 8. This is a much welcome and awaited circular, which takes cognizance of concerns of NRIs and other foreigners who arrived in India before March 22, 2020, but could not return on account of imposition of lockdown and suspension of international flights.
 9. Presently, this circular takes care of residential status only for FY 2019-20 and thus excluded period till March 31, 2020 only.
 10. One may expect a similar circular for FY 2020-21, providing exclusion of lockdown period for FY 2020-21 as well for determining the residential status.

INDIA'S CARBON EMISSIONS SEEN FALLING

India's carbon dioxide emissions fell for the first time in four decades as a combination of economic weakness and competition from renewable power limited consumption of fossil fuels. Emissions likely dropped by 1.4% in the year ended March, thanks to slowing demand for coal and oil over the previous 12 months, Centre for Research on Energy and Clean Air analysts said in a report on 12 May 2020.

What

1. Carbon dioxide releases plunged 15% in March and 30% in April from a year earlier, as a countrywide lockdown to halt the spread of the coronavirus further eroded fuel demand, the report said.
2. The pandemic could influence long-term energy planning in a country that's the **world's third**-largest emitter of carbon dioxide and heavily reliant on coal to **drive its economic growth. Weeks of lockdown have eased India's chronic air pollution**, raising hopes of a more sustainable solution.
3. **With declining prices of clean energy, a shift in the country's energy mix is already emerging. India's coal-fired generation fleet had an average utilization of 56% in the 12 months through March, the lowest in at least 15 years, power ministry data show.**
4. Any return of **India's poor air quality and smog can be expected to trigger a stronger response**, the report said.

INTERNATIONAL FAMILY DAY 2020

International Family Day is celebrated in order to raise consciousness about the importance of families and to address the issues that may adversely impact those efforts. Each year, the day is used as a forum to highlight the numerous issues that affect families around the world and what are the required measures that can be taken to

overcome these and create unity. The entire society and a country are strengthened by creating an ecosystem of stable and happy families. In India, the very concept of a family is considered as sacred and also a pillar to ensure harmony and well being in the society. International Family Day is marked by an emblem consisting of a solid green circle with a red picture containing a schematic drawing feature of a house and a centered face. This symbol signifies the healthy and stable atmosphere that a family should provide for people of all ages.

Why do we celebrate International Family Day?

1. The United Nations passed a resolution in 1993 to promote better living conditions and the social development of families around the world.
2. The day was proclaimed the following year as the International Day of Families to account for the socio-economic structures that affect the stability of families in various parts of the world.
3. While the world deals with the COVID-19 pandemic, there is a tremendous opportunity to reconsider and change the way we foster greater equality through attempts to strengthen the economic and social conditions around the world.
4. In India and most Asian countries, the belief is that happy and healthy family relationships are a lasting legacy of parents and elders to the next generation in their family.
5. A fleeting glimpse of films in any Indian languages demonstrate how every narrative celebrates and honours the concept of happy families as something to nurture and preserve.

Themes across the years to mark International Family Day

1. Depending on the developmental activities ahead of organizations working for family welfare, the theme varies every year.
2. The theme this year is **Forming Families: Copenhagen & Beijing+25** (because this year's **25th anniversary of Copenhagen Declaration and Beijing Platform for Action** comes at a time of one of the most challenging global health and social crises)