

My Notes....

NATIONAL

INDIA'S FIRST GAS EXCHANGE

India's first gas exchange —the Indian Gas Exchange (IGX) — was launched on 15 June 2020. The exchange is expected to facilitate transparent price discovery in natural gas, and facilitate the growth of the share of natural gas in **India's energy basket**.

How will IGX work?

1. The IGX is a digital trading platform that will allow buyers and sellers of natural gas to trade both in the spot market and in the forward market for imported natural gas across three hubs —Dahej and Hazira in Gujarat, and Kakinada in Andhra Pradesh.
2. Imported Liquefied Natural Gas (LNG) will be regassified and sold to buyers through the exchange, removing the requirement for buyers and sellers to find each other.
3. This will mean that buyers do not have to contact multiple dealers to ensure they find a fair price.
4. The exchange also allows much shorter contracts – for delivery on the next day, and up to a month – while ordinarily contracts for natural gas supply are as long as six months to a year. This, experts say, will allow buyers and sellers greater flexibility.
5. The price of domestically produced natural gas is decided by the government. It will not be sold on the gas exchange.
6. Domestic production of gas has been falling over the past two fiscals as current sources of natural gas have become less productive.
7. **Domestically produced natural gas currently accounts for less than half the country's natural gas consumption; imported LNG accounts for the other half.**
8. LNG imports are set to become a larger proportion of domestic gas consumption as India moves to increase the proportion of natural gas in the energy basket from 6.2% in 2018 to 15% by 2030.

Regulatory change

1. Currently, the pipeline infrastructure necessary for the transportation of natural gas is controlled by the companies that own the network. State-owned GAIL owns and **operates India's largest gas pipeline** network, spanning over 12,000 km.
2. An independent system operator for natural gas pipelines would help ensure transparent allocation of pipeline usage, and build confidence in the minds of buyers and sellers about neutrality in the allocation of pipeline capacity.
3. Experts have also called for natural gas to be included in the Goods and Services Tax (GST) regime to avoid buyers having to deal with different levies such as VAT across states, when purchasing natural gas from the exchange.

INDIA BECAME A FOUNDING MEMBER OF GPAI

India has joined leading nations of the world including USA, UK, EU, Australia among others as a founding member of a league of nations which has launched a Global Partnership on Artificial Intelligence (GPAI or Gee-Pay). The first of its kind initiative is aimed to guide responsible development and use of AI, grounded in human rights, inclusion, diversity, innovation, and economic growth.

What

1. The multi-stakeholder initiative will work towards evolving better understanding of the challenges and opportunities around AI using the experience and diversity of participating countries. It will also support cutting-edge research and applied activities on AI-related priorities.
2. Canada, France, Germany, Italy, Japan, Mexico, New Zealand, Republic of Korea and Singapore are among the other nations which have joined the partnership.
3. By joining GPAI as a founding member, India will actively participate in the global development of Artificial Intelligence, leveraging its experience around use of digital technologies for inclusive growth, the statement from Indian government said.
4. India has recently launched the National AI Strategy. Union minister for electronics and IT Ravi Shankar Prasad has also launched the National AI Portal to bring together best ideas and resources on AI which can be leveraged across various sectors and across industries.
5. In collaboration with partners and international organizations, GPAI will bring together leading experts from industry, civil society, governments, and academia to collaborate to promote responsible evolution of AI and will also evolve methodologies to show how AI can be leveraged to better respond to the present global crisis around COVID-19.
6. GPAI will be supported by a Secretariat, to be hosted by Organization for Economic Cooperation and Development (OECD) in Paris, as well as by two Centers of Expertise- one each in Montreal and Paris.

Flashback

1. Artificial intelligence (AI) is the simulation of human intelligence processes by machines, especially computer systems.
2. Specific applications of AI include expert systems, Natural language processing (NLP), Speech Recognition and Machine vision.

INDIA RANKING IN EPI 2020

India ranks 168th out of 180 countries in the Environmental Performance Index (EPI) 2020 according to **researchers at Yale and Columbia university's** who produce this biennial scorecard of national results on a range of sustainability issues. Yale professor Dan Esty, who directs the Yale Center for Environmental Law and Policy that **co-produces the EPI, observed that** "our analysis suggests that countries with broad-based sustainability efforts and particular emphasis on decarbonizing their economies **come out at the top of the pack.**" **India's decarbonization agenda needs to accelerate** and the country faces a number of serious environmental health risks, including poor air quality.

What

1. Now in its 22nd year, the EPI report has become the premier metrics framework for global environmental policy analysis, ranking 180 countries on 32 performance indicators across 11 issue categories covering environmental health and ecosystem vitality.
2. The EPI 2020 features new metrics that gauge waste management, carbon dioxide emissions from land cover change, and emissions of fluorinated gases – all important drivers of climate change.
3. In the EPI 2020, Denmark ranks first in the world, reflecting strong performance across nearly all issues tracked by the EPI.
4. Other nations in the top tier include Luxembourg, Switzerland, the United Kingdom, and France. Beyond providing issue-by-issue and country-by-country results, the EPI 2020 offers new insights into the factors associated with success on environmental sustainability goals.
5. As **Alex de Sherbinin of Columbia's Earth Institute**, one of the lead authors of the report, explained, “good governance more than any other factor separates the nations that are moving toward a sustainable future from those which are not.”
6. High-scoring countries generally exhibit long-standing commitments and carefully constructed programs to protect public health, conserve natural resources, and reduce greenhouse gas (GHG) emissions.

India's performance

1. India struggles to perform well **on several of the 2020 EPI's environmental issue** categories.
2. For air quality, India and Pakistan both rank at the very bottom of the EPI 2020, at 179th and 180th places, respectively.
3. By comparison, low air quality also continues to plague China, although its recent pollution controls and other environmental investments have helped it climb to 120th place in the EPI, **48 places ahead of India's 168th overall ranking**.
4. On biodiversity and habitat, India places 148th in the world, failing to maximize the conservation potential of its protected areas, especially in marine ecosystems.
5. Perhaps most critically, India places 106th in the world on climate change mitigation. **As one of the world's most significant emitters of greenhouse gases**, India should be applauded for recent gains in renewable energy investments.
6. However, the data show India is not on track to decarbonize quickly enough to avoid the worst impacts of climate change.
7. Low EPI scores for India suggest a need for national sustainability efforts on a number of fronts, including air and water pollution, biodiversity protection, and the transition to a clean energy future.
8. EPI rankings have long highlighted the environmental challenges that India faces. **India's 168th ranking** in the 2020 EPI reflects our improved knowledge about the current state of the world.
9. Ten years ago, these same metrics would have given India a rank of 163rd in the world. **The EPI finds essentially no overall improvement in India's environmental performance over the past decade**, though there are gains and losses on individual issues.

India's neighbor

1. India comes in near the bottom of the global rankings at 168th place worldwide, and only Afghanistan (178th place) ranks below India in Southern Asia.
2. Leading the region is Bhutan (107th), with relatively high scores in biodiversity & habitat protection. Sri Lanka (109th) and Maldives (127th) round out the top three countries in Southern Asia, followed by Pakistan (142nd), Nepal (145th), and Bangladesh (162nd).
3. Despite its high regional ranking in the EPI 2020, **Sri Lanka's** climate change score dropped by 12.5 out of 100 over the past decade, due to heavy reliance on fossil fuels, and **India's score** dropped by 2.9.
4. China, by contrast, improved its climate change score in the last ten years by 24.5. Meeting the goals set out in the 2015 Paris Climate Change Agreement requires sustained cuts in emissions of all greenhouse gases, and the 2020 EPI finds that no country is decarbonizing quickly enough to meet these climate change goals.

Flashback

1. As the 2020 EPI builds on data mostly from 2017 and 2018 and collected earlier, the results do not capture impacts from very recent events, including the burning of the Brazilian Amazon, wildfires in Australia, and the COVID-19 pandemic.
2. Regional performance on protecting and enhancing the vitality of ecosystems reveals both gains and stubborn challenges.
3. In the 2020 EPI, Morocco, UAE, Croatia, and Kuwait substantially improved their scores on protection of biodiversity and habitat. On other issues, the world community is doing well, while a few countries are trending in the wrong direction.
4. This analysis demonstrates that positive environmental performance requires good governance, including a strong rule of law, vibrant public engagement, an independent media, and well-crafted regulations.
5. The EPI builds on the best available global data from international research entities, such as the Institute for Health Metrics and Evaluation, the World Resources Institute, the Potsdam Institute for Climate Impact Research, CSIRO, the Mullion Group, and the Sea Around Us Project at the University of British Columbia, as well as from international organizations like the World Bank and the UN Food and Agriculture Organization.

ORDINANCES ON INTER-STATE AGRI TRADE, CONTRACT FARMING

The central government promulgated two ordinances that seek to free inter-state trade in agricultural commodities and facilitate contract farming between growers and processors. However, both ordinances give unbridled power to the lower bureaucracy in times of dispute between farmers and buyers that can also be companies in case of the contract agreement. The sub-divisional magistrates (SDM), in some of the provisions, have been vested with powers to adjudicate. This might lead to problems in implementation.

What

1. The first ordinance called **The Farmers' Produce Trade and Commerce** (Promotion and Facilitation) Ordinance 2020 allows any trader to engage in inter-state and intra-state trade of scheduled agricultural produce with a farmer or another trader in a trade area.
2. A trade area is defined as the any area, which is outside the APMC acts and existing private mandis. No transactions done within this zone will be subject to any state market fee, cess or levy.
3. Any transaction in this area needs to be paid for within three days, while the receipt for such transactions has to be paid immediately.
4. The ordinance empowers anyone to trade in agricultural commodities armed with just a PAN Card or any other document as specified by the Central government.
5. The ordinance also empowers anyone to open an e-trading platform for which the Centre can specify rules.
6. In the event of any dispute in such transactions, the parties, in this case the farmer and trader, who has bought from him outside the mandi might approach the SDM, who will then set up a reconciliation board comprising a chairman and at least two members.

Contract farming ordinance

1. In case of the contract farming ordinance, also promulgated by the President, and called the The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance 2020, allows any company, or processors, or FPO, or Cooperative Society to enter into a contract farming arrangement for a minimum of one crop cycle in case of crops, or one production cycle, in case of livestock. The maximum period for such an arrangement will be five years.
2. The price to be paid to the farmer in such a contract farming arrangement shall be mutually decided, or in case of volatility, a minimum price has to be paid on top of which a premium also needs to be paid by the company.
3. In case of any dispute if the farmer is at a fault, the buyer can recover the inputs contributed by him and the advance made by him.
4. No state act, or law, will be applicable to agriculture produce grown through this arrangement.
5. The ordinance strictly prohibits any contractual arrangement which has an encumbrance on the farmer's land.
6. If the buyer fails to make payment on time, he will have to pay a penalty of 1.5 times the value. He can inspect the produce during production or get it assessed through a third party. The agreement format would be in line with the Model Contract Farming Act, framed earlier by the NITI Aayog.
7. The state will have powers to frame rules under the ordinance, while the SDM will be the primary dispute resolution authority.

NCERT, UNESCO LAUNCHED E-RAKSHA

The National Council of Educational Research and Training (NCERT) in partnership with the Cyber Peace Foundation and United Nations Educational,

Scientific and Cultural Organisation (UNESCO) has launched 'e-raksha' competitions. The aim of e-Raksha 2020 is to "provide a platform to netizens to share tips and strategies on how to be safe and responsible netizens and how to address fake news and misinformation especially with regard to COVID-19, the NCERT said in an official notice.

What

1. The competition will be divided into three categories — category 1 will be for school students above the age of 10, category 2 for college students above the age of 17 and category 3 for parents, teachers and guardians.
2. There are several competitions under e-Raksha from Artcade, Tech Avishakar to Word Hack and Screen Masters.
3. Under Artcade, students will have to send in drawings, paintings, comics, memes, stickers, and even comic strips depicting what online safety means to them. Students can choose topics related to bullying, phishing, malware etc.
4. Under Tech Avishkar, participants can create software, hardware, or firmware on the **theme** 'digital citizenship and online safety'. **The innovation must address** a problem faced in cyberspace, such as privacy issues, safety, trolling, online fraud, etc.
5. The Word Hack or writing competition will receive entries from school students on short stories and essays. For college students and parents, the competition will be on **articles, blogs and research paper writing**. **The theme for this will also be** 'digital citizenship and online safety'.
6. In the **screen masters' programme**, students and teachers will have to make documentaries and interview with a string message aligning with the theme. Concepts like privacy, trolling security tops will be accepted. The project can be either in Hindi or in English.
7. For the Cyber Peace Honours award, people across categories who think they have put efforts to promote online safety can register themselves and winners will be conferred with prizes.
8. The registration process will begin soon at eraksha.net. Winners will be selected in each category for all the competitions. A participation certificate will be given to all, appreciation certificates for those shortlisted and trophies to the winners.

About NCERT

1. The National Council of Educational Research and Training (NCERT) is an autonomous organisation set up in 1961 by the Government of India to assist and advise the Central and State Governments on policies and programmes for qualitative improvement in school education.
2. The major objectives of NCERT and its constituent units are to: undertake, promote and coordinate research in areas related to school education; prepare and publish model textbooks, supplementary material, newsletters, journals and develops educational kits, multimedia digital materials, etc.

INDIAN INSTITUTIONS IN NATURE INDEX 2020

In the Nature Index table 2020, India is placed twelfth globally in science research output. The top five positions have gone to the United States of America, China, Germany, United Kingdom and Japan. Three of the autonomous institutions of the Department of Science & Technology, Government of India have found their place among top 30 Indian Institutions including universities, IITs, IISERs, and Research Institutions and Labs as per Nature Index 2020 ratings based on the research published in the top journals, a measure of research quality.

What

1. These are the Indian Association for the Cultivation of Science (IACS), Kolkata at 7th position, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore at 14th position and S. N. Bose National Centre for Basic Sciences, Kolkata at 30th position.
2. Keeping out CSIR, which is a cluster of institutions, IACS is among the top three institutions in quality Chemistry Research in India.
3. JNCASR ranks 4th among academic institutions in life sciences, 10th in Chemistry and Physical Sciences, 10th among Indian academic institutions, and 469th in global ranking.
4. Globally the top-rated Indian institutions in this list are Council of Scientific and Industrial Research (CSIR), a group of 39 institutions at the 160th position and Indian Institute of Science (IISc) Bangalore at the 184th position.

Flashback

1. The Nature Index is a database of author affiliation information collated from research articles published in an independently selected group of 82 high-quality science journals.
2. The database is compiled by Nature Research, a division of the international scientific publishing company Springer Nature that publishes academic journals.
3. The Nature Index provides a close to real-time proxy of high-quality research output and collaboration at the institutional, national and regional level.
4. The Nature Index is updated monthly and also releases annual tables of countries.

NOBEL PRIZE IN AGRICULTURE 2020

Indian-American soil scientist Dr Rattan Lal has been named as **this year's** recipient of the World Food Prize for developing and mainstreaming a soil-centric approach to increasing food production that conserves natural resources and mitigates climate change. The World Food Prize is considered equivalent to the Nobel Prize in the field of agriculture, and the recipient is awarded \$250,000 for improving the quality and availability of food. **Dr Lal's contribution to soil conservation** also increased the **global food supply by helping small farmers improve their soil's health.**

What

1. The World Food Prize Foundation President Barbara Stinson announced Lal as the winner in an online ceremony in Washington DC. The ceremony featured pre-recorded remarks from US Secretary of State Mike Pompeo and US Secretary of Agriculture

Sonny Perdue.

2. **Dr Lal's research in soil science** shows that the solution to this problem is right **under our feet**. He's helping the earth's estimated 500 million small farmers be faithful stewards of their land through improved management, less soil degradation, and the recycling of nutrients.
3. Dr Lal is a trailblazer in soil science with a prodigious passion for research that improves soil health, enhances agricultural production, improves the nutritional quality of food, restores the environment and mitigates climate change.
4. Dr. Rattan Lal, a native of India and a citizen of the United States, will receive the 2020 World Food Prize for developing and mainstreaming a soil-centric approach to increasing food production that restores and conserves natural resources and mitigates climate change, the Iowa-based foundation said.

Flashback

1. The World Food Prize was established by Nobel Peace Prize laureate Norman Borlaug in 1986.
2. The foundation is based in Des Moines, Iowa in US and the first recipient of this award was Indian agricultural scientist Dr M.S. Swaminathan in 1987, regarded as the **father of India's Green Revolution**.

ANCIENT CIVILIZATION PETROGLYPHS DISCOVERED

The rock carvings – known as petroglyphs – have been discovered atop hillocks in the Konkan region of western Maharashtra. Mostly discovered in the Ratnagiri and Rajapur areas. A majority of the images etched on the rocky, flat hilltops remained unnoticed for thousands of years. They are the material proof that the Indian civilization is over 10,000 years old. The person responsible for this finding is Dr Tejas Garge which is the director of the Maharashtra state archaeology department.

What

1. The discovery of rock carvings believed to be tens of thousands of years old in **India's the western state of Maharashtra** has greatly excited archaeologists who believe they hold clues to a previously unknown civilisation.
2. The way the petroglyphs have been drawn, and their similarity to those found in other parts of the world, have led experts to believe that they were created in prehistoric times and are possibly among the oldest ever discovered.
3. These prehistoric engravings found along more than 250 kilometres of the Konkan coast represent human figures, animals and geometric designs, for example,



- elephants, rhinos, deer, pigs, cattle, rabbits, buffaloes, tigers, wild boars, monkeys, birds, sharks, rays, turtles, alligators, abstract prints, the mother goddess, etc.
- Our first deduction from examining these petroglyphs is that they were created around 10,000 BC said the director of the Maharashtra state archaeology department.
 - Garge's department will also look for evidence of the people who made the carvings.** The figures are found only on windswept hills that flood during monsoons, places where there would be no refuge. The carvers would have had to come to these places on purpose to make the drawings.
 - Researchers began digging a cave about 30 kilometres away and found microliths like those in the hills, as well as other larger Stone tools. We hope to find more refuge sites near the petroglyphs, said Garge.
 - Many of the local communities are rightly proud of the discoveries on their land and can see the opportunities it may present in terms of visitors, tourism, and the subsequent boost to the local economy.
 - However, everyone involved needs to pull together and jointly ensure the safeguarding of these sites under often challenging circumstances.

NIRF RANKING 2020

The **Human Resource Development (HRD) Ministry's National Institutional Ranking Framework (NIRF)** announced the rankings on 11 June 2020. The annual rankings are usually announced in April but had to be postponed due to the COVID-19 pandemic. Five times in a row, the Indian Institute of Technology (IIT) Madras has secured the top rank in the list of best engineering institutes in India under the National Institutional Ranking Framework (NIRF) rankings released by the Human Resource Development (HRD) Minister. The Indian Institute of Technology (IIT-Delhi) has secured the second position, followed by IIT Bombay.

What

- The premier institutes like IITs, IISc also secured a good position in the QS World University Ranking 2021, Times Higher Education ranking released this month. Earlier, the IITs boycotted the **THE ranking citing "lack of transparency"** in the ranking parameters.
- NIRF Started in 2016, the rankings are announced by the Union Human Resources Development (HRD) Minister.
- The rankings have been announced under 10 categories – overall, universities, engineering, colleges, management, pharmacy, medical, architecture, dental and law.

THE TOP PERFORMERS IN EACH CATEGORY	
OVERALL	4. National Institute of Mental Health & Neuro Sciences
1. IIT-MADRAS	5. Sanjay Gandhi Postgraduate Institute of Medical Sciences
2. IISc	
3. IIT-DELHI	ENGINEERING
4. IIT-BOMBAY	1. IIT-Madras
5. IIT-KHARAGPUR	2. IIT-Delhi
UNIVERSITY	3. IIT-Bombay
1. IISc	4. IIT-Kanpur
2. JNU	5. IIT-Kharagpur
3. BHU	MANAGEMENT
4. Amrita Vishwa Vidyapeetham	1. IIM-Ahmedabad
5. Jadavpur University	2. IIM-Bangalore
COLLEGE	3. IIM-Calcutta
1. Miranda House	4. IIM-Lucknow
2. Lady Shri Ram College for Women	5. IIT-Kharagpur
3. Hindu College	LAW
4. St. Stephen's College	1. National Law School of India University, Bangalore
5. Presidency College	2. National Law University, New Delhi
MEDICAL	3. Nalser University of Law
1. All India Institute of Medical Sciences	4. IIT-Kharagpur
2. Post Graduate Institute of Medical Education and Research	5. National Law University, Jodhpur
3. Christian Medical College	

4. The framework outlines a methodology to rank institutions across India. The ministry prepares the list on the basis of teaching, learning and resources, research and professional practices, graduation outcomes, outreach and inclusivity, and perception.
5. The ranking framework evaluates institutions on five broad generic groups of parameters — teaching, learning and resources (TLR), research and professional practice (RP), graduation outcomes (GO), outreach and inclusivity (OI) and perception (PR).
6. The ranks are given on the basis of the total sum of marks assigned for each of these five broad groups of parameters.
7. **A total of 3,771 unique institutions had offered themselves for the “Overall”, category-specific or domain-specific rankings for the India Rankings 2020.**

QS WORLD UNIVERSITY RANKINGS 2021

Most of the premier Indian institutes have slipped in the 2021 Quacquarelli Symonds (QS) world rankings. In its World University Rankings (WUR), at least 10 institutions marked by the government under the Institution of Eminence (IoE) scheme have been included, according to a report. The IoEs which have lost in terms of their rankings are IIT Delhi, IIT Kharagpur, IIT Madras, University of Delhi, IISc Bangalore, Hyderabad Central University, BITS Pilani, Anna University, Manipal Academy of Higher Education (MAHE) and Vellore Institute of Technology (VIT).

What

1. Moreover, this year, only 21 Indian institutes found a place in the rankings which includes 1,000 universities, while last year, 25 Indian institutions had been included. While IIT Bombay retained its position as the best Indian university, it fell 20 ranks from 152 position last year to 172 this year.
2. IIT Bombay is followed by IISc Bangalore, which has fallen from 184 to 185 and IIT Delhi, which has lost 11 ranks to now stand at 193. Meanwhile, IIT Kharagpur fell from 281 to 314 this year.
3. BITS Pilani, which was selected as an IoE in 2018, participated in the ranking, but could not secure a place in the top 1,000 universities, even as it was included in the 801-1000 bracket for the last three years.
4. VIT, which was selected as IoE in 2019, has also not been able to secure a ranking this year, despite being included in the 801-1,000 bracket in 2019 and 2020.
5. Meanwhile, Shiv Nadar University, Jamia Hamdard and Kalinga Institute of

India at QS World University Rankings 2021		
RANK		
172		Indian Institute of Technology Bombay (IITB)
185		Indian Institute of Science
193		Indian Institute of Technology Delhi (IITD)

- Technology, all of which were recognised as IoEs in 2019, have been participating in the rankings for the past four years, but have not been able to secure a rank.
6. Of the 21 universities included this year, 14 have seen a decline in their positions, while only four institutes – OP Jindal University, IIT Guwahati, Savitribai Phule Pune University and IIT Hyderabad – have managed to improve their positions.
 7. None of the Indian institutes has obtained a rank in top 100 and most Indian institutes have performed worse than last year in this year's Quacquarelli Symonds (QS) World University Rankings (WUR).
 8. Overall, 21 Indian universities and institutes have found a place this year among **the world's top 1,000, as opposed to 25 last year.**
 9. Delhi university which was ranked at 474th spot last year has declined in the position this year. The varsity has slipped at the band 501-510.
 10. IIT-Kharagpur is fifth in India and 314th across the globe. This is a fall from 281th spot last year.
 11. IIT-Madras is ranked fourth in India. It has fallen four points from last year's 271 spot internationally and has obtained 275th rank this year.
 12. IIT-Delhi is ranked third in India and 193 across the globe. It has seen a huge fall from 182 from last year and 172 a year before.
 13. IISc Bangalore is ranked second in India and 185th spot globally. It has slipped by one rank from 184th rank last year. The decline for IISc started in 2019.
 14. Ranked top most in India, IIT-Bombay continues to hold best rank among nations. However, it has slipped from 152nd spot last year to 172nd rank.

INTERNATIONAL

A LANDMARK DEFENCE PACT INKED

India and Australia inked a landmark agreement on 4 June 2020 for reciprocal access to military bases for logistics support besides firming up six more pacts to further broad base ties after Prime Minister Narendra Modi and his Australian counterpart Scott Morrison held an online summit. The Mutual Logistics Support Agreement (MLSA) will **allow militaries of the two countries to use each other's bases for repair and replenishment of supplies besides facilitating scaling up of overall defence cooperation.**

What

1. Besides the MLSA, the other pacts signed will provide for bilateral cooperation in areas of cyber and cyber-enabled critical technology, mining and minerals, military technology, vocational education and water resources management.
2. The two sides also deliberated on a host of key issues including dealing with growing threat of terrorism, maritime security challenges in the Indo-Pacific region, reform in the World Trade Organisation and ways to deal with the coronavirus crisis.
3. Reflecting the importance they attached to the Indo-Pacific, the two countries also **unveiled a declaration titled 'Shared Vision for Maritime Cooperation in the Indo-Pacific', outlining their commitment to promoting peace, security, stability, and**

prosperity in the region.

4. According to a joint statement issued after the Modi-Morrison talks, both sides discussed the issue of taxation of offshore income of Indian firms through the use of the India-Australia Double Taxation Avoidance Agreement (DTAA) and sought early resolution of the issue.
5. It said both sides also decided to re-engage on a bilateral Comprehensive Economic Cooperation Agreement (CECA) while suitably considering earlier bilateral discussions where a mutually agreed way forward can be found.
6. The two countries recognised that terrorism remains a threat to peace and stability in the region and strongly condemned the menace in all its forms and manifestations, stressing that there can be no justification for acts of terror on any grounds whatsoever.
7. The joint statement said both sides support a comprehensive approach in combating terrorism, including by countering violent extremism, preventing radicalisation, disrupting financial support to terrorists and facilitating prosecution of those involved in acts of terror. They also called for early adoption of a Comprehensive Convention on International Terrorism (CCIT).
8. India has already signed similar agreements with the US, France and Singapore.
9. This is the first virtual bilateral summit India is holding with any country. Australia held one with Singapore in March.

INDIA-CHINA FACEOFF 2020

Galwan valley, about sixty kilometres north of the city of Ladakh, is back in the spotlight — the latest flashpoint between India and China. In early May, China moved two brigade-strength of **People's Liberation Army, over 6,000 soldiers and supporting infra**, to four locations in eastern Ladakh — three in the Galwan Valley and one near Pangong Lake. In response, India also rushed to match these numbers with high-altitude warfare troops along the Line of Actual Control.

What

1. The two nuclear armed trans-Himalayan neighbours coming head-to-head at the border generated high heat in military and political corridors again, though not as high as the last time when the two had squared off at Doklam nearly three years ago, remaining deadlocked for 72 days.
2. Both sides are making efforts to de-escalate the tension at the border, and the chances are that status quo — albeit an uneasy one — will return in a while.
3. There, however, are a few contexts that make this feud different from other recent episodes — Depsang in 2013, Chumur in 2014, and Doklam in 2017.
4. Unlike past conflicts, the stand-off this time is at more than one location, including the Finger areas of the Pangong Tso, Galwan Valley and Gogra post in Ladakh and the Naku La pass in Sikkim, and de-inducting soldiers from these remote areas would require careful strategising.

Cartographic Changes

1. The abrogation of Article 370 in Jammu & Kashmir and the creation of the Union Territories of Jammu and Kashmir, and Ladakh have inducted an element of strain in bilateral relation. With India redrawing borders to carve out the three, China

has accused India of breaching territorial limits.

2. Prior to this, in March 2019, Chinese customs officials destroyed 30,000 world maps printed in the country for not showing Arunachal Pradesh and Taiwan as part of its territory.
3. In April this year, **China's latest Sky Map** - the official digital map operated by Beijing's National Surveying and Mapping Geographic Information Bureau - showed parts of Arunachal Pradesh within its international borders.

Aksai Chin & Renewed Focus on Ladakh

1. **Beijing had a sudden outburst over Ladakh's changed status** — a move it described as 'unacceptable' and one that undermined its 'sovereignty' — even raising the issue at the informal meet of the UN Security Council last year.
2. **India responded by saying Ladakh's new status was an "internal matter" having "no impact" on the LAC status.**
3. Also, in August last year, Home Minister Amit Shah vowed in Parliament to "take back" Aksai Chin, further stoking China's resentment.
4. **The current intrusion in Ladakh appears aimed at reaffirming China's claim over the Aksai Chin Plateau.**

India-Pakistan-China Equations

1. **India's strategic intent** has also become firmer since last year. It reclaimed PoK in accordance with the February, 1994 Parliament resolution, even considering options to regain physical possession of Gilgit-Baltistan.
2. The **Survey of India's new map depicts** Gilgit-Baltistan and Aksai China within the UT Ladakh boundary. Another subtle move was the India Meteorological Department including areas in PoK and Gilgit-Baltistan in its daily weather forecasts, starting May 6.
3. This, just days after Pakistan Supreme Court permitted the federal government to hold elections in the region. Also, Pakistan has, since then, ceded territory in Pakistan Occupied Kashmir to China, making Beijing a stakeholder in the occupied area.

Absence of a Diplomatic Statement

1. Another deviation in the Chinese playbook is the avoidance of an official acknowledgement on the situation at LAC.
2. **Even though China's foreign ministry did issue a statement on the Naku-La pass (Sikkim) standoff**, Chinese Foreign Minister Wang Yi in his annual press conference on May 24, chose not to touch the LAC stand-off with India, instead opting to make a statement on Hong Kong.
3. Even the Chinese media has so far avoided hyping up the incident on the scale that they did during the Doklam standoff.

Wuhan Agreement

1. India's curbs on Chinese investments in Indian companies and the government's call on boycotting China-made products could also be seen as a violation of the Wuhan Agreement, which Xi Jinping and Prime Minister Modi had signed a couple of years ago.
2. The two nations agreed to be friends and partners, and not rivals. Also, India's

alliance with the United States, Japan and Australia to conduct naval exercises regularly, has also put its relationship with China in a precarious spot.

Coronavirus Link

1. The recent pandemic, which has now claimed more than 4,20,000 lives worldwide, could also complicate matters this time around.
2. With India a party to the common global perception that China's secrecy on the virus early on led to such a heavy and widespread toll, the spectre of Covid-19 is likely to hang like the proverbial Damocles' Sword over any India-China negotiations.

NEPAL PARLIAMENT PASSED POLITICAL MAP

Nepal's Parliament on 13 June 2020 unanimously voted to amend the Constitution to **update the country's new** political map, laying claim over three strategically key areas along the border with it. In a show of unprecedented national unity, Opposition parties including the Nepali Congress, Rastriya Janata Party-Nepal and Rastriya Prajatantra Party voted in favour of the bill to amend Schedule 3 of the Constitution to update the national emblem by incorporating the controversial map featuring new areas of Lipulekh, Kalapani and Limpiyadhura **along Nepal's border with India.**

What

1. India last month reacted angrily to Nepal showing the three areas as Nepalese territory **in the new map and cautioned the country that saying such "artificial enlargement" of territorial claims** will not be acceptable to it. India has been maintaining that these three areas belong to it.
2. India has said it deeply values its friendly ties with Nepal and the multi-faceted bilateral partnership has expanded and diversified in the recent years. Indian Army chief Gen M M Naravane on 13 June 2020 said the relationship between the two countries has always been strong and will remain so in the future.
3. As soon as **Nepal's Parliament** meeting started on 13 June 2020 afternoon, lawmakers from different political parties took part in deliberations on the bill. All 258 lawmakers who were present in the House voted in favour of the amendment bill.
4. A two-thirds majority was required in the 275-member House of Representatives or the lower house to pass the bill.
5. The endorsement of the lower house will now pave way for the government to

Why is Lipulekh pass important?

1. The region juts into the Himalayas and is connected to the other side of the mountain range through the Lipulekh pass, which has been used for centuries by Hindu and Buddhist pilgrims and tourists on their way to Kailash Mansarovar.
2. The nearby markets have been used by various mountain communities.
3. The Himalayas have several passes that connect the Gangetic region with the Tibetan plateau but Lipulekh is strategically located as it is nearest to the heart of the Indian state or the National Capital Region and can be of particular concern in case of an armed conflict with China.

- expedite the process to replace **the political map in Nepal's national emblem.**
6. Nepali Congress president Sher Bahadur Deuba said that Nepali people have stood united on the issue of nationality and territorial integrity. As per the Sugauli Treaty of 1816, the land east of Mahakali river belongs to Nepal.
 7. The government had registered the bill in the Parliament on May 22 and Minister for Law, Justice and Parliamentary Affairs Shivamaya Tumabahangphe presented it before the House on May 24.
 8. On June 9, the Parliament unanimously endorsed a proposal to consider the Constitution amendment bill to pave way for endorsing the new political map amid the border row with India.
 9. Now, the bill will be sent to the National Assembly where it will undergo a similar process. The ruling Nepal Communist Party commands two-thirds majority in the National Assembly.
 10. The ties between India and Nepal came under strain after Defence Minister Rajnath Singh inaugurated a 80-km-long strategically crucial road connecting the Lipulekh pass with Dharchula in Uttarakhand on May 8.
 11. Nepal reacted sharply to the inauguration of the road claiming that it passed through Nepalese territory. India rejected the claim asserting that the road lies completely within its territory.
 12. Nepal last month released the revised political and administrative map of the country laying claim over the strategically key areas, more than seven months after India published a new map in November 2019.

ECONOMY

FIRST EVER INDIA'S FOREX RESERVES CROSSED THE MILESTONE

India's foreign exchange reserves rose \$8.2 billion in the week of June 5 and has **now crossed the milestone \$500 billion mark for the first time in country's** history. The healthy surge in the forex kitty was largely on the back of capital raising rounds by Reliance and Kotak Mahindra as the foreign currency asset held by the Reserve Bank of India rose \$8.4 billion and stood at a record \$463 billion in the reporting week, data released by the central bank on 12 June 2020 showed.

What

1. Expressed in US dollars, foreign currency assets include the effect of appreciation or depreciation of non-US currencies such as the euro, pound and yen held in the reserves.
2. **India's central bank has been shoring** up its foreign reserves since over a year and in the process has leapfrogged Russia and South Korea as the third-biggest holder of forex reserves only behind China and Japan.
3. A healthy forex kitty provides room for central bank to The prime objective of RBI's reserve management policy is liquidity and safety of reserves.
4. A strong kitty allows the central bank to timely intervene in forward and spot currency markets to arrest any slide in rupee devaluations.
5. For example, the assimilation of reserve with the central bank and subsequent interventions helped the rupee recover by around 2% from a record low of 76.92

witnessed in April 2020. Since then, INR has been quite resilient, trading in the range of 75-76.

6. **Other components of India's foreign reserves** such as its reserves held in gold declined by \$329 million in the reporting week and stood at \$32.352 billion, the latest RBI data showed. Separately, **SDR and central bank's reserve position at IMF stood at \$1.4 billion** and \$4.2 billion respectively, in this period.

Why are forex reserves rising?

1. The major reason for the rise in forex reserves is the rise in investment in foreign portfolio investors in Indian stocks and foreign direct investments (FDIs).
2. Foreign investors had acquired stakes in several Indian companies in the last two months.
3. After pulling out Rs 60,000 crore each from debt and equity segments in March, Foreign Portfolio Investments (FPIs), who expect a turnaround in the economy later this financial year, have now returned to the Indian markets and bought stocks worth over \$2.75 billion in the first week of June.
4. Forex inflows are set to rise further and cross the \$500 billion as Reliance Industries subsidiary, Jio Platforms, has witnessed a series of foreign investments totaling Rs 97,000 crore.
5. On the other hand, the fall in crude oil prices has brought down the oil import bill, saving the precious foreign exchange.
6. Similarly, overseas remittances and foreign travels have fallen steeply – down 61 per cent in April from \$12.87 billion.

What are forex reserves?

1. Forex reserves are external assets in the form gold, SDRs (special drawing rights of the IMF) and foreign currency assets (capital inflows to the capital markets, FDI and external commercial borrowings) accumulated by India and controlled by the Reserve Bank of India.
2. The International Monetary Fund says official foreign exchange reserves are held in support of a range of objectives like supporting and maintaining confidence in the policies for monetary and exchange rate management including the capacity to intervene in support of the national or union currency.
3. It will also limit external vulnerability by maintaining foreign currency liquidity to absorb shocks during times of crisis or when access to borrowing is curtailed.

RBI SET UP PIFD

The Reserve Bank of India on 5 June 2020 announced that it has setup a Rs.500 crore Payment Infrastructure Development Fund (PIFD) to support and improve the development of digital payments ecosystem in the rural and north east districts of the country. The central bank has made an initial seed contribution of Rs.250 crore to the PIFD with the other half of the fund expected to be contributed by all card issuing banks and network operators, the central bank said.

What

1. Over the years, payments ecosystem in the country has evolved with a wide range of options such as bank accounts, mobile phones, cards, etc, RBI said.
2. To provide further fillip to digitisation of payment systems, it is necessary to give impetus to acceptance infrastructure across the country, more so in underserved areas.
3. Additionally, the PIDF will also receive annual recurring contributions to cover operational expenses from card issuing banks and card networks, while RBI will also make contributions time to time to cover for yearly shortfalls.
4. The Fund will be governed through an advisory council and managed and administered by Reserve Bank.
5. The primary objective of PIFD, as stated by the central bank, is to encourage acquirers to deploy Points of Sale (PoS) infrastructure in both physical and digital modes in tier-3 to tier-6 centres and north eastern states.
6. This assumes importance as payment companies and ecosystem players had earlier raised concerns following Finance Ministry's decision to waive off Merchant Discount Rate on UPI and RuPay instrument the deployment of POS machines would take a hit.
7. They claimed that without any monetary incentives, banks and payment companies would be reluctant to deploy their machines and acquire merchants in rural zones as the costs of maintenance are higher.
8. MDR or Merchant Discount Rate is the fee charged by acquiring bank from merchants for providing payment service. This fee was waived off for select National Payments Corporation of India operated instruments in January 2020.

Evolution of an Idea

1. The idea of a PIDF or an Acceptance Development Fund was first proposed in March 2016, when the RBI published a concept paper aimed at expanding the card acceptance infrastructure in the country.
2. The main objective of the ADF program is to subsidise the cost of acceptance infrastructure such that it enables banks to speed up their merchant acquiring activities and increase penetration in both existing market segments as well as new markets.
3. Such a fund would help address the thin margins that payments companies earn in certain areas of the country where the adoption and usage of digital modes of payments is weak. An ADF also helps in reducing the payback period of investment for acquirers.

TURNOVER LIMITS FOR MSMES RAISED

The Union Cabinet on 1 June 2020 formulated the roadmap for implementing the measures related to farmers, MSMEs (micro, small and medium enterprises) and others, as announced in the governments' Atma Nirbhar Bharat package.

What

1. The turnover limit for medium enterprises has been revised upward to Rs 250 crore (from Rs 100 crore as announced earlier).
2. For an **MSME to be defined as a 'small' unit**, its investment limit has been raised from Rs 5 crore to Rs 10 crore with a turnover of less than Rs 50 crore. Whereas

- enterprises with investments up to Rs 50 crore with a turnover of less than Rs 250 crore **will now be defined as 'medium' units.**
3. All differences between manufacturing and services in terms of definition has been eliminated.
 4. It is notable that the new MSME definition is being brought about 14 years after MSME Development Act, 2006.
 5. Based on feedback received after announcement of the package, turnover limit for medium enterprises has been further amended to Rs 250 crore and investment limit further raised to Rs 50 crore,
 6. Cabinet has approved modalities and road map for implementing two packages for MSMEs -- Rs 20,000 crore package for distressed MSMEs and Rs 50,000 crore equity infusion through fund of funds.
 7. The Rs 20,000 crore subordinate debt for stressed MSMEs, will benefit 2 lakh stressed MSMEs.
 8. The Rs 50,000 crore equity infusion for MSMEs will strengthen their growth potential and will enable them to get listed on stock exchanges. This is for the first time MSMEs are getting such support.
 9. MSMEs play a crucial role in the building of a self-reliant India. Hence, it has been made an important part of the Atma Nirbhar Bharat package.

SCIENCE AND TECHNOLOGY

TWO MORE CORONAVIRUS SYMPTOMS ADDED

Two more symptoms, anosmia and ageusia have been added to the list of previous seven coronavirus symptoms by the Health ministry. Anosmia refers to the loss of smell, while ageusia refers to the loss of taste. According to Health Ministry these two symptoms have been reported before the onset of the respiratory symptoms. The other seven symptoms include fever, cough, fatigue, shortness of breath, expectoration, myalgia and rhinorrhea, sore throat and diarrhea.

What

1. According to a health ministry document transmission from one person to other occurs through close contact via the respiratory droplets that are released when the infected person talks, sneezes or coughs.
2. India has seen an increase in the number of coronavirus cases reported in the country with the overall tally now over the 3 lakh mark.
3. Delhi, Maharashtra and Tamil Nadu are three most affected states in the country with more than 175,000 cases.
4. The health ministry in its report titled 'Clinical Management Protocol: Covid-19' has said that Covid-19 patients reporting to various treatment facilities have reported signs and symptoms including fever, cough, fatigue, shortness of breath, expectoration, myalgia, rhinorrhea, sore throat, diarrhoea.
5. The ministry quoting data of Integrated Health Information Platform/ Integrated Disease Surveillance Programme portal case investigation forms for Covid-19, said that the details on the signs and symptoms reported (as on June 11) are -- fever (27

- per cent), cough (21 per cent), sore throat (10 per cent), breathlessness (8 per cent), weakness (7 per cent), running nose (3 per cent) and others 24 per cent.
6. According to an expert, even though the symptom is not specific to Covid-19 as one may suffer from loss of smell and taste when they have flu or influenza, it could be one of the early signs of the onset of the disease and prompt detection may help in early treatment.
 7. The US' national public health institute the Centres for Disease Control and Prevention (CDC) had in early May incorporated "a new loss of taste or smell" in the list of Covid-19 symptoms.
 8. According to the Indian Council of Medical Research's revised testing strategy for Covid-19 issued on May 18, all returnees and migrants with symptoms of influenza-like illness (ILI) are to be tested within seven days of the onset of the trials.
 9. All hospitalised patients who develop ILI symptoms and frontline workers involved in containment and mitigation of Covid-19 having such symptoms will also be tested for Covid-19 through the RT-PCR test.
 10. Symptomatic ILI patients living in coronavirus hotspots or containment zones, all patients of severe acute respiratory infection (SARI), symptomatic healthcare workers also are eligible for testing as per the guidelines.

RARE EARTH BASED MAGNETOCALORIC MATERIAL

Scientists at the International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), an autonomous R&D Centre of Department of Science and Technology (DST), have developed a rare-earth-based magnetocaloric material that can be effectively used to address the issues of side effects of cancer treatment like chemotherapy. This method, when used in conjunction with radiation therapy, would reduce the side effects, damage caused to the human body and also reduces the treatment time of cancer tumours, a Ministry of Science and Technology said.

What

1. The magnetocaloric materials (certain materials in which application and removal of a magnetic field causes the materials to become warmer or cooler) developed by ARCI are being tested at Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST). A paper on the research work has been published in the Journal of Alloys and Compounds.
2. Advancements in magnetic materials led to the development of magnetic hyperthermia in which magnetic nanoparticles are

Flashback

1. International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) established in the year 1997, is an Autonomous Research and Development Centre of Department of Science and Technology (DST), Government of India with main campus at Hyderabad spread about 95 acres of land and with operations in Chennai and Gurgaon.
2. ARCI's mandate is Development of High Performance Materials and Processes for Niche Markets, Demonstration of Technologies at Prototype / pilot scale and Transfer of Technology to Indian Industry.

- subjected to alternating magnetic fields of few Gauss, which produce heat due to magnetic relaxation losses.
3. Usually, the temperature required to kill the tumour cells is between 40 and 45 degree C. However, the drawback in magnetic hyperthermia is the lack of control of temperature, which may damage the healthy cells in the body and also have side effects like increased blood pressure.
 4. These problems can be avoided by using magnetocaloric materials, as it can provide controlled heating.
 5. The advantage of magnetocaloric materials which heat up or cool down with the application and removal of the magnetic field, respectively is that as soon as the magnetic field is removed, cooling effect is generated, unlike in magnetic nanoparticles where overheating persists, even after removal of the magnetic field.

SATURN'S MOON TITAN DRIFTING AWAY

Saturn's moon: Saturn's Moon Titan is drifting away from the planet faster than scientists believed! The moons of all planets are drifting away from their hosts, moving a little bit each year. However, according to a statement by **NASA's Jet Propulsion Laboratory**, scientists thought they knew the rate at which the Moon Titan was drifting away, but it is moving much faster.

How does the moon drift away?

1. While orbiting, the gravity of the moon pulls on the host planet, causing a temporary bulge to occur in the planet as it passes.
2. The energy created by this bulging and subsiding eventually transfers from the host planet to the moon, causing it to drift farther and farther away.
3. **Earth's Moon drifts 3.8 centimeters or 1.5 inches** away from the planet every year.

How fast is it drifting?

1. Recent data received from the Cassini spacecraft of NASA revealed that the Moon Titan is drifting 100 times faster than what the scientists had originally thought, moving 4 inches or 11 centimeters every year.
2. This discovery is significant. It is known that Saturn was formed during the early formation of the solar system nearly 4.6 billion years ago.
3. However, there is uncertainty about when the system of the **planet's rings and over 80 moons** started.
4. At present, Moon Titan is 1.2 million kilometers away from Saturn. With the revised rate of the movement of Moon Titan, it seems that the moon started out closer to Saturn than earlier thought, meaning that the entire system of Saturn expanded much faster than believed.

Moon migration

1. The new findings also confirm a new theory explaining and predicting the effect of a planet on the orbit of its moons.
2. Over the last 50 years, the same formulas have been used to determine how quickly a moon is drifting away from its host planet, and this rate also helps in determining the age of the moon.
3. These were applied to all the moons in the solar system. Scientists also believed

that in Saturn's system and others like it which have multiple moons, the moons further away from the host planet drifted away at a slower pace than the ones closer to it, because they are farther from the gravity of the planet.

FIRST EVER 'FIFTH STATE OF MATTER' OBSERVED IN SPACE

Scientists have observed the fifth state of matter in space for the first time, offering unprecedented insight that could help solve some of the quantum universe's most intractable conundrums, research showed on 10 June 2020. Bose-Einstein condensates (BECs) -- the existence of which was predicted by Albert Einstein and Indian mathematician Satyendra Nath Bose almost a century ago -- are formed when atoms of certain elements are cooled to near absolute zero (0 Kelvin, minus 273.15 Celsius). At this point, the atoms become a single entity with quantum properties, wherein each particle also functions as a wave of matter.

What

1. BECs straddle the line between the macroscopic world governed by forces such as gravity and the microscopic plane, ruled by quantum mechanics.
2. Scientists believe BECs contain vital clues to mysterious phenomena such as dark energy -- the unknown energy thought to be behind the Universe's accelerating expansion.
3. But BECs are extremely fragile. The slightest interaction with the external world is enough to warm them past their condensation threshold.
4. This makes them nearly impossible for scientists to study on Earth, where gravity interferes with the magnetic fields required to hold them in place for observation.
5. On 11 June 2020 a team of NASA scientists unveiled the first results from BEC experiments aboard the International Space Station, where particles can be manipulated free from Earthly constraints.
6. Microgravity allows us to confine atoms with much weaker forces, since we don't have to support them against gravity, Robert Thompson of the California Institute for

'Remarkable' breakthrough

1. Creating the fifth state of matter, especially within the physical confines of a space station, is no mean feat.
2. First, bosons -- atoms that have an equal number of protons and electrons -- are cooled to absolute zero using lasers to clamp them in place. The slower the atoms move around, the cooler they become.
3. As they lose heat, a magnetic field is introduced to keep them from moving and each particle's wave expands. Cramming many bosons into a microscopic "trap" that causes their waves to overlap into a single matter wave -- a property known as quantum degeneracy.
4. The second the magnetic trap is released in order for scientists to study the condensate, however, the atoms begin to repel each other, causing the cloud to fly apart and the BEC to become too dilute to detect.
5. Thompson and the team realised that the microgravity on board the ISS allowed them to create BECs from rubidium -- a soft metal similar to potassium -- on a far shallower trap than on Earth. This accounted for the vastly increased time the condensate could be studied before diffusing.

- Technology, Pasadena.
7. The research published in the journal Nature documents several startling differences in the properties of BECs created on Earth and those aboard the ISS.
 8. For one thing, BECs in terrestrial labs typically last a handful of milliseconds before dissipating.
 9. Aboard the ISS the BECs lasted more than a second, offering the team an unprecedented chance to study their properties.
 10. Microgravity also allowed the atoms to be manipulated by weaker magnetic fields, speeding their cooling and allowing clearer imaging.

MISCELLANEOUS

ASIAN NOBEL PRIZE CANCELLED

A Philippine peace award has been cancelled this year due to the coronavirus pandemic, marking only the third disruption in six decades for the annual prize regarded as an Asian Nobel. The Manila-based foundation that hands out the Ramon Magsaysay awards said 9 June 2020 it has no choice with the COVID-19 pandemic practically immobilizing the world.

What

1. The awards were also cancelled due to a financial crisis in 1970 and a disastrous earthquake in 1990. They are named after a popular Philippine president who died in a 1957 plane crash and honor greatness of spirit in selfless service to the peoples of Asia.
2. The more than 330 awardees so far had included leaders like late Philippine President Corazon Aquino and Mother Teresa, known for her missionary work in India.
3. The five recipients of last year's awards included a South Korean who helped fight suicide and bullying; a Thai woman who became a human rights defender after losing her husband to violence in southern Thailand; journalists

Flashback

1. Indian journalist Ravish Kumar in August 2019 was awarded the 2019 Ramon Magsaysay Award, regarded as the Asian version of the Nobel Prize.
2. He is among five individuals who were declared winners of the award, which is Asia's premier prize and highest honour and celebrates greatness of spirit and transformative leadership in Asia.
3. The four other winners of the 2019 Ramon Magsaysay Award are Ko Swe Win from Myanmar, Angkhana Neelapajit from Thailand, Raymundo Pujante Cayabyab from Philippines and Kim Jong-Ki from South Korea.
4. Established in 1957, the Ramon Magsaysay Award is Asia's highest honour.
5. It celebrates the memory and leadership example of the third Philippine president after whom the award is named, and is given every year to individuals or organisations in Asia who manifest the same selfless service and transformative influence that ruled the life of the late and beloved Filipino leader.

- from India and Myanmar; and a musician credited with helping to shape modern Philippine musical culture.
4. The Philippines is a coronavirus hotspot in Southeast Asia, with about 22,400 infections, including more than 1,000 deaths.
 5. It has eased lockdowns for millions of people in a tightrope move to bolster its economy, which contracted in the first quarter.

ANTIFA DESIGNATED AS TERRORIST ORGANISATION

US President Donald Trump said that America is designating far-left extremist group Antifa as a terrorist organisation in view of its role in violence across the country after the killing of a black man by a white police officer in Minnesota. Antifa, regarded as a militant, left-wing, anti-fascist political activist movement in the US, comprises autonomous activist groups that aim to achieve their political objectives through the use of direct action rather than through policy reforms. The United States of America will be designating Antifa as a terrorist organisation.

What

1. The Trump administration is blaming this far-left extremist group for the sudden spike in violent protests across the country after the brutal killing of George Floyd in Minneapolis.
2. The violence instigated and carried out by Antifa and other similar groups in connection with the rioting is domestic terrorism and will be treated accordingly, Attorney General William P Barr said.
3. To identify criminal organisers and instigators, and to coordinate federal resources with state and local partners, federal law enforcement is using the existing network of 56 regional FBI Joint Terrorism Task Forces (JTTF), the Attorney General said.
4. It is time to stop watching the violence and to confront and stop it. The continued violence and destruction of property endangers the lives and livelihoods of others, and interferes with the rights of peaceful protestors, as well as all other citizens.

What is Antifa?

1. Antifa - short for anti-fascist action - is a protest movement that strongly opposes neo-Nazis, fascism, white supremacists and racism.
2. It is considered to be a loosely organised group of activists with no leaders.
3. Most members oppose all forms of racism and sexism, and strongly oppose what they see as the nationalist, anti-immigration and anti-Muslim policies that Mr Trump has enacted.
4. Anti-government and anti-capitalist, Antifa's members are often perceived as more closely aligned with anarchists than the mainstream left.
5. The movement gained new prominence in the US for its role in confronting white supremacists at a rally in Charlottesville, Virginia in 2017.

HOW CYCLONE 'NISARGA' WAS NAMED

After cyclone 'Amphan' wreaked havoc in West Bengal, the country is now bracing to face another cyclone which is headed towards the coastline of Maharashtra and

Gujarat. 'Nisarga', which is currently brewing in the Arabian Sea, means nature and was termed by India's neighbouring country -- Bangladesh. The name was accorded in a list formulated by a group of countries.

What

1. The naming of cyclones in the Indian Ocean began in 2000 and a formula was agreed in 2004. The next few cyclones will be named Gati (named by India), Nivar (Iran), Burevi (Maldives), Tauktae (Myanmar) and Yaas (Oman).
2. Tropical cyclones are named to help the scientific community and disaster managers to identify cyclones, create awareness and effectively disseminate warnings to wider audiences.
3. The World Meteorological Organisation and the UN Economic and Social Commission for Asia and the Pacific had, at its twenty-seventh Session held in 2000, agreed to assign names to the tropical cyclones in the Bay of Bengal and Arabian Sea.
4. Bangladesh, India, Maldives, Myanmar, Oman, Pakistan, Sri Lanka and Thailand were part of the panel. Later in 2018 Iran, Qatar, Saudi Arabia, the UAE and Yemen were added to the list.
5. Cyclones around the world are named by Regional Specialised Meteorological Centres and Tropical Cyclone Warning Centres. There are a total of six RSMCs and five TCWCs, including the India Meteorological Department.
6. The India Meteorological Department (IMD) has been mandated with the duty to name cyclones that develop over the North Indian ocean, including Arabian Sea and Bay of Bengal, by following a standard procedure.
7. As suggested by the 13 countries, IMD released a list of cyclone names in April, 2020. The names like Arnab, Nisarga, Aag, Vyom, Azar, Prabhanjan, Tej, Gati, Lulu among 160 other names were listed.
8. The new list included the last name from the previous list 'Amphan' as it remained unused at the time of release. After 'Amphan', 'Nisarga' name was picked up for the ensuing cyclone.
9. According to the IMD, the names should be gender, politics, religion and culture neutral, not hurt sentiments, not be offensive, be short, easy to pronounce.
10. Meanwhile, a deep depression has formed over the Arabian Sea and is inching closer to the coastal districts of Maharashtra and Gujarat.
11. The deep depression is now slated to further turn into a cyclonic storm in 12 hours and then into a severe cyclonic storm in subsequent 12 hours.
12. It is likely to cross north Maharashtra and south Gujarat coasts between Harihareshwar town in Maharashtra's Raigad district and Daman as a severe cyclonic storm on the afternoon of June 3.

KOLKATA PORT TRUST RENAMED

The Union Cabinet on 3 June 2020 approved the renaming of Kolkata Port Trust as Syama Prasad Mukherjee Port Trust. Syama Prasad Mukherjee was a minister in the central government and martyred in Kashmir. The decision to rename the port was announced by Prime Minister Narendra Modi on January 11. The Prime Minister had

announced the renaming of Kolkata Port Trust after Syama Prasad Mukherjee at a function to mark the 150th-anniversary celebrations of the port trust.

What

1. Kolkata Port is the only riverine Major Port in India, situated 232 kms.
2. Up-stream from the Sandheads, having arguably the longest navigational channel amongst Major Ports of India and its navigational channel is one of the longest in the world.
3. At one end at Kidderpore, it has the lowest draft and the other end at Sandheads, it has the deepest draft (more than 50 metres) amongst Indian and world ports.
4. What **was described as** “one of the best and most convenient ports out of Europe” by the Lt. Governor of Bengal in 1877, still retains a pre-eminent position among the **nation’s ports on the strength of its infinite variety of availability of draft throughout** the 232 kms long navigable channel.
5. The Port which was once considered the most important port in the country still remains the premier port which has been rightly called the gateway to Eastern India and is the guiding factor to trade and commerce of vast hinterland comprising the entire Eastern India including Bihar and Eastern Uttar Pradesh and the two land-locked Himalayan Kingdoms of Nepal and Bhutan.

WORLD ENVIRONMENT DAY 2020

In the year 1974 the United Nations declared June 5 as World Environment Day in an attempt to encourage awareness and attempts at protecting the environment. Colombia and Germany are hosting the event with an aim to inspire governments, industries and consumers to find ways to tackle environmental degradation.

What

1. The World Environment Day 2020’s theme is ‘Celebrate Biodiversity’, and it will be hosted in Colombia, in partnership with Germany.
2. The theme is extremely relevant because human beings are part of the ecosystem and cannot continue to survive in isolation.
3. Biodiversity is important for the survival of all living things big and small, on land, or in water.
4. We need to understand that while there may be a food chain and ranking of species, every living thing is connected to another living thing, and together it forms a network of diverse life forms on the planet.
5. **Last year’s theme was ‘Air Pollution’.** You can do your bit on June 5, by educating other people and also bringing some lifestyle changes yourself, so as to put less burden on the environment.
6. Climate change has the potential to damage human life severely. Calamities such as floods and droughts cause damage to biodiversity.
7. These calamities are caused by reckless extraction of natural resources through the felling of trees and intensified agriculture. These ramifications of these calamities mean an end to life itself through the death of biodiversity.

UTTARAKHAND'S SUMMER CAPITAL

Uttarakhand Governor Baby Rani Maurya on 8 June 2020 gave her assent to declaring Gairsain as the new summer capital of the state. The Governor is hereby pleased to give her assent for declaration of Bhararisen (Gairsain) district Chamoli as the summer capital of Uttarakhand State, a notification from the Uttarakhand government read.

On March 4, Chief Minister Trivendra Singh Rawat had made the announcement of the summer capital, partially fulfilling an over two-decade demand by statehood crusaders to make Gairsain the permanent capital.

What

1. **The announcement was made after Rawat's budget speech on the third day of the assembly session convened in Gairsain.**
2. Gairsain will have an e-Vidhan Sabha, the CM announced on the World Environment Day.
3. The state Assembly is located in the capital city Dehradun, but sessions are held in Gairsain as well.
4. Uttarakhand was carved out as a separate state from Uttar Pradesh in 1998.
5. Statehood activists had long contended that Gairsain, a tehsil in Chamoli district, was best suited to be the capital of the mountainous state as it was a hilly region falling on the border of Kumaon and Garhwal regions.

GLOBAL COST OF LIVING SURVEY 2020

India's financial capital Mumbai has emerged as the most expensive city in the country for expatriates in terms of cost of living, a survey said on 9 June 2020. According to Mercer's '2020 Cost of Living Survey', Mumbai is the 60th most expensive city for expatriates globally, while it ranks 19th in Asia. Mumbai is the most expensive among Indian cities surveyed, followed by New Delhi (101st globally) and Chennai (143rd globally). Bengaluru (171) and Kolkata (185) are the least expensive Indian cities in the rankings, the survey said.

What

1. Overall, all Indian cities surveyed showed a jump in rankings by a minimum of four places, with New Delhi climbing the most by 17 positions and narrowly escaping the top 100 list of most expensive cities for expatriates.
2. The global list was topped by Hong Kong, followed by Ashgabat (Turkmenistan) in second position.
3. Japan's Tokyo and Switzerland's Zurich remain in the third and fourth positions, respectively, whereas Singapore is in fifth position, down two places from last year.
4. Other cities figuring in the top ten in the global ranking are the United States' New York City at sixth place, China's Shanghai at seventh, Switzerland's Bern and Geneva at eighth and ninth place, respectively, and Beijing at the tenth slot.
5. On the other hand, Tunis in Tunisia, Windhoek (Namibia), Tashkent (Uzbekistan), Bishkek (Kyrgyzstan) and Karachi (Pakistan) were ranked at the bottom as the least expensive cities in the world.
6. The survey is designed to help multinational companies and governments determine

- compensation strategies for their expatriate employees.
7. New York City is used as the base city for all comparisons and currency movements are measured against the US dollar.
 8. This year's ranking includes 209 cities across five continents, and measures the comparative cost of more than 200 items in each location, including housing, transportation, food, clothing, household goods and entertainment.

NEW HEAD OF HUMAN SPACEFLIGHT MISSION

The US space agency has selected new head for its human spaceflight mission as it successfully sent two astronauts to the International Space Station (ISS) on board a SpaceX Falcon 9 rocket from the US soil, and now aims to land humans on the Moon by 2024. NASA Administrator Jim Bridenstine has selected Commercial Crew Program Manager Kathy Lueders to be the agency's next associate administrator of the Human Exploration and Operations (HEO) Mission Directorate.

What

1. Since 2014, Lueders has directed NASA's efforts to send astronauts to space on private spacecraft, which culminated in the successful launch of Demo-2 from the Kennedy Space Center in Florida on May 30.
2. Lueders gives us the extraordinary experience and passion we need to continue to move forward with Artemis and our goal of landing the first woman and the next man on the Moon by 2024.
3. The International Space Station (ISS) is a multi-nation construction project that is the largest single structure humans ever put into space.
4. Its main construction was completed between 1998 and 2011, although the station continually evolves to include new missions and experiments. It has been continuously occupied since Nov. 2, 2000.
5. The ISS includes contributions from 15 nations. NASA (United States), Roscosmos (Russia) and the European Space Agency are the major partners of the space station who contribute most of the funding; the other partners are the Japanese Aerospace Exploration Agency and the Canadian Space Agency.
6. The space station flies at an average altitude of 248 miles (400 kilometers) above Earth. It circles the globe every 90 minutes at a speed of about 17,500 mph (28,000 km/h).
7. In one day, the station travels about the distance it would take to go from Earth to the moon and back.

REMDESIVIR INCLUDED IN 'INVESTIGATIONAL THERAPY'

Union health ministry on 14 June 2020 said that drug Remdesivir has been included as an "investigational therapy" only for restricted emergency use on Covid-19 patients. In a release, the ministry of health and family welfare intimated the updated Clinical Management Protocol for Covid-19, in which the drug Remdesivir has been included as an "investigational therapy" only for restricted emergency use purposes along with off label use of Tocilizumab and Convalescent Plasma.

What

1. The said protocol also highlighted that the use of these therapies is based on limited available evidence and limited availability at present.
2. Use of Remdesivir under emergency use may be considered in patients with moderate disease (those on oxygen) but with no specified contraindications.
3. This drug has still not been approved (market authorization) by the US Food and Drug Administration (USFDA), where like India it continues only under an Emergency Use Authorization.
4. However, there are certain conditions to be met, as per the release, for the restricted emergency usage of the drug.
5. Written informed consent of each patient required, results of additional clinical trials to be submitted, active surveillance data of all treated patients to be submitted, risk management plan along with active post-marketing surveillance and reporting of serious adverse events also to be submitted.
6. Additionally, the first three batches of imported consignments are to be tested and reports submitted to the Central Drug Standard Control Organisation (CDSCO).
7. The health ministry in the release said that Gilead, a biopharmaceutical company, had applied to the Indian Drug Regulatory Agency, namely CDSCO, for import and marketing of Remdesivir on May 29 and after due deliberations, permission under Emergency Use Authorization was granted on June 1 in the interest of patient safety and obtaining further data.

What is remdesivir?

1. It is a drug with antiviral properties that was manufactured by US-based Biotechnology Company in 2014, to treat Ebola cases.
2. It was also tried in patients of MERS and SARS, both caused by members of the corona virus family, but experts said it did not show promising results back then.
3. Corona viruses have a single-strand RNA as their genetic material. When the novel corona virus SARS-CoV2 enters a human cell, an enzyme called RdRP helps the virus replicate. Remdesivir works by inhibiting the activity of RdRP.
4. When the virus engulfs itself around a human cell, it injects its RNA inside the cell.
5. The RdRp enzyme causes viral replication. Remdesivir inhibits the enzyme and stops further replication.