My Notes....

NATIONAL

COMPOSITE WATER MANAGEMENT INDEX

NITI Aayog has prepared a report on Composite Water Management Index (CWMI). The CWMI is an important tool to assess and improve the performance of States/ Union Territories in efficient management of water resources. This has been done through a first of its kind water data collection exercise in partnership with Ministry of Water Resources, Ministry of Drinking Water & Sanitation and all the States/ Union Territories.

What

1. The index would provide useful information for the States and also for the concerned Central Ministries/ Departments enabling them to formulate and implement suitable strategies for better management of water resources. Simultaneously a web portal on the subject has also been launched.

No.	Themes	Weights
	Indicator themes and weights	
1	Source augmentation and restoration of waterbodies	5
2	Source augmentation (Groundwater)	15
3	Major and medium irrigation—Supply side management	15
4	Watershed development—Supply side management	10
5	Participatory irrigation practices—Demand side management	10
6	Sustainable on-farm water use practices—Demand side management	10
7	Rural drinking water	10
8	Urban water supply and sanitation	10
9	Policy and governance	15
	Total	**100**

2. The report ranks Gujarat as number one in the reference year (2016-17), followed by Madhya Pradesh, Andhra Pradesh, Karnataka and Maharashtra.

3. In North Eastern and Himalayan States, Tripura has been adjudged number 1 in 2016-17 followed by Himachal Pradesh, Sikkim and Assam.

4. In terms of incremental change in index (over 2015-16 level), Rajasthan holds number one position in general States and Tripura ranks at first position amongst North Eastern and Himalayan States.

5. NITI Aayog proposes to publish these ranks on an annual basis in future.

6. CWMI has been developed by NITI Aayog comprising 9 broad sectors with 28 different indicators covering various aspects of ground water, restoration of water bodies, irrigation, farm practices, drinking water, policy and governance.

7. For the purposes of analysis, the reporting states were divided into two special groups – 'North Eastern and Himalayan states' and 'Other States', to account for the different hydrological conditions across these groups.

DAM SAFETY BILL 2018 APPROVED

The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has approved the proposal for introduction of Dam Safety Bill, 2018 in the Parliament. It will help all the States and Union Territories of India to adopt uniform dam safety

procedures which shall ensure safety of dams and safeguard benefits from such dams. This shall also help in safeguarding human life, livestock and property.

What

1. The Bill provides for proper surveillance, inspection, operation and maintenance of all specified dams in the country to ensure their safe functioning.

2. The Bill provides for constitution of a National Committee on Dam Safety which shall evolve dam safety policies and recommend necessary regulations as may be required for the purpose.

3. The Bill provides for establishment of National Dam Safety Authority as a regulatory body which shall discharge functions to implement the policy, guidelines and standards for dam safety in the country.

4. The Bill provides for constitution of a State Committee on Dam Safety by State Government.

National Dam Safety Authority

1. It shall maintain liaison with the State Dam Safety Organisations and the owners of dams for standardisation of dam safety related data and practices;

2. It shall provide the technical and managerial assistance to the States and State Dam Safety Organisations;

3. It shall maintain a national level data-base of all dams in the country and the records of major dam failures;

4. It shall examine the cause of any major dam failure;

5. It shall publish and update the standard guidelines and check-lists for the routine inspection and detailed investigations of dams and appurtenances;

6. It shall accord recognition or accreditations to the organisations that can be entrusted with the works of investigation, design or construction of new dams;

Background
1. There are over 5200 large dams in India and about 450 are under construction. Plus there are thousands of medium and small dams.
2. Due to lack of legal and institutional architecture for dam safety in India, dam safety is an issue of concern. Unsafe dams are a hazard and dam break may cause disasters, leading to huge loss of life and property.
3. The Dam Safety Bill, 2018 address all issues concerning dam safety including regular inspection of dams, Emergency Action Plan, comprehensive dam safety review, adequate repair and maintenance funds for dam safety, Instrumentation and Safety Manuals.
4. It lays onus of dam safety on the dam owner and provides for penal provisions for commission and omission of certain acts.

7. It will also look into unresolved points of issue between the State Dam Safety Organisation of two states, or between the State Dam Safety Organisation of a State and the owner of a dam in that State, for proper solution;

8. Further, in certain cases, such as dams of one State falling under the territory of another State, the National Authority shall also perform the role of State Dam Safety Organization thereby eliminating potential causes for inter-state conflicts.

State Committee on Dam Safety

1. It will ensure proper surveillance, inspection, operation and maintenance of all specified dams in that State and ensure their safe functioning.

2. It further provides that every State shall establish a "State Dam Safety Organisation", which will be manned by officers from the field dam safety preferably from the areas of dam-designs, hydro-mechanical engineering, hydrology, geo-technical investigation, instrumentation and dam-rehabilitation.

REPOSITIONING OF NORTH EASTERN COUNCIL

The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has approved the proposal of Ministry of Development of North Eastern Region (DoNER) for the nomination of the Union Home Minister as ex-officio Chairman of North Eastern Council (NEC) - a statutory body with Governors and Chief Ministers of all the eight North Eastern States as its Member. The Cabinet also approved that Minister of State (Independent Charge), Ministry of DoNER would serve as Vice Chairman of the Council.

What

1. NEC implements various projects through the State and Central agencies. Under the new arrangement with Home Minister as Chairman and Minister of DoNER as Vice Chairman, NEC and all the Governors and Chief Ministers of North Eastern States as Member would provide a forum for discussing inter-state matters more comprehensively and also consider common approaches to be taken in future.

Background
1. NEC was established under the North Eastern Council Act, 1971 as an apex level body for securing balanced and coordinated development and facilitating coordination with the States.
2. Subsequent to the Amendment of 2002, NEC has been mandated to function as a regional planning body for the North Eastern Area and while formulating a regional plan for this area, shall give priority to the schemes and projects benefiting two or more states provided that in the case of Sikkim, the Council shall formulate specific projects and schemes for that State.

2. NEC can now also perform the tasks undertaken by the various Zonal Councils to discuss such inter-State issues as drug trafficking, smuggling of arms and ammunition, boundary disputes etc.

3. This repositioning of NEC will help it to become a more effective body for the North Eastern Region.

4. The Council shall, from time to time, review the implementation of the projects/schemes included in the project; recommend effective measures for coordination among the state Governments for these projects etc. The Council shall have such powers as may be delegated to it by the Central Government.

INDIA'S FIRST ADVANCED FORENSIC LAB

Hon'ble Minister for Women and Child Development, Smt Maneka Sanjay Gandhi laid foundation of Sakhi Suraksha Advanced DNA Forensic Laboratory in the campus of Central Forensic Science Lab, Chandigarh. The Advanced Lab will contribute to address the gap in forensic DNA analysis of pending sexual assault cases in the country.

What

1. The Minister mentioned that the current capacity of CFSL, Chandigarh is less than 160 cases per year and the Sakhi Suraksha Advanced DNA Forensic Laboratory is estimated to increase the capacity to 2000 cases per year.

2. The Minister further said that 5 more advanced forensic labs would come up in Mumbai, Chennai, Guwahati, Pune and Bhopal in the next 3 months bringing the total minimum annual capacity of the labs to 50000 cases.

3. The Labs in Chennai and Mumbai would be set up with WCD funds while remaining 3 labs would be set up with funds by Home Ministry. To meet international standards and deliver timely justice to women, advanced forensic DNA laboratories with latest high throughput DNA technology, are required.

4. At present there are 6 Central Forensic Science Labs (CFSLs) in Chandigarh, Guwahati, Kolkata, Hyderabad, Pune and Bhopal and one State Forensic Science Lab in each State/UT.

5. These lab are responsible for conducting forensic analysis of all cases in the country including sexual assault, criminal paternity and homicide.

In Lab units are to be established
1. Sexual Assault and Homicide Unit
2. Paternity Unit
3. Human Identification Unit
4. Mitochondrial Unit
5. Apart from the Sexual Assault and Homicide Unit, the other three units are interlinked and will work to examine cases related to crime against women.
6. Paternity Unit is essential to solve cases related to criminal paternity, gender selection & child swapping in hospitals. Human Identification Unit is important in cases of missing person or children.
7. Mitochondrial Unit will conduct mitochondrial DNA analysis in cases where regular Nuclear DNA analysis is not possible such as in case of highly degraded samples. The Mitochondrial Unit can also be used to better explore family relationships.

Background
1. Forensic science plays a vital role in the criminal justice delivery system by providing investigators with scientifically based information through the analysis of physical evidence.
2. With increasing reports of crime against women such as sexual assault, foeticide, homicide etc. there is an increasing demand for better scientific analysis of physical evidence. Scrutiny by Hon'ble courts demands more admissible, accurate and powerful forensic proof for human individualisation.

NATIONAL SPORTS UNIVERSITY ORDINANCE 2018

National Sports University Ordinance, 2018 has come into force as the President of India has given his assent to the Union Cabinet's decision to promulgate the said Ordinance. Earlier, the Union Cabinet, in its meeting held on 23rd May, 2018, had decided to approve the proposal of the Ministry of Youth Affairs and Sports to promulgate the National Sports University Ordinance, 2018, by which the National Sports University will be established with headquarters at Manipur.

What
1. **National Sports University Ordinance, 2018 ("the Ordinance")** will be on the lines of the National Sports University Bill, 2017, introduced in Lok Sabha on 10.08.2017.
2. This will be a specialized University, first of its kind, to promote sports education in the areas of sports sciences, sports technology, sports management and sports coaching besides functioning as the national training centre for select sports disciplines by adopting the best international practices.
3. The proposal was formally announced by the Finance Minister in his Budget speech of 2014-15 on 10.07.2014. For setting up the University, 325.90 acres of land has been made available by the Government of Manipur in Koutruk, West Imphal district of Manipur.
4. The University would provide a boost to sports activities in the country, and also **improve the country's sports performance at the national and international levels.**
5. The proposed University has also considerable employment generation potential.

CONTINUATION PROGRAMME FOR MARK-III

The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved funding for the for Geosynchronous Satellite Launch Vehicle Mark-III (GSLV Mk-III) continuation programme (Phase-I) consisting of ten (10) GSLV (Mk-III) flights, at a total estimated cost of Rs. 4338.20 crores.

What
1. The operationalisation of GSLV Mk-III will make the country self-reliant in the launching capability of 4 tonne class of communication satellites, and sustain & strengthen the space infrastructure and reduce the dependence on procured launches from foreign countries.

2. The operationalisation of GSLV Mk-III will make the country self-reliant in the launching capability of 4 tonne class of communication satellites and sustain & strengthen the space infrastructure and reduce the dependence on procured launches from foreign countries.

3. The GSLV Mk-III Continuation Programme – Phase 1 will meet the launch requirement of communication satellites to meet the national demand for High Throughput Satellites for rural broadband connectivity, increase and sustain the availability of transponders for DTH, VSAT and Television broadcasters.

4. GSLV Mk-III Continuation Programme – Phase 1 will be the first phase of operational flights of the GSLV Mk-III launch vehicle and the approval will cater to the launch of satellite missions during the period 2019-2024.

Flashback	
1.	The Geosynchronous Satellite Launch Vehicle Mark-III (GSLV Mk-III) has been developed towards achieving indigenous launch capability to launch 4 tonne class of satellites into Geosynchronous Transfer Orbit (GTO).
2.	It has completed one experimental flight (LVM3-X) in 2014 and one developmental flight (GSLV MkIII-D1) in 2017.
3.	The second developmental flight will be completed by Q2 of 2018-19 this year.
4.	The Continuation Programme – Phase 1 will enable independent access to space for 4 tonne class of communication satellites, and establish GSLV Mk-III as a cost-effective workhorse vehicle to launch 4 tonne class of communication satellites in order to meet the national requirements as well as to boost its commercial potential in the international market for launch services.

RAMGARH CRATER CAUSED BY METEORITE IMPACT

Since the 19th century, Ramgarh Crater has evoked the interest of geologists and now a team of scientists is in Rajasthan's Baran district to solve the mystery of its origin and believes it has evidence to prove it was caused by meteorite impact. With a diameter of 3.2 kilometres and elevation of more than 200 metre above the surrounding terrain, it was first discovered by the Geological Survey of India in 1869. Nearly a century later in 1960, it was recognised as a 'Crater' by the Geological Society of London.

What

1. A four-member team from Geological Survey of India and National Trust for Art and Culture Heritage central office, New Delhi, visited the site to collect evidence related to the origin of the crater in Ramgarh village of the district.

2. A huge meteorite of about three kilometres diametre about 75,000 crore years ago is likely to have fallen here creating a trench of about 4 km diameter, Prof Vinod Agrawal of the team said.

3. According to experts, there are two recognised craters in India - Lonar Lake in Buldhana district of Maharashtra and another in Shivpuri district of Madhya Pradesh.

4. The centrally uplifted region of Ramgarh Crater is a live evidence of meteorite impact and is an ideal location as per well-established and internationally-approved criteria for meteorite presence.

5. There are several other evidence in Ramgarh structure that will prove the meteorite impact theory.

6. Pushpendra Singh Ranawat, geologists and coordinator of the team, said it was a very rare site in India and has got multi-faceted significance that include geo-heritage aspect.

7. The process for getting the structure recognised has been started and it is almost certain that Ramgarh Crater would soon get recognised by global agency in Canada as 191st crater in the world, third in India and first in Rajasthan.

'SEVA BHOJ YOJNA' INTRODUCED

The Ministry of Culture Government of India has introduced a new scheme namely **'Seva Bhoj Yojna'** for Financial Years 2018-19 and 2019-20. The scheme envisages reimbursing the Central Government share of Central Goods and Services Tax (CGST) and Integrated Goods and Service Tax (IGST) so as to lessen the financial burden of such Charitable Religious Institutions who provide Food/Prasad/Langar (Community Kitchen)/Bhandara free of cost without any discrimination to Public/Devotees.

What

1. The Charitable Religious Institutions such as Temples, Gurudwara, Mosque, Church, Dharmik Ashram, Dargah, Matth, Monasteries etc. which have been in existence for at least five years before applying for financial assistance/grant and who serve free food to at least 5000 people in a month and such institutions covered under Section 10(23BBA) of the Income Tax Act or Institutions registered as Society under Societies Registration Act (XXI of 1860) or as a Public Trust under any law for the time being in force of religious bodies constituted under any Act or institutions registered under Section 12AA of Income Tax Act shall be eligible for grant under the scheme.

2. Ministry of Culture will register the eligible charitable religious institutions for a time period ending with finance commission period and subsequently the registration may be renewed by the Ministry, subject to the performance evaluation of the institutions.

3. All the eligible institutions should be registered with Darpan portal.

MEETING OF GAELF

Shri J P Nadda, Union Minister of Health and Family Welfare inaugurated the 10th meeting of Global Alliance to Eliminate Lymphatic Filariasis (GAELF), in Delhi on 13 June 2018. During his inaugural address, he said that India as a Global leader is committed to eliminating Lymphatic Filariasis (LF) transmission and disease burden so that our future generations are free from Lymphatic Filariasis. He further stated that India will always welcome newer initiatives and research to translate into the Filariasis elimination programme.

What

1. At the event, Shri Nadda also gave away the GAELF awards to 11 countries- Cambodia, Cook Islands, Egypt, Maldives, Marshall Islands, Niue, Sri Lanka, Thailand, Togo, Tonga and Vanuatu, for

Flashback
1. Lymphatic Filariasis (LF) or commonly known as Elephantiasis is one of the oldest and most debilitating neglected disease, which is currently endemic in 73 countries of the world, including India.
2. LF disease is caused mainly by Wuchereria Bancrofti and spread by Culex mosquito. This mosquito grows in dirty accumulated water.
3. The disease affects the poorest population in society, particularly those living in areas with poor water, sanitation and hygiene. LF does not kill the affected people, but may cause permanent disfigurement, reduced productivity and social stigma.
4. GAELF is an alliance of partners from 72 LF endemic national country programmes, NGOs, private sectors, academic and research institutes and international development agencies that assists WHO's Global Programme to Eliminate Lymphatic Filariasis and was formed in year.
5. Since then the meeting are held biennially. The second meeting was held in 2002 in Delhi and India is again hosting the 10th meeting which recognizes that India has highest burden of Lymphatic Filariasis and there is need of taking leadership role to Eliminate lymphatic filariasis.

successfully interrupting the transmission. The Union Health Minister also released the Accelerated Plan for Elimination of Lymphatic Filariasis (LF) 2018 for India.

2. The Union Health Minister further said that the strategy to eliminate Lymphatic Filariasis in India is based on twin pillars of Mass Drug Administration (MDA) once in a year for interruption of transmission i.e no new case and to cater to the patients already afflicted with the disease with morbidity management.

3. Shri Nadda further said that there is also an urgent need for total integration of different departments for mobilizing the community.

WITHDRAWAL OF NALANDA UNIVERSITY (AMENDMENT) BILL, 2013

The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has approved the proposal for withdrawal of Nalanda University (Amendment) Bill, 2013 pending in the Rajya Sabha. The Nalanda University was established on the basis of a Joint Press Statement at the 4th East Asia Summit held in Thailand in October, 2009, which supported its establishment as a non-state, non-profit, secular and self-governing international institution. Subsequently, the Nalanda University Act, 2010 was passed by the Parliament and came into effect from 25th November 2010.

What

1. The present proposal is for moving a motion in Rajya Sabha withdrawing the Nalanda University (Amendment) Bill, 2013 introduced in Rajya Sabha on August 26, 2013 to amend certain existing provisions of the Nalanda University Act, 2010 and add some new provisions.

2. The Governing Board of Nalanda University has since been constituted as per section 7 of Nalanda University Act, 2010 with effect from 21.11.2016 with, the approval of Hon'ble President of India.

Flashback
1. The ancient Nalanda University was established in 427 AD during the reign of Gupta king Sakraditya.
2. **It was one of India's earliest** universities.
3. At its peak, it had attracted scholars and students from near and far with some travelling all the way from Tibet, China, Korea, and Central Asia.

3. The Amendment Bill will need to be discussed with the current Governing Board of Nalanda University before a final decision could be taken on going ahead with the proposed amendments.

4. Further, the current Governing Board may also look into the entire Nalanda University Act, 2010 afresh and suggest amendments/additions wherever necessary.

5. Teaching in the University was inaugurated by Smt.SushmaSwaraj, External Affairs Minister in September 2014. Hon'ble President of India is the Visitor of the University, Dr. Vijay Bhatkar, the Chancellor and Professor Sunaina Singh, is the Vice Chancellor.

6. At present, the University has 116 students in three schools of studies namely School of Historical Studies, School of Ecology and Environment Studies and School of Buddhist Studies. This includes 35 international students from 21 foreign countries.

"RAIL MADAD" LAUNCHED

In line with digital initiatives of Hon'ble PM, Indian Railways has for the first time completely digitized the Complaint management system. Shri Piyush Goyal, Minister of Railways & Coal launched a **new App "Rail Madad" –** An App to expedite & streamline passenger grievance redressal. RPGRAMS (Railway Passenger Grievance Redressal and Management System), which has been developed by Northern Railway (Delhi Division) and **comprises many novel features including 'Rail Madad' –** a mobile App to register complaints by passengers through mobile phone/web.

What

1. It relays real time feedback to passengers on the status of redressal of their complaints- the passenger gets an instant ID through SMS on registration of complaint followed by a customized SMS communicating the action taken thereon by Railway.

2. RPGRAMS integrates all the passenger complaints received from multiple modes (14 offline/online modes currently) on a single platform, analyzes them holistically and generates various types of management reports which enable the top management to continuously monitor the pace of grievance redressal as well as evaluate the performance of field units/ trains/ stations on various parameters viz cleanliness, catering, amenities etc.

3. It also identifies weak/deficient areas and laggard trains/stations for undertaking focussed corrective actions.

Salient features of Rail Madad application are

1. Rail MADAD (Mobile Application for Desired Assistance During travel) registers a complaint with minimum inputs from passenger(option of photo also available), issues unique ID instantly and relays the complaint online to relevant field officials for immediate action.

2. The action taken on complaint is also relayed to passenger through SMS, thus fast tracking the entire process of redressal of complaints through digitisation.

3. Rail MADAD also displays various helpline numbers (e.g., Security, Child helpline etc) and provides direct calling facility for immediate assistance in one easy step

4. All modes of filing complaints including offline and online modes are being integrated on a single platform, therefore the resultant management reports present a holistic picture of weak/deficient areas and enable focused corrective action by officials concerned.

5. The data analysis would also generate trends on various performance parameters of a selected train/station like cleanliness, amenities etc thus making managerial decision more precise and effective.

6. Hierarchy based dashboard/reports will be available for management at Division /Zonal/Railway board level and sent through auto email to every concerned officer weekly

SUCCESSFULLY TEST-FIRES AGNI-5

India 3 June 2018 successfully test-**fired it's** indigenously developed nuclear-capable Long Range Ballistic Missile Agni-5, which has a strike range of 5,000 km, off the Odisha coast. The surface-to-surface missile was launched with the help of a mobile launcher from launch pad-4 of the Integrated Test Range (ITR) at Dr Abdul Kalam Island in the Bay of Bengal. This was the sixth trial of the state-of-the-art Agni-5. The missile covered its full distance during the trial which was a total success.

What

1. Unlike other missiles of the series, Agni-5 is the most advanced with new technologies in terms of navigation and guidance, warhead and engine.

2. Many new technologies developed indigenously were successfully tested in the Agni-5 trial. Navigation systems, very high accuracy Ring Laser Gyro based Inertial Navigation System (RINS) and the most modern and accurate Micro Navigation System (MINS) had ensured the missile reached the target point within few meters of accuracy.

3. The missile has been programmed in such a way that after reaching the peak of its trajectory, it will turn towards the earth and continue its journey towards the **intended target with an increased speed due to the attraction of earth's gravitational** pull.

4. The path has been precisely directed by the advanced onboard computer and inertial navigation system.

5. **As the missile enters the earth's atmosphere**, the atmospheric air rubbing the skin of the missile during the re-entry phase raises the temperature beyond 4,000 degrees Celsius.

6. At present, India has in its armoury the Agni series — Agni-1 with 700 km range, Agni-2 with 2,000 km range, Agni-3 and Agni-4 with 2,500 km to more than 3,500 km range.

7. The first test of Agni-5 was conducted on April 19, 2012, the second on September 15, 2013, the third on January 31, 2015, and fourth on December 26, 2016. The last test was held on January 18, 2018. All the five earlier trials were successful.

EX-MALABAR 2018

Indian Naval Ships Sahyadri, Shakti and Kamorta of the Eastern Fleet under the command of Rear Admiral Dinesh K Tripathi, NM, Flag Officer Commanding, Eastern Fleet currently on an overseas deployment to South East Asia and the Western Pacific, arrived at Guam on 07 June 18 to participate in the 22nd edition of Exercise Malabar, off Guam, USA from 07 to 16 June 2018.

What

1. Exercise Malabar, which started as a bilateral exercise between the US Navy and the Indian Navy in 1992, has evolved over the years with the participation of the Japanese Maritime Self-Defense Force (JMSDF) from 2007.
2. Over the last 26 years, this Maritime Exercise has grown in scope and complexity and aims at increasing the level of mutual understanding, inter-operability and sharing of the best practices between the three navies.
3. Malabar 17 was held in July last year on the Eastern Sea Board of India, off Chennai and Visakhapatnam.
4. It is for the first time that the exercise is being conducted off Guam, a major US Naval Base in the Western Pacific. It would be of interest to note that the US has recently named their Hawaii-based Pacific Command as the U.S. Indo-Pacific Command.
5. The scope of the MALABAR-18 includes professional interactions during the Harbour Phase in Guam from 07 to 10 June 18.
6. The Sea Phase from 11 to 16 June 2018 includes a diverse range of activities at sea including Aircraft Carrier operations, Air Defence, Anti-Submarine Warfare (ASW), Surface Warfare, Visit Board Search and Seizure (VBSS), joint manoeuvres and tactical procedures.
7. The Indian Navy will be represented by the two indigenously designed and built ships, the multi-purpose stealth frigate INS Sahyadri and Anti-Submarine Warfare corvette, INS Kamorta as also by Fleet Tanker INS Shakti and Long Range Maritime Patrol Aircraft P8I.

NISTAR CULMINATES

Indian Naval Ship Sunayana entered Porbandar harbour on 07 Jun 2018 after successfully evacuating 38 Indian Nationals at/ off Socotra Islands during a swift Humanitarian and Disaster Relief Operation (HADR), code named Operation NISTAR.

What

1. The Indian Nationals were stranded for nearly ten days after severe Cyclonic Storm – Mekunu devastated the area around Socotra Island.
2. INS Sunayna was diverted from Gulf of Aden deployment to Socotra Island for search and rescue operations after Indian Navy received a distress call from Directorate General of Shipping and Indian Sailing Vessels Association.
3. The 38 Indian nationals were successfully rescued/ evacuated in the early morning of 03 Jun 2018.
4. All evacuees were safely embarked onboard the ship and were immediately provided with medical care, food, water and telephone facilities. Thereafter, the ship also undertook intensive surface search and aerial reconnaissance of the area to look for any more survivors.
5. Upon entering harbour INS Sunayna was received by Rear Admiral Sanjay Roye, Flag Officer Commanding Gujarat, Daman & Diu Naval Area.
6. After initial briefing about the scheduled disembarkation formalities, all 38 Indian nationals were put through mandatory customs clearance and immigration checks.

7. They were served light refreshments. Post completion of all the administrative formalities, they were handed over to the civil police to facilitate their return to native places.

GOVT OPENS UP LATERAL ENTRY

Paving the way for private sector professionals to take part in policy making and implementation of government programmes, the Centre on 10 June 2018 invited applications for 10 joint secretary-level posts in several departments through lateral entry. The joint secretary post is usually filled through exams conducted by the Union Public Service Commission. An advertisement published in leading newspapers on 10 June 2018 **mentioned the government was looking for 10 "outstanding individuals",** even from the private sector, with expertise in the areas of revenue, financial services, economic affairs, agriculture, cooperation **and farmers' welfare, road transport and** highway, shipping, environment, forests and climate change, new and renewable energy, civil aviation and commerce.

What

1. The NITI Aayog welcomed the move and said the move would bring in a vast number of fresh and vibrant ideas.
2. According to the circular issued by the Department of Personnel and Training, the period of contract will be for three years from the date of commencement of service, extendable up to five years depending upon performance.
3. Joint secretaries report to the secretary/additional secretary in the ministry or department. Applicants have to be atleast 40 years as on July 1, 2018 and graduate from a recognised university or institute.
4. Individuals, with a minimum of 15 years of experience, working at comparable levels in public sector undertakings, autonomous bodies, statutory organisations, universities, recognised research institutes with a minimum of 15 years of experience are eligible to apply.
5. The shortlisted candidates will be called for a personal interaction with the selection committee. The last date for receipt of applications is July 30.

INDIA IN LEAGUE OF EXOPLANET

India has made a place for itself by discovering a sub-Saturn or super-Neptune sized planet, which is about 27 times the mass of Earth and measures six times its radius. With this discovery, the country has joined a select league of countries, which has discovered planets around stars. A team of scientists at Physical Research Laboratory (PRL), Ahmedabad, discovered the planet, which revolves around a sun-like star some 600 light years away, by measuring the mass of the planet using the indigenously designed PRL Advance Radial-velocity Abu-Sky Search (Paras) spectrograph integrated with a 1.2m telescope at PRL's Gurushikar Observatory in Mount Abu.

What

1. **In a post on the Indian Space Research Organisation's website**, scientists said the name of the host star is EPIC 211945201 or K2-236 and the planet will be known as EPIC 211945201b or K2-236b.
2. With a surface temperature of 600°C, the planet was found take 19.5 Earth days to go around the star. Being seven times nearer its star in comparison with the Earth-Sun distance, it is uninhabitable.
3. According to scientists, the discovery is of importance for understanding the formation of such super-Neptune or sub-Saturn planets that are too close to the host star.
4. This is haram and illegal in I-SLAM religion. Now seculars will condemn it because earth is flat.
5. Initially, **it was Nasa's K2 (Kepler2) photometry** that found that the source was a planetary candidate as it was transiting, where the planet body comes in between the star and the observer on Earth.

6. Transiting is the process when the planet goes around the star and blocks a tiny amount of star-light. By measuring the amount of light blocked by the planet, its diameter or size can be measured. In this case NASA data was not sufficient to confirm the planetary nature of the system.

7. Paras spectrograph, an instrument that separates light into a frequency spectrum and records the signal using a camera, made an independent measurement of the mass of the planet.

8. PRL scientists observed the target for about 18 months and made calculations that suggested that elements like ice, silicates and iron content make 60% to 70% of the total mass. This detection was important as it adds to a sparse catalogue of confirmed exoplanets.

NEW SWACHH ICONIC PLACES LAUNCHED

Ten new iconic sites, namely, RaghavendraSwamy Temple (Kurnool, Andhra Pradesh); Hazardwari Palace (Murshidabad, West Bengal); Brahma Sarovar Temple (Kurukshetra, Haryana); VidurKuti (Bijnor, Uttar Pradesh); Mana village (Chamoli, Uttarakhand); Pangong Lake (Leh-Ladakh, J&K); Nagvasuki Temple (Allahabad, Uttar Pradesh); ImaKeithal/market (Imphal, Manipur); Sabarimala Temple (Kerala); and Kanvashram (Uttarakhand) have been taken up under Phase III of the flagship project Swachh Iconic Places (SIP) of the Swachh Bharat Mission.

What

1. The project envisioned by the Prime Minister is being coordinated by Ministry of Drinking Water and Sanitation with the support of State governments and local administration.

2. The consultation is in process for finalising the PSUs/corporates for extending support to new sites as CSR partners. These new sites have joined the 20 iconic places under Phase I & II where special Sanitation work is already underway.

3. Launched in 2016, the Phase I iconic places are: Ajmer Sharif Dargah, CST Mumbai, Golden Temple, Kamakhya Temple, MaikarnikaGhat, Meenakshi Temple, Shri Mata Vaishno Devi, Shree Jagannath Temple, The Taj Mahal and Tirupati Temple.

4. Phase II of Swachh Iconic Places was launched in Nov 2017, and included Gangotri, Yamunotri, Mahakaleshwar Temple, Charminar, Convent and Church of St. Francis of Assissi, Kalady, Gommateswara, BaidyanathDham, Gaya Tirth and Somnath temple.

5. SIP is a collaborative project with three other central Ministries: Ministry of Housing and Urban Affairs, M/o Culture, and M/o Tourism. It also involves local administrations in the concerned States and Public Sector and Private Companies as sponsoring partners.

6. The third phase of SIP was launched at Mana village which is situated close to the Badrinath temple in Uttarakhand. The village, which now becomes a Swachh Iconic Place, is visited by tourists and pilgrims as it houses places of mythological interest.

7. Phase I iconic sites have seen notable initiatives taken up, like improved sewage infrastructure, drainage facilities, installation of Sewage Treatment Plant (STP), improved sanitation facilities, water vending machines (Water ATMs), Solid and Liquid Waste Management (SLWM) set-up, structure restoration, roads maintenance, lighting arrangements, beautification of parks, better transport facilities in approach and access areas besides at the main sites.

8. The annual review of Phase I & II iconic sites for assessing the progress is scheduled at iconic site, Charminar, Hyderabad later this month.

9. Four major SLWM activities in Mana village, including community soak pits, compost pits, separation centre for organic and inorganic waste, and naalis for liquid waste launched with a sanctioned amount of Rs. 26.87 lakhs.

FIRST EVER RAILWAY STATION GETS CII-IGBC PLATINUM RATING

Secunderabad Railway Station has become the first station in the country to be awarded with the CII-IGBC (Indian Green Building Council) Platinum rating. The rating comes under the IGBC Green Railway Stations Rating System.

What

1. The Green Railway Stations rating is a tool to facilitate the adoption of green concepts, thereby reducing the adverse environmental impact arising from operation and maintenance of stations.
2. **The overarching principle of the rating is to enhance commuter's experience**. The rating system facilitates improvement in energy efficiency, use of renewable energy sources, water management and rain water harvesting, health, hygiene and sanitation, green cover and providing universal access.
3. The award of IGBC platinum rating to Secunderabad Railway Station marks a **watershed in the annals of IGBC's green pursuits.**
4. Secunderabad Railway Station will serve as an excellent demonstration green railway station and will encourage other railway stations in the country go the green way.
5. IGBC aspires to facilitate 10 billion sq.ft of green building footprint by 2022 and team Indian Railways will play a major role in achieving this vision.

PINAKA TURNS INTO GUIDED MISSILE

THE indigenous Pinaka rocket system of the Defence Research and Development Organisation (DRDO), known for firing a salvo of 12 rockets in just 44 seconds, is being evolved into a precision-guided missile, with enhanced range and accuracy to hit its targets. The missile, which has completed the initial trial, will undergo developmental trials next month and is expected to be delivered to the Army in two years, said senior DRDO scientists.

What

1. The initial version of the Pinaka rocket was further developed into Pinaka Mark II, which has an enhanced range of 70 to 80 km compared to Mark I, with a range of 40 km.
2. The rocket has been developed by the Armament cluster of the DRDO, with a lead from Pune-based Armament Research and Development Establishment (ARDE). Along with ARDE, the High Energy Material Research Laboratory in Pune and two DRDO establishments in Hyderabad have contributed to the development.
3. Pinaka is originally a 30 to 40 km range rocket in subsequent developments, the range was increased. But with the increased range, the user, the Army, wanted it to be more accurate. So, the guided version of the Pinaka is currently being developed and the first demonstration has taken place one year ago.
4. The parameters, which make Pinaka a guided missile, will be evaluated in these trials. Pinaka per se has already been tested. But the guided Pinaka will be a very **small number compared to the entire inventory of the Pinaka."**
5. The rocket has been named after Pinaka, the bow of Lord Shiva. The Pinaka system is like a quiver of 12 rockets. But the guided version serves a different purpose.
6. In future, the Pinaka and Guided Pinaka will co-exist in the proportion that the user wants. Pinaka will continue as a weapon that can destroy an area and the guided version will add an edge to it when a specific target has to be hit.

INTERNATIONAL

INDIA'S COASTLINE NOW EXTENDS

India and Indonesia have agreed to upgrade their ties to comprehensive strategic partnership as the two countries signed 15 agreements including one on defence cooperation after extensive talks between Prime Minister Narendra Modi and Indonesia President Joko Widodo in Jakarta. The two leaders highlighted potential areas of

cooperation in marine, economy, and socio-culture as well as discussed regional and global issues. **The highlight of Prime Minister Modi's Indonesia visit, strategically speaking, was the military access India got to the country's Sabang port. That adds to our growing** naval heft in the neighbourhood.

With this, India now has access to four important ports abroad:

1. SABANG, INDONESIA: Its position at the mouth of Malacca Strait makes it crucial. Malacca Strait is the main shipping lane between Indian Ocean and Pacific Ocean and one of the busiest sea routes. The deep sea port (deep enough for submarines too) will help counter China's rising maritime influence in the region.

2. DUQM, OMAN: **India gained military access to the port on Oman's southern** coast this year. Duqm, on the northwestern edge of Indian Ocean, provides easy access to Red Sea

3. CHABAHAR, IRAN: This one is close to Pakistan's Gwadar port where China has invested heavily. It also falls on the North-South Transport Corridor (NSTC) that links India to Central Asia and Europe

4. ASSUMPTION ISLAND, SEYCHELLES: On paper, this is purely an infrastructure project. The agreement had to be revised due to political opposition in Seychelles but **broadly it signals a step forward for India's strategic interests**

INDIA REFUSES TO ENDORSE CHINA'S BRI

India was the only country in the eight-nation Shanghai Cooperation Organisation (SCO) on 10 June 2018 which refused to endorse China's ambitious Belt and Road initiativefor which Beijing has signed pacts with nearly 80 countries and international organisations. A declaration issued at the end of the two-day summit of the SCO in Qingdao said Russia, Pakistan, Kazakhstan, Uzbekistan, Kyrgyzstan and Tajikistan have "reaffirmed their support for the Belt and Road Initiative (BRI)" of China.

What

1. The Member States express appreciation for the joint efforts taken towards its implementation, including efforts to coordinate the development of the Eurasian Economic Union and the BRI and call for using the potential of the regional countries, international organisations and multilateral associations to create a broad, open, mutually beneficial and equal partnership in the SCO space.

2. In his address at the summit, Prime Minister Narendra Modi, in an oblique reference to the BRI, said any mega connectivity project must respect sovereignty and territorial integrity of the countries and assured India's full support to initiatives which ensure inclusivity.

3. India has been severely critical of the Belt and Road Initiative (BRI), the pet project of President Xi Jinping, as the $50 billion China Pakistan Economic Corridor, which is part of the BRI, passes through Pakistan-occupied Kashmir (PoK).

4. India says it cannot accept a project that ignores its core concern on sovereignty and territorial integrity.

5. China had unveiled the BRI in 2013 with an aim to link Southeast Asia, Central Asia, the Gulf region, Africa and Europe with a network of land and sea routes.

6. President Xi has already announced that China would invest around $126 billion + for the project. However, there has been suspicion among several countries that the main aim of the project is to expand China's influence globally.

7. According to Chinese officials, around 80 countries and international organisations have already inked pacts with Beijing for the project.

DOCUMENT SIGN AT SINGAPORE SUMMIT

President Donald Trump and Kim Jong Un signed a document on 12 June 2018 **asserting that the US president would provide unspecified "security guarantees" to Kim in exchange for the North Korean leader's "**unwavering commitment to complete denuclearisation of the Korean peninsula.**" The two leaders signed copies of the** document, in Korean and English, at a signing ceremony to conclude their summit in

Singapore -- the first ever meeting of the North Korean and US heads of state. Trump and Kim noted the symbolism of the moment in their document, calling it an "epochal event of great significance in overcoming decades of tensions and hostilities" between the countries.

What

1. The United States and the DPRK commit to establish new U.S.-DPRK relations in accordance with the desire of the peoples of the two countries for peace and prosperity.

2. The United States and the DPRK will join their efforts to build a lasting and stable peace regime on the Korean Peninsula.

3. Reaffirming the April 27, 2018 Panmunjom Declaration, the DPRK commits to work toward complete denuclearization of the Korean Peninsula.

4. The United States and the DPRK commit to recovering POW/MIA remains, including the immediate repatriation of those already identified.

India welcomes Trump-Kim summit
1. India on 12 June 2018 welcomed the historic summit between US President Donald Trump and North Korean leader Kim Jong-un, calling it a positive development.
2. In its reaction, the Ministry of External Affairs (MEA) at the same time hoped that any resolution to the North Korean "peninsula issue" will address New Delhi's concerns about Pyongyang's proliferation linkages with India's neighbourhood, seen as an apparent reference to Pakistan.
3. India has been pressing for a probe into North Korea's proliferation linkages with India's neighbourhood.
4. India welcomes the United States-DPRK (Democratic People's Republic of Korea) Summit held in Singapore. This is a positive development. India has always supported all efforts to bring about peace and stability in the Korean Peninsula through dialogue and diplomacy, the MEA said in a statement.

5. The United States and the DPRK commit to hold follow-up negotiations, led by the U.S. Secretary of State, Mike Pompeo, and a relevant high-level DPRK official, at the earliest possible date, to implement the outcomes of the U.S.-DPRK summit.

6. The document also made no mention of the international sanctions that have **crippled North Korea's economy** for pursuing its nuclear weapons programme. Nor was there any reference to finally signing a peace treaty.

7. North Korea and the United States were on opposite sides in the 1950-53 Korean War and are technically still at war, as the conflict, in which millions of people died, was concluded only with a truce. But the joint statement did say the two sides had agreed to recovering the remains of prisoners of war and of those missing in action and repatriating them.

NEW PM OF SPAIN

Spain's Socialist chief Pedro Sanchez was sworn in as prime minister on 2 June 2018, a day after ousting Mariano Rajoy in a historic no-confidence vote sparked by fury over corruption woes afflicting the conservative leader's party. Sanchez, a 46-year-old economist with no government experience who has made a spectacular comeback to the frontline of politics, took the oath of office before King Felipe VI in the Zarzuela Palace near Madrid.

What

1. The Socialist leader must still name his cabinet and it is only when their names are published in an official government journal in the coming days that he will fully assume his functions.

2. His ousting of EU-friendly Rajoy, a 63-year-old veteran politician who had been in power since 2011, comes at a time of political instability in Europe as Italy brings in a new eurosceptic anti-establishment government.

3. But even if he will head up a minority government with support of a hodgepodge of disparate parties like far-left Podemos and Catalan separatists, Sanchez has promised his "main priority" will be to respect Madrid's deficit reduction commitments to the European Union.

> **Flashback**
> 1. Spain is located on the Iberian peninsula, of which it occupies 80% (the remaining 20% being Portugal), in the southwest of Europe.
> 2. To the north are France and Andorra with the Pyrenees as a natural border.
> 3. Spain is the third country in Europe as for it's size and fifth as for population numbers.
> 4. Spain counts more than 40 million people, most of them living in the cities or along the Costa's. Spain is divided into 19 autonomous areas, including the areas outside the Iberian Peninsula.
> 5. The most prosperous areas are Madrid, Catalonia and the Basque Country. Extremadura is the poorest area of Spain, adjacent to Portugal, Andalucia, Castilla La Mancha and Castillia y Léon.
> 6. There are 5 large mountain ranges which cross the country and about 50% of the land lies considerably higher than sea level.

SISSI SWORN IN FOR A SECOND TERM

Egyptian President Abdel-Fattah el-Sissi was sworn in for a second four-year term on 2 June 2018 after being re-elected in a vote earlier this year in which he faced no serious challengers. El-Sissi took the oath of office before parliament amid tight security enforced throughout Cairo.

What

1. After the oath, artillery delivered a celebratory 21-gun salute. Mohamed Khalil was shot in the knee by Israeli forces during the Great March of Return protests in Gaza. He now calls on Messi and Argentina to boycott Israel and not participate in the friendly match.

> **Flashback**
> 1. Egypt's official name is the Arab Republic of Egypt. The country is situated in the north-east part of Africa, although the Sinai Peninsula forms a land bridge with south-west Asia, and so Egypt is also called a Middle-East country.
> 2. Therefore it's transcontinental country, which helps it in being a major power in Africa, the Middle-East, the Mediterranean, and the Muslim world.
> 3. In Arabic, Egypt is called Miṣr, and in ancient times the country was known as Kemet, or the black land, due to the alluvial soil deposited during the Nile's annual flooding.
> 4. This yearly event gave Egypt the fertile land that enabled it to expand along the length of the river, especially in the delta where many various crops were, and still are, harvested.

2. El-Sissi won more than 97 per cent of the vote in the March election, with turnout of more than 40 per cent. He faced no serious challenger, after a string of potentially strong candidates withdrew under pressure or were arrested.

3. El-Sissi was first elected in 2014, nearly a year after leading the military overthrow **of Egypt's first freely elected president, the Islamist Mohammed Morsi, amid mass** protests against his divisive rule.

FIRST LONG-TERM LNG CARGO ARRIVES

As part of India's new energy sourcing strategy, the first Russian long-term liquefied natural gas (LNG) cargo arrived at the Dahej LNG terminal in Gujarat. This 3.4 trillion British thermal unit (TBtu) of cargo followed the first US long-term LNG cargo from the Houston-based Cheniere Energy Inc that arrived in India in March. Indian firms have inked long-term LNG contracts totalling 22 million metric tonnes per annum (mmtpa), with the country consuming 145 million standard cubic meters a day (mmscmd) **of gas. India, the world's fourth**-largest LNG importer, has also been trying to leverage the glut in global LNG supplies to renegotiate its contracts.

What

1. The first LNG cargo under the long term contract between GAIL and Gazprom Marketing & Trading Singapore (GMTS) of Russia arrived at the LNG terminal of Petronet LNG Ltd (PLL) in Dahej, Gujarat.
2. Major energy consumers such as India are seeking better prices as new natural gas suppliers such as Mozambique, Tanzania, Egypt, Israel, Canada and Cyprus expected to enter the LNG market. India imported 19 million metric tonnes of LNG in 2016-17.
3. The starting of LNG imports from Russia has added a new dimension to Indo-Russian **bilateral relations, particularly in the oil and gas sector, said India's petroleum** minister Dharmendra Pradhan.
4. Indian firms have invested $10 billion in acquiring stakes in hydrocarbon assets in **Russia. Also, a consortium led by Russia's Rosneft PJSC acquired Essar Oil Ltd for** nearly $13 billion.
5. LNG imports from Russia will go a long way in mitigating risks arising out of geopolitical uncertainties.
6. This comes at a time when there has been growing uncertainty in the global energy market with US President Donald Trump pulling his country out of a 2015 historic accord with energy-**rich Iran that was inked to curb the Islamic Republic's nuclear** programme in return for ending sanctions.
7. GAIL became the first Indian public-sector company to source LNG from Russia on a long term. It has contracted to import 2.5 mmtpa of LNG from Gazprom Marketing and Trading Singapore on a long term basis.
8. **Gas accounts for around 6.2% of India's** primary energy mix as compared to a **global average of 24%. The government plans to increase this to 15% by 2030. India's** gas demand is expected to be driven by the fertiliser, power, city gas distribution and steel sectors.

UN SIGN PACT FOR ROHINGYA RETURN

Myanmar and UN agencies signed an agreement that might eventually lead to the return of some of the 700,000 Rohingya Muslims who fled brutal persecution by the country's security forces and are now crowded into makeshift camps in Bangladesh.

What

1. The memorandum of understanding signed on 6 June 2018 promises to establish a "framework of cooperation" that aims to create the conditions for "voluntary, safe, dignified and sustainable" repatriation of Rohingya refugees.
2. Myanmar's security forces have been accused of rape, killing, torture and the burning of Rohingya homes. The UN and USA have described the army crackdown that began in August last year as "ethnic cleansing".
3. Myanmar and Bangladesh agreed in November to begin repatriating Rohingya, but refugees feared their lives would be at risk in Myanmar without international monitoring.

NEW SATELLITE TO BRI COUNTRIES

China has successfully launched a new meteorological satellite to improve the accuracy of weather forecasting and provide better meteorological services free of cost to countries participating in its ambitious, multi-billion dollar Belt and Road Initiative. The

massive Belt and Road Initiative (BRI) seeks to build rail, maritime and road links from Asia to Europe and Africa in a revival of ancient Silk Road trading routes.

What

1. The issues related to the BRI, earlier known as One Belt One Road (OBOR), have been a major bone of contention between India and China as one portion of the corridor passes through Pakistan-occupied Kashmir.

2. The Fengyun-2H satellite was launched from the Xichang Satellite Launch Centre in China's southwest Sichuan province, state-run Xinhua news agency reported.

3. Officials said the satellite would provide data free of cost to the countries participating in the BRI in which the USD 50 billion China Pakistan Economic Corridor (CPEC) is a flagship project.

4. The Chinese Ministry of Commerce has said recently that China has inked trade deals worth USD 390 billion with the countries participating in its BRI in the first four months of this year.

5. China says, five years on the BRI - a pet initiative of Chinese President Xi Jinping - over 100 countries and international organisations have supported and got involved in this initiative.

6. Critics say that the BRI, which aims to build trade and infrastructure networks connecting economies around the globe along the ancient Silk Route, is aimed at furthering its influence.

7. It also attracted criticism that BRI projects entailing huge loans with less transparency are leaving smaller countries with debt problems creating a degree of dependence on China as a creditor.

8. China has acquired Sri Lanka's Hambantota port on 99 years' lease as a debt swap.

9. The Fengyun-2H satellite which provides weather data, officials say will cover all the territory of China, as well as countries along the BRI, the Indian Ocean and most African countries, Zhao Jian, deputy director of the Department of System Engineering of China National Space Administration (CNSA) said.

10. This new satellite could potentially be military spy satellite too. Never heard of free lunches these days and that too from Chinese who have already snared countries with huge piling debts.

11. China will offer data of the Fengyun series free to BRI countries and Asia-Pacific Space Cooperation Organisation (APSCO) member countries.

UN GENERAL ASSEMBLY ELECTS NEXT PRESIDENT

The **UN General Assembly overwhelmingly elected Ecuador's Foreign Minister** Maria Fernanda Espinosa Garces as its next president, making her only the fourth woman to lead the 193-member world body in its 73-year history. She defeated another woman **— Honduras' UN Ambassador Mary Elizabeth Flores Flake** — by 128-62 with two abstentions in the secret-ballot vote. President Trump's decision to cancel the Eagles' White House visit left some residents surprised.

What

1. The world body controls the UN budget, adopts treaties, addresses global issues from poverty to climate change, and passes numerous resolutions that while not legally binding almost always reflect global opinion.

2. It is also the U.N. organ where countries large and small can speak and the scene of the annual gathering of world leaders in September.

3. The selection of the assembly president follows a regional rotation mandated by the world body, and it was the turn of Latin America and the Caribbean to preside over **the next yearlong session which starts just before September's global gathering.**

4. **By tradition, the UN's regional groups usually nominate a single candidate who is** then rubber-stamped by the assembly. But this year the election was contested — as it was in 1991, 2012 and 2016 — according to the UN, because Latin American **countries couldn't agree on a nominee.**

5. Espinosa Garces noted after her victory that she will also be the first woman from Latin America and the Caribbean to preside over the assembly starting in September.

6. For the first time this year, assembly president Lajcak decided to follow a new practice that was also used to choose secretary-general Guterres.

7. Espinosa Garces will join the short list of female assembly presidents that began in 1953 with Indian diplomat Vijaya Lakshmi Pandit, the sister of Prime Minister Jawaharlal Nehru and aunt of later Prime Minister Indira Gandhi.

8. She was followed by Angie Elisabeth Brooks of Liberia in 1969 and Sheikha Haya Rashed Al Khalifa of Bahrain in 2006.

INDIA, CHINA SIGNED 2 MOUS

In a significant move, China on 9 June 2018 agreed to provide India hydrological data of the Brahmaputra River in flood season, months after Beijing stopped the practice, crucial to predict floods. The two countries also signed an agreement under which China has agreed to import non-Basmati rice from India which is likely to bridge the ballooning trade deficit to a certain extent.

What

1. The two Memorandums of Understandings (MoUs) were signed after Prime Minister Narendra Modi held detailed discussions with Chinese President Xi Jinping on bilateral and global issues which will add further vigour to the India-China friendship after their informal summit in Wuhan.

2. Modi arrived in the picturesque coastal city of China's Shandong province on a two-day visit to attend the annual summit of the Shanghai Cooperation Organisation (SCO).

3. Last year, China had stopped sharing data soon after the 73-day long stand-off between Indian and Chinese troops at Dokalam over Chinese military's plans to build a road close to India's Chicken Neck corridor connecting North-Eastern states.

4. The first MoU was inked between China's Ministry of Water Resources and India's Ministry of Water Resources, River Development and Ganga Rejuvenation upon provision of hydrological information of the Brahmaputra River in flood season by China to India.

5. The agreement enables China to provide hydrological data in flood season from May 15 to October 15 every year. It also enables the Chinese side to provide hydrological data if water level exceeds mutually agreed level during non-flood season.

6. China, an upstream country, shares the scientific study of the movement, distribution and quality of water data for the river.

7. Originating from Tibet, the Brahmaputra is one of the major rivers in China. From Tibet it flows down to India and later enters Bangladesh where it joins the Ganga.

8. The second MoU was signed between China's General Administration of Customs and India's Department of Agriculture, Cooperation and Farmers Welfare on Phytosanitary requirements for exporting rice from India to China, one of the world's biggest rice markets.

9. The 2006 Protocol on Phytosanitary Requirements for Exporting Rice from India to China has been amended to include the export of non-Basmati varieties of rice from India. At present, India can only export Basmati rice to China.

10. The pact on non-Basmati rice may help in addressing India's concerns over widening trade deficit which has been in China's favour.

11. China has been promising to address the issue of trade deficit with India which has been seeking a greater market access for its goods and services in China.

12. Trade deficit with China stood at USD 36.73 billion during April-October this fiscal.

13. India's trade deficit with China has marginally dipped to USD 51 billion in 2016-17 from USD 52.69 billion in the previous fiscal.

ECONOMY

A GROUP CONSTITUTES IN SEZ POLICY

The Centre has constituted a group of eminent persons headed by **Bharat Forge's** Baba Kalyani to study the Special Economic Zones (SEZ) policy of the country and suggest measures to make it more relevant for exporters and compatible with World Trade Organisation (WTO) norms. The SEZ Act was passed in 2005 giving tax incentives to investors, but investments in the zone were subsequently brought under the ambit of Minimum Alternate Tax and Dividend Distribution Tax leading to a dwindling in flow of money into the SEZs.

What

1. The group will evaluate the SEZ policy, suggest measures to cater to the needs of exporters in the present economic scenario and make the SEZ policy WTO compatible, suggest course correction in SEZ policy, make comparative analysis of the SEZ scheme and dovetail the SEZ policy with other similar schemes.

2. Some of the incentives offered under the SEZ policy have been challenged at the WTO by the US and may need to be replaced by other sops. The group is required to submit **its recommendation in three months' time.**

3. Other members of the group include Ravindra Sannareddy from Sricity SEZ, Neel Raheja from K. Raheja Group, Arun Misra from Tata Steel SEZ, Anita Arjundas from Mahindra Life Space Developer, Ajay Pandey from GIFT City SEZ, Srikanth Badiga from Hyderabad Phoenix Developer, Principal Secretaries (Industries) of Gujarat, Maharashtra, Telangana, Andhra Pradesh, Tamil Nadu & Karnataka and Commerce Department officials.

4. There are 223 operational SEZs in the country and the total investments made in the zones so far is 18,878 crore.

OUTCOME BASED AUDITS

The Comptroller and Auditor General is embarking on its third generation audit by introducing outcome based audits **very soon. The government's official auditor** first started with compliance audits of various government departments, which it carried on for decades looking into the correctness of expenditure and accounts. Then, in the past few years, it had started conducting performance audits which looked into implementation of a policy and its revenue implications.

What

1. In its outcome based audit, the auditor **will assess the results of government's** various policies and schemes. In a Performance audit you may not measure the learning outcomes.

2. For instance, an outcome-based audit on primary and secondary school expenditures will look into not only implementation of the scheme but will also assess whether the expenditure in school education has borne the intended results such as the number of students passing with distinctions, or those qualifying for IITs or other such measurable achievements.

3. **"Right now, finding such data is a challenge, but the government can is**sue instructions to maintain such information in future, or a third party survey can assist in conducting such studies.

4. Whether the pollution level in Ganga has come down as a result of the Namami Ganga programme and if the open defecation has been brought down as a result of the Swacch Bharat Abhiyan- all these can be the subject matters of study in the outcome audits.

5. The official pointed out that the auditor continues to take up relevant issues for auditing. Currently, it is conducting audits of the go**vernment's implementation of the** Goods and Services Tax regime and its GST Network (GSTN).

6. The top government auditor is also not averse to conducting more performance audits like the 2G spectrum allocation and the coal block allocations as these audits have

brought the organization more credibility in highlighting the loopholes in government policies and their revenue implications.

ANALYTICAL TOOL UNDER FCRA

Union Home Minister Shri Rajnath Singh launched an Online Analytical Tool to facilitate closer monitoring of the flow and utilisation of foreign contributions received by various organisations registered or permitted under the Foreign Contribution (Regulation) Act, 2010. This web-based tool enables decision-makers in various Departments of Government to scrutinise source of foreign funds and their actual use in India. It gives them capacity to take data-driven and evidence-based decisions regarding the compliance of the provisions of the FCRA, 2010.

What

1. It has analytical features to conduct big data mining and data exploration. Its dashboard will be integrated with the bank accounts of the FCRA-registered entities through the Public Financial Management System for updation of transactional data on a real-time basis.

2. There are approximately 25,000 active organisations registered under The FCRA, 2010. Foreign Contributions worth Rs.18,065 crores were received by such organisations from foreign donors for various social, cultural, economic, educational and religious activities during financial year 2016-17.

3. Each FCRA-NGO conducts multiple financial transactions in receiving and spending the foreign contribution.

4. Therefore, there are hundreds of thousands of such transactions annually which can be monitored effectively through this tool. It will, therefore, help the stakeholders in Government to better regulate acceptance and utilisation of foreign contributions.

INDIAN LAG BEHIND IN SOCIAL INVESTMENTS

Indian investors are lagging behind their global as well as Asian counterparts in terms of social investments as the country does not have a robust culture of philanthropy that redirects billions of dollars to societal needs, Asian Venture Philanthropy Network (AVPN) said. According to Singapore-based AVPN, despite Asia's economic prosperity, the region is falling behind on nearly two-thirds of its sustainable development goals (SDG) and some of the top concerns for the region include -- inequality, environmental preservation and climate action.

What

1. AVPN is holding a gathering of social investors in Asia on June 4-7, 2018, at Suntec City, Singapore, that will bring together 800 of the world's leading social investment players from over 40 countries.

2. Moreover, there is a funding gap for early stage social enterprises. Besides, only 1 per cent of funds are leveraging environmental, social and governance (ESG) practices in Asia.

3. There is a definite scope of looking at increasing investing as per ESG guidelines. T

4. The Singapore Stock Exchange has signed a UN agreement on sustainable investing and that's one of the reasons why companies that are listed on the Singapore Stock Exchange are expected to make an ESG declaration.

5. Moreover, there is also a problem of income inequality in India. Going by statistics, 22 per cent of India's national income is accrued by the 1 per cent of its population.

6. But India does not have a robust culture of philanthropy that redirects billions of dollars to societal needs. The top 1 per cent in India has only begun to donate strategically.

IDEA CELLULAR GETS DOT APPROVAL

Paving the way for the approval of Idea Cellular and Vodafone India merger, the department of telecommunications (DoT) has cleared the former's proposal to

increase foreign direct investment (FDI) limit to 100 per cent in the merged entity. The approval is for total foreign investment up to 100 per cent in Idea Cellular and total indirect FDI in its relevant subsidiaries, Aditya Birla Telecom and Idea Cellular Infrastructure Services.

What

1.   The FDI approval is a milestone in the merger of the two companies, creating the country's largest telecom operator named Vodafone Idea.

2.   The two parties had already secured other statutory approvals from the Securities and Exchange Board of India, National Stock Exchange, BSE, Competition Commission of India and National Company Law Tribunal (NCLT), Mumbai and NCLT, Ahmedabad.

3.   The merger is expected to complete in the first half of this year, subject to the final approval from the DoT.

4.   The top operator will have a revenue market share of around 37 per cent and around 433 million subscribers.

5.   The companies had earlier this year announced a restructuring of the leadership team for the merged business that would have Kumar Mangalam Birla at the helm as the non-executive chairman.

6.   Vodafone Chief Operating Officer (India) Balesh Sharma would be chief executive officer of the merged entity.

SCIENCE AND TECHNOLOGY

BIRTH OF BLACK HOLE

The merger of two neutron stars that generated gravitational waves detected last year may have led to the birth of the lowest mass black hole ever found, say scientists who analysed data from **NASA's Chandra X**-ray Observatory. The data was taken in the days, weeks, and months after the detection of gravitational waves by the Laser Interferometer Gravitational Wave Observatory (LIGO) **and gamma rays by NASA's F**ermi mission on August 17, 2017.

What

1.   While nearly every telescope observed this source, known officially as GW170817, X-rays from Chandra are critical for understanding what happened after the two neutron stars collided.

2.   From the LIGO data astronomers have a good estimate that the mass of the object resulting from the neutron star merger is about 2.7 times the mass of the Sun?

3.   This puts it on a tightrope of identity, implying it is either the most massive neutron star ever found or the lowest mass black hole ever found. The previous record holders **for the latter are no less than about four or five times the Sun's mass.**

4.   If the neutron stars merged and formed a heavier neutron star, then astronomers would expect it to spin rapidly and generate a very strong magnetic field. This, in turn, would have created an expanding bubble of high-energy particles that would result in bright X-ray emission.

5.   Instead, the Chandra data show levels of X-rays that are a factor of a few to several hundred times lower than expected for a rapidly spinning, merged neutron star and the associated bubble of high-energy particles, implying a black hole likely formed instead.

6.   If confirmed, this result shows that a recipe for making a black hole can sometimes be complicated. In the case of GW170817, it would have required two supernova explosions that left behind two neutron stars in a sufficiently tight orbit for gravitational wave radiation to bring the neutron stars together.

NEW MATERIAL HELPS TO REGENERATE ENAMEL

Scientists have developed materials that help dental enamel regenerate, and could be used to prevent and treat tooth decay or sensitivity. Enamel, located on the outer part of our teeth, is the hardest tissue in the body and enables our teeth to function for a large part of our lifetime despite biting forces, exposure to acidic foods and drinks and extreme temperatures. This remarkable performance results from its highly organised structure.

What

1. The materials could be used for a wide variety of dental complications such as the prevention and treatment of tooth decay or tooth sensitivity - also known as dentin hypersensitivity.

2. This is exciting because the simplicity and versatility of the mineralisation platform opens up opportunities to treat and regenerate dental tissues.

3. The mechanism that has been developed is based on a specific protein material that is able to trigger and guide the growth of apatite nanocrystals at multiple scales - similarly to how these crystals grow when dental enamel develops in our body.

4. This structural organisation is critical for the outstanding physical properties exhibited by natural dental enamel.

5. The key discovery has been the possibility to exploit disordered proteins to control and guide the process of mineralisation at multiple scales.

NEW CLUES OF LIFE FOUND ON MARS

NASA's Curiosity rover has discovered "tough" organic molecules in three-billion-year-old sedimentary rocks near the surface of Mars — a finding that suggests the planet could have supported ancient life. It has also found seasonal variations in the levels of methane in the atmosphere, a discovery that has relation to the search for current life on the Red Planet.

What

1. With these new findings, Mars is telling us to stay the course and keep searching for evidence of life, said Thomas Zurbuchen, Associate Administrator for the Science Mission Directorate at NASA Headquarters, in Washington.

2. Bill Ingalls' camera melted while he was shooting the launch of SpaceX Falcon 9, which carried twin satellites in a joint mission called GRACE-FO by NASA and GFZ.

3. Organic molecules contain carbon and hydrogen, and also may include oxygen, nitrogen and other elements. While commonly associated with life, organic molecules also can be created by non-biological processes and are not necessarily indicators of life.

Flashback
1. Curiosity is a car-sized rover designed to explore Gale Crater on Mars as part of NASA's Mars Science Laboratory mission (MSL).
2. Curiosity was launched from Cape Canaveral on November 26, 2011 aboard the MSL spacecraft and landed on Aeolis Palus in Gale Crater on Mars on August 6, 2012.
3. The Bradbury landing site was less than 2.4 km (1.5 mi) from the center of the rover's touchdown target after a 560 million km (350 million mi) journey.
4. The rover's goals include an investigation of the Martian climate and geology; assessment of whether the selected field site inside Gale Crater has ever offered environmental conditions favorable for microbial life, including investigation of the role of water; and planetary habitability studies in preparation for human exploration.

4. Curiosity has not determined the source of the organic molecules," said Jen Eigenbrode of NASA's Goddard Space Flight Center in Greenbelt, Maryland, who is lead author of one of the two new Science papers.

5. Methane previously had been detec**ted in Mars' atmosphere in large,** unpredictable plumes. This new result shows that low levels of methane within Gale Crater repeatedly peak in warm, summer months and drop in the winter every year.

6. This is the first time we have seen something repeatable in the methane story, **so it offers us a handle in understanding it," said Chris Webster of NASA's Jet** Propulsion Laboratory (JPL) in Pasadena, California, lead author of the second paper.

7. Launched in 2011, Curiosity was designed to assess whether Mars ever had an environment able to support small life forms called microbes.

WORLD'S FIRST PSYCHOPATH AI

Norman, an artificial intelligence (AI) system created by the Massachusetts Institute of Technology (MIT), only thinks about murder. The reason: Norman has been specifically trained as a psychopath. Norman, like other AI-**bots we have seen in today's** age, is trained via machine learning methods where the AI computer system is fed a large chunk of a particular data-**set. In Norman's case, this data**-set included "extended exposure to the darkest corners of Reddit**," with violent image captions and thus it** explains the psychopathic tendencies of the AI.

What

1. Bias in data-sets can cause AI to go awry. We saw that most clearly in the case of **Microsoft's Tay, which pic**ked up the worst of humanity from Twitter thanks to the racists tweets that were tweeted to the bot.

2. These tweets formed the data-set from which Tay learnt its conversations, and soon had to be shut down. Tay was introduced in March 2016, and in less than a day had gone rogue.

3. Anorak is a platform that uses machine learning to tailor advice to those seeking life insurance.

4. **With Norman's case,** MIT is specifically training the AI with these dark, violent image captions from Reddit. The reason: they want to show what happens when an AI models is deliberately fed with the wrong data or when there is a bias in the data-set being used to train the model.

5. **In Norman's case, the researchers relied on images captions from an** infamous subreddit (the name was not revealed due to its graphic content), which is dedicated **to documenting "the disturbing reality of death. So Norman's primary source of data** was these violent image captions. MIT also says no real image of a real person dying was used in this experiment.

6. Across the inkblot tests, Norman was shown to have negative tendencies compared to its standard AI counterpart.

NASA FLIES UNMANNED AIRCRAFT

NASA has for the first time successfully flown its large remotely-piloted Ikhana aircraft in the public airspace without a safety chase airplane, said the US space agency. This historic flight moves the US one step closer to normalising unmanned aircraft operations in the airspace used by commercial and private pilots. Flying these large remotely-piloted aircraft over the US opens the doors to services such as monitoring and fighting forest fires to providing new emergency search and rescue operations.

What

1. This is a huge milestone for our Unmanned Aircraft Systems Integration in the National Airspace System project team, **said Ed Waggoner, NASA's Integrated Aviation** Systems Program director.

2. Flights of large craft like Ikhana, have traditionally required a safety chase aircraft to follow the unmanned aircraft as it travels through the same airspace used by commercial aircraft.

3. The US Federal Aviation Administration (FAA) granted NASA special permission to conduct this flight under the authority of a Certificate of Waiver or Authorization on March 30.

4. **The certificate permitted Ikhana's pilot to rely on the latest Detect and A**void technology, enabling the remote pilot on the ground to see and avoid other aircraft during the flight.

5. The flight took off from Edwards Air Force Base in California and entered controlled air space almost immediately.

6. Ikhana flew into the Class-A airspace, where commercial airliners fly, west of Edwards at an altitude of about 20,000 feet.

7. During the return, the pilot began a gentle descent over the city of Tehachapi, California, into Class E airspace - about 10,000 feet -where general aviation pilots fly.

8. The pilot initiated an approach into Victorville airport at 5,000 feet, coordinating in real time with air traffic controllers at the airport.

9. After successfully executing all of these milestones, the aircraft exited the public airspace and returned to its base at Armstrong.

MISCELLANEOUS

INDIA TO HAVE ITS 1ST POLICE MUSEUM

India will soon have its first national police museum as the central government has decided to establish the unique facility in Lutyens' Delhi, a senior official said on 10 June 2018. The museum - depicting the history, artefacts, uniforms and gear of central and state police forces - will come up as an underground facility in the premises of the national police memorial in Chanakyapuri area of the national capital.

What

1. The museum is expected to be inaugurated on October 21 (Police Commemoration Day) at the hands of either Prime Minister Narendra Modi or Home Minister Rajnath Singh.

2. The project is being steered by the Intelligence Bureau and according to the records accessed by PTI, IB Director Rajiv Jain had convened a meeting on the matter last month to expedite the process.

3. While some state police forces and paramilitary forces have their small museums, this is the first time that the country will have a national-level permanent exhibition on policing subjects. It will also act as a repository of knowledge for researchers on policing subjects.

4. The central armed police forces (CAPFs), the central police organisations and the state police forces have been asked to collect their historical documents, items, police related gazette notifications and unique weapons and uniforms so that it can be displayed at the museum.

5. As per the records, the items sought to be put in the first-ever national police museum will include brass insignia, ceremonial and operational head gears and uniforms, batons, belts, distinctive photographs of dog squads, mounted columns and old copies of the Indian Police Act.

6. Some other items include women in policing, creation of maiden 'mahila' battalions, news clippings of historical significance, the very old and basic police communication and wireless equipment, flying squads and police medals and decorations.

7. A memorial service is conducted every year on October, 21 at this site to pay tributes to the men and women in khaki who laid down their lives at the altar of duty.

STRATEGY ON AI RELEASED

NITI Aayog has identified five sectors -- healthcare, agriculture, education, smart cities and infrastructure and transportation -- to focus its efforts towards implementation of artificial intelligence (AI) to serve societal needs. The government's think-tank on 4 June 2018 unveiled its discussion paper on national strategy on AI which aims to guide research and development in new and emerging technologies.

What

1. AI refers to the ability of machines to perform cognitive tasks like thinking, perceiving, learning, problem solving and decision making.

2. The paper focuses on how India can leverage the transformative technologies to ensure social and inclusive growth in line with the development philosophy of the government.

3. The paper gives much disruptive suggestion including one to utilise market place models for data, annotation and deployable solutions in AI. We need to democratise access to and development of this technology.

4. According to the NITI Aayog paper, while AI can increase access and affordability of quality healthcare; in agriculture, it can contribute towards enhancing farmers' income, increase farm productivity and reduce wastage.

5. The paper added the technology can also improve access and quality of education, help build efficient infrastructure for the burgeoning urban population and develop smarter and safer modes of transportation to address traffic and congestion problems.

6. Technology disruptions like AI are once-in-a-generation phenomenon, and hence large-scale adoption strategies, especially national strategies; need to strike a balance between narrow definitions of financial impact and the greater good.

7. The strategy should strive to leverage AI for economic growth, social development and inclusive growth, and finally as a 'garage' for emerging and developing economies.

8. The paper has also identified some barriers that can prevent India from "truly reaping the benefits of deploying AI at scale.

9. These barriers include lack of broad based expertise in research and application of AI, absence of access to intelligent data, high resource cost and low awareness for adoption of the technology and privacy and security issues.

10. The paper has proposed a two-tiered structure to address India's AI research aspirations with setting up of a Centre of Research Excellence (CORE) and an International Centres of Transformational AI (ICTAI).

11. While the CORE will be focused on developing better understanding of existing core research and pushing technology frontiers through creation of new knowledge, the ICTAI will develop and deploy application-based research.

'Sandbox' unveils

In its efforts to develop the financial capital into a fintech hub, the Maharashtra Government has announced the **opening up of a 'sandbox' to boost start**-ups. Maharashtra, the first State to have a dedicated fintech policy, is also planning to **have a dedicated 'Fintech Officer' in the Department of Information Technology,** Chief Minister Devendra Fadnavis said at the inauguration of the Mumbai Fintech Festival.

What

1. In this sandbox, all the start-ups will be welcome. They can register, they can open their APIs (application programming interface) and banks can consume.

2. It can be noted that in a report released in February, a Reserve Bank panel had **recommended introducing a "regulatory sandbox" to foster financial technology** innovation.

3. Generally, sandbox is seen as a safe zone to test financial innovation which sees a limited rollout of new products to select customers.

4. Srinivas exhorted banks and non-bank lenders to open their APIs in order to help the start-ups in the State. The Government is also starting a virtual fintech registry, the senior bureaucrat said.

5. **Maharashtra's efforts are aimed at creating the entire eco**system which help the fintech industry will flourish, starting with four accelerators.

6. As part of the fintech policy, the State has given sops like tax benefits, financial incentives, cheaper electricity and Internet connectivity for the industry players.

7. The State had held a blockchain conference last year and lenders like SBI, YES Bank and Kotak Mahindra Bank have already entered into specific tie-ups on that front.

Global action plan on physical activity

World Health Organisation's (WHO) director-general Tedros Adhanom Ghebreyesus **has launched the new** "WHO Global action plan on physical activity and health 2018-2030: More active people for a healthier world. Being active is critical for health. But in

our modern world, this is becoming more and more of a challenge, largely because our cities **and communities aren't designed in the right ways; we need leaders at all levels to help** people to take the healthier step. This works best at city level, where most responsibility lies for creating healthier spaces.

What

1. Worldwide, one in five adults, and four out of five adolescents (11-17 years), do not do enough physical activity. Girls, women, older adults, poorer people, people with disabilities and chronic diseases, marginalized populations, and indigenous people have fewer opportunities to be active.

2. Regular physical activity is key to preventing and treating non-communicable diseases (NCDs) such as heart disease, stroke, diabetes and breast and colon cancer. NCDs are responsible for 71% of all deaths globally, including for the deaths of 15 million people per year aged 30 to 70.

3. The action plan shows how countries can reduce physical inactivity in adults and adolescents by 15% by 2030. It recommends a set of 20 policy areas, which combined, aim to create more active societies through improving the environments and opportunities for people of all ages and abilities to do more walking, cycling, sport, active recreation, dance and play.

4. It also calls for support to, for example, training of health care workers and other professionals, stronger data systems, as well as use of digital technologies.

India's first lithium-ion cell manufacturing plant

In line with the government's "Make in India" initiative, Munoth Industries, promoted by Chennai-based Munoth group, announced on 13 June 2018 the setting up of **India's first lithium**-ion cell manufacturing plant in Tirupati, Andhra Pradesh, for the mobile industry. The plant will be set up with an outlay of Rs 799 crore in three phases, Munoth Industries said, adding that the plant will provide employment opportunities to 1,700 people. The first phase of the project will be operational by March 2019 and the second and third phases by 2022, the company added.

What

1. The setting up of **India's first lithium**-ion cell manufacturing plant for mobile industry will improve competitiveness.

2. It will create more value addition to the country and eventually it will drive down the pricing.

3. This core component plant will catalyse establishment of an entire eco-system of forward and backward integration — forward integration to bring in through design houses, tooling facilities and many SME startups besides catering to the mobile battery pack industry as an OEM (original equipment manufacturer) supplier.

4. The current consumption of batteries is estimated to be around 400-450 million per annum for mobile phones, including replacement, and about 100 million per annum for power banks.

5. It has received all the required approvals from Tirupati Urban Development Authority (TUDA) and Ministry of Electronics and IT (MeitY) on M-SIPS (modified special incentive package scheme) benefits.

6. The company is targeting a market share of approximately six per cent of the total number of batteries consumed in the mobile phone industry in India during the first phase of production.

7. As of now, lithium-ion cells are imported and battery packs are assembled in India using the imported cells and with this project of Munoth Industries.

Geo-Intelligence Asia - 2018

The Eleventh edition of GeoIntelligence Asia 2018 organised by GeoSpatial Media and Communication with Directorate General of Information System as Knowledge Partners and Military Survey as Co-organisers, took place at Manekshaw Centre, New Delhi on 04-05 June 2018. **The theme of Seminar was 'GeoSpatial: A Forc**e Multiplier for Defence and Industrial Security'. The seminar brought together the military, security officials including BSF and Police Forces, Government and industry together to examine the

latest technology solutions and on the critical role of geospatial technology in military and security applications.

What

1. The Armed Forces are the repository of big data and there is a need to record and institutionalize the information and carry out predictive analytics using AI.
2. He stressed on the need for collaboration with industry and academia to automate the Indian Army and emphasized the need to leverage the various technologies available in the Geo Spatial field to find solutions for the challenges faced by the Indian Army.
3. The Sessions during the seminar covered crucial subjects including Enhanced Situational Awareness for Combat, Smart Cantonments, GIS and Logistics, Cyber Security and LIDAR.
4. The Seminar witnessed learned speakers putting forth their views during the thought provoking sessions. The latest advancements in Geospatial Technologies discussed during the sessions and the exhibits in the stalls were widely appreciated by all participants.

Global Peace Index 2018

India has moved up four places to the 137th rank among 163 countries on the 2018 Global Peace Index, due to a reduction in the level of violent crime driven by increased law enforcement, according to a report by an Australian think tank. Iceland remains the most peaceful country in the world, a position it has held since 2008. New Zealand, Austria, Portugal and Denmark also sit in the top five most peaceful rankings. Syria remains the least peaceful country in the world, a position it has held for the past five years. Afghanistan, South Sudan, Iraq and Somalia comprise the remaining least peaceful countries.

What

1. The index is topped by Iceland, followed by New Zealand, Portugal, Austria and Denmark, whereas war-torn Syria remains the least peaceful country in the world, followed by Afghanistan, Iraq, South Sudan, and Yemen.
2. India has improved by four positions in the overall ranking from 141st to 137th.
3. This has largely been due to a reduction in level of violent crime, driven by increased law enforcement. Meanwhile, unrest in Kashmir raised tensions between India and Pakistan, with the number of deaths from external conflict increasing in both countries, said the report published by the Sydney-based Institute of Economics and Peace (IEP).
4. India was also among the countries with the biggest decreases in the number of deaths, along with Sri Lanka, Chad, Colombia, and Uganda.
5. The report provides a comprehensive analysis on the state of world peace. It said that amid continuing social and political turmoil, the world continues to spend enormous resources on creating and containing violence but very little on peace.
6. The countries that displayed the most significant growth in heavy weapons capabilities over the last 30 years are primarily in unstable regions where there are high tensions with neighbouring countries. These include Egypt, India, Iran, Pakistan, South Korea, and Syria, it said.
7. The results of the 2018 Global Peace Index (GPI) show that the global level of peace has deteriorated by 0.27 per cent in the last year, marking the fourth successive year of deteriorations. Ninety-two countries deteriorated, while 71 countries improved.
8. The 2018 GPI reveals a world in which the tensions, conflicts, and crises that emerged in the past decade remain unresolved, especially in the Middle East, resulting in a gradual, sustained fall in peacefulness. Underlying the fall in peacefulness, six of the nine regions in the world deteriorated in the last year.
9. The four most peaceful regions - Europe, North America, Asia-Pacific, and South America - all recorded deteriorations, with the largest overall deterioration occurring in South America, owing to falls in the safety and security domain, mainly due to increases in the incarceration rate and impact of terrorism.

Pre-Iron Age artefacts unearthed

The pre-Iron Age artefacts recently unearthed from Sanauli excavation site in Uttar Pradesh **and housed in the premises of the ASI's Institute of Archaeology will be** investigated further to test the theories being conjectured around the findings, a senior official said. Along with copper-plated anthropomorphic figures and other artefacts dug out from the burial pits at the excavation site in Baghpat district, the archaeologists had also found remains of chariots. A team of experts led by Director of the Institute of Archaeology S K Manjul, had on June 4 claimed that the**se were "first-ever" physical** evidence of chariots in the sub-continent dating back to 2,000 BC – 1,800 BC.

What

1. Five burial pits were unearthed with some having one chariot while other having more. Decorated with copper motifs, the findings of the Copper-Bronze Age have **opened up further research opportunities into the area's civilisation and culture.**

2. The chariots have wheels made of wood, which were covered with copper plate. The wood has decayed but the form can be seen due to copper-plating.

3. The yoke and axle of the wheels are, however, intact, which would help in the investigation. The swords and daggers are of solid copper and indicate they were of warrior class.

4. The three-month long excavation, which started in March this year, has unearthed eight burial sites and several artifacts including three coffins, antenna swords, daggers, combs, and ornaments, among others.

5. The findings also shed light on the noteworthy progress Indian civilisation had made at the time, making it on par with the 2000 BC Mesopotamian civilisation.

6. Those artefacts are presently housed in the premises of the institute (located inside Red Fort premises). They will be further investigated to test the theories that have been conjectured since their excavation. For example, the possibility of the pits being royal ones or the weapons being of warrior class.

7. Besides, swords and daggers, shields, copper pots, steatite beads and other artefacts were also dug out during the excavation.

8. For the first time in the entire Indian sub-continent we have found this kind of a coffin. The cover is highly decorated with eight anthropomorphic figures. The sides of the coffins are also decorated with floral motifs.

9. Coffins have been discovered during excavations in Harappa, Mohenjo Daro and Dholavira (Gujarat), but never with copper decorations.

10. The excavation site, located 70 km out of Delhi, which is likely to be closed soon in view of the impending monsoon, lies 120 metres from an earlier one in the village, excavated in 2005, where 116 burials were found along with antenna swords and pottery.

MOU SIGN TO SET UP A RESOURCE EFFICIENCY CELL

In the run up to World Environment Day, Ministry of Environment, Forest and Climate Change and The Energy and Resources Institute (TERI) on 2 June 2018 launched a number of initiatives to support the Ministry of Environment, Forest and Climate Change (MoEFCC) focus on waste management and resource efficiency.

What

1. MoEFCC and TERI entered a Memorandum of Understanding (MoU) to set up a resource efficiency cell in the Ministry.

2. The main objectives of the Cell are to provide a platform to mainstream resource efficiency in public policy.

3. It aims to achieve this through coordinated thinking among the various relevant Ministries and agencies for promoting resource efficiency in the use of materials in the country.

4. **It also aims to ensure a 'systems' thinking based on materials, products and** processes, apart from enabling the preparation of an overarching resource efficiency policy for India and coordinated sectoral policies and regulatory mechanisms.

5. At the event hosted by TERI, the European Union and MoEFCC also signed a Joint Declaration of Intent (JDI) to support the implementation of the EU Resource Efficiency Initiative (EU-REI) Project in India, with a specific objective to foster the efficient and sustainable use of natural resources in India.

6. The JDI seeks to strengthen technological, scientific and management capacities of MoEFCC, the EU and other relevant partners from private and public sector along with the implementing partners in the field of Resource Efficiency.

7. Secretary, MoEFCC, Shri C K Mishra released a TERI paper on **'Opportunities and** Challenges of Plastics **Waste Management'. As** per the findings, the paper states that the annual average per capita consumption of plastic in India is about 11 kgs.

Flashback
1. The Energy and Resources Institute (TERI) is a research institute based in New Delhi that conducts research work in the fields of energy, environment and sustainable development.
2. Established in 1974, it was formerly known as Tata Energy and Resource Institute. As the scope of its activities widened, it was renamed The Energy and Resources Institute in 2003.
3. The origins of TERI lie in Mithapur, a remote town in Gujarat, where a TATA engineer, Darbari Seth, was concerned about the enormous quantities of energy his factory spent on desalination.
4. He proposed the idea of a research institute to tackle the depletion of natural resources and energy scarcity. J. R. D. Tata, chairman of the TATA Group, liked the idea and accepted the proposal.
5. TERI was set up with a modest corpus of 35 million rupees. On the invitation of the then Prime Minister Indira Gandhi, TERI was registered in Delhi in 1974 as the Tata Energy Research Institute.

8. Further, households generate maximum plastic waste, of which water and soft drink bottles form a large number.

9. In terms of plastic in water bodies, seas near Mumbai, Kerala and the Andaman and Nicobar Islands are among the worst polluted in the world.

10. The plastic debris under water affect at least 267 species worldwide, including 86% of all sea turtle species, 44% of all seabird species, and 43% of all marine mammal species.

11. The paper highlights how effective collection and recycling could lead to an overall reduction of waste, cost, and energy consumption, and also effectively reduce GHG (Green House Gas) emissions.

12. It also focuses upon the need to promote the use of biodegradable plastic, especially in high-end large-scale applications, which can help in pushing bioplastics from labs to markets.

13. It is the first time that stakeholders from diverse sectors have come together for the cause of waste management. The roadmap for the consortium will be to create a supply chain for various types of wastes so that there is a business case for all stakeholders.

14. To begin with waste collection points will also be set up in schools through KidZania, and policy research will be conducted on varied issues for better implementation.

QS RANKINGS 2019

Indian Institute of Technology Bombay (IIT Bombay) has emerged as the top-ranked institute from India in the latest Quacquarelli Symonds (QS) World University Rankings 2019. As against being ranked at 179th place in the 2018 rankings released last year, IIT Bombay jumped 17 places to 162nd position. However, it was IISc that saw the highest jump among Indian institutes, moving 20 places up from 190th position

to 170th position. Last year's top-ranked Indian institute - IIT Delhi, remained at the same position of 172nd.

What

1. Among the other top-ranked Indian institutes in the QS World University Rankings 2019, IIT Kanpur, IIT Kharagpur, IIT Roorkee and IIT Guwahati improved their rankings from 293 last year to 283, from 308 to 295, from 431-440 band to 381, and from 501-550 band to 472nd position respectively.

2. IIT Madras, however, remained unchanged at 264th position.

3. The 2019 edition of QS World University Rankings ranks the world's top 1,000 universities for the first time - the best of the 4,700 institutions that were eligible for inclusion.

4. Over 83,000 academic and 42,000 employer responses went into the analysis for the ranking. The agency gave a maximum weightage of 40 per cent to academic reputation, followed by employer reputation (10 per cent), faculty-student ratio (20 per cent) and citations per faculty (20 per cent), international faculty ratio (5 per cent), and international student ratio (5 per cent), respectively.

5. On its part, IIT Bombay scored an overall 48.2 out of 100. However, across different parameters, IIT Bombay bagged a score of 52.5 in academic reputation, 72.9 in employer reputation, 54.1 in citation per faculty, 43.3 in faculty-student ratio, 4.4 in international faculty and 1.8 in international students, all scores out of a maximum of 100 points.

6. Among the six parameters, employer reputation was the strongest for IIT Bombay with a rank of 93 globally.

SARITA NAYYAR APPOINTED TO WEF MANAGING BOARD

The World Economic Forum (WEF) on 8 June 2018 said it has appointed Sarita Nayyar to its Managing Board. In addition to her role as the Chief Operating Officer (COO) for the World Economic Forum LLC, Nayyar will help lead the international expansion of the **Forum's centre for the** Fourth Industrial Revolution Network.

What

1. Nayyar will also lead **the Forum's** international expansion with new centres opening in India, Japan and China.

World Economic Forum LLC
1. The World Economic Forum LLC is committed to improving the state of the world by engaging industry, government and civil society leaders in partnerships to shape global, regional and industry agendas.
2. Based in New York and San Francisco, the World Economic Forum LLC is impartial and not tied to any political, partisan or national interests.
3. It is the North American subsidiary of the World Economic Forum, the International Organization for Public-Private Cooperation, headquartered in Geneva, Switzerland, under the supervision of the Swiss Federal Government.
4. **The World Economic Forum LLC's New York** office acts as the headquarters for various Industry and System Initiatives, as well as for North America and Latin America activities.

2. The Network seeks to rapidly achieve global scope and scale in establishing a new operating system for international technology governance and cooperation, WEF said in a statement.

3. Nayyar joined WEF in 2007, where she has held various directorships including responsibility for engagement with the consumer industries, MD and COO of WEF LLC and Deputy Head of Industries.

4. **She holds a Bachelor's degree in Economics from St Stephen's College, University of** Delhi, Master degree from Indian Institute of Management, Ahmedabad, and an MBA from the University of Michigan.

UN SECURITY COUNCIL ELECTS NEW MEMBERS

The UN General Assembly elected Belgium, the Dominican Republic, Germany, Indonesia and South Africa to serve as non-permanent members on the Security Council for two years starting in January. All but three of the 193 UN member states cast paper ballots. Germany and the Dominican Republic each obtained 184 votes. South Africa got 183 votes; Belgium 181 and 144 went to Indonesia.

What

1. There are 15 members on the UN Security Council, including the five permanent ones -- Britain, China, France, Russia and the United States -- and 10 non-permanent members, half of which are elected each year.

2. Each candidate country needed to secure two thirds of the votes in order to clinch a seat.

3. The Dominican Republic will take its first turn on the Security Council, while the other nations chosen have served before.

4. Belgium and Germany obtained the two seats for the Western Europe and Others Group after Israel dropped out of the competition.

5. The Maldives, with only 46 votes, lost out to Indonesia for the Asia Pacific regional group's seat.

6. The African Union made a deal to see that South Africa was elected, while the Dominican Republic took up Latin America's spot after a similar consensus in that regional group.

7. The five new members will replace Bolivia, Ethiopia, Kazakhstan, the Netherlands and Sweden on the council.

8. Each regional bloc has its own process for Security Council candidates. For some, "it's first come, first served," and countries often seek a seat very early on, a diplomat said, speaking on condition of anonymity.

9. For the current election, Israel in the end decided to withdraw because it understood it stood no chance and could face humiliation with 30, 40 or even 50 votes maximum, which would trigger its automatic elimination.

JAPAN'S NIKKEI ASIA PRIZE

Noted social reformer and founder of Sulabh International, Bindeshwar Pathak, was 13 June 2018 honoured with **Japan's prestigi**ous **'Nikkei Asia Prize** for **Culture and Community'** for his significant work in tackling poor hygiene and discrimination. Launched in 1996, the award honours people in Asia who have made significant contributions in one of the three areas: regional growth; science, technology and innovation; and culture and community. Former Prime Minister Manmohan Singh and

Flashback
1. Sulabh International is an India-based social service organization that works to promote human rights, environmental sanitation, Non-conventional sources of energy, waste management and social reforms through education.
2. Sulabh International is the largest nonprofit organization in India.
3. Sulabh was founded by Bindeshwar Pathak from Bihar State in 1970.
4. Innovations include a scavenging-free two-pit pourflush toilet (Sulabh Shauchalaya); safe and hygienic on-site human waste disposal technology; a new concept of maintenance and construction of pay-&-use public toilets, popularly known as Sulabh Complexes with bath, laundry and urinal facilities being used by about ten million people every day and generates bio-gas and biofertilizer produced from excreta-based plants, low maintenance waste water treatment plants of medium capacity for institutions and industries.

Infosys Chairman Narayan Murthy are among the few Indians who have won the prize in the past.

What

1. The other two winners were Ma Jun (Economic and Business Innovation), a Chinese environmentalist, for using the power of the internet to promote cleaner industry and Professor Nguyen Thanh Liem (Science and Technology), a Vietnamese doctor, for bringing cutting-edge medicine to children.
2. Prime Minister Of Japan Shinzo Abe Day met the winners on 12 June 2018.
3. The awards were created and presented by Nikkei Inc, one of the largest media corporations in Japan.

UNICEF REPORT ON PATERNITY LEAVE

India is among almost 90 countries in the world without national policies in place that ensure new fathers get adequate paid time off with their newborn babies, according to a new UNICEF analysis. Almost two-**thirds of the world's children under** one year old **–** nearly 90 million – live in countries where their fathers are not entitled by law to a single day of paid paternity leave, the UNICEF analysis said. India and Nigeria, which have high infant populations, are among the 92 countries do not have national policies in place that ensure new fathers get adequate paid time off with their newborn babies.

What

1. The UN agency noted that around the world, momentum for family-friendly policies was growing. It cited the example of India, where officials are proposing a Paternity Benefit Bill for consideration in the next session of Parliament which would allow fathers up to three months of paid paternity leave.
2. Noting that much work remains to be done, UNICEF said in eight countries across the world, including the United States which is home to nearly four million infants, there was no paid maternity or paternity leave policy.
3. Other countries with high infant populations, including Brazil and Congo, all have national paid paternity leave policies, albeit offering relatively short-term entitlements.
4. **"Positive and meaningful interaction with mothers and fathers from the very beginning helps shape children's brain growth and development for life, making them** healthier and hap**pier, and increasing their ability to learn. It's all of our responsibility** to enable them to fill this role.
5. Evidence suggests that when fathers bond with their babies from the beginning of life, they are more likely to play a more active role in the chil**d's development.**
6. Research also suggests that when children positively interact with their fathers, they have better psychological health, self-esteem and life-satisfaction in the long-term, the UNICEF said.
7. UNICEF urged governments to implement national family-friendly policies that support early childhood development, including paid paternity leave, to help provide parents with the time, resources and information they need to care for their children.
8. Earlier this year, UNICEF modernised its approach to parental leave provisions, with up to 16 weeks of paid leave for paternity across all of its offices worldwide – the first United Nations agency to extend such leave beyond the standard four weeks.
9. **The new analysis forms part of UNICEF's 'Super Dads' campai**gn, now in its second year, which aims to break down barriers is preventing fathers from playing an **active role in their young children's development.**
10. **The campaign celebrates Father's Day** – recognised in more than 80 countries in June – and focuses on the importance of love, play, protection and good nutrition for the **healthy development of young children's brains.**