My Notes....

NATIONAL

National

KANCHENJUNGA BR IN WNBR

A global body has added **Kanchenjunga Biosphere Reserve (BR)** to the UNESCO's World Network of Biosphere Reserves, **making it 11th such entry from India in the list of 686 biosphere reserves from 122 countries**. The listing acts as a unique tool for international co-operation through sharing knowledge, exchanging experiences, building capacity and promoting best practices for conserving the biosphere reserves which are areas comprising territorial, marine and coastal ecosystems.

What

1. The decision to include **Kanchenjunga Biosphere Reserve, located in Sikkim, in the World Network of Biosphere Reserves (WNBR)** was taken in the International Coordination Council meeting of the UNESCO in Indonesia late last month.

2. The other Indian biosphere reserves in the list include **Nilgiri, Gulf of Mannar, Sunderban, Nanda Devi, Nokrek, Pachmarhi, Simlipal, Achanakmar-Amarkantak, Great Nicobar and Agasthyamala**.

3. **The Kanchenjunga Biosphere Reserve is one of the highest ecosystems in the world**. It falls within the Himalaya global biodiversity hotspot. The core zone alone has over 150 glaciers and 73 glacial lakes with the prominent one being the famous 26 km long Zemu glacier.

S.No.	Reserve	State (s)	Year
1	Nilgiri	TN, Karnataka, Kerala	2000
2	Gulf of Mannar	Tamil Nadu	2001
3	Sundarbans	West Bengal	2001
4	Nandadevi	Uttarakhand	2004
5	Nokrek	Meghalaya	2009
6	Pachmarhi	Madhya Pradesh	2009
7	Simlipal	Odisha	2009
8	Amarkantak - Achanakmar	Chhattisgarh, Madhya Pradesh	2012
9	Great Nicobar	Andaman & Nicobar	2013
10	Agasthyamalai	Tamil Nadu, Kerala	2016

4. **It is home for many of the globally threatened fauna** including **musk deer, snow leopard, red panda and Himalayan Tahr**.

5. It is also home for many ethnic communities including Lepcha, Nepalese, and Bhutia," said the UNESCO in a statement, announcing the inclusion of the Kanchenjunga Biosphere Reserve in the WNBR.

6. The entry into the WNBR happened two years after the UNESCO had designated the Kanchenjunga National Park as a World Heritage Site. **At present, there are 37 Indian sites in this global heritage list**.

7. The Kanchenjunga National Park within the Kanchenjunga Biosphere Reserve supports 130 endemic species of eastern Himalayas and over 212 bird species of conservation concerns including seven globally threatened species.

INDIA GETS STA-1 STATUS

India has become the third Asian country after Japan and South Korea **to get the Strategic Trade Authorization-1 (STA-1) status** after the US issued a federal notification to this effect, paving the way for high-technology product sales to New Delhi, particularly in **civil space and defence sectors**. **India is the 37th country to be designated the STA-1 status by the United States**. The federal notification, issued on 3 August 2018, gains

significance as the Trump Administration made an exception for India, which is **yet to become a member of the Nuclear Suppliers Group (NSG)**.

What

1. Traditionally, the US has placed only those countries in the **STA-1 list who are members of the four export control regimes**: **Missile Technology Control Regime (MTCR)**, **Wassenaar Arrangement (WA)**, **Australia Group (AG)** and the **NSG**.

2. In its federal notification, the Trump Administration notes that India is a member of three of the four multilateral export regimes.

3. Mainly because of the political opposition from China, India's membership application has been pending before NSG, which takes decision by consensus.

4. By placing India in the STA-1 list, the United States has acknowledged that for **all practical purposes India adheres to the export control regimes of the NSG**.

Flashback

1. To date, with the effective support of the US, India has been admitted to three of the four multilateral export control regimes, **the MTCR on 27 June 2016**, the **Wassenaar Arrangement on 7 December 2017**, and the **Australia Group on 19 January 2018**.

2. These memberships, important to the two countries' global strategic partnership, are enhanced by the US' recognition of India as a Major Defence Partner in the India-US Joint Statement of 7 June 2016 titled, "**The United States and India: Enduring Global Partners in the 21st Century**."

3. This recognition facilitates and supports India's military modernisation efforts with the US as a reliable provider of advanced defence articles.

4. As a result, **the Bureau of Industry and Security (BIS), formally recognises under the Export Administration Regulations (EAR) India's membership in the WA multilateral export control regimes** and revises the EAR accordingly.

5. India so far was listed in **STA-2 category** along with **Albania, Hong Kong, Israel, Malta, Singapore, South Africa and Taiwan**.

5. **This action befits India's status as a Major Defence Partner and recognises** the country's membership in three of the four export control regimes — the MTCR, WA and AG.

6. This rule is another in the series of rules that implement reforms to which **the US and India mutually agreed to promote global non-proliferation**, **expand high technology cooperation and trade**, and ultimately facilitate India's full membership in the four multilateral export control regimes. This rule also makes conforming amendments, the federal notification said.

7. According to the notification, the US and India continue their commitment to work together to strengthen the global non-proliferation and export control framework and further transform bilateral export control cooperation to recognise the full potential of the global strategic partnership between the two countries.

EASE OF LIVING INDEX

The **Ease of Living Index** is an initiative of the **Ministry of Housing and Urban Affairs (MoHUA)** to help **cities assess their liveability vis-à-vis global and national benchmarks** and encourage cities to move towards an **'outcome-based' approach to urban planning and management**. It was decided in June 2017 to rank cities based on the liveability parameters. The implementation of the assessment commenced formally on 19 January, 2018 covering 111 cities.

What

1. **Ease of Living framework comprises four pillars** namely **Institutional, Social, Economic and Physical** which are further broken down into **15 categories and 78 indicators**.

2. **Evaluation of cities has been done on a 100-point scale across the 78 indicators** with the institutional and social pillars carrying 25 points each, 5 points for the pillar on economic and 45 points for the physical pillar.
3. **The whole exercise is being carried out on a mass scale** and began with a National Orientation Workshop to orient city officials on assessment framework. It was followed by 33 state level workshops spread across all 36 states and Union Territories.
4. A data entry portal and a monitoring dashboard for real time update on progress was established. **The cities submitted data on more than 50000 points**.
5. Secondary audit of 10,000 documents, physical audit of 14,000 units and survey of more than 60,000 citizens have been completed which led to finalization of ease of living index.
6. **The Ease of Living assessment standards are closely linked to the Sustainable Development Goals (SDGs)** and will provide a strong impetus to India's effort for systematic tracking progress of SDGs in the urban areas.
7. **Of the 17 SDG goals, 8 goals are directly linked to India's ease of living assessment framework** with **SDG 11 that is aimed at making our cities and human settlements inclusive, safe, resilient and sustainable** being measured through a set of 30 indicators.
8. **Pune is the most liveable city**, followed closely by **Navi Mumbai and Greater Mumbai in a ranking of 111 Indian cities** with the **national capital ranked at a lowly 65** on the Ease of Living Index.
9. The **Ease of Living Index** was launched by Housing and Urban Affairs Minister Hardeep Singh Puri on 13 August 2018.

Four classifications of cities based on population include:
1. **Classification 1**- Cities with population of **4 million and above**
2. **Classification 2:** Cities with population **greater than1 million but less than 4 million**
3. **Classification 3:** Cities with population **greater 0.5 million but less than 1 million**
4. **Classification 4:** Cities with population less than 0.5 million).

Ranking: Ease of Living Index

Top ten cities
1. Pune
2. Navi Mumbai
3. Greater Mumbai
4. Tirupati
5. Chandigarh
6. Thane
7. Raipur
8. Indore
9. Vijaywada
10. Bhopal

Pillar Wise: Top ten cities

Institutional	Social	Economic	Physical
1. Navi Mumbai	1. Tirupati	1. Chandigarh	1. Greater Mumbai
2. Tirupati	2. Tiruchirappalli	2. Ajmer	2. Pune

3. Karim Nagar	3. Navi Mumbai	3. Kota	3. Thane
4. Hyderabad	4. Chandigarh	4. Indore	4. Chandigarh
5. Bilaspur	5. Pune	5. Tiruppur	5. Raipur
6. Kochi	6. Greater Mumbai	6. Itanagar	6. Tirupati
7. Ahmedabad	7. Amravati	7. Pune	7. Navi Mumbai
8. Pune	8. Vijayawada	8. Ludhiana	8. Bhopal
9. Vijayawada	9. Indore	9. Thane	9. Bilaspur
10. Visakhapatnam	10. Vasai Virar	10. Vijayawada	10. Visakhapatnam

City Population Typology wise : Top three cities

Population ≥ 4 million	Population ≥ 1 million < 4 million	Population ≥ 0.5 million < 1 million	Population les than 0.5 million
Greater Mumbai	Pune	Chandigarh	Tirupati
Chennai	Navi Mumbai	Tiruchirappalli	Karimnagar
Surat	Thane	Amravati	Bilaspur

SEEP INDEX RELEASED

Bureau of Energy Efficiency (BEE) and **Alliance for an Energy Efficient Economy (AEEE)** released the **State Energy Efficiency Preparedness (SEEP) Index** on 1 August 2018 which assesses state policies and programmes aimed at improving energy efficiency across various sectors. The nationwide Index, which is a **joint effort of the NITI Aayog and BEE**, was launched by Mr. A.K. Bhalla, Secretary, Ministry of Power; Dr Ajay Mathur, DG, TERIin the presence of senior officials from the Ministry and BEE.

What

1. **The dignitaries also released a set of Energy Conversation Guidelines for energy intensive industries** that are covered under the Government's **Perform Achieve and Trade (PAT) scheme**.

Flashpoint

1. **Bureau under the aegis of Ministry of Power** is implementing many initiatives for energy efficiency in the energy intensive industries.
2. **Perform Achieve and Trade (PAT) scheme is a flagship scheme of Government of India** to improve energy efficiency of large energy consuming industries.
3. As a part of Indo-Japan Energy Dialogue, Energy Conservation Centre of Japan (ECCJ) and Bureau of Energy Efficiency (BEE) have developed **Energy Conservation Guidelines for energy intensive industries** covering both large as well as MSMEs.
4. These guidelines will enable the industries to establish a systematic mechanism to improve the energy efficiency for major energy consuming utilities.
5. These guidelines would serve a ready reference of standard and target benchmarked energy performance values for major energy consuming equipment which will improve the overall energy performance of the industry.

2. Developed by the BEE, these will serve as a standard reference document for energy intensive industries and help them achieve high operational efficiency of energy consuming utilities thereby improving their energy performance.

3. The State Energy Efficiency Preparedness Index **will help in implementing national energy efficiency initiatives in states** and meet both State as well as national goals on energy security, energy access and climate change.

4. The State Energy Efficiency Preparedness Index has **63 indicators** across Building, Industry, Municipality, Transport, Agriculture and DISCOM with 4 cross-cutting indicators. **States are categorised based on their efforts and achievements towards energy efficiency implementation**, as 'Front Runner', 'Achiever', 'Contender' and 'Aspirant'.

5. **The 'Front Runner' states** in the inaugural edition of the Index are: **Andhra Pradesh, Kerala, Maharashtra, Punjab, and Rajasthan** based on available data.

6. The Index examines states' policies and regulations, financing mechanisms, institutional capacity, adoption of energy efficiency measures and energy savings achieved.

7. The required data was collected from the **concerned state departments such as DISCOMs, Urban Development Departments, etc**., with the help of State Designated Agencies (SDAs) nominated by the BEE.

8. Apart from the data furnished by SDAs, the AEEE also collected information from various central government sources such as: **Central Electricity Authority (CEA) General Review**; **Ministry of Road Transport and Highways (MoRTH)** annual report on the performance of **State Road Transport Undertakings (SRTU)**; BEE programme implementation reports; Petroleum Conservation Research Association (PCRA), Ministry of New and Renewable Energy (MNRE); and Energy Efficiency Services Limited (EESL).

WORLD'S FIRST THERMAL BATTERY PLANT

The world's first-ever facility to create thermal batteries was inaugurated on 6 August 2018 in Andhra Pradesh. The state's Chief Minister N Chandrababu Naidu was present at the unveiling of the plant that will see thermal batteries being manufactured by **Bharat Energy Storage Technology Private Limited (BEST)**. These batteries are based on **alternative sources of energy production**, and their presence is expected to reduce the dependence on fossil fuels.

What

1. **Through thermal batteries, BEST** will look to store energy that can power telecommunications, commercial enterprises, electric vehicles as well as charging systems.

2. Not only will it help create renewable energy, but these batteries are also expected to help provide energy to remote areas.

3. As per the plans known, **BEST aims to commercially open up the plant by May 2019**, where it could provide an initial capacity of 1000MW.

4. In its first phase, it will produce batteries for telecom, mini/microgrids and electric buses, with buses expcted to run for 800kms on single charge of BEST's thermal batteries.

5. **By 2025, BEST aims to expand the capacity of its thermal battery plant to 10GW**. This technology, patented in India by Dr Patrick Glynn in 2016, scores over Li-ion batteries due to lesser heat sensitivity, as well as a smaller carbon footprint.

6. In addition, these also outperform solar panels, which are expensive to maintain, and highly weather-dependent during operation.

Flashback
1. **Bharat Energy Storage Technology Private limited** is a Private incorporated on 13 July 2016.
2. **It is classified as Non-govt. Company** and is registered at Registrar of Companies, Hyderabad.
3. It is inolved in Production , collection and distribution of electricity

INDIA'S FIRST GENETIC BANK FOR WILDLIFE CONSERVATION

National Wildlife Genetic Resource Bank was inaugurated at **Centre for Cellular and Molecular Biology's (CCMB)** Laboratory of Conservation of Endangered Species (LaCONES) facility in Hyderabad, Telanagana. **It is India's first genetic resource bank where genetic material** will be stored for posterity which will further the cause of conservation of endangered and protected animals.

What

1. **It is equipped with sophisticated equipment** to preserve the genetic resources that could be utilised to virtually resurrect an **animal species in case it goes extinct.**

2. **It will cryopreserve living cell lines, gametes and embryos of endangered wild animal** species in India.

3. For cryogenic preservation, researchers at **CCMB-LaCONES will use liquid Nitrogen** that is cooled down to as low as minus 195 degrees Celsius.

4. It will aid wild life conservation efforts by taking up artificial reproduction, conducting studies in evolution biology and wildlife medicine.

Flashback

1. To develop this facility, **CCMB researchers had conducted detailed study of Frozen Zoo, San Diego Zoo, US**, which is considered as world's largest and most diverse genetic bank of living cell cultures, oocytes, sperms and embryos of extinct and endangered species.

2. CCMB-LaCONES is only laboratory in India that has developed methods for collection and cryopreservation of semen and oocytes from wild animals and successfully reproducing blackbuck, spotted deer and pigeons.

3. **LaCONES has developed universal DNA based marker for identification of wild animals** from parts and remains.

4. It also has DNA banking of more than 250 species of mammals, birds and reptiles.

SEVA BHOJ YOJNA LAUNCHED

The Ministry of Culture, Government of India has launched the **new scheme namely 'Seva Bhoj Yojna'** on 1 August 2018 for **Financial Years 2018-19 and 2019-20**. The scheme envisages **to reimburse 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 as **Religious /Charitable Institutions** who provide Food/Prasad / Langar (Community Kitchen) / Bhandara free of cost without any discrimination to Public/Devotees. The Religious / Charitable Institutions such as **Temples, Gurudwara, Mosque, Church, Dharmik Ashram, Dargah, Matth, Monasteries etc**.

What

1. The Religious / Charitable Institutions which have been in **existence for at least Three years before applying for financial assistance/grant** and who serve free food to at least 5000 people in a month.

2. Such institutions covered under **the provisions of section 10 (23BBA) of the Income Tax Act, 1961** (as amended from time to time) **or registered under the provisions of section 12AA of the Income Tax Act, 1961**, for Religious / Charitable purposes, or a company formed and registered under the **provisions of section 8 of the Companies Act, 2013** or section 25 of the Companies Act, 1956, as the case may be, for Religious / Charitable purposes, or a Public Trust registered as such for charitable/religious purposes under any Law for the time being in force, or a society registered under the Societies Registration Act, 1860, for Religious / Charitable **purposes shall be eligible for grant under the scheme**.

3. Ministry of Culture will **enroll the eligible Religious / Charitable Institutions for a time period ending with financial year 2019-20** and subsequently the enrolment may be renewed by the Ministry, subject to the performance evaluation of the institutions.

4. **Religious / Charitable Institution shall first register with Darpan Portal of NITI Aayog** and get Unique ID generated by Darpan Portal.
5. Thereafter, the institution shall enroll itself in CSMS Portal on the Ministry of Culture's website in a prescribed format.

MOVE HACK LAUCHED

NITI Aayog has launched Move Hack, a global **mobility hackathon to crowdsource solutions** aimed at the future of mobility in India. Envisaged to be one of the largest hackathons globally, **Move Hack is focused on 10 themes and structured over three legs:** online, followed by Singapore leg, and the finals in New Delhi. **Transportation and mobility** are emerging as potential drivers of innovation and economic growth of the **21st century**.

What

1. **Move Hack** aims to bring about innovative, dynamic and scalable solutions to problems pertaining to mobility.
2. The hackathon has two-pronged campaign approach: **(a) "Just Code It"**: aimed at solutions through innovations in technology / product / software and data analysis, and **(b) "Just Solve It":** innovative business ideas or sustainable solutions to transform mobility infrastructure through technology.
3. **Move Hack is open to individuals from all nationalities**, making it a truly global hackathon.
4. **The top 30 teams from the online submissions will travel to Singapore for two days (1 and 2 Sep 2018)**, and will be mentored by a curated group of top experts advising the teams on a host of parameters including design improvement, business viability, technical solution and customer targeting / marketing.
5. The top 20 teams from Singapore leg will participate in the Final Round to be held in New Delhi on 5 and 6 Sep 2018.
6. **The winners will be announced during the Move Summit 2018**, which is also organized by NITI Aayog on 7 and 8 Sep 2018 in New Delhi and is being inaugurated by the Hon'ble Prime Minister of India. **Awards for the hackathon include recognizing top 10 winners; with total prize of more than Rs. 2 crores**.
7. The hackathon is organized in partnership with Government of Singapore and is powered by Hacker Earth. PwC is the Knowledge Partner and NASSCOM is the Strategic Partner.
8. **The evaluations will be done by jury comprising of subject matter experts**, venture capitalists, business leaders and successful entrepreneurs.

RUCO LAUNCHED

The Food Safety and Standards Authority of India (FSSAI) on 10 August 2018 launched **RUCO (Repurpose Used Cooking Oil)**, **an initiative that will enable collection and conversion of used cooking oil to bio-diesel**. The initiative has been launched nearly a month after the food safety regulator notified standards for used cooking oil. FSSAI may also look at introducing regulations to ensure that companies that use large quantities of cooking oil hand it over to registered collecting agencies to convert it into biofuel.

What

1. **Under this initiative, 64 companies at 101 locations have been identified** to enable collection of used cooking oil. For instance: McDonald's has already started converting used cooking oil to biodiesel from 100 outlets in Mumbai and Pune.
2. **The regulator believes India has the potential to recover 220 crore litres of used cooking oil for the production of biodiesel by 2022** through a co-ordinated action.
3. FSSAI wants businesses using more than 100 litres of oil for frying, to maintain a stock register and ensure that UCO is handed over to only register collecting agencies. There is a possibility that a regulation will be developed on these lines.
4. According to **FSSAI regulations, the maximum permissible limits for Total Polar Compounds (TPC)** have been set at 25 per cent, beyond which the cooking oil is unsafe for consumption.

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5. **FSSAI is also working in partnership with Biodiesel Association of India** and the food industry to ensure effective compliance of used cooking oil regulations.

6. It is also going to publish guidance documents, tips for consumers and posters in this regard. It is also conducting several awareness campaigns through its e-channels.

7. FSSAI has additionally launched a **micro-site to monitor the progress of the collection and conversion of used cooking oil into biodiesel**.

> **Flashback**
> 1. **The Food Safety and Standards Authority of India (FSSAI)** has been established under **Food Safety and Standards, 2006** which consolidates various acts & orders that have hitherto handled food related issues in various Ministries and Departments.
> 2. **FSSAI has been created for laying down science based standards for articles of food** and to regulate their manufacture, storage, distribution, sale and import to ensure availability of safe and wholesome food for human consumption.
> 3. **The FSSAI has its headquarters at New Delhi**. The authority also has **6 regional offices located in Delhi, Guwahati, Mumbai, Kolkata, Cochin, and Chennai**.
> 4. 14 referral laboratories notified by FSSAI, 72 State/UT laboratories located throughout India and 112 laboratories are NABL accredited private laboratories notified by FSSAI.

NEW PATENTED CLOT BUSTER

A new Clot buster, PEGylated Streptokinase - a **Novel Biological Entity** developed by Dr. Girish Sahni, DG, CSIR and Secretary, DSIR and his team of inventors at **CSIR-Institute of Microbial Technology (CSIR-IMTECH), Chandigarh** is all set to revolutionize the treatment of **ischemic strokes**. **Ischemic stroke is a condition caused by a dysfunction in the supply of blood to the brain due to emboli, thrombus** or atherosclerosis occurring in cerebral arteries.

What

1. **According to the American Stroke Association (ASA)**, brain strokes are the **second leading cause of death in the world** with a staggering 15 million people effected causing 11 million people either die or become permanently disabled.

2. Surprisingly, the prevalence of stroke is much higher in India than the West and about 87% of all strokes are ischemic strokes.

3. **CSIR-IMTECH and Epygen Biotech Pvt. Ltd., Mumbai, have entered into an agreement** for the latter to develop **PEGylated Streptokinase** for treatment of **Ischemic Stroke. Epygen is the first company in India** with exclusive license of this **Novel Biological Entity (NBE)** thrombolytic protein for ischemic stroke.

4. **Epygen Biotech Pvt Ltd is a biopharmaceutical company**, engaged in research and manufacturing of Therapeutic Proteins for Oncology, Cardiovascular and Immune disorders.

5. **PEGylated Streptokinase, the novel recombinant protein Thrombolytic molecule** has been precisely engineered through decades of research for enhanced proteolytic stability and extended plasma half-life, fibrin-specificity and associated clot specificity, with reduced immuno-reactivity which would be significant attributes with unmistakable clinical advantages such as reduced probability of hemorrhage over current treatment regimens of **thrombolytic drugs for acute stroke**.

6. **These are huge advantages with a potential to transform the way ischemic stroke**, deep-vein thrombosis, pulmonary embolism and acute myocardial infarction are treated around the globe, especially in the developing world.

BILL TO GIVE CONSTITUTIONAL STATUS TO NCBC

The Lok Sabha on 2 August 2018 **passed a bill to provide constitutional status to the National Commission for Backward Classes (NCBC)**. Superseding the amendments by the Rajya Sabha, the Lok Sabha passed the **Constitution (123rd Amendment) Bill 2017** unanimously with **over two-third majority**.

What

1. The bill provides for the **grant of constitutional status to the National Commission for Backward Classes (NCBC)** on par with the **National Commission for Scheduled Castes** and the **National Commission for Scheduled Tribes**.

2. It states that the President may specify the socially and educationally backward classes in the various states and union territories. He may do this in consultation with the Governor of the concerned state.

3. **The legislation with regard to NCBC was passed by Lok Sabha on April 10 last year**, following which it was then sent to the Rajya Sabha. On July 31 last year, the Upper House passed the bill after incorporating certain amendments moved by the Opposition and returned it to the Lok Sabha for ratification of the amendments.

4. **The duties of the NCBC include investigating and monitoring how safeguards provided to the backward classes under the Constitution** and other laws are being implemented and probe specific complaints regarding violation of rights.

5. Under this measure, the NCBC will have the powers of a civil court while probing any complaint.

NAVAL VERSION OF TEJAS TESTS

The naval version of the indigenously built **Tejas Light Combat Aircraft** on 2 August 2018 underwent a series of successful tests to check **its capability to land on an aircraft carrier**. India has joined a select club of countries including **US, Europe, Russia and China** to have the capability to produce aircraft which can operate from an aircraft carrier. A series of tests including **"taxi-ins"** of the jet was carried out on a **naval platform in Goa**, in a significant milestone for development of the naval version of the jet. A series of further tests to check landing and refuelling of the aircraft will be carried out in the next few months.

What

1. **LCA Navy (NP2) undertakes maiden Taxi-in engagement** to prove arrestor hook system of aircraft at SBTF Goa.

2. **Tejas is a four-and-half generation light combat aircraft** developed by state-run aerospace behemoth **Hindustan Aeronautics Ltd (HAL)**.

3. Initially, the Indian Air Force placed an order with the HAL for 40 Tejas aircraft. In December last year, the IAF began the process to procure another batch of 83 Tejas aircraft at a cost of over Rs 50,000 crore.

4. The **LCA naval prototype 2 (NP2)**, piloted by Capt Shivnath Dahiya safely executed the first contact of the "arrestor hook system" at moderate taxi-in speeds at a shore based test facility in Goa.

EXERCISE MAITREE 2018

Exercise Maitree is a joint military exercise between Indian Army and Royal Thai Army conducted **from 06 to 19 August 2018 in Thailand**. It is a platoon level exercise which comprises of infantry component. The opening ceremony started with familiarization of organisation and display of weapons & equipment of both armies.

What

1. **The exercise will emphasize to hone the tactical and technical skills in joint counter insurgency** and counter terrorist operations in rural and urban scenario **under UN mandate**.

2. Due emphasis will be laid on increasing interoperability between forces from both countries which is crucial for success of any joint operation.

3. Both sides will jointly train, plan and execute a series of well developed tactical drills for neutralization of likely threats that may be encountered in urban warfare scenario.

4. Experts from both sides will also hold detailed discussions to share their experience on varied topics for mutual benefit.

5. Exercise Maitree will contribute immensely in developing mutual understanding and **bonhomie between the two armies in order to counter terrorism**.

BILL TO RESTORE ORIGINAL SC/ST ATROCITY LAW PASSED

A bill to overturn a Supreme Court order concerning **certain safeguards against arrest under the SC/ST law was unanimously passed** by the Lok Sabha. **The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Amendment Bill 2018** rules out any provision for anticipatory bail for a person accused of atrocities against SC/STs, notwithstanding any court order.

What

1. It also provides that **no preliminary enquiry will be required for registering a criminal case** and an arrest under this law would not be subject to any approval.

2. The move to amend the Bill is being seen by the Opposition as a reach-out by the BJP-led NDA government to Dalits, ahead of their proposed nationwide protest later this month to demand restoration of the provisions of the law which, the Dalit groups allege, **were diluted by a Supreme Court ruling of March 20**.

3. These groups have been asking the government to overturn a Supreme Court ruling of March 20, saying it had "diluted" and rendered "toothless" the law against atrocities faced by the weakest sections of the society by putting additional safeguards against arrest of the accused.

Flashback

1. **The SC And ST (Prevention Of Atrocities) Act, 1989** was formed **to prevent offences against the members of the Scheduled Castes and Scheduled Tribes group**.

2. It further aims to provide for Special Courts to try people caught in such offences and also to provide relief to the victims of such offences and for matters related to it.

3. **The Scheduled Castes (SCs) and the Scheduled Tribes (STs) Prevention of Atrocities (PoA) Act, 1989** was amended to ensure speedy justice to victims.

4. This Act seeks to stop people from committing such oppression and providing victims with special rights and privileges.

5. A fast-track court for complaints made by anyone from the SC and ST community is also established with respect to this.

6. Not only does the Act increase punishment in some instances for crimes under Indian Penal Code (IPC) but also targets specific crimes - generally humiliating in nature - against SC and ST communities.

7. **This gave rise to a controversy on March 20, 2018 three issues came in front of Supreme Court** where there were **instances of exploiting of the SC/ST Act against government servants**.

4. The review petition filed by the government is still pending. Due to delay in the Supreme Court and rising anger among the Dalit community, there was a need to amend Article 18.

SC TO CONSTITUTE PANEL ON ISSUES IN JAILS

The Supreme Court on 8 August 2018 said it would constitute a committee **under the chairmanship of its retired judge** to look into problems in jails, including overcrowding, and suggest measures to deal with it. The apex court said the committee for prison reforms would also have two or three officials from the government of India to look into the issues, including that of women prisoners languishing in jails across the country.

What

1. A bench comprising Justices M B Lokur, S Abdul Nazeer and Deepak Gupta expressed its displeasure that the government has collected a huge amount under the orders of the apex court but the funds are not being utilised properly.
2. **Agreeing with the court on setting up a committee for jail reforms**, Attorney General K K Venugopal told the bench that India was facing enormous problems in several other areas as well.
3. India has a population of around 1.3 billion which is increasing exponentially and there are several problems faced by the country.
4. **The apex court had on August 5 expressed its displeasure that several states** had not yet appointed the board of visitors who regularly inspect prisons to ensure that they are being run in accordance with rules.
5. The court is hearing a matter relating to inhuman conditions prevailing in 1,382 prisons across the country.
6. The court had earlier taken strong exception to overcrowded jails across the country and said prisoners also have human rights and cannot be kept in jail like "animals".
7. It had earlier passed a slew of directions over unnatural deaths in jails and on prison reforms across India.

SPORTS UNIVERSITY BILL PASSED

The National Sports University Bill, which was passed by a voice vote in the Upper House on 9 August 2018, was adopted by the Lok Sabha on August 3. **The bill seeks to set up a specialised university in Manipur**, which would be the first of its kind, to promote sports education in the areas of sports sciences, sports technology, sports management and sports coaching.
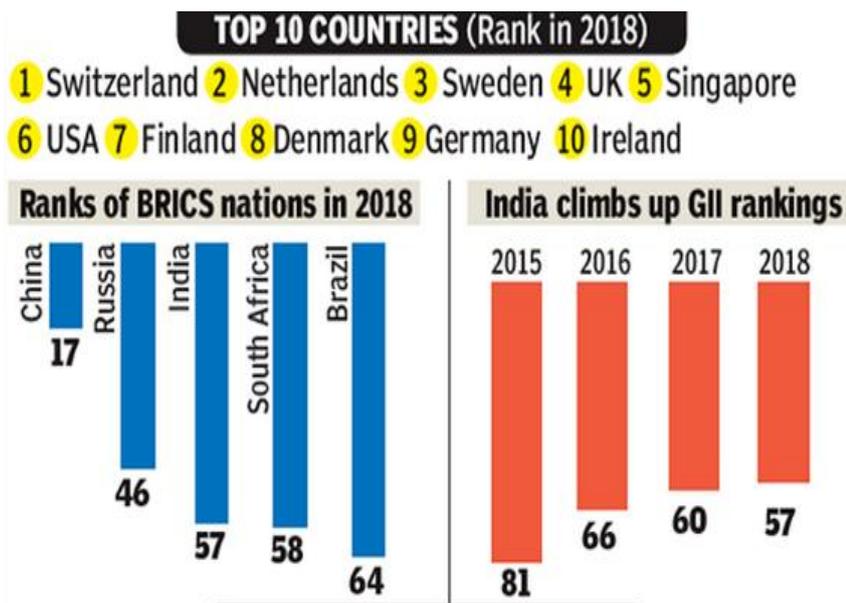
What

1. The proposed university **would offer masters and bachelor degree in various fields including sports management and sports science**.
2. Besides the main campus in Manipur, regional centres of the university would also be established in other parts of the country and abroad as well.
3. The government was also considering **to enhance the National Sports Development Fund** so that the sportspersons do not face any dearth of funds.
4. The proposed university at Manipur would also function as the national training centre for select sports disciplines by adopting best international practices.
5. In order to make the university a world-class institution, the government has signed an agreement with two Australian universities - University of Canberra and Victoria University - for development of curriculum, research facilities and laboratories, among others.
6. Nominated member MC Mary Kom supported the bill and said the legislation would help Manipur become "super Manipur in the field of sports."
7. The renowned boxer also wished the Indian contingent for the upcoming Asian Games saying "with 10 to 15 days to go for the games, I would like to wish Indian contigent all the very best."

GII- 2018 LAUNCHED IN INDIA

Global Innovation Index 2018 lunched in New Delhi on 8th August 2018. The event was organized by the **Confederation of Indian Industry (CII)** – one of the founding partners of GII along with the World Intellectual Property Organization (WIPO), in collaboration with the Department of Industrial Policy and Promotion (DIPP). **India's rank on the Global Innovation Index (GII) has improved from 60 in 2017 to 57 in 2018**. India has been consistently climbing the GII ranking for the past two years.

What

1. The culture of spending on research and development is growing in India and we are seeing the results in the **form of improvements in rankings such as the GII**.

2. GII 2018 report served another purpose. **It provided an opportunity to look at examples from similar economies from across the world** and understand how they effected change in their countries.

TOP 10 COUNTRIES (Rank in 2018)

1 Switzerland 2 Netherlands 3 Sweden 4 UK 5 Singapore
6 USA 7 Finland 8 Denmark 9 Germany 10 Ireland

Ranks of BRICS nations in 2018

China 17
Russia 46
India 57
South Africa 58
Brazil 64

India climbs up GII rankings

2015 81
2016 66
2017 60
2018 57

3. There is a **distinction between Innovation and Invention** and emphasized the role of pure science in building scientific temper in the country.

4. Former Chairman, Atomic Energy Commission, Dr Anil Kakodkar, who is author of the India chapter in the report said that "we must devise strategies to address our energy deficit, to ensure sustainable domestic energy supply". He emphasized the need to look for innovative ways to tackle the country's energy problems.

LS PASSES ARBITRATION BILL

The Lok Sabha passed a bill which will help **India become a hub for domestic and global arbitration** for settling commercial disputes. **Arbitration and Conciliation (Amendment) Bill 2018** provides **for time-bound settlement of disputes as well as accountability of the arbitrator**. The amendments **will facilitate achieving the goal of improving institutional arbitration** by establishing an independent body to lay down standards make arbitration process friendlier, cost-effective and ensure timely disposal of arbitration cases.

What

1. **It provides for setting up of an independent body -- Arbitration Council of India (ACI)** which will frade arbitral institution and accredit arbitrators by laying down norms.

2. **The ACI shall frame proper rules as to how instutitions would be graded**, norms to be followed, monitoring of quality and performance, and encourage training of arbitrators.

What is Arbitration

1. **Arbitration is a procedure in which a dispute is submitted, by agreement of the parties**, to one or more arbitrators who make a binding decision on the dispute.

2. In choosing arbitration, the parties opt for a private dispute resolution procedure instead of going to court

3. **The bill, which amends the 1996 Act**, is part of the government's efforts to encourage institutional arbitration for settlement of disputes and make India a centre of robust Alternative Dispute Resolution Mechanism.

4. Earlier, while moving the bill, Minister of State for Law P P Chaudhary said a l**arge number of arbitration cases are conducted outside India** in countries like Singapore, London and Paris and around 30 million cases are pending before the courts here.

5. **Due to globalisation, industralisation and liberalisation**, the disputes have increased manifold...We want to create India as a hub of arbritation," Chaudhary said, adding that even bilateral investment trade related issues are also referred to the Hague, London and Paris.

INDIA LOST ONE-THIRD OF ITS COASTLINE

Natural causes such as cyclones and waves, as well as human activities like construction have led to nearly one-third of a large part of **India's coastline to be eroded in the last 26 years**, but almost **an equal area has been added because of new sediment deposits**, according to a government report. **The National Centre for Coastal Research surveyed 6,031 kilometres of India's 7,517-kilometre coastline from 1990 to 2016**, and found that **33 per cent of it has witnessed erosion**, most of it along the eastern coast facing the Bay of Bengal, with West Bengal recording the highest erosion. At the same time, **29 per cent of the surveyed coastline saw an accretion**, or gain in deposits.

What

1. **Erosion and accretion are complementary to each other**. If the **sand and sediments have drifted from one side, it must accumulate somewhere**.

2. The report says that 2,156.43 kilometres of the country's surveyed coastline faced erosion, while 1,941.24 kilometres saw accretion on shore.

3. It has long been known that the **coastline is eroding**, but officials needed to map and document it so that various agencies could take corrective measures.

4. **Erosion leads to loss of human habitation as sea water enters the land**. This also affects farming done along the coasts. For traditional fishermen with small boats, beaches are gateway to the sea since they don't use fishing harbours. Loss of beaches means they have to use harbours to venture into the sea.

> **The major reasons for erosion are**
> 1. Changes in the wave pattern
> 2. Wave intensity
> 3. Cyclones and depressions that bring heavy rains and make the waters along the coastline choppy
> 4. Reduction in sediments that rivers and other water bodies bring to the sea
> 5. Rising sea-level and human activities like construction and dredging of ports.

5. **Accretion results in increase in the land area as beaches get extended**, which is positive. However, if accretion happens in the deltas and creeks, then it has a negative impact on the ecosystem because silting of sediments stops the inflow of sea water into these areas.

6. The estuaries and creeks are a breeding ground for several species of aquatic flora and fauna. **Any disturbance hurts the eco-system**.

7. The report found that **63 per cent of West Bengal's coastline has eroded**, losing 99 sq km of land in the last 26 years. **The second-highest loss was in Puducherry (57 per cent)**, followed by Odisha (28 per cent) and Andhra Pradesh (27 per cent).

8. **Kerala is the only state on the western coast that saw erosion of over 40 per cent of its coastline**, while Gujarat, Diu and Daman saw an erosion of 26 per cent, Maharashtra 24 per cent, Goa 12 per cent and Karnataka 22 per cent.

9. On the other hand, **Odisha and Andhra Pradesh saw a high-level of accretion — 51 and 42 per cent of their coastline respectively**, according to the report by the NCCR, an institute under the Ministry of Earth Sciences.

10. West Bengal saw a 24 per cent accretion, Gujarat, Diu and Daman 31 per cent, Maharashtra 12 per cent, Goa 20 per cent, Karnataka 30 per cent, Kerala 21 per cent, and Tamil Nadu 23 per cent.

11. **The survey measured 6,031 km of coastline, excluding creeks**, and analysed 526 maps along 66 districts in 10 states and Union territories using data from five satellites - Landsat 5 and 7 (operated by NASA), ISRO's Resourcesat 1 and 2 and Cartosat-1.

12. **The causes behind erosion differ from state to state**, and the NCCR has started the second phase of the study to state-wise analyse the reasons behind it.

ADOPTION PROGRAMME WITH INDIA

The **Government of Australia has decided to recommence the Adoption Programme with India**, as per **Hague Convention on Inter-Country Adoption**. The adoptions from India had earlier been put on hold by the Government of Australia **eight years ago**, on the reported charges of **trafficking of children for Inter-country adoption by some of the recognized Indian placement agencies** (the Adoption agencies mandated to place children in Inter-country adoption at that point of time).

What

1. **The regulation of Inter-country adoptions have been made strict by the Government of India** with the enactment of **Juvenile Justice Act, 2015** and notification of Adoption Regulations, 2017.

2. **The Ministry of Women & Child Development along with Central Adoption Resource Authority (CARA)** have been constantly engaging with Australian Government for recommencement of the Adoption Programme.

3. The recommencement of the adoption programmes will now enable large number of prospective adoptive parents including those of Indian origin settled in Australia in fulfilling their desire of adopting a child from India.

Flashback

1. **Hague Adoption Convention** is an international convention dealing with international adoption, **child laundering and child trafficking** in an effort to protect those involved from the **corruption, abuses, and exploitation which sometimes accompanies international adoption**.

2. The Convention has been considered crucial because **it provides a formal international and intergovernmental recognition of intercountry adoption** to ensure that adoptions under the Convention will generally be recognized and given effect in other party countries.

3. The Convention was developed by the **Hague Conference on Private International Law**, the preeminent organization in the area of private international law.

4. It was concluded on 29 May 1993 and entered into force on 1 May 1995.

NEW CSS FOR PROMOTING PHARMA COVIGILANCE

Ministry of AYUSH has introduced **new Central Sector scheme (CSS) for promoting pharmacovigilance** of **Ayurveda, Siddha, Unani and Homoeopathy (ASU&H) Drugs**. **Prime objective of the scheme is to develop the culture of documenting adverse effects** and undertake safety monitoring of Ayurveda, Siddha, Unani and Homoeopathy drugs and surveillance of misleading advertisements appearing in the print and electronic media. **The Standing Finance Committee (SFC) chaired by Secretary (AYUSH) approved the scheme on 1st November, 2017** and thereafter it was rolled out for implementation in the country near the end of financial year 2017-18.

What

1. The scheme intends to facilitate the establishment of three-tier network of **National Pharmacovigilance Centre (NPvCC)**, **Intermediary Pharmacovigilance Centres (IPvCCs)** and **Peripheral Pharmacovigilance Centres (PPvCC)**.

2. All India Institute of Ayurveda, New Delhi, an autonomous body under the Ministry of AYUSH, has been designated as National Pharmacovigilance Centre for coordinating various activities of the initiative.

3. In the initial phase of implementation, five (05) National Institutes of AYUSH are designated as the Intermediary Pharmacovigilance Centres and forty two (42) institutions of AYUSH having clinical facilities as Peripheral Pharmacovigilance Centres to take up the work of reporting, documentation, analysis, causality

assessment of the adverse reactions and events associated with the consumption of **Ayurveda, Unani, Siddha and Homoeopathy drugs**.

4. It is intended to have more such centres across the country and achieve the target of **100 peripheral pharmacovigilance centres by 2020**.

5. Government in the first instance has sanctioned grant of Rs 10.60 Crore to All India Institute of Ayurveda, New Delhi to establish the proposed pharmacovigilance network and steer implementation of the initiative with standard protocol and reporting format, training of coordinators & nodal officers, constitution of various committees and systematic reporting of the progress.

6. **Representatives of Central Drug Standards Control Organisation as the national drug regulatory authority** and the **Indian Pharmacopoeia Commission being the WHO Collaborating Centre for Pharmacovigilance in the country** are associated in the initiative as mentor and guide.

7. **Pharmacovigilance initiative will facilitate detection of potentially unsafe ASU&H medicines** and misleading advertisements for taking regulatory action against them.

"PITCH TO MOVE" LAUNCHED

NITI Aayog has launched "Pitch to MOVE" - a mobility pitch competition that **aims to provide budding entrepreneurs of India a unique opportunity to pitch their business ideas to a distinguished jury**. Startups working in the various fields of mobility can pitch their ideas to industry leaders and Venture Capitalists for raising investments. Winners of the event will be felicitated by Hon'ble PM during the **Global Mobility Summit**.

What

1. "**Pitch to MOVE aims to identify and incentivise the startups**, which will help the Government realize its **vision of Shared, Connected, Intermodal and Environment Friendly Mobility for India**.

2. **The importance of mobility as the potential driver of innovation, job creation, economic growth and social change** for the 21st century is highlighted time and again.

3. With rapidly evolving technologies and business models for delivering mobility services, our goal of cleaner and more efficient mobility systems will be achieved with the help of the dynamic entrepreneurial class of India.

4. **"Pitch to MOVE" is organised by NITI Aayog in collaboration with Invest India and Society of Indian Automobile Manufacturers (SIAM)** as a part of a series of engaging featured events in the run up to the main event.

5. **The Summit is scheduled to be held on 7th and 8th Sep 2018 at Vigyan Bhawan, in New Delhi** and is being inaugurated by the Hon'ble Prime Minister of India.

6. **The Mobility Pitch Competition is open to primarily startups** from various parts of India who are interested in showcasing their business ideas to jury members.

7. The winners of the mobility pitch will receive support from the VCs and additionally have the opportunity to be felicitated by the Hon'ble Prime Minister on the 8th September 2018 during the Valedictory session of MOVE Summit.

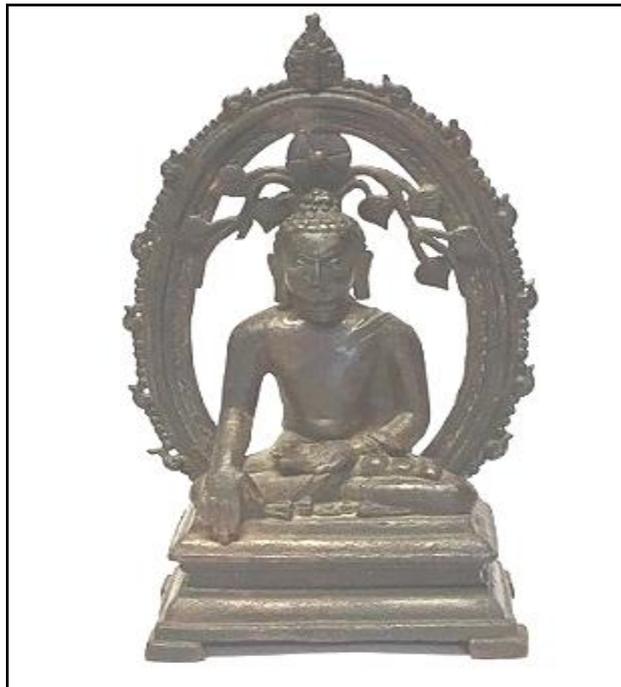## UK RETURNS 12TH CENTURY BUDDHA STATUE

Stolen in 1961, a 12th-century bronze statue of Buddha was returned to India on 15 August 2018 **to commemorate its 72nd Independence Day** by the London Metropolitan Police Service (MPS) at India House in London. **The statue returned by the Scotland Yard** is supposedly **one of the 14 statues which were stolen 57 years back from the Archaeological Survey of India (ASI) museum in Nalanda**.

What

1. The statue received by the Indian High Commissioner of UK YK Sinha **was identified at a trade fair in March by Lynda Albertson of the Association for Research into**

Crimes Against Art (ARCA) and Vijay Kumar from the India Pride Project, who then alerted the police.

2. The statue has been dealt with many hands over the years. Once the dealer and the owner were made aware the sculpture was the same one that had been stolen from India, the Metropolitan Police said they cooperated with the **Met's Art and Antiques Unit** and agreed for the piece to be returned to India.

3. Detective Constable Sophie Hayes of the Met's Art and Antique Unit said no criminality by the current owner or the dealer who had been offering the stolen statue for sale.

4. Sinha described the homecoming of the statue as a "wonderful gesture" and highlighted the "multi-faceted cooperation" between two countries.

5. Michael Ellis, UK Minister for Arts, Heritage and Tourism, said, "This underlines how law enforcement and the London art market are working hand-in-hand to deliver positive cultural diplomacy to the world."

INTERNATIONAL

GOVERNMENT TO DEFER 'RETALIATORY TARIFF'

The government is **set to extend the deadline for the proposed retaliatory import duties against 29 American products** by another 45 days beyond the current date for the higher import duties to be imposed. **The revenue department will notify the revised deadline on August 4 through an "amendment"** to the earlier order. While the government had proposed **to impose higher duties on several goods in June**, it postponed the levies on products such as almonds, apples and phosphoric acid, among other products until August 4.

What
1. **Indian and US officials have used the 45-day window** to negotiate possible concessions, but a deal is yet to be clinched.

2. The government is hopeful that a deal will be clinched

Flashback
1. **India joined the European Union and other U.S. trading partners in retaliating** against the Trump administration's tariff hikes on steel and aluminum on 22 June 2018 by raising import duties on a variety of goods, including almonds, apples and some metal products.

2. **India had notified the World Trade Organization on June 14** of its decision to increase tariffs on more than two dozen goods from the United States.

3. It is a $241 million measure that matches the amount of steel and aluminum import duty expected to be collected from India by the United States after the Trump administration imposed the measures earlier this year.

4. More than a third of that number comes from almonds, as India is the world's biggest buyer of U.S.-grown almonds.

5. Retaliatory tariff a tariff imposed as a **means of coercing a foreign government and intended to compel the grant of reciprocity privileges**

soon. The Centre has proposed to counter the impact of **additional duty on steel and aluminium**, which are expected to leave a $241-million dent on exports, by increasing levies on 29 products.

3. Apart from seeking an exemption from higher tariffs on aluminium and steel goods, the government is pushing for concessional levies on certain items under the **US Generalised System of Preferences (GSP)**.

4. As many as 3,500 Indian products from sectors such as chemicals and engineering get duty free access to the US market under the GSP, introduced in 1976, some of which have now been withdrawn.

5. **According to the US Trade Representative (USTR)**, the GSP is a trade preference programme designed to promote economic development by allowing duty-free entry for thousands of products from designated beneficiary countries.

CHINA, ASEAN NAVIES STAGE FIRST EMERGENCY DRILLS

Chinese and Southeast Asian naval forces staged their first computer-simulated drills so they can jointly respond to emergencies and build trust amid the long-seething disputes in the **South China Sea**. The two-day exercises that ended on 3 August 2018 **involved more than 40 sailors from China** and the **10-member Association of Southeast Asian Nations**. They worked on search and rescue scenarios following a mock ship collision.

What

1. **Singapore's navy hosted the drills at a training center in Changi naval base**, where officers coordinated their force deployments and helicopter landings on navy ships.

2. They monitored developments on three giant screens, including one showing the location of a collision between an oil tanker, which supposedly caught fire, and a passenger ship that sank and scattered people in the high seas.

3. It's a successful prelude to actual maneuvers at sea that are planned for October in China, said Col. Lim Yu Chuan of the Singapore navy.

4. **The exercise is beneficial to promote military exchanges and cooperation between China and ASEAN member states**, to advance our mutual trust.

5. China and ASEAN have held talks for years to try to ease tensions and prevent the disputes from degenerating into open conflicts. During the annual meeting of their foreign ministers in Singapore on 2 August 2018, **an agreement was announced on an initial draft of a "code of conduct,"** a set of rules to discourage aggression and reduce chances of accidental clashes and miscalculations.

CHINA TESTS FIRST HYPERSONIC AIRCRAFT

China on 6 August 2018 announced that **it has successfully tested its first hypersonic aircraft** which **could carry nuclear warheads and penetrate any current generation anti-missile defence systems**, seen as a breakthrough in developing cutting-edge weapons. **The Xingkong-2 or Starry Sky-2** was launched in a target range located in Northwest China, the state-run China Academy of Aerospace Aerodynamics (CAAA) said. **The United States and Russia have been carrying out similar experiments**.

What

1. **Launched by a multi-stage rocket**, China's waverider was released in the air after about 10 minutes. It flew independently, **made large-angle turning maneuvers**, and landed in the targeted area as planned.

2. The flight vehicle reached 30 kms in altitude at **Mach 5.5-6**.

3. **The hypersonic aircraft was designed by the CAAA** in collaboration with the China Aerospace Science and Technology Corporation.

4. Wave rider is a flight vehicle that flies in the atmosphere and uses shockwaves generated by its own hypersonic flight with the air to glide at high speed.

5. Various parameters were proved and the flight vehicle was fully recovered, which marks the successful launch of Xingkong-2 and the first flight of a Chinese waverider.

6. **The wave rider is expected to be tested more frequently in future** before being handed over for deployment to the People's Liberation Army.

7. **The current generation of anti-missile defence systems is mainly designed to intercept cruise and ballistic missiles**, which are either slower or easier to predict, making them possible to intercept.

8. But the trajectory of a waverider is relatively unpredictable in the glide and it flies so fast that it poses an extreme challenge to current anti-missile defense systems.

INDIA NOT TO JOIN US-LED COUNTER TO CHINA'S BRI

India has stayed away from a joint initiative launched by the United States, Japan and Australia to fund infrastructure projects **to counterbalance China's Belt and Road Initiative (BRI)** in the Indo-Pacific region. The decision not to join the **US-led trilateral initiative, launched on July 30**, is in keeping with India's emphasis on multipolarity in the Indo-Pacific region and non-bloc security architecture, said people aware of the matter.

What

1. **India continues to harbour serious reservations against the BRI** and is keen to foster greater stability in the Indo-Pacific region.

2. Prime Minister Narendra Modi made it clear at the Shangri La dialogue in Singapore on June 1, **India never viewed the region as "a strategy or as a club of limited members**.

3. Earlier, during his informal summit with Russian President Vladimir Putin in Sochi, Modi emphasised on non-bloc security architecture for the Indo-Pacific region.

4. The latest US-led trilateral partnership is aimed at funding projects to "**build infrastructure, address development challenges, increase connectivity and promote economic growth**" in the countries in the Indo-Pacific region.

5. The US has separately committed $113 million to support digital economy, energy and infrastructure development projects in the region. It has also committed funds for security initiatives in the region.

6. **Although India is part of the so-called quadrilateral or 'Quad' that was revived in November last year**, the Modi government is simultaneously working to stabilise ties with China.

7. India and China had a series of engagements over the past few months, beginning with Modi's "informal summit" with Chinese President Xi Jinping at Wuhan in central China on April 27-28.

8. **India had joined Japan, Australia and the US in November 2017 and re-launched a Quad for "consultation on Indo-Pacific"**. The second meeting of the Quad was held in Singapore a couple of months ago.

9. India has also been holding two separate trilateral dialogues – one with the US and Japan and another with Japan and Australia – with "peace, prosperity and security" in a "free and open" Indo-Pacific being among the issues discussed in both.

10. India, Japan and Australia discussed "strengthening regional connectivity" when they held the most recent three nation talks in Delhi in December 2017.

ECONOMY

SIP INDEX 2018

Delhi has emerged the most-attractive State for investors, improving its position on the think-tank National Council for Applied and Economic Research (NCAER)'s 2018 **State Investment Potential (SIP) Index**. **Gujarat, previously No 1, slipped two places to the third position**. The surprise elements in the index, **named N-SIPI**, were Tamil Nadu, which moved up four places to No 2. **West Bengal jumped 11 places** from last year to **emerge the 10th most attractive State** for investors.

What

1. **Andhra Pradesh saw a decline in its attractiveness**, falling from the **third position in 2017 to the seventh in the 2018 index**, while Punjab moved up four places to No

12. N-SIPI, now in the third edition, ranked 21 major States, including Delhi, on various parameters.

2. In the overall rankings, Delhi, Tamil Nadu, Gujarat, Haryana, Maharashtra and Kerala emerged the most attractive States to do business, while Odisha, Uttar Pradesh, Assam, Jharkhand and Bihar were at the bottom.

3. **N-SIPI was constructed with six pillars** that were classified under four broad categories: **Factor-driven (land and labour)**, **efficiency driven (infrastructure)**, **growth-driven (economic climate, political stability and governance)**, and **perceptions-driven (responses to the survey)**.

4. Researchers at NCAER contacted 1,049 business enterprises of different sizes in manufacturing and services sector for the survey.

5. Respondents to the perception survey said the law and order situation was a major issue, almost 55 per cent identifying that as the primary constraint. In the 2017 round of survey, almost 57 per cent of the respondents had identified corruption a major constraint.

6. **This time, the proportion of respondents identifying corruption as a major constraint declined 46 per cent**.

7. Other significant constraints identified by the respondents include **difficulty in getting approvals for land**, **transition to GST**, **quality of skilled labour** and getting all approvals before starting business.

8. Disaggregated assessment of individual pillars of the N-SIPI showed Telangana was the best performer on the land pillar, followed closely by Madhya Pradesh and Tamil Nadu. Assam and Kerala displayed significant improvement over the year, moving up the rankings by seven and six places, respectively.

9. **On the labour pillar, Tamil Nadu and Andhra Pradesh retained their first and second positions**, and **on the infrastructure pillar, Delhi retained its top position**. Punjab moved up to the second position, improving its ranking by two places.

10. **On the economic climate pillar, Delhi retained the No 1 position**, while Telangana moved up four places to the second spot.

11. **On the governance and political stability pillar, Tamil Nadu moved up four places to No 1**, displacing Haryana, which moved down to the second.

12. However, it was the perceptions pillar that threw up some surprises. Gujarat retained its number one position, Haryana moved up two places to number two and West Bengal jumped 18 places to the third position.

13. Uttarakhand was another State that saw vast improvement on perceptions, moving up 10 places to the sixth position.

GST COUNCIL MEET

The GST Council on 4 August 2018 cleared a proposal to offer cash backs to consumers on trial basis for digital payments through **Rupay cards, BHIM app and UPI system** to promote cashless transactions in **rural and semi-urban areas**. **Volunteer states would roll out incentives on pilot basis for digital payments**, and the GSTN, the IT backbone of the GST network, and **the National Payments Corporation of India will develop a system soon for the same**, Finance Minister Piyush Goyal told.

What

1. **Once implemented, customers making payments through Rupay card and BHIM UPI, would get a cash back of 20 per cent of the total GST amount**, subject to a maximum limit of Rs 100, while terming the move as a step towards formalisation of the economy.

2. A broad framework has been worked out so that users of Rupay debit card, BHIM, Aadhaar, UPI, USSD transactions can be given the incentives because these are mostly used by poor people.

3. A group of ministers under Bihar deputy chief minister Sushil Modi, had worked out the cash back mechanism and had assessed that the revenue loss on account of it would be Rs 10 billion annually.

4. The Council has decided **to prepare the software and backend for this (cash back incentive)** and whichever state volunteers for it, the pilot can be run in that state itself and impact on revenue can be assessed.

5. **The GST Council also set up a six-member panel of ministers under Minister of State for Finance Shiv Pratap Shukla** to look into the **issues of the MSME sector**.

6. Simultaneously, **the law and procedure as well as rates related issues for the MSME sector would be considered in detail by the law committee** and the Fitment Committee comprising central and state tax officers. They will give their recommendations to the GoM. The ministerial panel is expected to finalise its report within six weeks.

7. **In the pre-GST regime, small businesses with turnover of up to Rs 15 million were exempt from excise duty**.

8. The next meeting of the GST Council will be held on September 28-29 in Goa.

NO GST REFUNDS FOR FOREIGNERS
　　　Foreigners coming to India may not get GST refunds on goods purchased and carried back by them as the government has not invoked relevant provisions of the **Integrated Goods and Services Tax Act yet**, the Finance Ministry said. It was asked to provide details on procedures for foreigners to get GST refunds on goods purchased by them in India. **Some western nations provide refunds of certain taxes on goods purchased by foreigners there**.
What

1. **Section 15 of the IGST (Integrated Goods and Services Tax)** has not yet been enforced.

2. According to the section, **integrated tax paid by a tourist leaving India on any supply of goods taken out of India by him shall be "refunded in such manner** and subject to such conditions and safeguards as may be prescribed.

3. For the purposes of this section, the term 'tourist' means a person not normally resident in India, who enters India for a stay of not more than six months for legitimate non-immigrant purposes, the Act says.

4. The **IGST makes provisions for the levy and collection of taxes on inter-state supply of goods or services** or both by the Central government.

5. Like other developed countries, **it is likely that the foreign tourist would need to show the form/certificate along with invoices etc at refund counters** that need to be set up at exiting points like international airports, so that tourists can get refunds of the GST paid on the goods brought by them.

6. He added that foreign countries, mainly in Europe, have established a provision that a foreigner needs to show a form or receipt that he has got on purchase of particular goods to get refund.

7. **The Goods and Services Tax came into force on July 1, 2017**. But Section 15 of the IGST has not been brought into force yet.

8. It is more than a year since we implemented the GST and the IT system has also stabilised to a great extent.

BILLS TO AMEND GST LAWS PASSED
　　　The Lok Sabha on 9 August 2018 passed four bills amending laws relating to the Goods and Services Tax (GST). The move aims at plugging loopholes in existing laws and reducing the compliance burden for taxpayers. The Central GST (Amendment) Bill, 2018, Integrated GST (Amendment) Bill, 2018, The Union Territory GST (Amendment) Bill, 2018 and the GST (Compensation to States) Amendment Bill, 2018 **got the Lower House's nod**.
What

1. **The provisions will allow taxpayers to amend their tax returns in order to rectify errors**. They also widen the scope for availing input tax credit.

2. The amendments **propose to facilitate the introduction of new tax return forms approved by the GST Council**, and allow firms to get multiple registrations in the same state for different business verticals.

3. Taxpayers will not have to pay interests in case of delayed payments to suppliers. Also, to lessen the compliance burden, consolidated credit/debit notes can now be issued by companies, instead one for every invoice.

4. **Further, only e-commerce operators who need to collect tax at source need to register under GST**.

5. No GST will be levied on job works on items imported into India, including gold and diamonds, and then exported.

6. The provisions related to reverse charge mechanism — entities registered under GST that purchase goods from small unregistered dealers have to pay a tax on behalf of the latter — has been done away with.

7. However, the Centre has been empowered to bring in certain taxpayers under the reverse charge mechanism through a notification subject to the approval of the GST Council.

8. **The proposed changes will also widen the ambit of the Composition Scheme for small traders**. In line with the decision of the GST Council, the threshold for availing the Composition Scheme has been raised to 1.5 crore from 1 crore.

9. Besides, manufacturers and traders supplying services will now be able to opt for the scheme if they supply services of value **not exceeding 10% of the turnover or 5 lakh**, whichever is higher.

10. This is expected to benefit small taxpayers. Under the Composition Scheme, taxpayers can pay a fixed low rate of tax, and avoid the onerous compliance requirements.

11. The amendments also **propose to allow input tax credit for food and beverages, health services, and travel benefits to employees**, which have to be mandatorily provided by employees under existing laws.

12. Credit can also be availed of in case of motor vehicles with approved capacity of not more than 13 persons (including the driver), thereby extending the credit facility to rental cabs as well. However, no input tax credit can be levied on general insurance, servicing, repair and maintenance of those motor vehicles.

GOVT LOSES GAS MIGRATION ARBITRATION

An **international tribunal has awarded** in favour of **Reliance Industries Ltd (RIL)** and its partners BP Plc and Niko Resources Ltd in the **gas migration dispute with the Indian government**. The tribunal also **awarded costs of $8.3 million** to be paid by the government to the consortium. **The dispute pertains to a $1.55 billion penalty imposed on RIL** and its partners BP Plc and Niko Resources Ltd by the Indian government over **allegedly exploiting gas reserves** belonging to state-run Oil and Natural Gas Corporation Ltd. (ONGC) in the course of their own drilling activities.

What

1. **The adjacent deepwater fields in question are RIL's D6 field (KG-DWN-98/3) coast** and ONGC's KG-DWN-98/2 block, in the Krishna-Godavari (KG) basin off India's east coast. RIL and its partners BP Plc and Niko Resources Ltd together own the D6 block.

2. All the contentions of the consortium have been upheld by the majority with a finding that the consortium was entitled to produce all gas from its contract area and all claims made by the **Government of India have been rejected**. The consortium is not liable to pay any amount to the Government of India.

3. The petroleum ministry had raised the demand on 4 November 2016, giving RIL one month to pay up, **after the justice A.P. Shah panel told the ministry on 31 August** that RIL should make up for the "unfair enrichment" it had obtained by way of retaining the gains of gas that seeped into its field from that of ONGC.

4. **An international arbitration panel has issued an award in favour of Reliance, BP & Niko (Consortium)** rejecting completely the claims of the Government of India against the Consortium in respect of migrated gas, by a majority of 2 to 1.

5. According to a report by **DeGolyer and MacNaughton, a US-based consultancy** selected by **both ONGC and RIL**, which was relied upon by the **Shah panel** for confirmation of the gas flow between the blocks, **about 11 billion cubic metres (bcm) of gas migrated to KG D6 from adjacent fields between 1 April 2009 and 31 March 2015**, of which 8.9 bcm was tapped by RIL.

SCIENCE AND TECHNOLOGY

FIRST MISSION TO TOUCH THE SUN

Nasa's Parker Solar Probe**, mankind's first mission to 'touch' the Sun**, has been launched on 12 August 2018 on a **seven-year-long journey** to **unlock the mysteries of our star's fiery outer atmosphere** and its effects on space weather. Liftoff took place from **Space Launch Complex 37 at Cape Canaveral Air Force Station in the US** early on 12 August 2018. The launch of the **United Launch Alliance Delta IV Heavy rocket** carrying the spacecraft was scrubbed yesterday due to a violation of a launch limit, resulting in a hold.

What

1. **The car-sized spacecraft will travel directly into the Sun's atmosphere**, about four million miles from its surface - and more than seven times closer than any spacecraft has come before, thanks to its innovative **Thermal Protection System**.
2. The **$1.5 billion mission will perform the closest-ever observations of a star** when it travels through the Sun's outer atmosphere, **called the corona**.
3. It will make 24 passes through the corona during its seven-year mission. The mission will rely on measurements and imaging to revolutionise our understanding of the corona and how processes there ultimately affect near-Earth space.
4. **The Parker Solar Probe carries a lineup of instruments to study the Sun** both remotely and in situ, or directly. Together, the data from these instruments should help scientists answer three foundational questions about our star.
5. **A Sun-skimming mission like Parker Solar Probe** has been a dream of scientists for decades, but only recently has the required technology - like the heat shield, solar array cooling system, and fault management system - been available to make such a mission a reality.
6. Parker Solar Probe will explore the corona, a region of the Sun only seen from Earth when the Moon blocks out the Sun's bright face during total solar eclipses.
7. The corona holds the answers to many of scientists' outstanding questions about the Sun's activity and processes.

SKA'S 'NERVOUS SYSTEM'

A team of Indian scientists — led by National Centre for Radio Astrophysics (NCRA) — claims to have finished its part in Phase 1 of the ambitious **Square Kilometre Array (SKA) Telescope project**. The team has designed the Telescope Manager (TM). This also is the first team to finish its module among the 12 international engineering teams working on the SKA. The TM — considered the observatory's nervous system — will control, monitor and

About NCRA
1. **The Centre has its roots in the Radio Astronomy Group of TIFR** set up in the early 1960s under the leadership of Prof. Govind Swarup.
2. The group designed and built the **Ooty Radio Telescope**. In the early 80's an ambitious plan for a new telescope was proposed - the Giant **Meterwave Radio Telescope**.
3. Since the site chosen for this new telescope was close to Pune, a new home for the group was built in the scenic campus of Pune University.
4. The radio astronomy group morphed into the National Centre for Radio Astrophysics around this time.

operate the SKA telescopes.

What

1. **The SKA is an international collaborative project** to build the world's largest radio telescope.
2. Data collected by the SKA in a single day would take nearly 20 lakh years to play on an iPod. The SKA "will monitor the sky in unprecedented detail."
3. **The SKA will be nearly 50 times the size of India's Giant Metrewave Radio Telescope (GMRT)**.
4. The work had started for SKA since 2013 and it was assisted by the R&D departments of Tata Consultancy Services and Persistent Systems.
5. **The software had to be submitted last year, but ran into delays**. There were some time lapses because of the number of people working across different time zones, he said, adding that the real challenge was to manage the vast team across time zones and varying work cultures.
6. The **Critical Design Review (CDR) was done two months ago in Manchester**. This is the last stage where experts check if the design meets tough engineering requirements of the project.
7. The Centre has contributed Rs 30 crore to first phase. The scientists will meet the government officials on August 13 regarding funds for the second phase.

IWAI LAUNCHES FOCAL

The Inland Waterways Authority of India (IWAI) has launched a **dedicated portal to connect cargo owners and shippers** with real time data on availability of vessels. It has been designed and **developed by the in-house IT Department and the traffic wing of IWAI** as part of its preparedness for optimal use of its ongoing capacity development on various National Waterways. **The landmark e-connect measure** will enable direct interaction among the vessel operators, shippers and cargo owners as currently, there is no platform to know the availability of vessels in the market.

What

1. The portal has been named as the **Forum of Cargo Owners and Logistics Operators (FOCAL)** and it will facilitate responses from the logistics operators against the requirement raised by cargo owners and vice-versa.
2. The users can register on the portal to key in the availability and details of vessels or the available cargo, as the case may be, cargo owners will be able to put details like the origin, destination, type of cargo, etc.
3. **In its role as a facilitator and now aggregator**, IWAI, that owns a limited number of vessels itself, has been doing pilot movements to establish technical and commercial viability of IWT.
4. The government is developing National Waterways as a key transport intervention, **as part of an integrated transport network strategy.**
5. **It will help correct the transport modal mix** that imposes huge logistics costs on the Indian economy.
6. At present, the cost of logistics in India, at 15 per cent of GDP, is about twice of that in the United States.

FIRST MANNED US SPACE LAUNCH SINCE 2011

Indian-origin US astronaut **Sunita Williams is among the nine astronauts named by NASA who will fly the first mission into space** on commercially provided rockets and capsules, starting next year. After years of vehicle development and building anticipation, **the National Aeronautics and Space Administration (NASA)** has now put the crew in commercial crew spacecraft. The astronauts named will be carried aloft aboard spacecraft developed by entrepreneur **Elon Musk's SpaceX and Boeing Co**, crewing first the test flights, and then missions involving **both Boeing's CST-100 Starliner and SpaceX's Crew Dragon**.

What
1. **Future Commercial Crew astronauts** will be riding to space on partner vehicles built by SpaceX & BoeingSpace.
2. The eight active NASA astronauts and one former astronaut-turned-corporate crew member will be carried on **Boeing CST-100 Starliner and SpaceX Dragoncapsules** to the International Space Station beginning in 2019.
3. The missions will **mark the first crewed launches from US soil since the end of the space shuttle programme in 2011**.
4. NASA has worked closely with the companies throughout design, development and testing to ensure the systems meet its safety and performance requirements.
5. **NASA also announced the four astronauts who will fly aboard the first operational Starliner and Dragon missions** to the space station. Both vehicles were developed in cooperation with NASA to deliver crew members to and from the orbiting laboratory.
6. Josh Cassada, 45, will fly with Sunita ("Suni") Williams, 52, aboard NASA's first contracted Starliner mission. It will be Cassada's first spaceflight. Williams had previously logged 321 days in orbit on two stays aboard the space station, most recently returning to the Earth in 2012.

MOST LITHIUM-RICH GIANT STAR DISCOVERED

Chinese scientists have discovered the most **lithium-rich giant star ever known** – with **lithium abundance 3,000 times higher than normal** – which could shed new light on the evolution of the universe. **The star is in the direction of Ophiuchus**, **north side of the Galactic disk**, with a distance of 4,500 light years to Earth, said researchers at National Astronomical Observatories of China (NAOC) and Chinese Academy of Sciences.

What
1. The discovery of this star has **largely increased the upper limit of the observed lithium abundance**, and provides a potential explanation to the extremely lithium-rich case.
2. **Lithium is considered one of the three elements synthesised in the Big Bang**, together with Hydrogen and Helium.
3. The abundance of the three elements was regarded as the strongest evidence of the Big Bang,which describes how the universe expanded from a very high-density and high-temperature state.
4. **The evolution of lithium has been widely studied in modern astrophysics**, however, a few giants were found to be lithium-rich in the past three decades.
5. This makes the lithium study remarkably challenging, researchers said. Detailed information of the star was obtained by a follow-up observation from the Automated Planet Finder (APF) telescope at Lick Observatory.
6. Besides measuring the anomalously high lithium abundance, the research team also proposed a possible explanation to the lithium-rich phenomenon by the nuclear network simulation with the up-to-date atomic data as an input.

NIRYAT MITRA APP LAUNCHED

Union Minister of Commerce & Industry and Aviation **Suresh Prabhu launched Niryat Mitra – mobile App in New Delhi** on 8 August 2018. **The app developed by the Federation of Indian Export Organisations (FIEO)** is available both on Android and on IOS platforms. **It provides wide range of information required to undertake international trade right** from the policy provisions for export and import, applicable GST rate, available export incentives, tariff, preferential tariff, market access requirements – SPS and TBT measures.

What
1. **The most interesting part is that all the information is available at tariff line**.

2. The app **works internally to map the ITC HS code of other countries with that of India** and provides all the required data without the users bothering about the HS code of any country. **Presently the app comes with the data of 87 countries**.

3. Suresh Prabhu said that **digital technology is going to play a key role in trade and business** and this app is a step towards Digital India.

4. The exports are showing good sign and registering increase at the rate of 20%. He said that the government is working on to further increase the ease of doing business.

5. The app **will provide big opportunity to everybody and help promote export interests in the country**.

6. The Human Resource tool of the app enables candidates with interest in the international trade sector to register and apply against the vacancies arising in the sector.

7. Companies can also search the profiles of the candidates and engage them.

HUMANOID ROBOTS INTRODUCED

The Chennai Airport on 15 August 2018 introduced humanoid robots to perform a variety of actions, including greeting passengers and responding to queries, "**deciphering variances in accent**." **Two such bots were introduced** on a 'trial' basis, one each positioned at the Arrival and Departure sections in the domestic terminal.

What

1. **Humanoid Robots introduced on trial basis at Chennai Airport**.
2. The robot will **provide info on Chennai Airport and its amenities**.
3. These autonomous bots can navigate on their own,identify and greet passengers and respond to "queries deciphering variances in accent" and converse with them.

Humanoid robot

1. A **humanoid robot is a robot with its overall appearance based on that of the human body**.
2. In general humanoid robots have a **torso with a head**, two arms and two legs, although some forms of humanoid robots may model only part of the body, for example, from the waist up.
3. Some humanoid robots may also have a 'face', with 'eyes' and 'mouth'.
4. **Androids are humanoid robots** built to resemble a **male human**, and **Gynoids are humanoid robots built to resemble a human female**.

MISCELLANEOUS

WORLD BIOFUEL DAY

World Biofuel Day is observed every year on 10th August to create awareness about the importance of **non-fossil fuels** as an alternative to conventional fossil fuels and to highlight the various efforts made by the Government in the biofuel sector. **The World Biofuel Day is being observed by the Ministry of Petroleum & Natural Gas for the last three years**. This year, it is proposed to hold the World Biofuel Day programme at Vigyan Bhawan, New Delhi on 10th August, 2018.

What

1. The proposed participants in the programme are **sugarcane and other farmers, scientists, entrepreneurs in biofuels**, students of agriculture, science and engineering streams, Members of Parliament, Ambassadors, officers of Central & State Governments and companies involved in bio-energy sector, national and international media, and others.

2. There will be separate interactive sessions on ethanol, bio-diesel, bio-CNG and 2nd Generation biofuels after the inaugural session.

3. **Biofuels have the benefits of reducing import dependency on crude oil**, cleaner environment, additional income to farmers and employment generation in rural areas.

4. **The biofuels programme is also in synergy with the Government of India initiatives for Make in India**, Swachh Bharat and enhancing farmers' income.

5. Since 2014, the Government of India has taken a number of initiatives to increase blending of biofuels.

6. The major interventions include administrative price mechanism for ethanol, simplifying the procurement procedures of OMCs, amending the provisions of Industries (Development & Regulation) Act, 1951 and enabling lignocellulosic route for ethanol procurement.

7. These interventions of the Government of India have shown positive results. **Ethanol blending in petrol has increased from 38 crore litres in the ethanol supply year 2013-14 to an estimated 141 crore litres** in the ethanol supply year 2017-18.

8. **Bio-diesel blending in the country started from 10th August, 2015** and in the year 2018-19, Oil Marketing Companies have allocated 7.6 crore litres of biodiesel.

9. Oil PSUs are also planning to set up 12 Second Generation (2G) Bio-refineries to augment ethanol supply and address environmental issues arising out of burning of agricultural biomass.

Flashback

1. **The Government approved the National Policy on Biofuels-2018 in June 2018**.

2. The policy has the objective of reaching 20% ethanol-blending and 5% biodiesel-blending by the year 2030. Among other things, the policy expands the scope of feedstock for ethanol production and has provided for incentives for production of advanced biofuels.

3. Recently, the Government has increased the price of C-heavy molasses-based ethanol to Rs. 43.70 from Rs. 40.85 to give a boost to EBP Programme.

4. Price of B-heavy molasses-based ethanol and sugarcane juice-based ethanol has been fixed for the first time at Rs. 47.40.

5. The Government has **reduced GST on ethanol for blending in fuel from 18% to 5%**. The Ministry of Petroleum & Natural Gas is making all efforts to increase ethanol supply for petrol and has taken several steps in this direction.

DRAFT ON STANDARDS FOR MEDICAL DEVICES

In the first of its kind document to spell out standards for medical devices in the country, the Union Health Ministry has come out with an exhaustive draft, **covering simple items such as ice-bags and tongue-depressors on one end of the continuum** and very sophisticated items such as cardiac-pacemakers and proton-therapy devices on the other end.

What

1. The 241-page guidance document describes fundamental design and manufacturing requirements for up to 594 medical devices, referred to as "**Essential Principles for Safety and Performance**" that when met, indicate a medical device is safe and performs to its specification.

2. The enlisted medical devices are **classified into categories A, B, C, D**: A being the most low-risk device, B (low-moderate high risk), C (moderate high risk) and D (high-risk) and elaborated on management of quality.

3. These include a range of products including ablation devices, catheters, bone cement, cardiac stents, contraceptives like tubal and fallopian rings, male and female

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Flashpoint

1. **The Indian medical device sector is the fourth largest in Asia** and is worth $5.5 billion. India relies heavily on medical device imports, with 70-80 per cent of sales being generated through imports.

2. **As India is playing a major role in marketing of these devices in Asia**, and beyond, regulating medical devices poses a real challenge, upon implementation of the Medical Device Rules, 2017 which ultimately aim at replacing the existing **Rules of the Drugs and Cosmetics Act, 1940**.

condoms, disinfectants, disposable hypodermic needles, heart valves, internal prosthetic replacements like penile, dental, vaginal, breast, retinal, cochlear implants and the like.

4. It is crucial to adhere to standards when dealing with medical devices, as they pose a direct risk to a patient's life. The draft states that **the design and manufacturing requirements are grouped in many categories** including those that pose a risk of infection, devices incorporating materials of biological origin and so on.

5. For example, the draft mentions that for medical devices incorporating non-viable tissues, cells and substances of animal origin, the animals should have been subjected to veterinary controls and surveillance. The manufacturer is required to retain information on the geographical origin of the animals.

6. In addition to the newly introduced Medical Devices Rules earlier in January, **the draft also refers to the British, Japanese, European as well as Bureau of Indian Standards** while framing standards. The draft is open for comments from all stakeholders until September, before it gets finalised.

GOVT APPROVES WATER AERODROMES

The Civil Aviation Ministry has approved a proposal for setting up of water aerodromes in the country, with **Chilika Lake in Odisha**, **Sardar Sarovar Dam** and **Sabarmati River Front in Gujarat** being identified in the first phase for development of such facilities. The proposal was cleared by Civil Aviation Minister Suresh Prabhu. The Directorate General of Civil Aviation (DGCA) issued regulations in June this year, prescribing procedures and requirement for licencing of water aerodromes. Since there is **no historical data on the market and demand from any airlines**, the project will be done as a pilot project, the ministry official said. The development would pave the way for **operation of amphibian planes (both in land and water) to enhance air connectivity**.

What

1. Under the proposal, water aerodrome would be **set up near locations of tourist and religious importance**.

2. The **Airports Authority of India** has already identified the **sites in Odisha, Gujarat, Assam, Maharashtra and Andhra Pradesh** where water aerodrome would be developed.

3. **In the first phase, Chilika Lake in Odisha, Sardar Sarovar Dam and Sabarmati River Front in Gujarat have been identified** for development of water aerodromes.

4. Earlier, Civil Aviation Secretary R N Choubey said that his ministry was also considering a proposal to look at seaplane operation under phase III of the regional connectivity scheme UDAN.

Airports Authority of India

1. The **Government of India constituted the International Airports Authority of India (IAAI) in 1972** to manage the **nation's international airports** while the **National Airports Authority (NAA) was constituted in 1986** to look after domestic airports.

2. **The organisations were merged in April 1995 by an Act of Parliament**, namely, the **Airports Authority of India Act, 1994** and has been constituted as a Statutory Body and was named as Airports Authority of India (AAI).

3. This new organisation was to be responsible for creating, upgrading, maintaining and managing civil aviation infrastructure both on the ground and air space in the country.

5. According to the DGCA, **an entity seeking to set up a water aerodrome has to take approvals from various authorities**, including the ministries of defence, home, environment and forests, and shipping. **A water aerodrome licence would be valid for two years**.

6. **Initially, a provisional licence shall be issued for a period of six months** during which implementation of the water aerodrome operation is monitored. **Regular licence shall be accorded after post implementation monitoring period** and completion of corrective action.

7. The formal application for setting up a water aerodrome has to be submitted at least 90 days before the date of intended operations.
8. Under the aviation regulations, **an aerodrome cannot be used for scheduled air transport services**, among others, unless there is a licence.
9. Generally, seaplanes are described as fixed-wing aircraft that is designed for taking off and landing on water.
10. In October last year, **no-frills carrier SpiceJet had unveiled plans to buy over 100 amphibian planes**, estimated to cost $ 400 million.
11. **The airline had signed a memorandum of understanding with Japan's Setouchi Holdings** to explore whether the amphibian planes can be used by the airline in a cost-effective manner.
12. It has already approached the Odisha government evincing interest to operate amphibian planes from the Chilika Lake.

RE-STRUCTURING OF ASRB

The Union Cabinet chaired by Prime Minister has approved the proposal for **restructuring of Agricultural Scientists Recruitment Board (ASRB)**. The **ASRB will now be a 4 Member body instead of 3 Members**. It will have a Chairperson and 3 Members. It would be for a period of three years or till attainment of 65 years of age, whichever is earlier.

What
1. **For the purpose of autonomy, secrecy, accountability and efficient functioning ASRB shall be delinked from ICAR** and to be attached with Deptt. of Agricultural Research & Education (DARE) under Ministry of Agriculture & Farmers' Welfare.
2. The budget head for ASRB may also be delinked from ICAR and be created under DARE, and the ASRB may have its own cadre of administrative staff in the secretariat and have independent administrative control.
3. The four Member body comprising of one Chairperson and three Members would help in expediting the work and functioning of ASRB.
4. It would support in expediting therecruitment process which would be beneficial for the agrarian community and agriculture at large.

Background
1. **In November 1973,** the Cabinet approved inter alia setting up of **Agricultural Scientists Recruitment Board with a whole-time Chairman**, to function as an independent recruitment agency in recruitment to various scientific positions in Agricultural Research Service and Research Management Positions of ICAR/DARE.
2. In view of the significant increase in work load of ASRB a proposal was initiated for restructuring of the Board, and **the Cabinet approved the proposal in October 1986** by increasing the membership from one to three of ASRB.
3. Since the last restructuring of ASRB in 1986, the work load of ASRB have substantially increased and significant changes have occurred in the field of agricultural science, and hence, there was a need to enlarge the composition of the board and to expand the zone of expertise to choose the Chairman and Members of the Board.

5. Moreover, it will ensure more transparency and efficiency in recruitment of meritorious scientists to various scientific positions in lCAR, the premier agency for agricultural research and education in the country.

DG AIR ELECTED AIBD PRESIDENT

The Asia-Pacific Institute of Broadcasting Development (AIBD) on 3 August 2018 elected **Fayyaz Sheheryar,** Director-General of All India Radio, as its new President. This is the first time India has been elected for the position of president of AIBD.
What

1. **The Asia-Pacific Institute for Broadcasting Development (AIBD), established in 1977** under the auspices of UNESCO.
2. It is a **unique regional inter-governmental organisation** servicing countries of the **United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP)** in the field of electronic media development.
3. It is hosted by the Government of Malaysia and the secretariat is located in Kuala Lumpur.
4. The AIBD is mandated to achieve a vibrant and cohesive electronic media environment in the Asia-Pacific region through policy and resource development.
5. The elections were held at the 44th annual meeting of AIBD in Colombo.

M KARUNANIDHI PASSES AWAY

Muthuvel Karunanidhi, 94, the five-time chief minister of Tamil Nadu and president of Dravida Munnetra Kazhagam (DMK) passed away in Chennai on 7 August 2018. He entered the 50th year as the president of DMK late last month, the longest tenure by a person as head of one of Tamil Nadu's major Dravidian parties.

What

1. **The 94-year-old leader was admitted to Kauvery Hospital on July 26** due to age-related complications. Karunanidhi had been suffering from various ailments since October 2016.
2. Karunanidhi was known for his contribution to **Tamil literature and film industry for several years**, apart from playing a major role in Tamil Nadu's politics for almost over seven decades.
3. **Born on June 3, 1924, to Muthuvel and Anjugam, at Thirukuvalai in Tiruvarur**, around 320 kilometres from Chennai, he was named Dakshinamurthy, which he later changed to Karunanidhi. He was known as Kalaignar, a scholar of arts, for his literary work.
4. He entered politics at the age of 14 and participated in anti-Hindi agitations in 1937. His protest at Kallakudi, in Trichy, to change the name of the railway station from Dalmiapuram to Kallakudi became a turning point in his political career.
5. He was one of the few politicians who did not lose even one election to the Legislative Assembly.
6. **He won his first Assembly seat from Kulithalai, in Trichy, in 1957** and became a minister of public works in 1967, when Annadurai was chief minister.

PARTIAL SOLAR ECLIPSE 2018

A partial solar eclipse took place on August 11, lasting for nearly 3 hours 30 minutes. The partial solar eclipse was visible in the day starting at around 1:32 PM Indian Standard Time (IST), and was visible till 5:02 PM IST. It was visible across major parts of the Northern Hemisphere, **though India was not get to see the event**.

What is partial solar eclipse?

1. **An eclipse is a celestial phenomenon** which **takes place when the Sun, Moon, and Earth are aligned in a straight line**.
2. **In a solar eclipse, it is in the Moon which blocks the Sun's path** and stops the sunlight from reaching the Earth.
3. **During a total solar eclipse, it turns dark during the day**, and temperatures can fall, since the Sun is completely blocked by the Moon.
4. This is also the reason why a total solar eclipse has inspired so much superstition and fear, given that it turns dark during the day.
5. **When the Moon covers the sun in an angular dimension it is known as a partial solar eclipse**.
6. During a partial solar eclipse, the Sun appears as a disk or in a crescent shape, the nature of which may differ according to the location on Earth and the alignment of the three bodies.

UN RIGHTS CHIEF

The **UN General Assembly** on 10 August 2018 **approved the appointment of Chile's former president Michelle Bachelet** to be the world body's next human rights chief. **The decision was taken by consensus by the 193-nation assembly** after Secretary-General Antonio Guterres put forward Bachelet to be the next UN high commissioner for human rights on 8 August 2018.

What

1. **Bachelet most recently served as President of Chile (from 2014 to 2018, and 2006 to 2010)**.
2. She was the **first Executive Director of UN-Women between 2010 and 2013**.
3. She has also served as Minister of Defence and Minister of Health in Chile.
4. **She will be the seventh High Commissioner since the Office was created in 1993**.
5. Zeid Ra'ad Al-Hussein has been in office since 1 September 2014. His predecessors are: José Ayala-Lasso (1994-97); Mary Robinson (1997-2002); Sergio Vieira de Mello (2002-03); Louise Arbour (2004-08); and Navi Pillay (2008-14).

About UN Women
1. **In July 2010, the United Nations General Assembly created UN Women**, **the United Nations Entity for Gender Equality and the Empowerment of Women**, to address such challenges.
2. In doing so, UN Member States took an historic step in accelerating the Organization's goals on gender equality and the empowerment of women.
3. **The creation of UN Women came about as part of the UN reform agenda**, bringing together resources and mandates for greater impact.

INDIA GETS FIRST ALL-WOMEN SWAT TEAM

Ahead of the Independence Day, **the Delhi Police inducted India's first all-woman Special Weapons and Tactics (SWAT) team** for anti-terrorist operations. After rigorous training of around 15 months from specialists all across India and abroad, **36 women commandos from the northeastern states have been inducted into this squad**. While 13 members are from Assam, rest of them hail from Arunachal Pradesh, Sikkim and Manipur.

What

1. Delhi Police Commissioner **Amulya Patnaik** was behind the idea of the SWAT team.
2. **The team is ready to take on hostage crises and terror strikes in urban areas**.
3. The members of this all-women SWAT team received better ratings at the Police Training College in Jharoda Kalan than their male counterparts.
4. Home Minister Rajnath Singh, who formally inducted the unit, said that the women commandos will be deployed at Red Fort and India Gate during Independence Day celebrations.
5. Armed with MP5 submachine guns and Glock 21 pistols, all the members of the force are also well-versed in Israeli Krav Maga, an unarmed combat style.

Genesis of SWAT
1. **SWAT was used as an acronym for the "Special Weapons and Tactics" established as a 100-man specialized unit in 1964** by the Philadelphia Police Department in response to an alarming increase in bank robberies.
2. The purpose of this unit was to react quickly and decisively to bank robberies while they were in progress, by utilizing a large number of specially trained officers who had at their disposal a great amount of firepower.
3. **The tactic worked and was later soon to resolve other types of incidents involving heavily armed criminals**.
4. Los Angeles Police Department (LAPD) Inspector Daryl Gates has said that **he first envisioned "SWAT" as an acronym for "Special Weapons Attack Team"** in 1967, but later accepted "**Special Weapons and Tactics**" on the advice of his deputy chief, Edward M. Davis.

6. Members of this team are experts in building interventions, counter ambush and VVIP security, Deputy Commissioner of Police (DCP) (Special Cell).

V S NAIPAUL DIES AT 85

V S Naipaul, the Nobel laureate who **documented the migrations of peoples**, the **unraveling of the British Empire**, the ironies of exile and the clash between belief and unbelief in more than a dozen unsparing novels and as many works of nonfiction, died on 12 August 2018 at his home in London. **He was 85**.

What

1. **Mr Naipaul was born of Indian ancestry in Trinidad** went to Oxford University on a scholarship and lived the rest of his life in England, where he forged one of the most illustrious literary careers of the last half century. **He was knighted in 1990**.

2. Compared in his lifetime to Conrad, Dickens and Tolstoy, he was also a lightning rod for criticism, particularly by those who read his portrayals of third-world disarray as apologies for colonialism.

3. **Mr. Naipaul personified a sense of displacement**. Having left behind the circumscribed world of Trinidad, he was never entirely rooted in England.

4. **In awarding him the Nobel Prize in Literature in 2001**, the Swedish Academy described him as "**a literary circumnavigator**, only ever really at home in himself, in his inimitable voice."

5. His first novel, "**The Mystic Masseur" (1957)**, about Ganesh Ramsumair, a failed schoolteacher who becomes a masseur and later guru and politician in Trinidad, was well received.

6. **In 1964 Mr. Naipaul published the first of three travelogues about India**, "**An Area of Darkness**." He found that in spite of his Indian origins, he did not belong there at all.

SOMNATH CHATTERJEE DIES

Somnath Chatterjee, former Lok Sabha Speaker, passed away on 13 August 2018 morning following a multi-organ failure at a city hospital. H**e was 89**. The 89-year-old was earlier admitted to the nursing home on June 25 after suffering a haemorrhagic stroke. Somnath Chatterjee underwent treatment for 40 days and was discharged just for three days after his health showed signs of improvement. However, he was re-admitted after his condition deteriorated.

What

1. **Chatterjee was the Speaker in the first five-year term (2004-2009)** of the United Progressive Alliance government and was **elected to Parliament's Lower House for ten times since 1971**.

2. **He was expelled from the CPM in July 2008** for refusing to resign as Speaker after his party CPM withdrew support from the United Progressive Alliance (UPA) government.

3. Somnath Chatterjee: A profile of the Parliamentarian, ex-Lok Sabha Speaker

4. **He was born in 1929 in Tezpur, Assam**. Chatterjee was educated at Mitra Institution School, Presidency College and then the University of Calcutta in Calcutta.

5. He also attended Jesus College, Cambridge and graduating with a BA in 1952 and an MA in 1957, both in Law.

6. **Somnath Chatterjee was awarded an honorary fellowship by the college in 2007**.

7. Chatterjee was called to the bar from Middle Temple in London and took up legal practice as an advocate at the Calcutta High Court before joining active politics. **He joined CPM in 1968 and was a member till his expulsion in 2008**.

SWACHH SURVEKSHAN 2019

Swachh Survekshan 2019 will be conducted across all cities and towns across the country **4th – 31st January 2019**. The distinctive features of the survey are geared

towards **encouraging large scale citizen participation, ensuring sustainability** of initiatives taken towards garbage free and open defecation free cities, **providing credible outcomes which would be validated by third party certification**, institutionalizing existing systems through online processes and creating awareness amongst all sections of society about the importance of working together towards making towns and cities a better place to live in. Further, **this year's Swachh Survekshan** will focus separately on sanitation and **garbage-free certifications by independent third party**, while parallelly accelerating citizens' engagement in the Mission. Additionally, the survey also intends to foster a spirit of healthy competition among towns and cities to improve their service delivery to citizens, towards creating cleaner cities.

The key highlights of Swachh Survekshan 2019 are as follows:

1. Fully digitized survey through **online MIS**
2. The survey indicators/questionnaire will carry a **total of 5000 marks as compared to 4000 marks in Swachh Survekshan 2018**.
3. Data will be collected from 4 broad sources – '**Service Level Progress**', **Direct Observation**, **Citizens Feedback and Certification** – as shown below.
4. Revised weightage for the components under 'Service Level Progress', adding a new component 'By-Laws' (refer diagram below).
5. Certification (Star Rating of Garbage Free Cities and Open Defecation Free Protocols)
6. MoHUA has introduced an important component of 'Certification' of the city on two different aspects:
7. **Star Rating of Garbage Free Cities:** The cities would be evaluated on the basis of the star rating achieved by them as per the protocol released by MoHUA.
8. **The Star Rating protocol is based on 12 parameters** and follows a SMART framework – Single metric, Measurable, Achievable, Rigorous verification mechanism and Targeted towards outcomes – and has been devised in a holistic manner including components such as cleanliness of drains & water bodies, plastic waste management, managing construction & demolition waste, etc. which are critical drivers for achieving garbage free cities.
9. In order to give added impetus to cities to accelerate their journey towards a garbage-free status, the Swachh Survekshan 2019 has allocated 20% weightage of marks to the star rating certifications.
10. **Open Defecation Free Protocols:A 5% weightage has been allotted in the Swachh Survekshan to ODF certifications**.
11. Direct Observation (On-field independent observation and collection of data): The collection of data from Direct Observation shall be based on physical observation of the survey agency.

NEW CONCESSION MODEL FOR GREENFIELD AIRPORTS

The government proposes a new policy for greenfield airports which it feels will bring down the cost of air travel in the country. According to the new proposal, **the maximum blended aeronautical yield in rupee per passenger** terms will be predetermined by the Concession Authority at the beginning of the concession period.

What

1. **Currently, the entire aeronautic charges are based on capital expenditure**. In the years when capital expenditure is incurred the per passenger charges shoot up to as much as 800.
2. Once the charges (money spent by the airport operator to build the airport) are recovered, these charges can come down to 100 rupees. Instead of that we giving something like an equalised tariff and we are saying that it will be 400.
3. **The new guidelines will be in the public domain till September 14** for suggestions after which the government will review the suggestions and come up with the new guidelines.

4. **The concession period is for 40 years** and industry could witness shocks, the concessionarie can avail of deferral of concession fee for a maximum of five years within the 40 years' concession. However, the amount has to be repaid once the business picks up.

> **Flashback**
> 1. **Greenfield project means that a work which is not following a prior work**.
> 2. In infrastructure the projects on the unused lands where there is no need to remodel or demolish an existing structure are **called Green Field Projects.**
> 3. The projects **which are modified or upgraded are called brownfield projects**.
> 4. So simply **Greenfield airport is a new airport which is constructed on an undeveloped site**.
> 5. As per the Government of India's Policy on Airport Infrastructures issued in December, 1999, No Greenfield airport will normally be allowed within a distance of 150 kms from the nearest existing airport.

5. Airport operators will be allowed to utilise 10 per cent of the airport area.

COSMOS BANK FRAUD

The National Payments Corporation of India (NPCI) on 15 August 2018 said its systems are "fully secure" and **the cyber fraud of more than Rs 900 million at Pune-based Cosmos Bank happened due to a malware-based attack** on the lender's IT system. Hackers managed to siphon off over Rs 900 million through a malware attack on the server of the bank and cloning thousands of debit cards, Cosmos Bank chairman Milind Kale had said.

What

1. **The fraudulent transactions were carried out on August 11 and August 13** and the malware attack by the hackers originated in Canada.
2. In a release, NPCI said **one of its network members has confirmed about a malware-based attack on their system** which has caused a fraud loss of over Rs 900 million.
3. **NPCI wish to reiterate that our systems are fully secure** and this particular issue has occurred within the Banks own IT environment, adding that NPCI will continue to extend support to the affected bank in identifying the cause of the fraud.
4. The bank has also registered an FIR at the Chatushringi police station in the city. A case was registered **under sections 43, 65, 66(C) and 66 (D) of the Information Technology Act** and **relevant sections of the Indian Penal Code**.
5. Over the two days, **hackers withdrew total Rs 780 million from various ATMs in 28 countries**, including Canada, Hong Kong and a few ATMs in India, and another Rs 250 millon were taken out within India.
6. On August 13, hackers again transferred Rs 139 million in a Hong Kong-based bank by using fraudulent transactions.
7. The cooperative bank's core banking system was not affected and that it has already appointed a professional forensic agency to investigate the fraud.
8. As a precautionary measure, **the bank has closed ATMs operations and suspended net and mobile banking facilities**.