

My Notes...

NATIONAL

HUMAN RIGHTS (AMENDMENTS) BILL, 2018 APPROVED

The Union Cabinet chaired by Prime Minister Shri Narendra Modi has given its approval to the Protection of Human Rights (Amendments) Bill, 2018 for better protection and promotion of human rights in the country.

Salient Features

1. It proposes to include “National Commission for Protection of Child Rights” as deemed Member of the Commission;
2. It proposes to add a woman Member in the composition of the Commission;
3. It proposes to enlarge the scope of eligibility and scope of selection of Chairperson, National Human Rights Commission as well as the State Human Rights Commission; and
4. It proposes to incorporate a mechanism to look after the cases of human rights violation in the Union Territories.
5. It proposes to amend the term of office of Chairperson and Members of National Human Rights Commission and State Human Rights Commission to make it in consonance with the terms of Chairperson and Members of other Commissions.

Flashback

1. The amendment to the Protection of Human Rights Act, 1993 will make National Human Rights Commission (NHRC) and State Human Rights Commission (SHRC) more compliant with the Paris Principle concerning its autonomy, independence, pluralism and wide-ranging functions in order to effectively protect and promote human rights.

Benefits

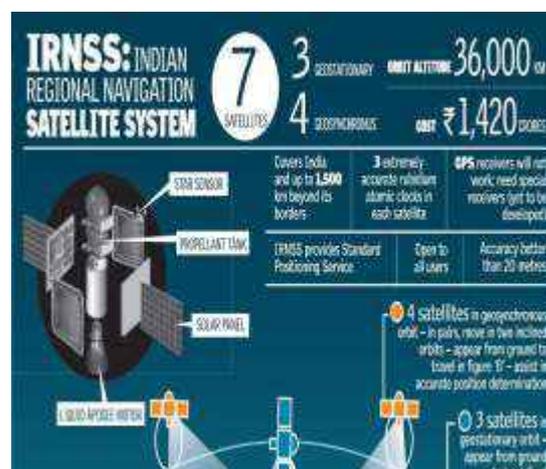
1. The Amendment will strengthen the Human Rights Institutions of India further for effective discharge of their mandates, roles and responsibilities.
2. Moreover, the amended Act will be in perfect sync with the agreed global standards and benchmarks towards ensuring the rights relating to life, liberty, equality and dignity of the individual in the country.

INRSS-1I PUT INTO ORBIT

The Indian Space Research Organisation (ISRO)'s navigation satellite INRSS-1I was launched by PSLV-C41 from the spaceport and successfully placed in the designated orbit. PSLV-C41/INRSS-1I Mission blasted off from the first launchpad at the Sathish Dhawan Space Centre.

What

1. INRSS-1I is expected to replace INRSS-1A, the first of the seven navigation satellites that was rendered ineffective after its three rubidium atomic clocks failed.
2. The seven satellites are part of the NavIC navigation satellite constellation. The launch is ISRO's second attempt at sending a replacement satellite.



3. The previous mission of a PSLV carrying IRNSS-1H in August last year failed after the heat shield covering the satellite failed to separate.
4. The IRNSS-1I mission takes place two weeks after the space agency launched GSAT-6A on board GSLV Mk-II.
5. Though the rocket placed GSAT-6A in orbit, the ISRO lost communication with the satellite within two days.

FIRST HEALTH CENTRE UNDER AYUSHMAN BHARAT

Prime Minister Narendra Modi inaugurated the first health centre under Ayushman Bharat Scheme in Bijapur on 14 April 2018. He also inaugurated the first phase of the Bastar Internet scheme under which a 40,000 km-long network of fibre optics cable would be spread across the seven districts of the tribal region. The districts are Bijapur, Narayanpur, Bastar, Kanker, Kondagaon, Sukma and Dantewada.

What

1. Modi also inaugurated bank branches in seven villages and visited rural BPO centre developed under the India BPO promotion scheme. The BPO centre is provided Internet by the Bastar internet scheme. He also laid foundation stones for road and bridge projects worth over Rs 1,700 crore.
2. Chhattisgarh Chief Minister Raman Singh chaired the programme while Health Minister J P Nadda was the Chief Guest on the occasion. Under the Ayushman Bharat Scheme, the government aims to open 1.5 lakh health and wellness centre by 2022, which would be equipped to treat host of diseases, including blood pressure, diabetes, cancer and old-age illness.
3. Also under the scheme, the government has prepared the broad contour of the National Health Protection Scheme (NHPS) and work is on to finalise parameters for identifying beneficiaries and hospital entitlement.



GOVT EXTENDS FAME SCHEME

The Union government decided to extend the Faster Adoption and Manufacturing of (Hybrid) and Electric Vehicles (FAME) scheme by six months until 30 September 2018, or till the time the second phase of the scheme is approved by it. The department of heavy industries has already prepared a draft of the second phase of the scheme, which has been sent to the finance ministry for approval.

What

1. As the government intends to promote electric mobility in India, it is expected that the new version of the scheme will give exemptions and subsidies for manufacturing electric vehicle components and to buyers of electric vehicles (EVs) for commercial purposes like public transport.
2. FAME, launched in fiscal 2015, was meant to run for two years until March 2017. Subsequently the scheme was extended twice till March 2018.

3. In December, the department of heavy industries in a bid to utilize the funds sanctioned under the FAME scheme and boost electric mobility across the country, launched a pilot project for funding electric vehicles in 11 cities for public transport purposes.
4. Under the pilot project, a 60% subsidy is provided to buses, 20% for three-wheelers and 10-15% to four-wheelers. Almost 10% of the total subsidy will be spent on establishing charging stations.
5. Automobile manufacturers were eagerly awaiting an extension of the FAME scheme before the second phase is introduced some time during the current fiscal year.

Flashback

1. Government of India has notified FAME India Scheme [Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India] for implementation with effect from 1st April 2015, with the objective to support hybrid/electric vehicles market development and Manufacturing eco-system.
2. The scheme has 4 focus areas i.e. Technology development, Demand Creation, Pilot Projects and Charging Infrastructure. The phase-I of the scheme is being implemented for a period of 2 years i.e. FY 2015-16 and FY 2016-17 commencing from 1st April 2015.
3. The FAME India Scheme is aimed at incentivising all vehicle segments i.e. 2 Wheeler, 3 Wheeler Auto, Passenger 4 Wheeler Vehicle, Light Commercial Vehicles and Buses.
4. The scheme covers Hybrid & Electric technologies like Mild Hybrid, Strong Hybrid, Plug in Hybrid & Battery Electric Vehicles.

GAGANSHAKTI-2018 CONCLUDED

IAF exercise ‘Gaganshakti-2018’, the Indian Air Force conducted a Mass Casualty Air Evacuation Drill in the Northern sector. 88 Casualties were airlifted from Leh and taken to Chandigarh by C-17.

What

1. The C-17 Globe Master Aircraft was converted for this role by fixing support structures for the stretchers, in the main cabin. An indigenously developed Patient Transfer Unit (PTU) capable of providing In-Flight Critical Care to patients was demonstrated during the exercise.

2. After landing at Chandigarh, these patients were evacuated to Command Hospital, Chandimandir. For swift transfer of the patients in ambulances to the Hospital, a green corridor was made in liaison with Chandigarh civil authorities.

3. With this demonstration the IAF has proven its flexibility and quick response in carrying out mass casualty evacuations.

Strengthening the Core

Aim of Gaganshakti exercise was real time coordination and employment of air power in a short and intense battle scenario



IAF had never carried out an exercise of this scale

IAF used its entire war fighting machinery to check its operational concepts and war waging capability

Exercise conducted in two phases- first one focussed along the western front with Pakistan, second was along the eastern front with China



For Phase 2, forces were relocated within a short span of 48 hours

Over 1400 officers and 14,000 men were pulled out of training establishments and deployed for exercise

300 odd experts are now analysing how the exercise went

4. This capability will also be utilised by the IAF in case of Human Assistance & Disaster Relief operations near the incident locations by even landing on the designated highways.

INDIA'S MOST POWERFUL LOCOMOTIVE

Prime Minister Narendra Modi on 10 April 2018 flagged off India's first all-electric high-speed locomotive in Bihar. The first big Make-in-India project completed by France's Alstom, the train has the country's most powerful engine with 12,000 horsepower and a maximum speed of 120 km per hour. The average cost of one high-speed locomotive is around 25 crore. The new bi-weekly train Humsafar Express will connect Katihar to New Delhi.

What

1. Developed at Madhepura's Electric Locomotive Factory, the all-electric high-speed train is the first big Make-in-India project completed by Alstom of France.
2. Each double section locomotive will have a hauling capacity of 6,000 tonnes. With a speed of 120 km/hr, the high-speed all-electric locomotive will reduce the congestion faced by Indian railways. The heavy haulage locomotives will be used transport coal and iron ore confirmed a senior railway ministry official.
3. With the launch of this locomotive, India will be competing with Russia, China, Germany and Sweden that have successfully run 12,000 horsepower and above capacity electric Locomotives.
4. With 100% electrification, the new locomotive will not only bring down operating costs for the Railways but will significantly cut down greenhouse gas emissions as well
5. Equipped with IGBT based propulsion technology, the locomotive will have the ability to endure the tough Indian climate.
6. Make in India: Alstom is expected to deliver a total of 800 high horsepower locomotives over a period of 11 years. The entire project will cost Rs 200 million.
7. The first five locomotives will be imported while the remaining 795 will be manufactured in the country under the Make in India programme, according to the agreement.

NHAI'S FIRST INTERNATIONAL PROJECT

To provide seamless vehicular movement for enhancing trade, business, health, education and tourism between Indian, Myanmar and Thailand, the National Highways Authority of India has signed an agreement for upgradation of Yagyi – Kalewa section of highway (Milepost 40/0 to Milepost 115/5) in Myanmar to two lane with earthen shoulder.

What

1. The agreement was signed by NHAI with M/s Punj Lloyd Ltd. – Varaha Infra Ltd. (JV).
2. The project has been funded by Ministry of External Affairs, Government of India and would be executed on EPC mode at a cost of Rs.1177 crores.
3. The project will have 3 new major bridges and 2 new minor bridges.

About NHAI

1. NHAI is an autonomous statutory agency of Central Government, responsible for management of network of over 70,000 km of national highways in India.
2. It was established through NHAI Act, 1988.
3. In February 1995, it was formally made an autonomous body.
4. It is nodal agency of Ministry of Road Transport and Highways.
5. It is responsible for the development, management, operation and maintenance of National Highways.

- 4 existing major bridges and 9 existing minor bridges will be repaired and strengthened and 6 existing minor bridges will be reconstructed.
4. The stretch will have 6 truck lay bays, 20 bus bays and passenger shelters and 1 rest area. The project would be completed in three years.

'EOI' FOR FIRST OFFSHORE WIND ENERGY

The National Institute of Wind Energy (NIWE) an autonomous body under the Ministry of New and Renewable Energy (MNRE) has called for **'Expression of Interest'** (Eoi) for the first offshore wind energy project of India. The global Eoi is intended to shortlist prospective offshore wind energy developers for a 1000 MW offshore wind energy project in Gulf of Khambhat, off the coast of Gujarat. The proposed area is located 23-40 km seaward side from Pipavav port. MNRE plans to install at least 5 GW of offshore wind capacity by 2022.

What

1. As per the National Offshore Wind Energy Policy notified on October, 2015, National Institute of Wind Energy (NIWE), Chennai is the nodal agency to carry out the necessary studies/surveys before final bidding and act as a single window for facilitating necessary clearances required for development of offshore wind project in India.
2. The first offshore LiDAR was installed in Gulf of Khambhat in Gujarat for measurement of wind resource and NIWE is collecting wind speed data from November, 2017 onwards.
3. Areas off the coasts of Gujarat and Tamil Nadu are two identified areas for development of offshore wind power.
4. The second LiDAR would be installed off Tamil Nadu coast by September, 2018. In addition NIWE is planning to set up few more LiDARs for assessment of offshore wind resources.
5. Besides necessary Geo-Technical and Geo-Physical studies off the coast of Gujarat and Tamil Nadu are underway.
6. At global level, it has been observed that, offshore wind energy while being better than onshore wind in terms of efficiency is also becoming competitive and comparable in terms of tariffs.
7. With a large energy market in India, the Eoi is expected to evince keen interest from leading players of offshore wind turbine manufacturers and developers. Indian industry can also participate along with suitable tie up with global players.
8. With the announcement of this first offshore wind energy project, the Government is attempting to develop this sector in India and envisages replicating similar success as on-shore wind power sector.
9. This would help the country towards attaining energy security and achievement of National Action Plan for Climate Change (NAPCC) targets.

INDIA TO HOST IEF 16

India, the world's third-largest energy consumer after the US and China, will host the 16th International Energy Forum Ministerial (IEF—16), that will be inaugurated by Prime Minister Narendra Modi. The ministerial comes in the backdrop of a supply cut by the Organization of the Petroleum Exporting Countries (Opec) and Russia that has led to a rally in global oil price. The Indian basket represents the average of Oman, Dubai and Brent crude.

What

1. Covering all six continents and accounting for around 90% of global supply and demand for oil and gas, the IEF is unique in that it comprises not only consuming and producing countries of the IEA and Opec, but also Transit States and major

- players outside of their memberships, including Argentina, China, India, Mexico, Russia and South Africa.
2. **The ministerial hosted by India also assumes significance given that the country's energy needs are primarily met through imports, with India importing 214 million tonnes of crude oil in 2016-17.**
 3. This also comes at a time when India has been pushing for a gas based economy. **India, the world's fourth**-largest liquefied natural gas (LNG) importer, has been trying to leverage the glut in global LNG supplies to renegotiate its contracts. Indian firms have been exploring strategies such as time swap of volumes, destination swaps and contract on free on board basis to reduce the final fuel price. India imported 19 million metric tonnes of LNG in 2016-17.
 4. The International Energy Forum (IEF) aims to foster greater mutual understanding and awareness of common energy interests among its members.
 5. Its 72 Member Countries are signatories to the IEF Charter, which outlines the framework of the global energy dialogue through this inter-governmental arrangement. Apart from them, 20 countries are also participating in this meeting as special invitees.
 6. As a major consumer, India is trying to leverage its position to seek reasonable rates. New Delhi is also reworking its import strategy by stepping up the share of short-term contracts whenever the market is favourable and exploring long-term supply deals at discounted prices as its new energy architecture evolves.

SAHYOG-HYEOBLYEOG 2018

India, South Korea joint anti-**piracy, search and rescue exercise 'Sahyog-Hyeoblyeog 2018' was conducted in** Bay of Bengal off the Chennai coast in Tamil Nadu. The exercise was conducted between Indian Coast Guard (ICG) and Korean Coast Guard (KCG) as part of proposed establishment of MoU between them to improve maritime security in Indian Ocean Region (IOR).

What

1. The exercise aimed at developing working level co-operation and enhanced interoperability between coast guards of both countries in fields of maritime search and rescue.
2. The exercise witnessed varied scenarios such as prohibition of a pirate vessel, cross boarding, fire fighting, hijacking of merchant vessel and its subsequent rescue and search and rescue (SAR) demonstration.
3. ICG had deployed Dornier aircraft along with ICG Shaurya, Rani Abbakka, C-423, C-431.
4. KCG had deployed its lone ship BADARO.
5. As part of the exercise, ships of ICG and KCG undertook strategic exercises and drills to counter piracy and carry out maritime law enforcement tasks.
6. Dornier aircraft deployed by ICG undertook out sea-air coordinated search along with five ships. KCS ship took part in this search and rescue exercise.

NIRF INDIA RANKINGS 2018

The Union Minister of Human Resource Development, Shri Prakash Javadekar, released the NIRF India Rankings 2018 in various categories on the basis of performance of Higher Educational Institutions in a programme held in New Delhi on 3 April 2018. 69 top institutions in 9 categories were given awards. Speaking on the occasion, Shri Prakash Javadekar said that the idea behind these rankings is to promote quality in education and encourage competition to perform better and to set up new benchmarks of performance in Higher education space.

What

1. In this third edition of India Rankings, a total of 2809 institutions have participated in 9 categories. Collectively they have submitted 3954 distinct profiles, some in multiple disciplines/categories.
2. This includes 301 Universities, 906 Engineering Institutions, 487 Management Institutions, 286 Pharmacy Institutions, 71 Law Institutions, 101 Medical Institutions, 59 Architecture Institutions and 1087 General Degree Colleges.
3. **“India Rankings 2018” have ranked institutions in the disciplines/categories mentioned above, and have also provided a common overall rank across all disciplines for those institutions which have more than 1000 enrolled students.**
4. The parameters used for India Rankings 2018 are broadly similar to those used in previous years. However, some of the sub-parameters have been further tweaked for greater robustness and accuracy.
5. In particular for evaluating Research Impact, parameters for quality of publications have been enhanced to include the number of highly cited papers, (i.e., number of papers lying in the top 25 percentile of citations) in addition to the usual parameters of publications per faculty and citations per paper.
6. The data received from both institutional and third party sources were subject to extensive scrutiny for consistency and correctness by a team of experts.
7. The Rankings List includes 100 institutions each in the Overall, University, Engineering and General College Categories, and 50 each in Management and Pharmacy, 25 in Medical and 10 each in Architecture and Law.
8. This year also saw the beginning of limited ranking of institutions in new areas like Medicine, Law and Architecture.

Overall:

Indian Institute of Science, Bengaluru	1
Indian Institute of Technology Madras	2
Indian Institute of Technology Bombay	3
Indian Institute of Technology Delhi	4
Indian Institute of Technology Kharagpur	5
Jawaharlal Nehru University, New Delhi	6
Indian Institute of Technology Kanpur	7
Indian Institute of Technology Roorkee	8
Banaras Hindu University, Varanasi	9
Anna University, Chennai	10

INDIA OPPOSES 'WEAPONISATION' IN UN

India has voiced opposition to the “weaponization” of outer space, saying it should not become an area of conflict while calling for collective efforts to strengthen safety and security of the space-based assets. Counsellor (Disarmament) in the Permanent Mission of India to the Conference on Disarmament in Geneva Rachita Bhandari told a session of the UN Disarmament Commission (UNDC) that deliberations will begin on the new agenda of outer space — the first in the last 18 years.

What

1. India believes that outer space should be an ever expanding frontier of cooperative endeavour rather than an area of conflict, Bhandari said.
2. India, as a space-faring nation with wide ranging interests in outer space activities, **remained opposed to the “weaponisation”** of outer space and support collective efforts to strengthen the safety and security of space-based assets.
3. The group of governmental experts on outer space, which will meet in Geneva in August later this year, has been mandated to make recommendations on the substantive elements of an international legally-binding instrument on the prevention of an arms race in outer space.
4. It was important that member states be given the incentive to protect their interests by investing in legally-binding multilateral instruments rather than by resorting to national measures or interim partial steps that do not fully address the concerns of all space actors. India attaches much importance to the UNDC as the specialised deliberative leg of the disarmament machinery.
5. Bhandari emphasised that India remained committed to global, non-discriminatory and verifiable nuclear disarmament and the complete elimination of nuclear weapons. India has supported the proposal put forward by NAM for the Conference on Disarmament (CD) to commence negotiations on a comprehensive Nuclear Weapons Convention.
6. Without prejudice to the priority we attach to nuclear disarmament, India has also supported the commencement of negotiations of an FMCT (Fissile Material Cutoff Treaty) in the CD on the basis of the agreed mandate.

GLOBAL NORMS FOR HIGHWAY

India will adopt global norms for calculating highways construction from this fiscal after hitting a record 26.92 km road building per day in FY 2017-18, which as per international standards is 94.18 lane km, Union minister Nitin Gadkari said. A record 9,829 km of highways were constructed in 2017-18 which comes to 26.92 km of roads per day while the road awards stood at 17,055 km in the just concluded fiscal, thus witnessing about two-folds and five-folds increase in construction and awards of roads respectively.

What

1. The ministry has so far been calculating construction of National Highways in linear length, which means there is no difference between 1 km of 2-lane with paved shoulders and 1 km with 6-lanes and service roads.
2. This is not as per internationally adopted norms and the correct position is captured through counting of lane km.
3. Internationally, one standard lane width in the US is 3.7 metres, it varies between 2.75 to 3.25 metres in Europe and 3.5 metres in Germany.
4. As per Indian standards, the width of one lane is prescribed as 3.5 metres.
5. By international norms, India constructed 34,378 lane km of highways in 2017-18 which comes to 94.18 lane km a day last fiscal. This in linear length wise comes to 26.92 km a day and 9,829 km in the year.
6. From this fiscal, the ministry will follow international norms to calculate construction of highways - lane km.

JIO PAYMENTS BANK BEGINS OPERATIONS

The Reserve Bank of India (RBI) said that Jio Payments Bank has commenced its banking services from 3 April 2018. Reliance Industries Ltd (RIL) was one of the 11 applicants which were issued in-principle approval for setting up a payments bank in August 2015. Jio Payments Bank Limited has commenced operations as a payments bank with effect from April 3, 2018.

What

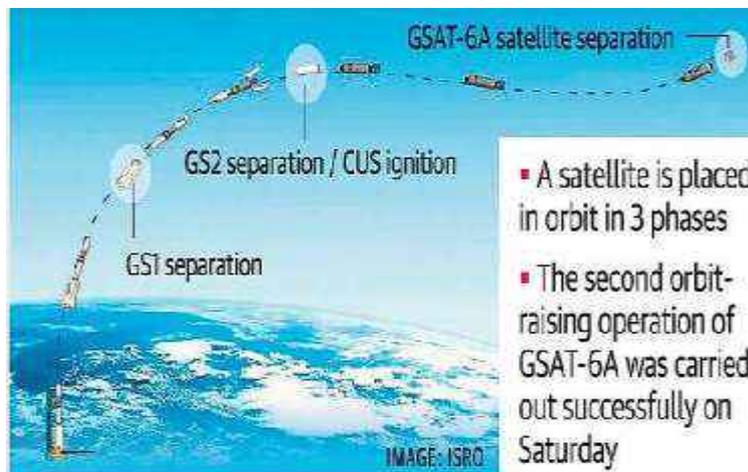
1. Telecom major Bharti Airtel was the first to begin payment bank services in November 2016.
2. Paytm founder Vijay Shekhar Sharma promoted Paytm Payments Bank began operations from May 2017 last year while FINO Payments Bank Limited kicked-off in in June last year.
3. Birla group's Aditya Birla Idea Payments Bank was the latest in this space whose operations were started from February 22 this year.
4. The Department of Posts, which also got a license for a payment bank is yet to start its services formally, who is running services on pilot basis currently.
5. Payments banks are being promoted by the Reserve Bank to further financial inclusion by giving services such as small savings accounts, payment or remittance services to migrant labour workforce, low income households, small businesses and unorganised sector entities as well as other users.

CONTACT WITH GSAT-6A SATELLITE LOST

The Indian Space Research Organisation (Isro) said that it has lost communication with GSAT-6A satellite, a communication satellite launched on 29 March 2018. Isro said that the second orbit raising operation of GSAT-6A satellite has been successfully carried out by LAM Engine firing for about 53 minutes on March 31, 2018 in the morning. After the successful long duration firings, when the satellite was on course to normal operating configuration for the third and the final firing, scheduled for April 1, 2018, communication from the satellite was lost.

What

1. GSAT-6A, similar to GSAT-6 is a high power S-band communication satellite configured around I-2K bus.
2. This is the second mission failure for Isro in six months, with the previous one being the PSLV-C39.
3. The mission life of spacecraft was planned to be about 10 years.
4. The satellite was expected to provide a platform for developing technologies such as demonstration of 6 m S-Band Unfurlable Antenna, handheld ground terminals and network management techniques that could be useful in satellite based mobile communication applications.
5. The GSAT 6A was in news even before the launch, but with a controversial touch.



When it was on course to normal operating configuration for the third and final firing scheduled for April 1, communication was lost

6. This was one satellite, along with GSAT 6, which was launched already, mentioned in the foiled Antrix- Devas deal.
7. Under the \$300 million deal, a majority of the S-Band wavelength of the communication satellite was allegedly offered to Devas by leasing almost 90 per cent of the transponders in GSAT 6 and GSAT 6A.

SATYAGRAHA SE SWACHHAGRAHA

The Prime Minister, Shri Narendra Modi, on 10 April 2018 addressed 20,000

Swachhagrahis in Motihari, East Champaran district of Bihar. The event marked the culmination of a weeklong **“Satyagraha se Swachhagraha”** campaign run in Bihar from 3rd April onwards. At this event, associated with the clarion call **“Chalo Champaran”**, the Prime Minister also awarded ten Swachhagrahis who have performed outstandingly in their villages.

What

1. In the run-up to this event, Ministry of Drinking Water and Sanitation, in coordination with the Government of Bihar, worked to spread the message of Swachhata by initiating the **“Satyagraha se Swachhagraha”** campaign, from 3rd to 10th April.
2. More than 10,000 Swachhagrahis from different parts of the country have been invited to Bihar, where they have been working with 10,000 Swachhagrahis from Bihar to **“trigger” behaviour change** throughout the 38 districts of the State and build momentum of the jan andolan further.
3. The Prime Minister mentioned that under the Swachh Bharat Mission (Gramin), in the last 3.5 years alone, 3.5 lakhs villages and over 350 districts, and 35 crore people have shunned open defecation. Nearly 7 crore toilets have been built and 14 States and UTs have already been declared ODF.
4. **The Prime Minister appreciated that toilets are now being called “Izzat Ghar” (House of Dignity)** in Uttar Pradesh and Bihar.
5. The Prime Minister quoted a study done by UNICEF that found that a household in an ODF village in India saves Rs.50,000 every year by way of disease treatment costs averted, saving of livelihood by not falling ill, etc.

Background

1. Swachh Bharat Mission (SBM) Gramin, launched on October 2, 2014 by the Prime Minister of India, Shri Narendra Modi, is the largest behaviour change campaign ever attempted in the field of sanitation in the world.
2. It aims to build an ODF (Open Defecation Free) and Swachh Bharat by October 2, 2019 as a tribute to Mahatma Gandhi on his 150th birth anniversary.
3. India is witnessing a sanitation revolution with the number of people in rural India, practising open defecation having fallen from 55 crores in October 2014 to 20 crores by April 2018. Sanitation has been proven, by various independent studies, to have a positive economic as well as health impact on families in rural India.
4. Under the Swachh Bharat Mission (Gramin), 6.7 crore toilets have been built, 3.5 lakhs villages and over 360 districts, and 14 States and UTs have already been declared ODF.
5. A recent survey conducted by an Independent Verification Agency across 90,000 households in over 6000 villages has found the rural toilet coverage to be 77% and the usage of these toilets to be 93.4%. The progress is accelerating every day and the Mission is on track to achieve an ODF India before October 2nd, 2019.

AADHAAR GETS VIRTUAL ID

On 2 April 2018, the Unique Identification Authority of India launched Virtual ID for Aadhaar which provides a more secure way of protecting identity by masking the Aadhaar number and generating a 16 digit randomised VID that can be shared with service providers instead. However, the new VIDs generated can be used right away for updating registered address on the Aadhaar e-portal. The virtual ID system was announced in January this year amidst rising security concerns about Aadhaar as people questioned the secrecy of their data which is being shared with service providers such as banks, insurance companies and telecom operators by way of Aadhaar linking.

What

1. The circular also explained the rationale behind launching the Virtual ID in the environment of heightened privacy concerns.
2. The launch of VID comes in the midst of the ongoing Supreme Court case on the constitutional validity of the entire UID project.

FIRST 'LED STREET LIGHT DISTRICT'

East Godavari district in Andhra Pradesh is all set to become the **country's first** 'LED street light district'. The rural LED street lighting programme in the district entailing the installation of around 3.1 lakh LED street lights has been completed. The exercise is expected to save around 34 Million Units (MU) annually.

What

1. The State Chief Minister N Chandrababu Naidu will declare the district as the first to be equipped with 100 per cent LED street lighting on April 24 and dedicate the credit to all the rural people on the occasion of Panchayat Raj Divas.
2. AP is already ranked the best State in implementation of energy efficiency and conservation programmes by the World Bank.
3. The Energy Efficiency Services Ltd (EESL) is supporting the LED project which has been completed in five months. Naidu wanted coverage of all the 13 districts with over 28-30 lakh LED lights, which is expected to save around 333 MU of energy a year.
4. The project is being implemented in the districts of East Godavari, Chittoor, Ananthapur, YSR Kadapa, Vizianagaram & Visakhapatnam.
5. Total 50 lakh LED street lights installed in the country, AP has installed around 11.61 lakh which cover 20 per cent of the total LED street lights whereas even the big States such as Maharashtra, New Delhi, Rajasthan and Tamilnadu were lagging behind.
6. Special action plan is under process for **integrating the Minister's Dash Board with Centralised Control Monitoring System (CCMS)**. The EESL has agreed to take up the LED street lighting project in other districts also.

INTERNATIONAL

UN REJECTS RUSSIAN ATTEMPT

The UN Security Council overwhelmingly rejected a Russian resolution calling **for condemnation of "aggression" by the United States, United Kingdom and France against Syria**, a vote reflecting support for the allied air strikes on Syrian chemical sites. But the vote at the end of an emergency meeting called by Russia also demonstrated again the paralysis of the **UN's most powerful body** in dealing with **Syria's seven-year** conflict.

What

1. Russia's demand for condemnation and an **immediate halt to "aggression"** and **"any further use of force"** by the three Western allies got support from only two other countries on the 15-member Security Council — China and Bolivia.
2. By contrast, eight countries voted against the Russian draft — the US, UK, France, Netherlands, Sweden, Kuwait, Poland and Ivory Coast. Four countries abstained — Ethiopia, Kazakhstan, Equatorial Guinea and Peru.
3. At the meeting, the fifth in a week on chemical weapons in Syria, Russia and its supporters again clashed with the US and its allies over a suspected poison gas attack on April 7 in the Damascus suburb of Douma.
4. The US, UK and France said they launched air strikes against Syrian chemical sites after obtaining evidence that a chemical weapon was used by **President Bashar Assad's government**. **Russia and its ally Syria called the attack fabricated** and said no evidence of chemical weapons use exists in Douma.
5. A draft resolution circulated by the three countries and obtained by The Associated Press would condemn all use of chemical weapons, especially the April 7 attack in Douma.
6. It seeks answers from Syria on gaps in its chemical weapons declaration to the Organisation for the Prohibition of Chemical Weapons. And it would establish a new body to determine responsibility for chemical attacks, call for a cease-fire in Syria, unimpeded access for all humanitarian aid, and an urgent resumption of negotiations on a political settlement.

NEW CHAIRMAN OF BOAO FORUM

Former UN Secretary General Ban Ki-moon was elected as Chairman of Boao Forum for Asia replacing **Japan's Yasuo Fukuda**. Former governor of **People's Bank of China Zhou Xiaochuan** was appointed vice-chairman.

What

1. Both the appointments took place during second session of annual Boao Forum, **known as "Asian Davos"** underway in China's Hainan province.
2. Ban Ki-moon is South Korean diplomat and was eighth Secretary-General of United Nations from January 2007 to December 2016.
3. This year forum was attended by UN Secretary General Antonio Guterres, **International Monetary Fund (IMF's) Managing Director Christine Lagarde**, **Austrian President Alexander van der Bellen** and Philippines President Rodrigo Duterte.

Boao Forum for Asia (BFA)

1. BFA is non-profit organisation that hosts high-level forums for leaders from government, business and academia in Asia and other continents to share their vision on most pressing issues in this dynamic region and world.
2. It is modelled on annual World Economic Forum (WEF) held annually in Davos, Switzerland.
3. The Forum is committed to promoting regional economic integration and bringing Asian countries even closer to their development goals. It was established in 2001.
4. Its first meeting was held in April 2002 and since then it is held annually.
5. **The forum sometimes is known as the "Asian Davos".**
6. **It takes its name from town of Boao in China's southern Hainan province, which has been permanent venue for its annual conference since 2002.**

JAPAN ACTIVATES FIRST MARINES SINCE WW2

Japan on 7 April 2018 activated its first marine unit since World War Two trained to counter invaders occupying Japanese islands along the edge of the East China Sea that Tokyo fears are vulnerable to attack by China. In a ceremony held at a military base near Sasebo on the southwest island of Kyushu, about 1,500 members of the Amphibious Rapid Deployment Brigade (ARDB) wearing camouflage lined up outside amid cold, windy weather.

What

1. The brigade is the latest component of a growing marine force that includes helicopter carriers, amphibious ships, Osprey tilt-rotor troop carriers and amphibious assault vehicles, meant to deter China as it pushes for easier access to the Western Pacific.
2. China, which dominates the South China Sea, is outpacing Japan in defense spending. In 2018, Beijing which claims a group of uninhabited islets in the East China Sea controlled by Tokyo will spend 1.11 trillion yuan (\$176.56 billion) on its armed forces, more than three times as much as Japan.
3. The activation of the 2,100 strong ARDB takes Japan a step closer to creating a force similar to a US Marine Expeditionary Unit (MEU) able to plan and execute operations at sea far from its home base.
4. Japanese military planners are already mulling some of those additions. Its Air Self Defense Force (ASDF) wants to acquire F-35Bs to operate from its Izumo and Ise helicopter carriers, or from islands along the East China Sea, sources have told Reuters.
5. The United States last month deployed its F-35Bs for their first at-sea operations aboard the USS Wasp amphibious assault ship, which is based in **Sasebo. The Kyushu port is also home to Japan's Ise and close to the ARDB's base.**

UAE, MALAYSIA CONCLUDE JOINT MILITARY EXERCISE

The United Arab Emirates (UAE) and Malaysia concluded "Desert Tiger 5" joint military exercise in Dubai, aimed at sharing expertise and enhancing joint military actions. The military exercise was implemented within the framework of the UAE leadership's continued desire "to support and create unique partnerships between both countries in all areas".

What

1. The drill was also aimed at raising the level of performance and combat efficiency and working together based on a strategy to improve the overall ability and combat readiness of the ground forces.
2. The military exercise was aimed at raising level of performance and combat efficiency and working together between both countries based on strategy to improve the overall ability and combat readiness of ground forces. It highlighted the success of plans to build their skills and capacities of armies of both countries.
3. It also aimed at sharing experience and increased military action between two countries. Its objective was to reach general level and combat readiness of ground forces and professionalization in dealing with modern weapons and weapons in different environments of operational areas.
4. The joint exercise reflected interest and concern of General Command of Armed Forces in improving their capabilities and fighting skills consistent with clear strategy and contributing to the development of the capabilities and capabilities land forces of **both countries protecting the country's bottom-hunger.**

FUEL PIPELINE PROJECT

Prime Minister Narendra Modi and Nepal's premier K.P. Sharma Oli on 7 April 2018 **remotely attended the ground breaking ceremony of South Asia's first** transnational petroleum pipeline that will supply fuel to India's land locked neighbour.

The 69 km pipeline from Motihari in Bihar to Amlekhganj in Nepal will deliver 2 million tonnes per annum (MTPA) of petroleum products to the fuel starved country and will be built at a cost of around Rs200 crore.

What

1. Historically, **India has played a very important role in Nepal's development**, said Modi at the joint press conference. This comes in the backdrop of the fuel supplies from India temporarily being disrupted in 2015 when protestors blocked the main transit point on the border. Nepal also signed a fuel purchase deal with China, but the route between the nations presents logistic challenges.
2. The project is being implemented by state run Indian Oil Corporation (IOC) and Nepal Oil Corporation and will supply petrol, diesel and kerosene. India has been supplying fuel to Nepal since 1974 under contracts that were periodically renewed.
3. **This is Oli's second visit to India as prime minister since 2016**. Ties with India were prickly as there was a perception in Nepal that India was backing protests against the new constitution by the discontented 51% of the population—the Tharus, Janjatis and Madhesis—who were blocking key access roads from India to Nepal, used for transporting essentials such as fuel and medicines to the landlocked country.
4. India has also been supplying electricity to Nepal with the eight-member South Asian Association for Regional Cooperation (Saarc) signing a framework agreement on electricity trade at its Kathmandu summit in November 2014.

INDIA, SOUTH KOREA TO INK PACT FOR SEAFARERS

India and South Korea are set to boost bilateral ties in ports and shipping space and will sign pact to provide Indian seafarers employment on over 500 Korean ships, Union Minister Nitin Gadkari said. Shipping, Road Transport & Highways, Water Resources, River Development & Ganga Rejuvenation Minister Gadkari, who will be on a four-day visit to Korea beginning from 9 April 2018, said both the nations are also eyeing partnerships in shipbuilding, waterways and smart transportation, among others.

What

1. Both the nations will sign an undertaking for mutual recognition of certificate of competency of seafarers.
2. It will be beneficial to both the countries as Korea is a large ship owning nation, while India is a large seafaring nation with over 1.5 lakh seafarers.
3. The agreement will facilitate Indian seafarers to work on Korean ships as there is requirement of seafarers.
4. Korean entities as of now own more than 500 foreign going ships.
5. Signing of the undertaking, apart from creating job opportunities for Indian seafarers, will also pave the way for recognition of maritime education and training, besides various certificates for seafarers issued by the governments of both the countries
6. During the four-day visit, Gadkari will focus on taking forward the bilateral cooperation between India and South Korea in shipping, ports, inland waterways, highways, river interlinking and infrastructure sectors.
7. Known for maritime technology prowess, Korea had partnered with the Ministry of Shipping in the Maritime India Summit held in Mumbai during April 2016.
8. India and Korea have an institutional framework for cooperation through the memorandum of understanding (MoU) for cooperation and mutual assistance to facilitate development of ports, port-related industries and maritime relationship.
9. Industry body Ficci is partnering to organise a coinciding visit of a business delegation from India, comprising of firms with business interests in maritime, highways and infrastructure.

ECONOMY

BBB RECONSTITUTED

The Union Finance Ministry has reconstituted Banks Board Bureau (BBB) and appointed former bureaucrat Bhanu Pratap Sharma as its chairman. It will replace earlier BBB headed by former Comptroller and Auditor General (CAG) Vinod Rai as its two-year term ended in March 2018. The reconstituted BBB will have two-year tenure, same as its predecessor.

What

1. Sharma is retired IAS officer of Bihar cadre (1981 batch) and former Principal Secretary (Finance) in the Bihar government.
2. He is presently chairman of recruitment and assessment centre at Defence Research and Development Organisation (DRDO).
3. He had been health secretary and secretary for personnel and training at Centre, before retiring in June 2017 from civil service.

Flashback

1. BBB is super authority (autonomous body) of eminent professionals and officials for public sector banks (PSBs).
2. It was announced by Union Government in August 2015 as part of seven point Indradhanush Mission to revamp PSBs and started functioning in April 2016.
3. It had replaced Appointments Board of Government. It is housed in Reserve **Bank of India's central office in Mumbai, Maharashtra.**
4. BBB is considered as the first step towards Bank Investment Company as recommended by P J Nayak committee.

STATE TO LAUNCH INTRA-STATE

Nationwide electronic or e-way bill system for inter-state movement of goods has been rolled out on 1 April 2018, with Goods and Service Tax Network (GSTN). Karnataka is the only state which has implemented the e-way bill system for moving goods within the state. The state has been using the e-way bill platform since September last year for intra-state movement of goods.

What

1. From 1 April 2018, businesses and transporters have to produce before a GST inspector e-way bill for moving goods worth over Rs 50, 000 from one state to another.
2. Officials at GSTN, the company which has developed the IT backbone for GST regime, said that the e-way bill platform has been working smoothly and Karnataka is also generating e-way bill for intra-state movement of goods.
3. Touted as an anti-evasion measure and would help boost tax collections by clamping down on trade that currently happens on cash basis, the e-way bill provision of GST was first introduced on 1 February. However, its implementation was put on hold after the system developed glitches in generating permits.
4. With several states starting to generate intra-state e-way bills on the portal, the system developed a snag. Since then, the platform has been made more robust, so that it can handle load of as many as 75 lakh inter-state e-way bills daily without any glitch. The system has been designed and developed by National Informatics Centre (NIC).
5. The GST Council, last month, had decided on a staggered rollout of the e-way bill starting with inter-state from 1 April and intra-state from 15 April.

INDEX OF ECONOMIC FREEDOM 2018

India ranked 130th out of 186 economies in recently released Index of Economic Freedom 2018 that measures the degree of economic freedom in the countries of the world. In this edition of index, India with score of 54.5 jumped 13 places from 143rd rank in previous year (2017) with a score of 52.6 points.

What

1. The index was released by top US based Think Tank, The Heritage Foundation.
2. It ranks countries based on score ranging 0 (least free) to 100 (most free).
3. The score is based on 12 factors of economic freedom, separated into four categories, using statistics from international organizations like World Bank, IMF, Economist Intelligence Unit and Transparency International.
4. Based on the score, countries are grouped in 5 different categories, Free (80–100), Mostly Free (70.0–79.9), Moderately Free (60.0–69.9), Mostly Unfree (50.0–59.9) and Repressed (0–49.9).
5. Twelve factors for calculating score are: property rights, government integrity, tax burden, judicial effectiveness, government spending, fiscal health, business freedom, monetary freedom, labor freedom, trade freedom, investment freedom and financial freedom.
6. Top 10 countries are: Hong Kong, Singapore, New Zealand, Switzerland, Australia, Ireland, Estonia, United Kingdom, Canada and UAE.
7. The first edition of the index was released in 1995.
8. **India's Neighbours:** Bhutan (87), Sri Lanka (111), Bangladesh (128), Pakistan (131) and Nepal (133). China with 57.4 points was ranked 111th. It has jumped one spot compared from 112th rank in previous edition.
9. BRICS: South Africa (77), Russia (107), China (111), India (130) and Brazil (153).

SEBI BANS FIRST FINANCIAL SERVICES

Securities and Exchange Board of India (Sebi) on 2 April 2018 barred First Financial Services and 28 others from the markets for three years for orchestrating a fraudulent scheme involving preferential allotment route, which ultimately benefited a few allottees. **The move follows Securities Appellate Tribunal's (SAT) directive to Sebi** for passing the final orders in the matter by March this year. The markets regulator had conducted an investigation into the dealings of the First Financial Services Ltd (FFSL) stock as it observed abnormal movement in the price and trading volume of the scrip on BSE from 15 May 2012 to 31 March 2014.

What

1. Besides, Sebi had received references from the Director General of Income Tax (Investigation). The probe found that FFSL and its connected entities perpetrated a fraudulent scheme which included the two tranches of preferential allotment, manipulative trades jacking up the price of the scrip, unexplained fund transfers between several connected entities and FFSL and profits made by those entities that exited subsequently.
2. It can be seen that FFSL, its directors along with the Comfort group and certain other noticees basically orchestrated a fraudulent scheme involving preferential allotment route, which ultimately benefited a few allottees and was never retained for utilisation as per the stated objects of the issue, the regulator noted.
3. By indulging in such activities, they violated the provision of PFTUP (Prohibition of Fraudulent and Unfair Trade Practices) norms. Accordingly, Sebi has prohibited these 29 entities from accessing the securities for a period of three years.

ARBITRAGE RATE INDEX

Asia Index, a joint venture between S&P Dow Jones Indices and BSE, has launched arbitrage rate index. The S&P BSE Arbitrage Rate Index will equally weigh long positions in the Sensex and equivalent short positions in the futures contracts.

What

1. It will provide market participants with a transparent benchmark to compare the performance of similar arbitrage strategies.
2. The index will be rebalanced every month, effective after the close of business a day prior to the expiration of the futures contract.
3. The futures contract expires on the last Thursday of each month.
4. The index is designed to measure a 100 per cent long index weight in the S&P BSE Sensex total return index and a 100 per cent short index weight in the S&P BSE Sensex futures excess return index.

INDIAN CONSORTIUM AND SAUDI ARAMCO SIGN MOU

An Indian Consortium consisting of IOCL, BPCL and HPCL and Saudi Aramco signed a Memorandum of Understanding (MoU) to jointly develop and build an integrated refinery and petrochemicals complex, Ratnagiri Refinery & Petrochemicals Ltd. (RRPCL) in the State of Maharashtra. Saudi Aramco may also seek to include a strategic partner to co-invest in the project.

What

1. The strategic partnership brings together crude supply, resources, technologies, experience and expertise of these multiple oil companies with an established commercial presence around the world.
2. A pre-feasibility study for the refinery has been completed, and the parties are now **finalising the project's overall configuration. Following the signing of the MoU, the parties will extend their collaboration to discuss the formation of a joint venture that would provide for joint ownership, control and management of the project.**
3. The refinery will be capable of processing 1.2 million barrels of crude oil per day (60 million metric tonnes per annum, or MMTPA).
4. It will produce a range of refined petroleum products, including petrol and diesel meeting BS-VI fuel efficiency norms. The Refinery will also provide feedstock for the integrated petrochemicals complex, which will be capable of producing approx. 18 million tonnes per annum of petrochemical products.
5. In addition to the refinery, cracker and downstream petrochemicals facilities, the project will also include the development of associated facilities such as a logistics, crude oil and product storage terminals, raw water supply project as well as centralised and shared utilities.
6. **RRPCL will rank among the world's largest refining & petrochemicals projects and will be designed to meet India's fast-growing fuels and petrochemicals demand.** The project cost is estimated at around Rs.3 lakh crore (USD 44 billion).
7. Union Minister of Petroleum and Natural Gas and Skill Development & Entrepreneurship, Shri Dharmendra Pradhan said that this a joint partnership between the consortium from India consisting of IOCL, HPCL and BPCL and Saudi Aramco & an additional strategic partner on a 50:50 basis.
8. **The signing of MoU marks a significant development in India's Oil & Gas Sector.** He further stated that participating in this mega project will allow Saudi Aramco to go beyond the role of crude oil supplier to a fully integrated position which supports **India's future energy demands.**

30 CENTS DIAMOND FUTURES CONTRACTS

Reliance ADAG anchored Indian Commodity Exchange Limited (ICEX) has launched 30 cents polished diamond futures contracts on its platform to attract small investors and make natural precious stone popular amongst average middle class. The exchange currently offers 1 carat (100 cents) and 50 cents polished diamond contracts on its platform.

What

1. ICEX was the first company globally, to launch diamond derivatives contracts on August 28, 2017.
2. The commodity exchange had started operations with 1 carat futures contracts and had subsequently added the 50 cents contracts. With the addition of 30 cents, ICEX now also serves a larger chunk of the diamond industry in terms of providing direct hedging facilities.
3. Initially, three monthly futures contracts of 30 cents diamonds will be available for trading on the exchange platform– July 2018, August 2018 and September 2018.
4. The important quality parameters for diamonds to be traded on the exchange platform are HVS2, triple X with pointed culet and negligible fluorescence. Since its launch in August 2017, the exchange has witnessed the delivery of 282.39 carats of diamond valuing Rs 80.2 million.
5. Earlier last month, ICEX had started the facility of delivering the diamond purchased by clients on its platform to their doorstep.
6. In an exchange environment, the physical delivery is effected from its designated warehouse where client or representative has to come physically to take delivery.
7. Such a practice dissuades buyers who belong to locations other than the designated delivery centers. ICEX understood the gap and devised a mechanism wherein the vault agency delivered the diamond bought by the investor at the doorstep of the client.
8. On ICEX, investors can trade in polished diamond with a minimum price of 1 cent like systematic investment plan (SIP) which over a period of time gets accumulated to the deliverable size of the contract.

EXPLORATION AND EXPLOITATION OF CBM

The Cabinet Committee on Economic Affairs chaired by the Prime Minister, Shri Narendra Modi gave its approval for issuing a notification amending clause 3(xiii) of the notification dated 03.11.2015 issued by the Ministry of Petroleum & Natural Gas under Section 12 of the Oil Fields (Regulation and Development) Act, 1948 (ORD Act, 1948).

What

1. Due to this amendment relaxation is granted under the Petroleum & Natural Gas Rules 1959 (PNG Rules, 1959), to Coal India Limited (CIL) and its subsidiaries for not applying for grant of license/lease under the PNG Rules, 1959 for extraction of Coal Bed Methane (CBM) under their Coal Bearing Areas.
2. The decision is in line with **the Government's initiatives of 'Ease of Doing Business'**. It will expedite the

Background

1. Government of India has earlier issued a notification on 03.11.2015 granting rights to CIL and its subsidiaries for exploration and exploitation of CBM from all coal bearing areas for which they possess mining lease for coal. Clause 3(vi) of the Notification provides that the "Lessee shall submit application under the P&NG Rules 1959 for grant of Mining Lease (ML) for CBM to MoP&NG along with detailed recommendations of Central Mine Planning & Design Institute Limited (CMPDIL)."

exploration and exploitation of CBM, enhance the availability of natural gas and reduce the gap in demand and supply of natural gas.

3. The increased development activities for exploration and exploitation of CBM gas reserves in-and-around the block will generate economic activities which in turn has potential to create employment opportunities in CBM operations and in the industries.

SCIENCE AND TECHNOLOGY

PARKER SOLAR PROBE

NASA's Parker Solar Probe — humanity's first mission to the Sun — is undergoing final preparations for its launch scheduled for July 31. The spacecraft was flown by the US Air Force to Florida, where it will continue testing, and eventually undergo final assembly and mating to the third stage of the Delta IV Heavy launch vehicle.

What

1. Parker Solar Probe is humanity's first mission to the Sun. After launch, it will orbit directly through the solar atmosphere - the corona- closer to the surface than any human-made object has ever gone.
2. While facing brutal heat and radiation, the mission will reveal fundamental science behind what drives the solar wind, the constant outpouring of material from the Sun that shapes planetary atmospheres and affects space weather near Earth.
3. For the next several months, the spacecraft will undergo comprehensive testing.
4. Just prior to being fuelled, one of the most critical elements of the spacecraft, the thermal protection system (TPS), or heat shield, will be installed.
5. The TPS is the breakthrough technology that will allow Parker Solar Probe to survive the temperatures in the Sun's corona, just 9.8 million kilometres from the surface of our star.
6. There are many milestones to come for Parker Solar Probe and the amazing team of men and women who have worked so diligently to make this mission a reality
7. Parker Solar Probe project manager from the Johns Hopkins Applied Physics Laboratory in the US.
8. The installation of the TPS will be our final major step before encapsulation and integration onto the launch vehicle.
9. Parker Solar Probe will be launched from NASA's Kennedy Space Center in Florida.
10. Throughout its seven-year mission, Parker Solar Probe will explore the Sun's outer atmosphere and make critical observations to answer decades-old questions about the physics of stars.
11. Its data will also be useful in improving forecasts of major eruptions on the Sun and the subsequent space weather events that impact technology on Earth, as well as satellites and astronauts in space.

MISSION MICRO-11

NASA has launched human sperm to the International Space Station (ISS) to test what happens when it gets exposed to zero-gravity environment. The mission, dubbed Micro-11 technically began on April 1, when NASA sent frozen human and bull sperm on board a Falcon 9 rocket to the ISS.

What

1. The astronauts aboard the ISS will thaw and chemically activate the samples to prepare them for union with an egg.

2. Using video recording they will track the sperm movements and send them back to **Earth for further analysis.** “Based on previous experiments, it seems the lack of gravity facilitates sperm mobility, Fathi Karouia, lead scientist for NASA’s space biology project, was quoted as saying to Inverse.
3. This is in line with other investigations on different model organisms which have shown that microgravity conditions trigger faster cell regeneration.
4. This flight project is the first to apply proven analytical methods to assess the fertility **of human and bovine sperm in spaceflight,” Karouia said. The experiment could also offer new insights into the ways long-duration spaceflight will influence human reproduction.**
5. NASA human sperm test, International Space Station, zero-gravity experiments, SpaceX Falcon 9, sperm activity, space breeding, human reproduction, spaceflight Previously several species, including frogs, salamanders, sea urchins, jellyfish, snails, medaka fish, nematode (roundworm, known as *Caenorhabditis elegans*), and other aquatic invertebrate animals, have successfully undergone breeding in space.
6. Though this is not the first time sperm has been sent into space for testing, it could offer new insights into the ways long-duration spaceflight will influence human reproduction. This research is looking at early fundamental microgravity science, the report said. Previously several species, including frogs, salamanders, sea urchins, jellyfish, snails, medaka fish, nematode (roundworm, known as *Caenorhabditis elegans*), and other aquatic invertebrate animals, have successfully undergone breeding in space.
7. Moreover, aquatic invertebrates like amphipods, gastropods (pond snails), ostracods and daphnia (water flea) produced their offspring or repeated their life-cycles under microgravity during four months in space.

NEW CLASS OF ANTIBIOTICS DISCOVERED

Researchers have discovered new class of antibiotics called odilorhabdins or ODLs that fights drug resistance. It was produced by symbiotic bacteria found in soil-dwelling nematode worms that colonise insects for food. The bacterium helps to kill insect and secrete antibiotic to keep competing bacteria away.

What

1. Researchers had screened 80 cultured strains of ODL bacteria for antimicrobial activity.
2. They had isolated active ODL compounds and studied their chemical structures and engineered more potent derivatives.
3. During research it was found that ODL act on ribosome (molecular machine that makes proteins cells needed to function) of bacterial cells.
4. ODL like many clinically useful antibiotics, work by targeting ribosome. But ODL is unique because it binds to place on ribosome that has never been used by other known antibiotics.
5. ODL after binding to ribosome disrupts ability of ribosome of bacterial cells to interpret and translate genetic code.
6. ODL impact reading ability of ribosome and cause ribosome to make mistakes when it creates new protein. This miscoding corrupts cell with flawed proteins and causes bacterial cell to die.

IMPORTS OF HORMONE OXYTOCIN BANNED

The Union government has banned imports of hormone oxytocin to stop its misuse in livestock industry, where it causes hormonal imbalances and shortens the lives of milch animals. The Government has decided to rely on domestic production to satisfy requirements of hormone. It has asked customs officials to step up vigilance against those likely to try and smuggle oxytocin into India.

What

1. India had halted retail sales of oxytocin as prescription-only drug in 2014, but failed to curb illegal sales and the volume of imports was unclear.
2. Even, Drug Technical Advisory Board (DTAB) in February 2018 had recommended import ban of oxytocin.
3. It also had recommended that sale be limited to registered government hospitals and clinics and bar code system should be used on all forms of drug to ensure tracking and prevent abuse.
4. For adopting its recommendations, DTAB proposal had proposed amendments to section 10 of Drugs and Cosmetics Act, 1940 and rule 96 of Drugs and Cosmetics Rules, 1945.
5. Oxytocin, often called love hormone, is released naturally in human bonding activities such as sex, childbirth and breastfeeding.
6. It is uterine stimulant hormone, prescribed for initiation of uterine contractions and induction of labour in women as well as stimulation of contractions during labour.
7. It is also used to help abort fetus in cases of incomplete abortion or miscarriage and control bleeding after childbirth. It may be used for breast engorgement.

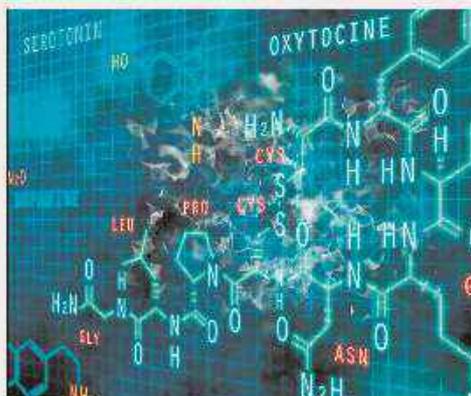
What is oxytocin

- Oxytocin is a hormone secreted by the pituitary gland

- It plays a role in reproduction, child birth and lactation, apart from social interaction

- Oxytocin is used both for humans and animals, to accelerate normal labour

- It is supposed to act directly on the uterus to induce rhythmic contractions



- In certain animals, especially farm animals, it is used to achieve 'milk let down'

- Oxytocin is believed to stimulate the mammary gland and induce milk production in farm animals, provided the udder is prepared to do so

TEST LAUNCH OF MARS LANDING PARACHUTE

A supersonic parachute that will help NASA missions to land on Mars was successfully launched into the sky during a key test designed to mimic the conditions of entering the red planet. The Advanced Supersonic Parachute Inflation Research Experiment (ASPIRE) **was launched aboard a sounding rocket on March 31 from NASA's Wallops Flight Facility in the US.**

What

1. The successful launch came after several days of delays due to rough seas at the **parachute's recovery** zone in the Atlantic Ocean.
2. The test was meant to mimic the conditions that a spacecraft would experience during a red planet entry, descent and landing (EDL).
3. Shortly after liftoff, ASPIRE splashed down into the Atlantic Ocean, from where it will be retrieved by boat. Analysis of the recovered chute, and data gathered by the cameras and other instruments will help researchers complete the design of the chute **for NASA's 2020 Mars rover.**
4. The Mars rover is scheduled to launch in two years, on a mission to hunt for signs of ancient life on the Red Planet. The six-wheeled vehicle, whose body is based heavily on **NASA's Curiosity Mars rover, will study rocks on site and cache samples for** eventual return to Earth.

E-FRRO SCHEME LAUNCHED

The Union Home Minister Shri Rajnath Singh launched the web-based **application 'e-FRRO'** (e-Foreigners Regional Registration Office) in Delhi. Speaking on the occasion Shri Rajnath Singh said that it has been a constant endeavour of the Home Ministry to provide fast and efficient services to foreigners visiting India so that they have a pleasant experience of their stay here.

What

1. The e-FRRO scheme is aimed at building a centralized, transparent online platform for the foreigners to avail visa related services and to provide Faceless, Cashless and Paperless services to the foreigners with user friendly experience.
2. The e-FRRO scheme would be a quantum jump in improving the ease of service delivery with respect to foreigners visiting and staying in India.
3. In the new system, foreigners would be able to get as many as 27 Visa and Immigration related services in India from the comfort of their place of stay.
4. Using the e-FRRO application, foreigners can apply online on the portal and obtain the service(s) through email/post without appearing in person at the FRO/FRRO office.
5. It may be noted that the online services offered by E-FRRO scheme are not available even in some of the most advanced countries in North America and Europe.
6. In 2017, more than one crore foreigners visited India and out of them approximately 3.6 lakhs had to visit FRRO offices spread across the country for various visa-related services. With the launch of the online e-FRRO scheme, their physical visit to the FRRO offices thus been obviated.
7. The e-FRRO scheme has been implemented on the IVFRT platform with negligible extra expenditure, taking a cue from the already successfully running e-Visa scheme. It may be noted that the e-Visa scheme has earned revenue of more than Rs 1400 crores since its launch in Nov 2014.
8. In the present system, foreigners staying in India on Visa duration of more than 180 days have to get themselves registered with their respective FROs/FRROs.
9. e-FRRO has already been implemented and is running successfully as a pilot project in four FRROs (Bangalore, Chennai, Delhi and Mumbai) since February 12, 2018. Now it has been rolled out in the remaining eight FRROs, - namely Kolkata, Amritsar, Hyderabad, Cochin, Thiruvananthapuram, Calicut, Lucknow and Ahmedabad.
10. Advantages of e-FRRO include facilitation of **legitimate foreigners through "Digital India" vision of the Government, foreigners need not visit FRRO/FRO office – "Services from the comfort of home", convenient and Time saving, exclusive dashboard for User friendly experience and Uniform & Standardized Services across the Country.**

Major changes w.r.t. current C-FRO (Centralized Foreigners Registration Office) system and e-FRRO are as under:-

Current C-FRO System	Proposed "e-FRRO"
Foreigner needs to take appointment online and visit FRRO/FRO office mandatorily.	<ul style="list-style-type: none"> • There would not be any requirement of mandatorily visiting FRRO/FRO office. However, in certain exceptional cases, the foreigner will be intimated to visit the FRRO / FRO on scheduled date and time for interview.
Endorsement in Passport and Signed/Stamped RC/RP given to the	<ul style="list-style-type: none"> • No endorsement in Passport.

applicant.	<ul style="list-style-type: none"> Digitally signed Immigration document. Emphasis on online verification.
Manual Interface	<ul style="list-style-type: none"> Online , Cashless, Paperless
Lack of expertise at FRO level in dealing with foreigners.	<ul style="list-style-type: none"> Uniform and Standardized services through FRROs under Bureau of Immigration. FROs to be consulted online by FRROs.

MISCELLANEOUS

NATIONAL MARITIME DAY

The National Maritime Day (NMD) is observed every year on 5 April to commemorate the maiden voyage of the **first Indian owned ship “SS Loyalty”** (the first ship of the Scindia Steam Navigation Company Ltd) sailed from Bombay to London on 5th April 1919. It was crucial step for India shipping history when sea routes were controlled by the British. It marked red letter day in maritime history of India, a country known for its seafaring abilities since ancient days.

What

- This year is it is 55th edition of NMD **and theme is “Indian Ocean-An Ocean of opportunity”**.
- The NMD is being observed annually since 1964. It provides opportunity to spread awareness in supporting safe and environmentally sound commerce between continents across the world.
- World Maritime Day (WMD) is observed on September 29 to highlight the importance of shipping safety, maritime security and the marine environment.

WORLD HEALTH DAY 2018

World Health Day is celebrated every year on 7 April under the leadership of World Health Organisation (WHO) to create global health awareness. First celebrated in the year 1950, this day also marks the establishment of WHO. A particular health-related theme is chosen every year and varieties of programs related to it are organised on international and national levels. The celebration focuses on increasing the life expectancy of people by promoting healthier living habits.

What

- The day is one of the eight official global health campaigns marked by WHO, which include World Tuberculosis Day on 24 March, World Immunization Week in April, World Malaria Day on 25 April, World No Tobacco Day on 31 May, World Blood Donor Day on 14 June, World Hepatitis Day on 28 July and World AIDS Day on 1 December.
- The 2017 theme was **Depression: Let’s Talk**, which aimed to reach out to help people **battling with the disorder. According to WHO’s latest estimates, between 2005-2015, there has been an 18 per cent increase in people dealing with depression, that is approximately 300 million people. 2018 theme: ‘Universal Health Coverage: Everyone, Everywhere’**
- Universal Health Coverage (UHC) refers to the providing of essential healthcare services to a person while ensuring that the use of these does not expose the user to financial distress.

4. The basic objective is that every person who needs these services should get them and not only those who can pay them. This is required to alleviate the financial costs associated with healthcare while making individual access to these services easier.
5. UHC is firmly based on the WHO constitution of 1948 declaring health a fundamental human right and on the Health for All agenda set by the Alma Ata declaration in 1978.
6. UHC cuts across all of the health-related Sustainable Development Goals (SDGs) and **brings the hope of better health and protection for the world's poorest.**

ONLY INDIAN CITY IN TOP 10 TECH HUBS' LIST

India's knowledge capital Bengaluru has been named among the top 10 global innovation hubs in the world. According to a report titled "The changing landscape of disruptive technologies". The Chinese city of Shanghai is placed at the top, followed by Tokyo, London, New York, Beijing, Singapore and Seoul. Technology industry leaders were asked which three cities, in addition to Silicon Valley/San Francisco, will be the leading technology innovation hubs over the next four years. Unlike last year, when the US and China dominated the Top 10, this year's top 10 includes cities from the Americas, Asia, Europe and Israel, KPMG said in its report.

What

1. The tech focus in the IT capital of the country has propelled India to the third slot when it comes to disruptive technology breakthroughs that will have a global impact.
2. Out of 800 technology industry leaders globally, 13% rest their belief in India. The US (34%) and China (26%) are ahead of India in this race. India is racing to become an innovation hub for global businesses.
3. Earlier, India moved up the rank to 60 on the Global Innovation Index (GII) in 2017 as compared with 66 in 2016.
4. Recognised as one of the emerging innovation centres in Asia, many large and global enterprises are opening innovation facilities here. Additionally, several global players have set up R&D centres in India.
5. In 2016, approximately 950 multinational corporations (MNCs) were in India and collectively set up 1,200 R&D hubs, according to consulting firm Zinnov's annual report on global in-house centres (GICs).
6. The report states that Indian startups are playing a crucial role in driving the innovation wave in the country as they continue to disrupt existing business models.

WORLD HOMOEOPATHY DAY

The World Homoeopathy Day (WHD) is observed every year on April 10 to pay tribute to Dr. Christian Friedrich Samuel Hahnemann, founder and father of Homeopathy system of medicine. The day seeks to spread more knowledge about this form of medicine in mainstream public health. This year it is 263rd birth anniversary of founder of Homoeopathy.

What

1. On this occasion, Vice President M Venkaiah Naidu inaugurated scientific convention on WHD 2018 in New Delhi organised by Ministry of AYUSH.
2. The theme of two-day convention was **"Innovate: Evolve, Progress: Exploring Science since 40 years"**.
3. Homeopathy as system of medicine was developed by Dr. Samuel Hahnemann in Germany in 1796.
4. Now it is one of the major forms of treatment, adapted by most of the doctors of the world. It second most widely used system of treatment.
5. It is one of major medical practices used to cure the diseases worldwide.

6. This system of medicine uses a unique way of treatment **by stimulating body's own** healing power. It is an alternative to the standard medicine system.

INDIA REPLACES VIETNAM IN PHONE PRODUCER

India is now the second largest mobile phone producer in the world after China, as per information shared by Indian Cellular Association with Telecom Minister Manoj Sinha and IT Minister Ravi Shankar Prasad.

What

1. ICA referred to data available from market research firm IHS, China's National Bureau of Statistics and Vietnam General Statistics Office.
2. According to the data shared by ICA, annual production of mobile phones in India increased from 3 million units in 2014 to 11 million units in 2017.
3. India replaced Vietnam to become second largest producer of mobile phones in 2017.
4. With the rise in mobile phone production, imports of the devices in the country also reduced to less than half in 2017-18.
5. The fast track task Force, a body under Ministry of Electronics and IT, has set target to achieve around 500 million mobile phone productions in India by 2019, with value estimated to be around USD 46 billion.
6. The FTTF, which has members from industry and government, has set target to create USD 8 billion component manufacturing as result of growth in mobile phone production and create 1.5 million direct and indirect jobs by 2019.
7. The body has set the target to export 120 million mobile phone units with an estimated value of USD 1.5 million by the end of next year.

CMFRI SCIENTIST GETS GLOBAL RECOGNITION

Shyam S Salim, Principal Scientist at the Central Marine Fisheries Research Institute (CMFRI), has been elected as a regular executive member of the International Institute of Fisheries Economics and Trade (IIFET) based in Oregon State University, USA.

What

1. IIFET, which is a global organisation consisting of more than 700 members from over 65 countries around the world, provides an international forum for the exchange of research, information, and ideas on the economics of fisheries management, seafood trade, and aquaculture.
2. Shyam, an expert in fisheries economics at CMFRI, was elected to the post in recognition of his research and development initiatives in areas such as marine fisheries economics, domestic marketing, international trade, climate change, women empowerment, policy research and management.

ARTICLE 370 NOT A TEMPORARY

The Supreme Court on 3 April 2018 said that Article 370 of the Constitution which gives special status to Jammu and Kashmir is not a temporary provision. The apex court said that in its earlier verdict of 2017 in the SARFESI case, it has been already held that **Article 370 was "not a temporary provision"**. "The issue concerned is covered by the judgement of this court in the 2017 SARFAESI matter, where we have held that despite the headnote of Article 370, it is not a temporary provision, a bench of justices A K Goel and R F Nariman said.

What

1. The top court was hearing an appeal filed by petitioner Kumari Vijayalakshmi Jha, against the **Delhi High Court's April 11, 2017** order dismissing the plea seeking a declaration that Article 370 is temporary in nature.

2. The petitioner had claimed before the high court that Article 370 was a temporary provision that had lapsed with the dissolution of the Constituent Assembly in 1957.
3. The petition had said that the continuance of the temporary provision of Article 370 even after dissolution of Constituent Assembly of J&K, and that of J&K Constitution which has never got the assent of the President of India or Parliament or the government of India, “amounts to fraud on the basic structure of our Constitution”.

THEATRE OLYMPICS CONCLUDES

The eight editions of Theatre Olympics concluded in Mumbai, Maharashtra after glorious run of 51 days across 17 cities of India and showcasing rich heritage and culture across length and breadth of the country. It was inaugurated by Vice President Venkaiah Naidu in February 2018 at the majestic Red Fort in New Delhi.

What

1. The 8th Theatre Olympics was organised by National School of Drama (NSD) under Ministry of Culture.
2. The theme of the festival was – **“Flag of Friendship”**.
3. The 51-day event had brought together around 25,000 artists from India and across the world.
4. It witnessed 450 shows from more than 30 countries performed across 17 cities such as across Indian during festival.
5. It was biggest international theatre festival held in India for first time.
6. It staged more than 400 plays and hosted 78 allied events including 34 Living Legend series, 29 Master Classes, seven Interfaces, six national and international seminars and two workshops across 17 cities.

Flashback

1. The Theatre Olympics is an international festival that brings together finest productions of well-known theatre practitioners from around the world.
2. It was established in 1993 in Delphi, Greece as an initiative of noted Greek theatre director Theodoros Terzopoulos.
3. Greece was the first country to host Theatre Olympics in 1995.
4. Since then it was held in Japan (1999), Russia (2001), Turkey (2006), South Korea (2010) and China (2014). The 7th edition of mega carnival of theatre was held in Poland in 2016.

TOPS IN 4G EXPERIENCE

Patna tops in 4G connectivity among 20 of India’s largest cities. It has emerged ahead of the likes of Bengaluru, Mumbai and Delhi, said a report from OpenSignal, a wireless coverage mapping company.

What

1. 4G user experience in the 20 cities was monitored for 90 days from 1 December 2017.
2. **Four cities from India’s central and eastern regions**—Patna, Kanpur, Allahabad, Kolkata, Bhopal and Lucknow—made it to the top 10 while popular tech hubs like Bengaluru are at 10, followed by Hyderabad, Mumbai and Delhi.

FIRST CITY TO ROLL-OUT BS-VI FUEL

Delhi became the first city in India to supply ultra-clean Bharat Stage (BS) VI grade fuel (both petrol and diesel) with an aim to combat the rising levels of air pollution in Delhi-NCR region. State-owned oil firms have started supplying the BS-VI fuel (equivalent to fuel meeting Euro-VI emission norm) at all their 391 petrol pumps in NCT.

What

Other cities in NCR like Noida, Gurugram, Ghaziabad and Faridabad as well as other 13 major cities, including Mumbai, Chennai, Bengaluru, Hyderabad and Pune will roll-out cleaner BS-VI grade fuel from January 1 2019.

BS-VI fuel will be rolled out in rest of the country by April 2020.

By switching to BS-VI, India will join league of US, Japan and European Union, which follow Euro Stage VI emission norms.

The Union Government in October 2016 had decided to skip one stage and migrate to BS-VI directly from BS-IV from April 2020 to fight the growing pollution.

Flashback

1. The major difference in standards between the existing BS-IV and new BS-VI auto fuel norms is presence of sulphur.
2. BS-IV fuels contain 50 parts per million (ppm) sulphur, while BS-V and BS-VI grade fuel will have 10 ppm sulphur.
3. Thus, newly introduced BS VI fuel is estimated to reduce amount of sulphur released by 80%.
4. It will also bring down the emission of NOx (nitrogen oxides) from diesel cars by nearly 70 % and 25% from cars with petrol engines.
5. It will also bring down cancer causing particulate matter emissions from diesel engine cars by phenomenal 80%.

The deadline for it in Delhi was brought forward to 2018 due to higher level of pollution i.e. thick toxic smog faced in winter season.

DELHI AIRPORT DEBUTS IN WORLD'S TOP 20 BUSIEST

New York's John F. Kennedy International Airport is no longer ranked among the 20 busiest in the world, thanks to the rush in Asia. Among those pushing out JFK was **New Delhi's Indira Gandhi International Airport** that made its debut on the table last year at No. 16, according to Airports Council International rankings released. The Indian airfield was also the fastest-growing on the list, with passenger growth at 14%, followed by the 10% clip at China's Guangzhou, which climbed two notches to No. 13.

What

1. **World aviation's centre of gravity is continuing its eastward shift**, with China and India poised to feature among the world's top three air-travel markets by 2020 as rising incomes make fares more affordable, Montreal-based ACI said. Asia Pacific is likely to have 3.5 billion passengers by 2036, adding more than double the forecast for North America and Europe combined, according to estimates by the International Air Transport Association (IATA).
2. Efforts by Chinese airlines to add more direct flights to the US and Europe stoked passenger traffic at second- and third-tier airports last year.
3. Travel demand in China is expected to add 3 billion more passengers by 2040, representing 21% of the projected global passenger traffic growth.

10TH DEFEXPO-2018

The 10th edition of Defexpo India, a biennial exhibition on Land, Naval and Internal Homeland Security Systems, held from 11 to 14 April 2018 at Thiruvudanthai in Kancheepuram district on the East Coast Road near Chennai, concludes.

What

1. The Ministry of Defence for having successfully organised the DefExpo India – 2018 at Thiruvudanthai attracting large number of Indian and foreign exhibitors.
2. He also mentioned that the occasion added flavour to the celebrations as it coincides with Tamil New Year and also with 127th birth anniversary of Babasaheb Dr Bhimrao Ramji Ambedkar, the principle architect of our Constitution.

3. On the concluding day, very large crowd turned up to DefExpo India – 2018 making the event a grand success. Enthusiasm was also evident among organised groups from schools and colleges and visiting youth who were curious and showing keen interest in defence technology.
4. On the sidelines of the DefExpo India – 2018, indigenously designed and built Indian Naval Ships Sahydari - a stealth frigate, Kamorta - anti submarine warfare corvette, Sumitra - a naval advanced offshore patrol vessel, Airavat - an amphibious ship and Kirch - **a missile corvette were kept 'Open to Visitors' at Chennai Port for the first time in the history of DefExpo from 13 to 15 April 2018.**
5. The ships visit witnessed overwhelming response from the citizenry of Chennai and adjoining districts.
6. The DefExpo witnessed four-days of hectic activities with underlined theme of **'India: The Emerging Defence Manufacturing Hub' showcasing India's capability** in export of defence systems and components.
7. More than 670 exhibitors, including over 150 international exhibitors took part in the event. The MSME sector had representation this time around 15 per cent. An event of this scale was made feasible by the wholehearted support of people and various service agencies, including hotel industry and tour operators, in the host state of Tamil Nadu.

HOW TINY SEA CREATURES AFFECT EARTH'S CLIMATE

In a first, NASA is conducting a study of the world's largest phytoplankton bloom in the North Atlantic to see how the tiny sea critters influence the climate in every season. The North Atlantic Aerosols and Marine Ecosystems Study (NAAMES) mission began its fourth and final deployment, which will study how phytoplanktons give rise to small organic particles that leave the ocean and end up in the atmosphere, ultimately influencing clouds and climate.

What

1. It is the first research mission to conduct an integrated study of all four distinct **phases of the world's largest phytoplankton bloom**. Most scientists studying the bloom head to sea during its climax in late spring and early summer.
2. This thoroughness pays off as our ship-based scientists use these data to fully describe the entirety of the plankton bust/boom cycle. No one has done this **before, and we're excited about** the science findings that are beginning to trickle out now.
3. NAAMES research challenges traditional ideas about bloom dynamics and species succession. Findings from three deployments have already confirmed a distinct shift in the annual cycle of the phytoplankton bloom and researchers have noted a clear lack of larger-sized plankton during the peak of the bloom.
4. During previous NAAMES deployments, researchers completed 220 research hours aboard an instrumented C-130 aircraft along specific tracks and manoeuvres over the North Atlantic, including fly overs of the **Woods Hole Oceanic Institute's (WHOI)** Research Vessel Atlantis, which carries more than 50 researchers and crew members.
5. The ongoing ship deployment is currently collecting observations of ocean biological composition and stocks, aerosol measurements and optical properties of the North Atlantic study area. Satellites such as CALIPSO, a joint NASA and CNES mission, also help to study the ocean and the atmosphere – from the depths of the phytoplankton bloom, to the clouds and atmospheric particles in the sky above.

GNFC NEEM PROJECT

Smriti Irani, Union Cabinet Minister for Textile, Information & Broadcasting Government of India launched the Uttar Pradesh Neem Project at Kathaura –Jagdishpur,

District Amethi Uttar Pradesh initiated by the Gujarat Narmada Valley Fertilizers & Chemicals Limited (GNFC).

What

1. Irani **appreciated GNFC's efforts for implementing Neem project in many states** across the country. She acknowledged that this Neem Project has generated additional income to lacs of rural poor, especially women.
2. Considering large population of Neem trees in Uttar Pradesh, this project will generate significant additional income to rural women and will go a long way.
3. This will be a significant step towards **fulfilling Hon'ble Prime Minister's vision of** Neem coated urea in the interest of millions of farmers of the country.
4. This project has been appreciated by the Prime Minister & many other dignitaries nationally & internationally. Department of Fertilizers, GOI has issued an advisory to all fertilizer units to replicate GNFC Neem project in other states.

INDIA'S THIRD BEST OUTING EVER

India's gold rush continued till the last day of 21st Commonwealth Games at Goldcoast, Australia. Saina Nehwal claimed gold in an all-Indian final of women's singles in badminton on the last day. With 26 gold medals, the 2018 Commonwealth **Games has become India's third most successful of all time**. It has surpassed the medal tally of Glasgow Commonwealth Games 2014 by two medals — India won 64 medals in Glasgow.

What

1. Indian contingent with 200-strong athletics performed brilliantly throughout the tournament. India finished third on the medal tally — Australia tops the chart with 198 medals. England is at the second position with 136 medals.
2. The total medal count comes to 66 with India bagging 26 gold medals, 20 silver medals and 20 bronze medals.
3. On the final day of 21st Commonwealth Games, Joshna Chinappa and Dipika Pallikal settled for the silver medal in the final of women's doubles in squash. They lost the match to New Zealand's Joelle King and Amanda Landers-Murphy.
4. Manika Batra created history by winning the first ever women's singles table tennis gold for India on 14 April 2018. Neeraj Chopra won the gold medal with a season's best of 86.47 m in the fourth throw, scripting another historic record for India.
5. Here are all the latest developments of 21st Commonwealth Games 2018
6. In a historic match between two Indian superstars, Saina Nehwal beat and P V Sindhu to win a gold medal in women's final.
7. Satwik Rankireddy and Chirag Shetty claimed India's first ever medal in men's doubles after settling for a silver at the 21st Commonwealth Games.
8. India continued its dream run in Table Tennis with Achanta Sharath Kamal bagging the third bronze medal for India on the final day of 21st Commonwealth Games.
9. Scripting history, Indian boxer Satish Kumar settled for silver in the final of the 91kg category at the 21st Commonwealth Games on 14 April 2018.
10. India's men's hockey team lost 1-2 to England in the bronze medal playoff at the 21st Commonwealth Games. India had problems in defence throughout the tournament and it was no different on 14 April 2018.
11. Neeraj Chopra scripted history by becoming the first Indian javelin thrower to claim a gold medal at the Commonwealth Games with a season's best effort of 86.47m.
12. Indian boxing legend MC Mary Kom, who claimed a gold medal on debut at the Commonwealth Games, will be India's flag-bearer at the event's closing ceremony on 15 April 2018.

Event	Gold	Silver	Bronze	Total
Shooting	7	4	5	16
Wrestling	5	3	4	12
Weightlifting	5	2	2	9
Boxing	3	3	3	9
Table Tennis	3	2	3	8
Badminton	2	3	1	6
Athletics	1	1	1	3
Squash	0	2	0	2
Para Powerlifting	0	0	1	1