

# My Notes....

## NATIONAL

### ISRO LAUNCHES RECORD 104 SATELLITES

**Indian Space Research Organisation (Isro)** launched as many as **104 satellites from a single rocket**, a global record, from its Sriharikota launch station off the Andhra coast. The bulk of these satellites were **from the US; some other countries also hired Isro's services**. Isro hopes this development would help its aim of making the country a **one-stop shop to build and hurl micro satellites**. There is a global shortage of launchers for small satellite missions and there's also a rush from private business in the US and Europe to send hundreds of these to space for various needs.

#### What

1. In the next five years, **at least 3,000 such satellites**, the sizes varying from a small shoebox to a **24-inch television set**, weighing between one and 50 kg, are expected to be built and launched by various players.
2. The biggest of it would be from **OneWeb, the SoftBank-funded satellite venture**, which has India's Bharti as a partner. It would be launching 648 small satellites to provide high-speed internet to various corners of the world.
3. Planet Labs, which acquired the satellite infrastructure of Google last week, has, for the second time, used **Isro's Polar Satellite Launch Vehicle (PSLV) rocket to hurl 88 micro satellites ('Doves') into space** for high-resolution images of the Earth.
4. **Spire Global, a satellite firm that tracks navigation on the seas by providing real-time weather data to ships**, used the Indian rocket to send up eight Lemur-2 satellites. These micro satellites have a lifespan of two to three years and need to be replaced regularly.
5. **Antrix Corp, commercial arm of Isro, expects around 500 small and micro satellites to be built and launched annually in the world.**
6. **So far, Isro's PSLV rocket has launched 225 satellites, of which 179 were for foreign customers.**
7. **India has already seen the start of a process to share satellite-making technology with private entities in this country**, to build for Isro and the world.
8. Last year, Isro contracted to a **consortium of small players to build two Navic navigation satellites.**

#### How Isro blasted a ton

- 1 Cartosat-2 - Indian earth observation satellite built and launched in 3 months
- 2 INS-2 - Isro nano satellites to demonstrate technologies for the future
- 5 One micro satellite each from Israel, Kazakhstan, the Netherlands, Switzerland and the United Arab Emirates
- 8 Lemur-2 satellites for weather tracking by the US space start-up Spire Systems
- 88 Imagery satellites of Planet Labs, a US start-up owned by former Nasa scientists
- 179 Total foreign satellites launched by Isro on its PSLV rocket
- 225 Total satellites launched by Isro so far

#### Features

1. The launch of PSLV-C37 in a single payload, including the **Cartosat-2 series** and **103 co-passenger satellites**, together weighed over 650 kg (1,433 lb)
2. A 'flock' of 88 will get to work to map every inch of the planet in super high resolution, creating images of limitless potential
3. The Mars mission cost Isro about \$73 mn, nearly one-tenth the cost of a Nasa probe sent to orbit the planet the previous year

4. The low price tag led Prime Minister to quip that India had sent a satellite into space for less than Americans had spent making the movie Gravity

### FIRST INDIGENOUS AEW&C

The **first indigenous Airborne Early Warning and Control System (AEW&C)** in IOC configuration shall be handed over to the Indian Air Force (IAF) during Aero India 2017 at Yelahanka Air base in Bengaluru.

#### What

1. The **Airborne Surveillance System** is a game changer in air warfare. The **AEW&C System is a system of systems** populated with state-of-the art Active Electronically Scanned Radar, Secondary Surveillance Radar, Electronic and Communication Counter Measures, LOS (Line of Sight) and beyond LOS data link, voice communication system and self protection suite, built on an Emb-145 platform, having an air to air refueling capability to enhance surveillance time.
2. Complex **tactical software has been developed for fusion of information from the sensors**, to provide the air situation picture along with intelligence to handle identification/classification threat assessment.
3. This **system has been developed and evaluated through collaborative efforts between DRDO and the IAF**, with coordination for certification clearance and quality assurance by CEMILAC and DGAQA.
4. The AEW&C system has undergone all weather and environmental trials and has been accepted by the IAF for induction.

### INDIA SUCCESSFULLY TEST FIRES INTERCEPTOR MISSILE

**India successfully test-fired their interceptor missiles off the Odisha coast**, achieving a significant milestone in the direction of developing a two-layered Ballistic Missile Defence system. The interceptor was launched from Abdul Kalam Island or Wheeler Island of ITR.

#### What

1. This mission termed as "**PDV mission is for engaging the targets in the exo-atmosphere** region at an altitude above 50 km of earth's atmosphere. Both, the PDV interceptor and the two stage target missile, were successfully engaged.
2. The **target was developed for mimicking a hostile Ballistic Missile approaching from more than 2,000 km** away was launched from a ship anchored in the Bay of Bengal.
3. In an automated operation, radar based detection and tracking system detected and tracked the enemy's ballistic missile.
4. The computer network with the help of data received from radars predicted the trajectory of the incoming Ballistic Missile.
5. **The PDV that was kept fully ready took-off once the computer system gave the necessary command for lift-off.** The Interceptor guided by high accuracy Inertial Navigation System (INS) supported by a Redundant Micro Navigation System moved towards the estimated point of the interception.
6. Once the missile crossed the atmosphere, the Heat Shield ejected and the IR Seeker dome opened to look at the Target location as designated by the Mission Computer. With the help of Inertial Guidance and IR Seeker the missile moved for interception.

### INS SARVEKSHAK GOES GREEN

**Indian Navy's survey vessel INS Sarvekshak** has gone green by installing a solar power system on board. Navy said the system, equipped on the ship, works on sunlight and hence is **100 per cent reliable for power source** that can be used for communication equipment, battery charging and general lightings onboard round the clock with battery outputs during night.

#### What

1. The system is "**maintenance free**" whereas the diesel generator requires regular maintenance.

2. The estimated profit generated in a ship service life of 25 years is Rs 2.7 crore in this small project alone. Even if the system is used for 25 days in one year, the system can repay its cost in less than 10 years while protecting the nature, the Navy said. Navy claimed that by installing 5 KW solar power systems, it avoids around 165kg of carbon a day, 60,225 kg of carbon a year plus 22,995 litres of diesel.
3. In its 25 years life the total carbon saved is around 15 lakhs kg and 5.75 lakh litres of diesel by this innovation.

### **BILL TO REPLACE NOTE BAN ORDINANCE PASSED IN LS**

The **Specified Bank Notes (Cessation of Liabilities) Bill, 2017 (demonetisation bill)** was passed in Lok Sabha. The bill, to formally make the banning of Rs 500 and Rs 1,000 notes a law, was introduced in the Lok Sabha.

#### **What**

1. It will replace an **Ordinance promulgated on December 30** last that provides for a fine of Rs 10,000 or five times the cash held, whichever is higher, on holding of more than 10 banned 1,000 and 500 rupee notes.
2. The Bill also provides for a **minimum fine Rs 50,000 for false declaration by persons**, who were abroad during the demonetisation period (November 9-December 30, 2016) and given time to deposit the scrapped notes with RBI till March 31.
3. It will also end the liability of the Reserve Bank of India and the government on the currency notes demonetised in November last year.

### **FIRST STATE FOR ESTABLISHING CASHLESS SYSTEM FOR FPSS**

**Gujarat** has become the **first State in the country** for establishing Cashless System for distribution of foodgrains. The State Government for installing **Aadhaar Enabled Payment System** in 17250 FPSs, much before the targeted date of 31st March, 2017.

#### **What**

1. The **beneficiaries under NFSA will need to carry only Aadhaar cards** for getting their foodgrains in Gujarat. This will help in establishing the identity of beneficiaries, help in stopping the leakages of grains at shop level and above all eradicate corruption in the Public Distribution System.
2. **Gujarat State has taken a step ahead by partnering with common service centres**, a Special Purpose Vehicle of Ministry of Electronics and IT by offering 30 odd digital services through the FPSs. Now a consumer will also be able to get his Rail, Air and Bus ticket reserved at the FPS itself.
3. A beneficiary can pay his mobile bill, a farmer can deposit crop insurance premium, LIC premium etc. at these centres. A farmer can get the **Soil Health Card** and registration for Centrally Sponsored Schemes. It is told that the State Government is also trying to make provision for monthly bus travel pass for students and payment of electricity bill through these shops. Besides, one can use the computer and Internet facility at the FPS.
4. It is worth mentioning that Shri Paswan had organized a meeting with **State Food Ministers on the 19th January, 2017 for establishing Cashless System in the Public Distribution System across the country**.
5. There are over **81 crore beneficiaries under NFSA and Cashless system in PDS** will become the largest cashless system in the country, once it is implemented.

### **CABINET NOD FOR RURAL DIGITAL LITERACY PROGRAMME**

The Cabinet, chaired by Prime Minister Narendra Modi approved '**Pradhan Mantri Gramin Digital Saksharta Abhiyan' or PMGDISHA** to make six crore rural households digitally literate. The outlay for the project is 2,351.38 crore. The programme aims to **usher in digital literacy in rural India by March 2019**. This is in line with the announcement made by Finance Minister in the Union Budget 2016-17 PMGDISHA is expected to be one of the largest digital literacy programmes in the world.

#### **What**

1. As many as **25 lakh candidates will be trained in FY 2016-17, 275 lakh in FY 2017-18 and 300 lakh candidates in FY 2018-19**. Further, to ensure equitable

geographical reach, each of the 250,000 gram panchayats in the country will be expected to register an average of 200-300 candidates.

2. **Digitally literate persons would be able to operate computers and digital access devices** such as tablets and smart phones, send and receive emails, browse internet, access government services, search for information, undertake cashless transactions, among other things.
3. The implementation of the scheme would be carried out under the overall supervision of Ministry of Electronics and IT in active collaboration with States/UTs through their designated state implementing agencies, District e-Governance Society (DeGS), etc.
4. As per the **71st NSSO Survey on Education 2014, only 6% of rural households** have a computer, highlighting that more than 15 crore rural households do not have computers and a significant number of these households are likely to be digitally illiterate.

## PARLIAMENT PASSES BILL FOR WAGE PAYMENT VIA E-MODE

Parliament **passed a bill seeking to enable the Centre and state governments to specify industrial units** which will have to pay wages only either through cheques or by transferring into bank accounts. **The Payment of Wages (Amendment) Bill 2017**, which was passed by voice vote in Rajya Sabha, also enables the employers to pay wages to workers through cheque or by transferring into their bank account without their written authorisation. Lok Sabha had passed the bill.

### What

1. Allaying apprehensions of members that it will take away workers' **right to get their wages in cash**, Labour Minister Bandaru Dattatreya told the House "this will improve the compliance of labour laws. Exploitation of workers is going on. There is cut in payments (of wages in cash)."
2. The minister had introduced the bill in Lok Sabha on December 15, 2016, just before the Winter Session ended. The government had then taken the ordinance route.
3. **The bill replaces the Payment of Wages (Amendment) Bill 2016**, which was introduced in Lok Sabha on December 15, 2016 and **repeals the Payment of Wages (Amendment) Ordinance 2016 promulgated on December 28, 2016**.
4. As both the Houses of Parliament were not in session and immediate action was required to be taken to ensure that the benefits of the proposed legislation reach the employed person at the earliest, President promulgated the **Payment of Wages (Amendment) Ordinance 2016**.
5. The minister said **Section 20 of the bill "provides for six months imprisonment for violation of the Act**. Moreover the inspector can initiate appropriate action under the Factories Act 1948.

## GOVT APPROVES REVENUE INSURANCE SCHEME FOR PLANTATION CROPS

The Commerce Ministry has approved **the pilot Revenue Insurance Scheme for plantation crops for protecting the growers from the risks such as yield loss**, pest attacks and income decline caused by fall in prices.

### What

1. The **Price Stabilization Fund (PSF) Scheme, 2003** was closed on September 30, 2013 and Revenue Insurance Scheme for Plantation Crops (RISPC) is an improved form of the PSF, Commerce and Industry Minister Nirmala Sitharaman said.
2. **RISPC was approved on September 16 last year** and will be implemented on a pilot basis for two years covering tea, coffee, rubber, cardamom and tobacco in eight districts in West Bengal, Kerala, Karnataka, Andhra Pradesh, Assam, Sikkim and Tamil Nadu by the commodity boards.
3. Department of Commerce has recently approved the pilot RISPC for protecting growers of plantation crops from the twin risks of yield loss due to adverse weather parameters, pest attacks etc and income loss caused by fall in international/domestic prices.

4. Citing example of Delhi Mumbai Industrial Corridor, the minister said for **the Ahmedabad Dholera Special Investment Region in Gujarat, 1706.13** hectares of land has been transferred by the state to Dholera Industrial City Development Ltd.
5. For the Visakhapatnam Chennai Industrial Corridor (VCIC), the land under possession is 1,887 acres and the land under acquisition/alienation is about 24,056 acres.

## INDIA RANKS 43RD IN IP ENVIRONMENT

India ranked low **43rd among the surveyed 45 nations in 2017 International Intellectual Property Index (IIPI)**. In this edition, India is just above Pakistan (44th) and Venezuela (45th). The fifth annual index was released by US Chamber of Commerce's Global Intellectual Property Centre (GIPC) in its report titled 'The Roots of Innovation'.

1. In India, many of the same challenges to innovation remain. Although it has made incremental progress, the government needs to build upon the positive rhetoric of its IPR policy with the substantial legislative reforms that innovators need.
2. The **report includes 90 per cent of global gross domestic product (GDP)** and grades countries on patents, trademarks, copyright, trade secrets, enforcement and international treaties.
3. **In addition to its anaemic IPR policy**, the report cited challenges with the scope of patentability for computer-implemented inventions, Section 3(D) of the Indian Patent Act, and the recent Delhi High Court decision regarding photocopying copyrighted content.
4. The **new economies included in the fifth edition of the index are Egypt, Hungary, Kenya, Pakistan, the Philippines, Saudi Arabia, and Spain**. India ranks 43, just ahead of Pakistan. The US ranks on top, followed by UK, Germany, Japan and Sweden respectively.

## FSSAI DRAFTING ORGANIC FOOD NORMS

The **Food Safety and Standards Authority of India (FSSAI)** is drawing up guidelines to regulate organic food. The regulator will put up draft guidelines for organic packaged food and commodities in the public domain for suggestions next month.

### What

1. The **size of the organic food (grains and pulses) market in the country is around Rs 3,350 crore** and industry estimates suggest the market is growing 30 per cent a year.
2. Organic food exporters are now required to obtain approval from the **Agricultural and Processed Food Products Export Development Authority**. There are no guidelines for domestic players.
3. The initial draft, prepared after consultations with stakeholders, is ready.
4. The draft will propose setting up of a committee to suggest changes in the certification method being followed now.
5. The **FSSAI is also planning to ensure more disclosures about food**. Contents and calorie counts are now mentioned on packets. We are trying to figure out how more details can be incorporated in bar codes printed on packs.
6. The **regulator is also trying to rope in restaurants to offer healthier food choices to patrons**. Restaurants may be required to list ingredients used and calorie counts.
7. It is voluntary now, but is increasingly becoming a global practice. The Federation of Hotel and Restaurant Associations of India is working with the FSSAI on this initiative.
8. **The FSSAI is sending a team to train staff at 20 temples in Tamil Nadu** that offer food and drinks to devotees. The regulator will pursue such training programmes across the country.

## COUNTER- IED STRATEGY

The **17th International Seminar on "Counter- Improvised Explosive Device (IED) strategy"**, organized by the National Security Guard (NSG), concluded. **Thirty-three International delegates from 12 countries** and 225 delegates from various states of India participated in the seminar. The theme of the seminar was "**synergizing the National and International special forces to meet challenges of terrorism and IED**".

**What**

1. Minister of State for Information and Broadcasting, Col. Rajyavardhan Singh Rathore, graced the occasion as Chief Guest at **NSG Campus, Manesar, and Haryana**.
2. Before his keynote address and release of NSG Bombshell Magazine, the Minister inaugurated the "Niranjan Auditorium", constructed by NSG as a tribute and as a mark of respect to Lt. Col. Niranjan, E. K., who was martyred during Pathankot operation in Jan, 2016. Shaheed Lt Col Niranjan's parents were also present on this occasion.
3. After the inauguration, the deliberations for the day commenced focusing on various aspects of dealing with IEDs with various experts from within the country as well as from **Australia, UK, USA, Japan, Russia and Israel** throwing light on various facets of the issue.
4. A CT Expo: 2017 was also organized at NSG Campus Manesar to enable the industries to showcase their latest equipment in the field of counter terrorism. Besides, demonstrations on IED, simulation of IED blasts and futuristic IEDs were also organized.

**NATIONAL WOMEN'S PARLIAMENT**

The **three-day National Women's Parliament, being organised by Andhra Pradesh Legislative Assembly** with the theme of **'Empowering Women – Strengthening Democracy'** was held on 10 February 2017 in the **state capital region Amaravati**.

**What**

1. The **vision of NWP is to enable and encourage social, political and economic empowerment of women** in all strata of the society. One of the objectives of NWP is to generate new ideas, concepts, theories and ideologies for women empowerment.
2. An **'International Woman Icon of the World'** award and 12 best young achievers awards for women in different fields will be presented at the NWP.
3. There would be seven plenary sessions at the event with discussions on subjects like socio-political challenges in women empowerment, women's status and decision-making, building own identity and vision for the future.
4. The **conclave will be a common platform for women from diverse backgrounds** like politics, arts and culture, sports, education, industry, media, cinema, judiciary and social sector to share their knowledge and research in the area of women's social, economic and political empowerment.
5. The **NWP would facilitate interaction among women from all backgrounds and girl students to sensitise the society** on issues like malnutrition, social security, sexual harassment, sanitation, oppression and other gender-based problems.
6. One of the objectives of **NWP is to make young girls realise their potential** and make them aware of the canvas where they can leave their footprints.

**BILL PASSED TO ALLOW KAMBALA**

Bowing to public pressure, a **bill to legalize traditional buffalo race "Kambala" and bullock cart races in Karnataka** was passed by the state Assembly with all parties backing the move. **The Prevention of Cruelty to Animals Act, 1960**, was amended in its application to Karnataka by the bill which was tabled after the clamour for Kambala grew, spurred by the success of **pro-jallikattu (taming of bull) stir in Tamil Nadu**.

**What**

1. The bullock cart races are held in **parts of North Karnataka and Shivamogga and Kambala in the coastal districts of Udupi and Dakshina Kannada**.
2. To pave the way for the sports, the state Cabinet on January 28 had decided to amend the Prevention of Cruelty to Animals Act, (Central Act 59 of 1960), enacted to prevent the infliction of unnecessary cruelty and suffering on animals.

**SC CLARIFIED ON ANTHEM PLAYED IN FILMS**

The **Supreme Court clarified that the audience need not stand when the National Anthem is played** as a part of the storyline of a film, newsreel or documentary. A bench of Justices Dipak Misra and R Banumathi made this clear after one of the petitioners said that the apex court should clarify if people are expected to stand when the National Anthem is played in a film, newsreel or documentary.

**What**

1. It is clarified that **when the National Anthem is played as part of the storyline of a film, newsreel or a documentary the audience need not stand,** the bench said.
2. The bench, which said the issue raised by petitioners needs to be debated, has fixed the matter for further hearing on April 18.
3. The apex court had on November 30 last year ordered cinema halls across the nation to mandatorily play the National Anthem before screening of a movie and the audience must stand and show respect.
4. **This order had come on the PIL filed by one Shyam Narayan Chouksey** seeking directions that National Anthem should be played in cinema halls across the country before a film begins and proper norms and protocol be fixed regarding its playing and singing at official functions and programmes where those holding constitutional office are present.
5. The court had barred printing of the anthem or part of it on any object and displaying it in such a manner at places which may be **"disgraceful to its status and tantamount to disrespect"**. It had also barred playing or displaying an "abridged version" of the anthem.

**INDIA JOINS UN NETWORK TO HALVE MATERNAL**

**India is among nine countries that will be part of a global health network** focused on improving the quality of care for new mothers and babies and strengthen national efforts to **end preventable deaths of pregnant women and newborns by 2030**. The nine countries are India, Bangladesh, A Cote d'Ivoire, Ethiopia, Ghana, Malawi, Nigeria, Tanzania and Uganda. Through the new **'Network for Improving Quality of Care for Maternal, Newborn and Child Health'**, supported by **World Health Organisation (WHO), UN International Children's Fund (UNICEF)** and other partners, the countries will work to improve the quality of care mothers and babies receive in their health facilities, a statement from WHO said.

**What**

1. The **Network aims to strengthen national efforts to end preventable deaths by 2030**, as envisioned by the Every Woman Every Child Global Strategy for Women's, Children's and Adolescents' Health. Countries will do that by strengthening capacity and motivation of health professional to plan and manage quality improvement, improving data collection and increasing access to medicines, supplies, equipment and clean water.
2. **Every mother and infant deserves to receive the highest quality of care when they access health facilities in their communities,**" WHO Department of Maternal, Newborn, Child and Adolescent Health director Anthony Costello said.
3. **The first nine countries in the Network have committed to identifying the actions** they will take to improve quality of care and will work with partners to deliver the vision of quality that encompasses values of equity and dignity.
4. **Every year, worldwide, 303 000 women die during pregnancy and childbirth, 2.7 million babies die** during the first 28 days of life and 2.6 million babies are stillborn. Most of these deaths could be prevented with quality care during pregnancy and childbirth.
5. The eight new standards provide a quality of care framework which will help countries ensure their services are safe, effective, timely, efficient, equitable and people-centred.

**INTERNATIONAL****UN REPORT ON IWT**

The **40-year-old Indus Water Treaty** between **India and Pakistan** has been an outstanding example of conflict resolution but the scarcity of water in the basin states since the early 1990s has brought the agreement under strain and it's **"survival appears weak"**, according to a UN report.

### What

1. The **treaty fails to address two issues**: the division of shortages in dry years between India and Pakistan, when flows are almost half as compared to wet years, and the cumulative impact of storages on the flows of the River Chenab into Pakistan,” said the UNDP report titled ‘**Development Advocate Pakistan**’.
2. **Wular Barrage and Kishenganga project on the Jhelum and Neelum rivers** present a similar problem whereby water storage during the Rabi season is critical as flows are almost one-fifth of the Kharif season.
3. Pakistan has gone as far as calling the treaty an inefficient forum for resolving water issues, elevating the water issue to a “core issue” and including it in the composite dialogue. But India has refused to include the issue in the composite dialogue because it is not ready to discard the treaty.
4. The **treaty permitted India to create storages on the western rivers of 1.25, 1.60 and 0.75 million acre feet (MAF) for general**, power and flood storages, respectively, amounting to a total permissible storage of 3.6 MAF.
5. With control of the **River Chenab through the Salal dam**, India has several plans under way for the development of hydropower with enhanced water storage on the western river. Pakistan continues to face reduced flows from the Chenab owing to the recent storage of water in the Baglihar dam.
6. According to the report, annual flows in the Chenab during wet years have continued to **decline since 1958-59** with an increase in droughts since 1937-38.
7. Same is the case with the River Jhelum being controlled by India. Since the river is a major source of irrigation and hydropower for Pakistan, it will pose dire impacts for the country if India chooses to close the gates of the barrage.

## BANGLADESH REPLACES US ON TOURIST INFLOW

A **new pecking order has emerged for foreign tourist arrivals in India**. The US, the traditional top source for arrivals, has lost the spot it held for years to Bangladesh. India’s neighbour has for the first time become the biggest source market for foreign tourists coming to the country.

### What

1. Data from **ministry of tourism showed 1.37 million visitors came to India from Bangladesh in 2016**, up 21 per cent over the number in 2015.
2. The **21 per cent growth was much higher than the increase of 8.2 and 10.4 per cent** seen in arrivals from the US and UK, respectively. The UK is the third-largest source market for foreign tourists.
3. The rise of Bangladesh in the Indian travel market has been quite rapid. From a mere 0.48 million visitors in 2012, the number has now grown almost threefold. Bangladesh now accounts for 15.47 per cent of the total 8.89 million foreign tourists who visited India in 2016.
4. **The US and UK accounted for 14.74 and 9.51 per cent, respectively**. Quality medical and health-care facilities in India are one of the reasons for the growing number of tourists from Bangladesh.
5. Trade and business are another factor. Government data show that of the 134,344 medical visas issued by India in 2015, half went to citizens from Bangladesh. The number of medical visas increased to almost 97,000 during the first half of 2016.

## INDIA, INDONESIA TO HOLD AIR COMBAT EXERCISE

**India and Indonesia have decided to hold their first-ever joint air combat exercise** as well as enhance maritime security cooperation, according to sources. India and Indonesia have already been **conducting joint army drills** but now they were moving ahead and planning for joint air force exercise.

### What

1. India has already stepped up its military ties with **Vietnam, Singapore and other countries in Southeast Asia** and is now going ahead to crank up defence ties with Indonesia.

- Also during the visit of Indonesian President Joko Widodo in December last year, Prime Minister Narendra Modi had agreed to give top priority to their defence and security ties in order to jointly combat terrorism and organised crime.

## ECONOMY

### TReDS CAN BOOST MSMEs' LIQUIDITY

The **Trade Receivables Discounting System (TReDS)** proposed by the RBI is expected to provide much-needed liquidity to **micro, small and medium enterprises (MSMEs)**. Lack of adequate working capital has been a major issue for MSMEs. Institutional lenders are typically obsessed with immovable collateral and credit history, which these units lack. On the other hand, the large and medium-sized corporates that these units supply tend to delay payments, often inordinately.

#### What

- CRISIL's analysis of about 10,000 MSMEs** shows their average trade receivable position at about 75 days, which impedes their working capital cycle and crimps growth. One reason for this is that factoring hasn't taken off in India, given inefficient recovery mechanism, fraud and excessive documentation involved.
- TReDS aims to **provide instant liquidity through a transparent and competitive bidding system, initially to MSMEs supplying to large corporates.**
- These MSMEs can discount their supply bills on TReDS with no recourse to them, and large corporates will have to make payments to the lenders who discount the MSMEs' purchase order bill. This way, the buyer's credibility will enable MSMEs to obtain cost-efficient and collateral-free finance. The assumption, of course, is that large corporate buyers would be comfortable on 'without recourse', which is an untested hypothesis.
- RBI has granted in-principle sanction for TReDS to Axis Bank, Mynd Solutions and the Receivables Exchange of India Limited**, expected to be launched soon.
- CRISIL believes TReDS can take off, given a strong framework of debt-recovery mechanism, credit insurance and enablement of partial recourse or full recourse models.
- The current TReDS design should be enhanced to include supply-side financing, which can happen with third-party credit-assessment of MSMEs that gives lenders some comfort for discounting.

### FIRST COMBINED RAIL BUDGET

The General Budget 2017-18 is the **First combined Budget of Independent India that includes the Railways**. India is now in a position to synergize the investments in railways, roads, waterways and civil aviation. For 2017-18, the total capital and development expenditure on Railways has been pegged at Rs. 1,31,000 crores.

#### What

- The Railways will focus on **four major areas, namely, passenger safety, capital and development works, cleanliness and finance and accounting reforms**. For passenger safety, a '**Rashtriya Rail Sanraksha Kosh**' will be created with a corpus of Rs.1 lakh crores over a period of 5 years, to be funded by seed capital from the Government, Railways' own revenues and other sources.
- The Government will lay down clear cut guidelines and timeline for implementing various safety works to be funded from this 'Kosh'. Unmanned level crossings on Broad Gauge lines will be eliminated by 2020. Expert international assistance will be harnessed to improve safety preparedness and maintenance practices.
- Railway lines of 3,500 kms will be commissioned in 2017-18**, as against 2,800 kms in 2016-17 and steps will be taken to launch dedicated trains for tourism and pilgrimage.
- In the next 3 years, the throughput is proposed to be enhanced by 10%. Further, the Minister added that Railways have set-up joint ventures with 9 State Governments and 70 projects have been identified for construction and development.

5. Regarding station redevelopment, at least 25 stations are expected to be awarded during 2017-18 for redevelopment and 500 stations will be made differently abled friendly by providing lifts and escalators. It is also proposed to feed about 7,000 stations with solar power in the medium term, of which, a beginning has already been made in 300 stations. Works will be taken-up for 2,000 railway stations as part of 1000 MW solar mission, the Minister added.
6. **Emphasizing the Government's focus on 'Swachh Rail'**, a series of steps are proposed to be taken to enhance cleanliness in Railways, of which, an SMS based '**Clean My Coach Service**' has already been started. It is now proposed to introduce the '**Coach Mitra**' facility, a single window interface to register all coach related complaints and requirements.
7. By 2019, all coaches of Indian Railways will be fitted with bio toilets. Pilot plants for environment friendly disposal of solid waste and conversion of biodegradable waste to energy are being set-up at New Delhi and Jaipur Railway Stations and five more such Solid waste management plants are now being taken-up.

## UNION BUDGET 2017

**Finance minister Arun Jaitley presented the Union Budget 2017 in Parliament.** The budget proposal into **10 distinct themes**: Farmers; rural population; energizing youth; poor and underprivileged; infrastructure; financial sector; digital economy; public service; prudent fiscal management; and tax administration.

### For Farmer

1. Farmer credit fixed at record level of Rs10 trillion; will ensure adequate flow to underserved areas
2. Soil health cards: Govt to set up mini-labs in Krishi Vigyan Kendras
3. Long-term irrigation fund in Nabard—corpus at Rs40,000 crore
4. Model law on contract farming to be circulated
5. Dairy processing infra fund with corpus of Rs8,000 crore
6. Dedicated micro-irrigation fund with Rs5,000 crore corpus

### For Rural

1. **Mission Antyodaya** to bring 1 crore households of poverty
2. MGNREGA: Rs48,000 crore has been allocated; participation of women now at 55%; using space technology in a big way
3. Prime Minister Gram Sadak Yojana: Rs19,000 crore allocated; along with states, Rs27,000 crore will be spent in FY18
4. Pradhan Mantri Awas Yojana: Rs23,000 crore allocated
5. 100% village electrification by May 2018
6. Rural livelihood mission: Rs4,500 crore allocated
7. Mason training to be provided for 5 lakh people
8. Panchayat Raj: Human resource reform programme to be launched
9. Rs1,87,223 crore allocated for rural programmes

### For Youth

1. Education: System of measuring annual learning outcomes, emphasis on science
2. **Innovation fund for secondary education**
3. Reforms in UGC: Colleges to be identified based on ranking and given more autonomy
4. Propose to leverage information technology with launch of SWAYAM platform for virtual learning
5. National testing agency to be established for all entrance exams, freeing up CBSE, AICTE and other bodies
6. 100 Indian international skill centres to be established with courses in foreign languages
7. Rs4,000 crore allocated to launch skill acquisition and knowledge awareness
8. Special scheme for creating employment in leather/footwear sector
9. Tourism: Five special zones to be set up

### For Poor and Unprivileged

1. Women: Mahila Shakti Kendras with Rs500 crore corpus
2. Stepped up allocation to Rs1.84 trillion for various schemes for women and children
3. Affordable housing to be given infrastructure status
4. Action plan to eliminate leprosy by 2018, TB by 2025, reduce IMR to 29 in 2019
5. To create additional PG medical seats per annum
6. Two new AIIMS in Jharkhand and Gujarat
7. New rules to be introduced for medical devices
8. Labour rights: Legislative reforms to simplify and amalgamate existing labour laws
9. Allocation to SCs increased to Rs52,393 crore; STs given Rs31,920 crore, minority affairs allocated Rs4,195 crore
10. Senior citizens: Aadhaar-based smart cards with health details to be provided

### Infrastructure

1. Total capex and development expenditure of railways pegged at Rs1.31 trillion
2. Railways: Passenger safety—Safety fund corpus set up; unmanned level crossings to be eliminated by 2020
3. Railway lines of 3,500km to be commissioned
4. To launch dedicated tourism/pilgrimage trains
5. 500 stations to be made differently-abled friendly
6. Cleanliness in railways: To introduce Coach Mitra facility; By 2019, biotoilets for all coaches
7. Railways to offer competitive ticket-booking facility; service charge withdrawn for tickets booked on IRCTC
8. New metro rail policy to be announced
9. Roads sector: Allocation for national highways at Rs64,000 crore
10. Airports Authority of India Act to be amended to enable monetization of land resources
11. Total allocation to transport sector at Rs2 trillion
12. Telecom sector: Allocation to Bharat Net programme at Rs10,000 crore
13. Digi-gau initiative to be launched
14. To make India global hub for electronics manufacture
15. Export infra: New restructured central scheme to be launched
16. Total allocation for infrastructure: Rs3.96 trillion

### Financial Sector

1. Foreign Investment Promotion Board (FIPB) to be abolished
2. Commodities market: panel to study legal framework for spot and derivative markets
3. Resolution mechanism for financial firms
4. Cyber-security: Computer emergency response team to be set up
5. Listing of PSEs will foster public accountability; revised mechanism for time-bound listing
6. To create integrated public sector oil major
7. New ETF to be launched
8. Pradhan Mantri Mudra Yojana: Lending target at Rs2.44 trillion
9. Stand-up India scheme: over 16,000 new enterprises have been set up

### Digital Economy

1. India at cusp of massive digital revolution
2. Govt to launch two new schemes to promote BHIM app, including cashback scheme for merchants
3. Aadhaar Pay to be launched for people who don't have mobile phones
4. Focus on rural and semi-urban areas
5. To strengthen financial inclusion fund
6. Panel on digital payments has recommended structural reforms
7. To create payment regulatory board at RBI

### Public Service

1. To use head post-office for passport services
2. Defence: centralized defence travel system developed
3. Defence: Centralized pension distribution system to be established
4. Govt recruitment: To introduce two-tier exam system
5. Govt looks to introduce laws to confiscate assets of economic defaulters
6. High-level panel chaired by PM to commemorate Mahatma Gandhi's 150th birth anniversary

### Fiscal Management

1. Total budget expenditure: Rs21 trillion
2. Rs3,000 crore to implement various budget announcements
3. Defence expenditure excluding pensions: Rs2.74 trillion
4. Consolidated outcome budget for all ministries being created
5. Fiscal deficit for FY18 pegged at 3.2% of GDP
6. Revenue deficit for FY18 at 1.9%

### Tax Administration

1. Direct tax collection not commensurate with income/expenditure pattern of India
2. We are largely a tax non-compliant society; predominance of cash in society enables tax evasion
3. After demonetization, data received will increase tax net
4. Black money: No cash transactions above Rs3 lakh
5. Transparency in political funding: Parties continue to receive anonymous donations; propose system of cleaning up
6. Political funding: Maximum amount of cash donation that can be received is Rs2,000; political parties can receive donations by cheques or digitally; amendment proposed to RBI Act to issue electoral bonds; every party has to file returns within specified time
7. Personal income tax: Rate reduced to 5% for income bracket of Rs2.5-5 lakh; All other categories to get uniform benefit of Rs12,500 per person; to levy surcharge on income bracket Rs50 lakh-Rs1 crore
8. Personal income tax: To have simple one-page form for taxable income up to Rs5 lakh
9. GST: preparedness of IT system on schedule
10. Not many changes to excise duties since GST will be implemented soon
11. FPI category 1 and 2 investors exempted from indirect transfer provisions
12. Time period of revising tax returns reduced to 12 months
13. Real estate: to make changes in capital gains tax
14. Concessional withholding rate will be extended to 30 June 2020, rupee-denominated masala bonds to be included
15. MAT not to be abolished at present; to allow carry-forward for 15 years
16. Corporate tax rate: MSMEs' rate (annual turnover less than Rs50crore) reduced to 25%
17. LNG: Reduce customs duty to 2.5%
18. Limit of cash donation for charitable trusts cut to Rs2,000.

### MASALA BONDS TO GET MORE TAX BENEFITS

Rupee-denominated offshore bonds, popularly known as **masala bonds**, got a tax benefit boost with the Union Budget exempting them from taxation for transfer among non-residents, while a **low rate of 5 per cent** will apply for investors till 2020.

#### What

1. The decision to **levy lower tax deducted at source (TDS) of 5 per cent** with respect to masala bonds would be retrospectively effective from April 1, 2017.
2. A concessional with-holding rate of 5 per cent is being charged on interest earned by foreign entities in external commercial borrowings or in bonds and government securities.

3. This concession is **available till June 30, 2017**. This benefit is also extended to rupee-denominated (masala) bonds.
4. It is further proposed to extend the **benefit of Section 194LC to rupee-denominated bond issued outside India** before July 1, 2020. This amendment will take effect retrospectively from April 1, 2016 and will, accordingly, apply in relation to the assessment year 2016-17 and subsequent years.
5. As per the Budget, amendment would be effected to ensure that "the said appreciation of rupee shall be ignored for the purposes of computation of full value of consideration".
6. In this regard, **the amendments would be effective from April 1, 2018** and will, accordingly, apply in relation to the assessment year 2018-19 and subsequent years.

## FIRST MAJOR BANKING CONSOLIDATION

**The government has cleared the way for the first major banking consolidation in the country**, by approving the merger of **five associate banks with the State Bank of India**. However, the merger, which will create a banking behemoth, **does not include Bharatiya Mahila Bank**.

### What

1. Five associate banks which would be merged with SBI are -- **State Bank of Bikaner and Jaipur, State Bank of Hyderabad, State Bank of Mysore, State Bank of Patiala and State Bank of Travancore**.
2. The merger will lead to synergy of operations that will cut down cost of operations and hence cost of funds. The recurring savings are estimated to be more than Rs 1,000 crore in the first year.
3. The finance minister evaded a direct reply on consolidation of other public sector banks, saying the media will be informed as and when the proposal comes.
4. **SBI shares closed down 0.68 per cent at Rs 268.65 on BSE**.
5. The proposal went to respective bank boards and SBI board which again gave nod to the merger.
6. The merger will create a **huge banking entity with an asset book of Rs 37 lakh crore**. SBI's asset base will now be five times larger than the second-largest Indian bank, ICICI Bank.
7. Post-merger, SBI would have about 22,500 branches and 58,000 ATMs. Some of them may be rationalised as well. It will have over 500 million customers.
8. **The five Associate Banks of SBI had a market share of 5.3 per cent in deposits** and 5.33 per cent in advances approximately as on March 31, 2016. Their net profit stood at Rs 1,640 crore that time.
9. State Bank of Saurashtra and State Bank of Indore had already merged with SBI in 2008 and 2010 respectively.
10. According to initial plans, **SBI will give 28 of its shares for every 10 shares held of State Bank of Bikaner**.
11. It will give 22 of its shares for every 10 shares held of State Bank of Mysore. The lender will give 22 of its own shares for every 10 shares held of State Bank of Travancore.

## GAAR, POEM TO COME INTO EFFECT

**Rules for anti-tax avoidance and place of effective management (POEM)** will be implemented from 1 April, the government said emphasising the rules have been delayed long enough and cannot be deferred any more. While **Place of Effective Management (POEM)** requires **foreign firms to pay taxes in India** if the effective control of business lies within the country, **General Anti-Avoidance Rules (GAAR)** seeks to prevent companies from routing transactions through other countries to avoid taxes.

### What

1. The tax department feels that the **adoption of anti-abuse rules in tax treaties** may not be sufficient to address all tax avoidance strategies and the same are required to be tackled through domestic anti-avoidance rules.

2. **POEM is not for Indian companies doing genuine business outside.** It is for those companies which are creating structures outside the country, mainly to get passive income from stocks and investments.
3. **POEM requires foreign companies in India and domestic firms with overseas subsidiaries to pay local taxes based on where the business is effectively controlled** but will not apply to companies having a turnover or gross receipts of Rs50 crore or less in a financial year.
4. **This would help target shell companies**, or holding companies, incorporated overseas to evade taxes by showing their residency as a tax haven even though the management and effective decision-making takes place in India.
5. **POEM will not apply to those overseas companies of an Indian promoter that get passive income outside the tax net of India.** POEM guidelines make it clear that if you have got active business outside India, POEM will not apply.
6. **India will be the 17th nation in the world** to have the law that aims to fix tax loopholes.

### INDIA SIGNS AGREEMENT FOR TEQIP III

A Financing Agreement for IDA credit of US\$201.50 million (equivalent) for the “**Third Technical Education Quality Improvement Programme (TEQIP III)**” was signed with the World Bank.

#### What

1. The objective of the Program is **to enhance quality and equity in participating Engineering Education Institutes** and improve the efficiency of the Engineering Education System in **Uttarakhand, Himachal Pradesh, Bihar, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Rajasthan, 8 North Eastern States and Andaman & Nicobar Islands.**
2. The Project has two main components, (i) **Improving quality and equity in engineering institutes in those states;** and (ii) **System-level initiatives to strengthen sector governance and performance.** The project has been designed as a disbursement linked one, that is, the World Bank loan will be disbursed on achievement of specific outcomes.
3. The closing date of TEQIP III is **31st March, 2022.**

## SCIENCE AND TECHNOLOGY

### INDIA TAKES FIRST STEPS ON ARTIFICIAL LIFE FORMS

India is taking its first steps to evolve a **policy on synthetic biology**, an emerging science whereby **new life forms can potentially be made in labs** and existing life forms — such as bacteria and other microbes — can be tweaked to exude specific proteins or chemically useful products. The environment ministry will be convening a group of experts on biodiversity and biotechnology, which will **assess the extent of synthetic biology work in Indian labs**, potential benefits and risks, and the implications of the trans-boundary movement of such forms of life.

#### What

1. **Synthetic biology in microbial systems can potentially** be used to produce **drugs, vaccines, fuel components and other chemicals.**

#### No policy yet

1. Last December, officials from the environment ministry **participated in the United Nations Biodiversity Conference of the Convention on Biological Diversity (CBD) at Cancun, Mexico**, where about 8,000 delegates from 180 countries convened to discuss matters related to biodiversity.
2. **India, so far, has no policy on synthetic biology**, and according to a presentation made at the venue, it has promised to “put in place a Synthetic Biology Team for articulating India’s view” in a forthcoming edition of the conference.
3. A major part of discussions at the **CBD generally involve assessing risks from the Living Modified Organisms**, a broader term that also includes genetically modified plants. While India has a biosafety system in place to assess risks from GM crops, it has faced severe opposition from several activist groups.

2. A popular example is the production of **artemisinin, a powerful anti-malarial drug**, in yeast at a commercial level. Microorganisms have also been constructed to act as sensors that can detect a toxin in vitro or in vivo.
3. There are assorted labs in India that work on synthetic biology and Indian students have, since the turn of the decade, been participating in international competitions to engineer new life forms using standardised biological tools.

### **‘UMBRELLA’ LAUNCHED**

**Global networking giant Cisco** launched “Umbrella”, a **Cloud-based secure internet gateway** that provides visibility and protection against threats wherever users work. A **secure internet gateway (SIG)** provides safe access to the internet anywhere users go, even when they are off the VPN and provides **the first line of visibility and defense regardless of where users are located or to what they’re trying to connect.**

#### **What**

1. **Umbrella stops current and emergent threats over all ports and protocols for the most comprehensive coverage.**
2. It blocks access to malicious domains, **URLs, IPs, and files before a connection is ever established or a file downloaded.** By combining “Umbrella” with Cisco Cloudlock’s Cloud Access Security Broker technology, Cisco can now enable organisations to identify which SaaS apps are being used and enforce policies to block risky or inappropriate apps.
3. **“Umbrella” can integrate with existing systems**, including security appliances, intelligence platforms or feeds, and custom, in-house tools which enables users to extend protection for devices and locations beyond the perimeter.
4. “Umbrella” resolves over 100 billion internet requests every day and correlates this live data with over 11 billion historical events.
5. This is analysed to identify patterns, detect anomalies, and create models to automatically uncover attacker infrastructure being staged for the next threat.

### **FIRST EVER BLUEPRINT FOR QUANTUM COMPUTERS UNVEILED**

Scientists have unveiled the **first ever practical blueprint to construct a large scale quantum computer**, the most powerful computer on Earth that could revolutionise industry, science, medicine and commerce. The work by scientists, including those from **University of Sussex in the UK and Google**, features the actual industrial blueprint to construct such a large-scale machine, more powerful in solving certain problems than any computer ever constructed before.

#### **What**

1. Once built, **the computer’s capabilities mean it would have the potential to answer many questions in science**; create new, lifesaving medicines and solve the most mind-boggling scientific problems, researchers said.
2. It could also **unravel the yet unknown mysteries of the furthest reaches of deepest space** and solve some problems that an ordinary computer would take billions of years to compute.
3. The work features a new invention permitting actual quantum bits to be transmitted between individual quantum computing modules in order to obtain a fully modular large-scale machine capable of reaching nearly arbitrary large computational processing powers.
4. Previously, **scientists had proposed using fibre optic connections to connect individual computer modules.** The invention introduces connections created by electric fields that allow charged atoms (ions) to be transported from one module to another. The approach allows 100,000 times faster connection speeds between individual quantum computing modules compared to current state-of-the-art fibre link technology.

### **MR VACCINATION CAMPAIGN LAUNCHED**

The Ministry of Health and Family Welfare **launched Measles Rubella (MR) vaccination campaign in the country at a function in Bengaluru.** The campaign against these two

diseases will start from five States/UTs (**Karnataka, Tamil Nadu, Puducherry, Goa and Lakshadweep**) covering nearly 3.6 crore target children. Following the campaign, Measles-Rubella vaccine will be introduced in routine immunization, replacing the currently given two doses of measles vaccine, at **9-12 months and 16-24 months of age**.

#### What

1. The Government is committed to eradicating **Measles and Rubella from the country**. This shall be taken up in a mission mode and rolled out in partnership with States , NGOs and development partners such as **WHO, UNICEF, Gates Foundation, Lions Club, IPA, IMA, etc.**
2. In the nationwide campaign, the Ministry will reach out to and cover 41 cr children in the age group of 9 months – 15 years
3. **MR vaccine will be provided free- of- cost across the states** from session sites at schools as well as health facilities and outreach session sites.
4. Measles vaccine is currently provided under **Universal Immunization Programme (UIP)**. However, rubella vaccine will be a new addition. After the completion of the campaign, MR vaccine will be introduced in routine immunization and will replace measles vaccine, given at 9-12 months and 16-24 months of age of child.
5. **Rubella is generally a mild infection**, but has serious consequences if infection occurs in pregnant women, causing congenital rubella syndrome (CRS), which is a cause of public health concern.
6. **Measles immunization directly contributes to the reduction of under-five child mortality**, and with combination of rubella vaccine, will control rubella and prevent CRS in country population. Given the wide target group of the vaccination campaign, schools and educational institutions will play a critical role, and will require partnership from multiple stakeholders at all levels.

## Miscellaneous

### WORLD WETLAND DAY 2017

The **National Biodiversity Authority (NBA)** under the Environment Ministry has organised events to spread public awareness about conservation of wetlands which includes a **radio-outreach and awareness generation campaign**. The **World Wetland day 2017** on 2 February 2017, with the theme '**Wetlands for Disaster Risk Reduction**' is being celebrated in **collaboration with the Madhya Pradesh government at Bhoj Wetlands Bhopal**, which is **one of the 26 Ramsar sites** that India has designated under the **Ramsar Convention**.

#### What

1. **World Wetlands Day** is celebrated on **February 2** each year to mark the day the **Convention on Wetlands was adopted in the Iranian city of Ramsar in 1971** and India is a party to the **convention since 1982** and committed to the Ramsar approach of wise use of wetlands.
2. The ministry has also asked all the state governments to celebrate the World Wetlands Day in their respective states in a befitting manner.
3. Till date, **over 170 wetlands have been covered under the programme** and the ministry has also introduced **Wetlands (Conservation and Management) Rules, 2010** as the regulatory framework for conserving wetlands of the country.

### AWARDS FOR EXCELLENCE IN PUBLIC ADMINISTRATION

'**Prime Minister's Awards for Excellence in Public Administration**' is instituted to acknowledge, recognize and reward extraordinary and innovative work done by Districts/Organizations of the Central and State Governments. There shall be a **maximum of 15 awards** under the **Priority Programme category** and 2 awards under the Innovation category.

Following priority programmes have been identified for awards under the scheme.

1. Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

2. Pradhan Mantri Fasal Bima Yojana (PMFBY)
3. Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY)
4. e – National Agriculture Market (e-NAM)
5. Standup India/ Startup India

In addition to the awards in **Priority Programmes**, awards shall be given to organizations of Central/State Government/District for innovations in Environment Conservation, Disaster Management, Water Conservation, Energy, Education and Health, Women and Child Centric Initiatives etc.

For the Prime Minister's Awards 2017 ('PM Awards'), an innovative and competitive methodology has been adopted for wider participation. Districts across the country and Central and State Government Organisations were motivated to compete under the scheme.

## **'STATE OF GLOBAL AIR 2017' REPORT**

**India and China account for more than half of the world's premature deaths due to air pollution**, a new report said. Noting that India's lives lost to the tiny particulate matter is "approaching" China's numbers, the **'State of Global Air 2017'** report said that among the 10 most populous countries and the European Union (EU), Bangladesh and India have the highest exposure to PM2.5, the "steepest" rise since 2010.

### **What**

1. Globally, **there was 60 per cent rise in ozone attributable deaths**, with a striking 67 per cent of this increase occurring in India.
2. The 'State of Global Air 2017' is the first of a new series of annual reports and accompanying interactive website, designed by Health Effects Institute in cooperation with the Institute of Health Metrics and Evaluation (IHME) at the University of Washington and University of British Columbia.
3. In 2015, long-term exposure to **PM2.5 contributed to 4.2 million deaths and to a loss of 103 million years of healthy life**. China and India together accounted for 52 per cent of the total global deaths attributable to PM2.5.
4. It found that increasing exposure and a growing and aging population have meant that India now rivals China for among the highest air pollution health burdens in the world, with both countries facing some 1.1 million early deaths due to it in 2015.
5. According to the report, while 11, 08,100 deaths were attributed to PM2.5 exposure in China in 2015, in India, it was 10, 90,400.
6. **Around 92 per cent of the world's population lives in areas with "unhealthy" air.**
7. **Bangladesh and India, have experienced the steepest rise in air pollution levels since 2010** and now have the highest PM2.5 concentrations among the countries.
8. Among the world's 10 most populous countries and the EU, the biggest increase (14 per cent to 25 per cent) in seasonal average population-weighted concentrations of ozone over the last 25 years were experienced in China, India, Pakistan, Bangladesh, and Brazil.
9. **China, India, Bangladesh, and Japan increases in exposure**, combined with increases in population growth and aging, resulted in net increases in attributable mortality.
10. Meanwhile, **Pakistan, Bangladesh and India had PM2.5 attributable Disability Adjusted Life Years (DALYs) rates** that were 5 to 10 times the lowest rates, which were found in the US and Japan.

## **BRAND FINANCE GLOBAL REPORT 2017**

According to the latest Brand Finance Global 500 report, **Tata group's position has slipped to 103 from last year's 82**. It, however, continues to be one of the most valuable brands from India. The Tata group has been the **only Indian brand** that has found a place in the top 100 global brands of Brand Finance.

### **What**

1. The 2017 ranking also shows that **other Indian brands have all managed to improve their positions**. For instance, **Airtel, at 242 in 2016**, climbed up to 190 in 2017. LIC improved its position to 222 from 283 in 2016. Infosys climbed 50 positions to reach 251.

2. Other than the Tata group, two other brands that saw their valuations erode are **State Bank of India** and **Larsen & Toubro**.
3. Globally, **Google dethroned Apple to become the most valuable global brand**.
4. **Amazon managed to hold on to its position at the third spot**. Amazon's 53 per cent brand value growth meant it nearly secured the top spot for itself this year.
5. Facebook though continues to climb the ranks following 82 per cent brand value growth, but has been outdone by China's biggest tech brands. Alibaba, WeChat and Tencent have grown by 94 per cent, 103 per cent and 124 per cent, respectively.

#### Flashback

1. Every year, valuation and strategy consultancy Brand Finance values the brands of **thousands of the world's biggest companies**.
2. **Brands are first evaluated to determine their power/strength** (based on factors such as marketing investment, familiarity, loyalty, staff satisfaction and corporate reputation).
3. Brand strength is used to determine what proportion of a business's revenue is contributed by the brand, which is projected into perpetuity to determine the brand's value.
4. The results of this analysis are ranked, with the world's 500 most valuable brands featured in the Brand Finance Global 500.

### UN REMOVES AFGHAN WARLORD FROM TERRORISTS LIST

The **UN has removed Afghan warlord Gulbuddin Hekmatyar** from its list of designated terrorists, lifting the assets freeze, travel ban and arms embargo imposed on the insurgent leader who has signed a peace pact with the government. The **Security Council's al-Qaeda sanctions committee** concerning ISIS, al-Qaeda and associated individuals, groups, undertakings and entities removed Hekmatyar's name from the ISIS (Da'esh) and Al-Qaida Sanctions List.

#### What

1. **Hekmatyar, head of the Hezb-e-Islami party**, had last year in September signed a landmark peace agreement with Kabul.
2. He is expected to return to the country within weeks. A former Prime Minister, Hekmatyar was a prominent anti-Soviet commander in the 1980s.
3. Following the 2001 US-led invasion of Afghanistan and fall of the Taliban, the US State Department designated him a terrorist, accusing him of taking part in and supporting attacks by al-Qaeda and the Taliban.

### INDIAN DIPLOMAT RE-APPOINTED TO UN JIU

**Achamkulangare Gopinathan**, a top Indian diplomat, has been re-appointed by the **UN General Assembly** to the **Joint Inspection Unit (JIU)**, the only independent external oversight body of the UN system. Gopinathan, along with Sukai Prom-Jackson of Gambia, Jean Wesley Cazeau of Haiti and Nikolay Lozinskiy of Russia were appointed members of the Joint Inspection Unit for a **five-year term beginning January 1, 2018**.

#### What

1. The **Joint Inspection Unit (JIU)** is the only independent external oversight body of the United Nations system mandated to conduct evaluations, inspections and investigations system-wide.
2. Gopinath's re-appointment follows his nomination by India and endorsement as the sole candidate of the **Asia-Pacific Group**.
3. Gopinathan was first appointed to the UN body for a term from January 2013 to December 2017.
4. At that election, he had secured 106 votes out of 183 votes and had defeated Ambassador Zhang Yan of China. He was serving as Chairman of the Joint Inspection Unit.

## FIRST EVER TRAINING CENTRE FOR PARA ATHLETES

**Para athletes have won 4 medals at RIO Olympics for India in 2016** and brought glory for the country in International Sports Arena. The government approved a Center of Excellence for Differently Abled Sportspersons at SAI Gandhinagar, the **first ever training centre dedicated for Para athletes in the country.**

### What

1. The Center of Excellence for Differently Abled Sportspersons for which he laid the foundation will help Para Athletes to showcase their skills and talent further both at national and international level.
2. It will have the World Class facilities where Para athletes will be trained for various International Competitions including Asian Games, Common Wealth Games and Olympic Games and will also Classification center.
3. The center will also hold Seminars, Educational Programmes and Workshops throughout the year with the help of International Paralympic Committee.

## FACILITIES FOR PARA ATHLETES

1. Indoor Hall (64m x 42m) fully AC
2. Elite Hostel (100 bedded) fully AC
3. VIP Accommodation for Foreign Guest (20 nos) AC.
4. Open land for warmup.

The following playing facilities of International level will be provided to the para athletes for day to day training at SAI Campus Gandhinagar.

1. Athletics – Synthetic Athletic Track
2. Swimming – International Standard Swimming Pool.
3. Power Lifting – Modern Fitness center with world class equipment.
4. Qualified coaches are posted in each discipline.

## HYDROFLUOROCARBONS IN 2028

Aiming to **curb global warming and facilitate enough carbon space for growth of domestic industry and the economy**, India has agreed to freeze production and consumption of **Hydrofluorocarbons (HFCs)** in 2028 and start reducing it from 2032 onwards.

### What

1. **This was agreed in the 28th meeting of parties to Montreal protocol held in October 2016 in Kigali**, Rwanda, said by Environment Minister Anil Madhav Dave.
2. The **Kigali meeting adopted an amendment to the Montreal Protocol** which is historic and aimed at phasing down HFCs that contribute to global warming.
3. As **per the agreement reached in Kigali**: "India will freeze its manufacturing and consumption of HFCs in 2028 and start reducing it from 2032 to 2047 with reference to the base line years 2024, 2025 and 2026".
4. **India has agreed to phase out 10 per cent of HFCs in 2032**, 20 per cent in 2037, 30 percent in 2042 and 85 per cent in 2047, he said, adding that the freeze year was subject of technology review and could be further deferred to 2030.
5. The agreement facilitates adequate carbon space for growth on domestic industries while minimizing the cost to the economy during the transition period.
6. The Montreal protocol had no arrangement till date to incentivise improvement in energy efficiency in case of use of new refrigerant, it was "agreed in Kigali that multilateral funds under the Montreal protocol will pay for maintaining or increasing energy efficiency with new technology."
7. As per the agreement, the developed countries would reduce the production and consumption of HFCs by 70 per cent in 2029.
8. **India represents only around 2 per cent of the global production and consumption of HFCs** but our manufacturing and consumption sector is expected to grow at a rapid pace in future.