My Notes....

NATIONAL

INDIA NOW IN 'AUSTRALIA GROUP'

India on 19 January 2018 became a member of **Australia Group**, aimed at **checking proliferation of chemical and biological weapons**. With this, India has gained entry in three of the four multilateral export control regimes even as its quest for a seat in the most significant of them all **Nuclear Suppliers Group continued to be blocked by China**. The **Missile Technology Control Regime (MTCR) admitted India in June 2016** and the **Wassenaar Arrangement (WA)** in December 2017.

What

1. **On 19 January 2018 India formally became the 43rd member of the Australia Group (AG)**, the cooperative and voluntary group of countries working to counter the spread of materials, equipment and technologies that could contribute to the development or acquisition of chemical and biological weapons (CBW) by states or terrorist groups.
2. **The Australia Group (AG)** announced that India's plea for membership of the cartel had received widespread support from its members at its last plenary in Paris in June last year.
3. New Delhi said that **India's entry into the AG would be "mutually beneficial** and further contribute to international security and non-proliferation objectives".
4. The Ministry of External Affairs, said that **India's membership would help further strengthen its impeccable non-proliferation credentials**.

Australia Group

1. It is **multilateral export control regime (MECR)** and informal group that works to counter spread of materials, equipment and technologies that could contribute to development or acquisition of chemical and biological weapons (CBW) by states or terrorist groups through harmonisation of export controls.
2. **It was established in 1985.**
3. Coordination among participant countries of Australia Group helps them to fulfil their obligations under Chemical Weapons Convention and the Biological and Toxin Weapons Convention to the fullest extent possible.
4. It has now has 43 members. China, Pakistan, Iran, North Korea are not its members.

5. India was continuing its pursuit for membership of the NSG and remained engaged with the members of the cartel, which controlled global nuclear commerce to check proliferation of atomic weapons.
6. **India, like all other members of the AG**, is a signatory to both the Chemical Weapons Convention (CWC) and the Biological Weapons Convention (BWC).
7. **The MTCR's primary objective is to restrict proliferation of missiles**, complete rocket systems, unmanned air vehicles, and related technology for systems capable of carrying a 500 kg payload at least 300 km, as well as systems intended for the delivery of weapons of mass destruction.
8. **The WA controls global commerce of conventional arms and dual-use goods and technologies**.
9. China has been blocking India's bid for NSG membership arguing that the NSG should reach agreement on a non-discriminatory formula to deal with the issue of granting membership to countries which had not signed the **Nuclear Non-Proliferation Treaty, or NPT**.

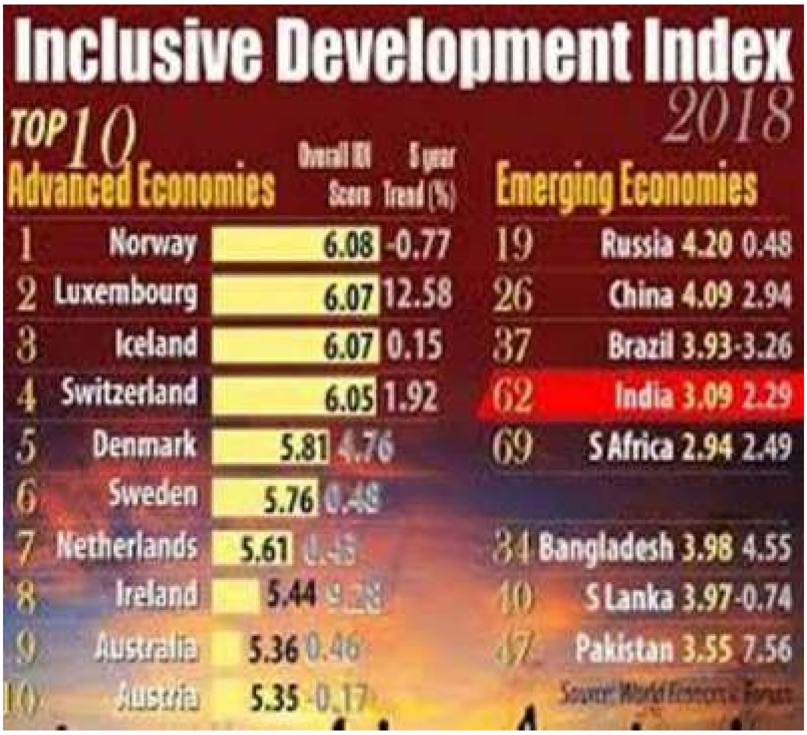
INCLUSIVE DEVELOPMENT INDEX 2018

India was 22 January 2018 **ranked at the 62nd place among emerging economies on an Inclusive Development Index**, much below China's 26th position and Pakistan's 47th. **Norway remains the world's most inclusive advanced economy**, while **Lithuania**

again tops the list of emerging economies, the World Economic Forum (WEF) said while releasing **the yearly index** before the start of its annual meeting, to be attended by several world leaders including Prime Minister Narendra Modi and US President Donald Trump.

What

1. The index takes into account the "**living standards, environmental sustainability and protection of future generations from further indebtedness**".



Inclusive Development Index 2018

TOP 10

Advanced Economies		Overall IDI Score	5 year Trend (%)	Emerging Economies			
1	Norway	6.08	-0.77	19	Russia	4.20	0.48
2	Luxembourg	6.07	12.58	26	China	4.09	2.94
3	Iceland	6.07	0.15	37	Brazil	3.93	-3.26
4	Switzerland	6.05	1.92	62	India	3.09	2.29
5	Denmark	5.81	4.76	69	S Africa	2.94	2.49
6	Sweden	5.76	0.48				
7	Netherlands	5.61	0.45	34	Bangladesh	3.98	4.55
8	Ireland	5.44	9.28	40	S Lanka	3.97	-0.74
9	Australia	5.36	0.46	47	Pakistan	3.55	7.56
10	Austria	5.35	-0.17				

Source: World Economic Forum

2. It urged the leaders to urgently move to a new model of inclusive growth and development, saying reliance on GDP as a measure of economic achievement is fuelling short-termism and inequality.
3. **India was ranked 60th among 79 developing economies last year**, as against China's 15th and Pakistan's 52nd position.
4. The 2018 index, which measures progress of 103 economies on three individual pillars -- growth and development; inclusion; and inter-generational equity -- has been divided into two parts. The first part covers 29 advanced economies and the second 74 emerging economies.
5. The index has also classified the countries into **five sub-categories in terms of the five-year trend of their overall Inclusive Development Growth score** -- receding, slowly receding, stable, slowly advancing and advancing. Despite its low overall score, **India is among the ten emerging economies with 'advancing' trend**. Only two advanced economies have shown 'advancing' trend.
6. Among advanced economies, **Norway is followed by Ireland**, Luxembourg, Switzerland and Denmark in the top five.
7. Small European economies dominate the top of the index, with Australia (9) the only non-European economy in the top 10. Of the G7 economies, Germany (12) ranks the highest. It is followed by Canada (17), France (18), the UK (21), the US (23), Japan (24) and Italy (27).
8. The **top-five most inclusive emerging economies are Lithuania, Hungary, Azerbaijan, Latvia and Poland**.
9. Performance is mixed among BRICS economies, with the **Russian Federation ranking 19th**, followed by **China (26), Brazil (37), India (62) and South Africa (69)**.
10. Of the three pillars that make up the index, **India ranks 72nd for inclusion**, **66th for growth and development** and **44th for inter-generational equity**.

EPI REPORT 2018

India has slipped to **177th position in green ranking this year** from **its 141st position two years ago** and figured among the group of **bottom five nations in the list of 180 countries** due to its poor handling of air pollution abatement and forest protection measures. **The country's poor show on environment protection front** is reflected in the latest **global Environmental Performance Index (EPI) rankings**, released on sidelines of the **World Economic Forum (WEF)** in Davos, Switzerland on 23 January 2018.

What

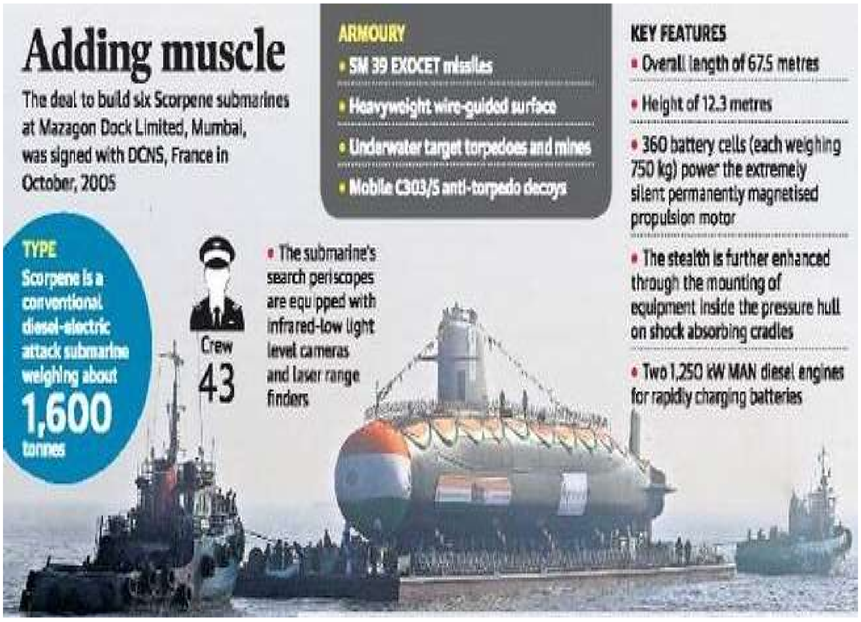
1. **The EPI report ranks 180 countries on 10 broad categories (issues)**, including 24 performance indicators, covering environmental health and ecosystem vitality.
2. These performance indicators include air quality, water & sanitation, CO2 emission intensity (emission per unit of the GDP), forests (deforestation) and waste water treatment among others.
3. **Air quality (household solid fuels and PM2.5 exposure)**, however, remained the leading environmental threat to public health and the report noted that countries such as India, China and Pakistan which scored badly on air quality front "face public health crisis that demands urgent attention".
4. On this front, **India's 'UjjwalaYojana' - meant for LPG connections to women from Below Poverty Line (BPL) households - got a special mention in the report** which noted that if the goal of this scheme is realised, it has potential to positively impact the lives of millions of BPL households by providing them with access to safe, affordable cooking technologies and fuels.
5. **The biennial report, brought out by the Yale and Columbia Universities in collaboration with the WEF**, noted that the low ranking of the emerging economic like India and China (120th) reflects the strain population pressure and economic growth impose on environment.
6. **However, at the same time, it also gave example of Brazil (69th)**, suggesting that a concerted focus on sustainability as a "policy priority" will pay dividends.
7. **Switzerland leads the world in protecting environment and sustainable practices**, followed by France, Denmark, Malta, and Sweden. In general, higher rank shows long-standing commitments to protecting public health, preserving natural resources, and decoupling greenhouse gas (GHG) emissions from economic activity.
8. Low scores on EPI are indicative of the need for national sustainability efforts on a number of fronts, especially cleaning up air quality, protecting biodiversity and reducing GHG emissions", said the report which is the 10th version of the EPI ranking.
9. Though the report noted that the some of the laggards (mainly African countries) face broader challenges such as civil unrest, the low scores in many other countries can be attributed to weak governance.
10. **Change in country's ranking this year as compared to 2016** can also be attributed to the quality of data and the broadening base of parameters. As compared to nine broad categories, including 20 performance indicators, in 2016 EPI, the 2018 EPI took into account 10 broad categories including 24 performance indicators.
11. **The US ranked 27th in the 2018 EPI**, with strong scores on issues such as sanitation and air quality. But the country's weak performance on issues such as deforestation and GHG emissions puts it behind other rich nations like France (2nd), the United Kingdom (6th), Germany (13th), Italy (16th), Japan (20th), and Canada (25th).
12. **As the EPI project has highlighted for two decades**, better data collection, reporting, and verification across a range of environmental issues are urgently needed.

KARANJ LAUNCHED

The third of the latest Scorpene-class submarines - Karanj - was launched **into the Arabian Sea** amid recitation of Sanskrit shlokas from the Atharva Veda and traditional ceremonies associated with the launch of naval platforms. Indian Navy formally launched the ship at the facility of the **Mazagon Dock Ship Builders Ltd**. **The submarine was then towed to Mumbai Port Trust**, for separation from the pontoon. Karanj will now undergo rigorous trials and tests, both in harbour and at sea before it is commissioned into the Indian Navy. The launch of Karanj marked a significant departure from the manning and training philosophy that was adopted for the **first two submarines and added** that from third submarine onwards the Navy would be fully self-reliant in training and certification processes. The old Karanj had served the nation for 34 years from 1969 to 2003, including participation in the 1971 war.

What

1. The Karanj submarine has an **overall length of 67.5 metre and a height of about 12.3 metres**. The hull form, fin and hydroplanes are specifically designed to produce minimum underwater resistance.
2. **Erstwhile Karanj was commissioned in Indian Navy on September 4, 1969** and was retired on August 1, 2003. Today she is reborn in a new avatar.
3. Karanj submarine: Attacks can be carried out with torpedoes both while submerged and on the surface -- in all war theatres including the tropics, giving it an unmatched invulnerability.



Adding muscle

The deal to build six Scorpene submarines at Mazagon Dock Limited, Mumbai, was signed with DCNS, France in October, 2005

ARMOURY
- SM 39 EXOCET missiles
- Heavyweight wire-guided surface
- Underwater target torpedoes and mines
- Mobile C303/S anti-torpedo decoys

KEY FEATURES
- Overall length of 67.5 metres
- Height of 12.3 metres
- 360 battery cells (each weighing 750 kg) power the extremely silent permanently magnetised propulsion motor
- The stealth is further enhanced through the mounting of equipment inside the pressure hull on shock absorbing cradles
- Two 1,250 kW MAN diesel engines for rapidly charging batteries

TYPE
Scorpene is a conventional diesel-electric attack submarine weighing about 1,600 tonnes

Crew 43

- The submarine's search periscopes are equipped with infrared-low light level cameras and laser range finders

4. According to MDL, the technology being used for the construction of the Scorpene class submarines has ensured superior stealth features such as advanced acoustic silencing techniques, low radiated noise levels and hydrodynamically optimized shape.
5. **Submarines have the ability to launch a crippling attack on the enemy using precision-guided weapons**.
6. A Shore Integration Facility developed for various equipment of the Scorpene submarine combat system.
7. Scorpene submarines can undertake various missions such as anti-surface warfare, anti-submarine warfare, intelligence gathering, mine laying and area surveillance.
8. The Scorpene deal for India was signed in October 2005 and the first submarine was to be delivered by 2012, but due to inordinate delays and teething problems, it could not happen.
9. Total six submarines are going to be built at the MDL. They are being built in collaboration with French shipbuilding major Naval Group (formerly DCNS).
10. Prime Minister Narendra Modi has last month commissioned the first of the six Scorpene-class submarines Kalvari into the Indian Navy and said its induction was a big step in the country's defence preparedness. Defence Minister Nirmala Sitharaman had then said that submarine building is a sophisticated and exacting craft which very few countries possess in their industrial capacity.

CENTRE SCRAPS HAJ SUBSIDY

The Centre had abolished the Haj subsidy on 16 January 2018. The **Supreme Court had in 2012 asked the Centre to phase out the subsidy by 2022**, but the government decided to **implement the decision in 2018 itself** as "**empowerment without appeasement**" of the minority communities.

What

1. The Centre **would use the money for welfare of minority communities**. A record number of 175,000 Muslims will undertake the pilgrimage this year from India. The Centre had spent over Rs 2.5 billion last year towards Haj subsidy.
2. **The Saudi Arabian government has agreed to allow Indians to go on Haj by the sea route** and officials of the two countries will work out the modalities. The sea route is likely to be much cheaper.

3. Haj pilgrims from certain regions will be free to choose their port of departure and this would bring down the cost by up to **70 per cent on some routes**.
4. In a first, over **1,300 women would go on Haj without a 'mehram' (male guardian)**, a practice done away with from this year. Woman Haj assistants would accompany them and the government has made arrangements for their stay in Saudi Arabia.

What is the Haj subsidy?

1. The Haj subsidy refers to discounted airfares given by the **government-owned airlines**, Air India.
2. It also includes **assistance to Muslim pilgrims for domestic travel to reach specially designed Haj departure airport terminals**, lodging, medical care and meal.
3. Originally, the subsidy was given on air fares of flights between Bombay and Jeddah. Later, additional flight legs were added to the subsidy list.
4. **Since 1984, all the traffic for Haj from India to Saudi Arabia has been shared between Air India and Saudi**, both of which are the government funded carriers of their respective countries.
5. The amount charged from each pilgrim after the subsidy varies depending on the category of accommodation and airport charges from the point of embarkation.
6. **After the 2012 Supreme Court order to phase out the subsidy in the next ten years**, the government had been steadily declining the amount of subsidy offered to Haj pilgrims each year.
7. In 2014, the subsidised air fare charged for Haj, per pilgrim was Rs. 35,000, while the actual amount was anything between Rs. 63,750 and Rs. 1,64,350 depending on the point of boarding. By 2016, the amount paid by each pilgrim had risen to Rs. 45,000. In 2017, the Haj subsidy was cut down by almost 50 per cent of the expected cost.

When was the Haj subsidy started?

1. **The Haj subsidy was first introduced in 1932** when the British government provided for a government funded Haj committee and named **Bombay and Calcutta as two ports from where Muslims could embark upon their pilgrimage**.
2. The Haj Committees Act along with the Muslim Personal Law were enacted by the government to fulfill Muslim demands in the pre-Partition days.
3. Post independence, in 1959 the government replaced the previous Act. According to the new Act, a committee was created in Bombay to take care of all affairs of the pilgrims, including travel arrangements during the pilgrimage and to cover overhead expenses.
4. **The Committee Act was further modified in 1973** when the mode of travel to Saudi Arabia was changed from sea to air, owing to rising oil prices. Accordingly, the government also increased subsidy to cover the difference between sea and air fares.
5. Till 1995, about 5,000 pilgrims used to travel by sea, while around 19,000 used to travel by air each year. However, in 1995 sea travel was completely discarded and all pilgrims had to use air transport.

CARTOSAT-2 BECOMES OPERATIONAL

India’s remote sensing satellite **Cartosat-2 has become operational** and started beaming images from the **earth’s lower orbit**, a space official said on 17 January 2018. “**Cartosat-2** has been operationalised and beamed the first image on 15 January 2018 after **it was launched and deployed in the earth’s lower orbit on January 12**.

What

1. **The first image in high resolution shows a part of Indore**, about 200 km from Bhopal in central India. As one of our earth’s observatory in the Cartosat-2 series, the spacecraft has become operational after it was injected into a **sun-synchronous orbit at 505 km above the earth**.
2. **The 710 kg spacecraft was launched on board a polar rocket (PSLV-C40) along with 30 satellites** including one nano and micro from India and 28 from six countries.

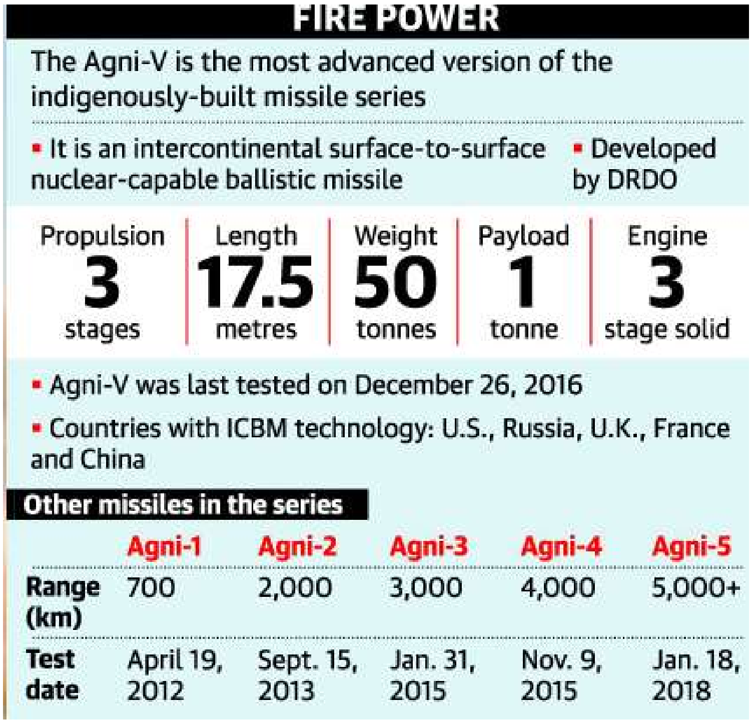
3. As a follow-on mission, Cartosat will also relay high resolution scene specific spot imageries with data from its panchromatic and multi-spectral cameras operating in time delay integration mode. **It has a 5-year life span**.
4. **The Cartosat-2 imagery will be useful for cartographic applications**, urban and rural applications, coastal land use and regulation, utility management like road network monitoring, water distribution, creation of land use maps and change detection to bring out geographical and man made features.
5. **The 10 kg nano-satellite** and **100 kg micro satellite** are also functioning and have started relaying data from their respective orbits to our receiving stations.
6. The micro-satellite is the 100th spacecraft the state-run space agency had launched and deployed **around the earth orbit**. The micro-satellite was also **placed in the sun synchronous orbit 359 km above the earth** after the space agency's mission control had fired the rocket's engines to restart its fourth stage for the intended orbit.
7. The first space mission in 2018 onboard the PSLV-C40 comes four months after a similar rocket failed to deliver the country's eighth navigation satellite in the **earth's lower orbit on August 31 last year**.

INDIA SUCCESSFULLY TEST-FIRES AGNI-5

India on 18 January 2018 successfully test-fired its nuclear capable **surface-to-surface ballistic missile Agni-5** - the most advanced missile in the Agni series with a strike range of over 5000 kms -- from a test range off Odisha coast. The user associate test-flight of the missile has further boosted indigenous missile capabilities and deterrence strength of the country. All radars, tracking systems and range stations monitored the flight performance.

What

1. **The sleek missile was test-fired from a canister launcher**, mounted on a mobile platform, at about 9.54 am from No. 4 launch pad of the Integrated Test Range (ITR) in Abdul Kalam Island, earlier known as Wheeler Island. After four successful developmental trials, **this was the first user associate test of Agni-5 missile**.
2. **Agni-5 is most advanced missile in the Agni series** with new technologies incorporated in it in terms of navigation and guidance, warhead and engine. **It has a range of over 5000 km**.
3. The redundant Navigation systems, very high accuracy Ring Laser Gyro based Inertial Navigation System (RINS) and the most modern and accurate Micro Navigation System (MINS) had ensured the missile reached the target point within few metres of accuracy.



FIRE POWER

The Agni-V is the most advanced version of the indigenously-built missile series

- It is an intercontinental surface-to-surface nuclear-capable ballistic missile
- Developed by DRDO

Propulsion	Length	Weight	Payload	Engine
3 stages	17.5 metres	50 tonnes	1 tonne	3 stage solid

- Agni-V was last tested on December 26, 2016
- Countries with ICBM technology: U.S., Russia, U.K., France and China

Other missiles in the series

	Agni-1	Agni-2	Agni-3	Agni-4	Agni-5
Range (km)	700	2,000	3,000	4,000	5,000+
Test date	April 19, 2012	Sept. 15, 2013	Jan. 31, 2015	Nov. 9, 2015	Jan. 18, 2018

4. The high speed on board computer and fault tolerant software along with robust and reliable bus guided the missile flawlessly. The missile is so programmed that after reaching the peak of its trajectory **it will turn towards Earth to continue its journey towards the intended target** with an increased speed due to the attraction of the earth's gravitational pull.

5. Its path is precisely directed by the advanced on-board computer and inertial navigation system. The first two successful flights of Agni-5 in 2012 and 2013 were in open configuration.
6. **The third, fourth and todays launch from a canister**, integrated with a mobile sophisticated launcher, were in its deliverable configuration that enables launch of the missile with a very short preparation time as compared to an open configuration.
7. It also has advantages of higher reliability, longer shelf life, less maintenance and enhanced mobility.
8. **India has at present in its armoury of Agni series**, **Agni-1 with 700 km range**, **Agni-2 with 2000 km range**, **Agni-3 and Agni-4 with 2500 km to more than 3500km range**.
9. The first test of Agni-5 was conducted on April 19, 2012, the second on September 15, 2013, the third on January 31, 2015 and fourth trial on December 26, 2016 from the same base.

INDIGENOUS MALARIA VACCINE FAILED

An indigenous malaria vaccine the first and the only one to be transferred to the industry **for clinical trial - has failed**, prolonging the wait for a life-saving shot against the **mosquito-borne disease**. Developed by researchers at **Delhi-based International Centre for Genetic Engineering and Biotechnology**, the vaccine was transferred to Hyderabad-based **Bharat Biotech in May 2010** with much fanfare for the clinical trial. But since **the vaccine performed poorly in the phase-1 clinical trial** on 45 healthy volunteers, it was decided not to proceed further with the malaria vaccine, named **Jaivac-1**. Created by **ICGEB scientist Chetan Chitnis and his colleague V S Chauhan with their team members** after two decades of research, **Jaivac-1 was developed against the killer malaria parasite Plasmodium falciparum**. It was found safe in animal studies.

What

1. **The vaccine comprises two proteins**. The trial results showed **one of the proteins didn't work whereas the other did**. But since the clinical vaccine was a combination of both, it couldn't be taken to the next step because of its poor performance.
2. The phase-I clinical trial showed while **one protein (name: PfEBA175-PfF2) produced immune response** and elicited growth inhibitory antibodies, the **second protein (PfMSP1-19) was poorly immunogenic**.
3. It was, therefore, decided not to proceed further with clinical development of Jaivac-1," Chitnis, who now works at the Pasteur Institute in Paris.
4. After the failure, **ICGEB researchers tweaked Jaivac-1 by modifying the non-responsive protein** with the addition of another protein (a peptide).
5. Named Jaivac-2, the tweaked vaccine was transferred to Zydus Cadila for producing the vaccine for toxicology studies and Phase I Clinical Trials.
6. **Toxicology study was completed and an investigational new drug application is currently being submitted** to the Drugs Controller General of India for permission to conduct a Phase I trial.
7. Outside the African continent, India is the only nation in the world where malaria continues to be a public health problem. Majority of the malaria cases in India are the deadly ones caused by the parasite Plasmodium falciparum.

INDIA IMPROVES TALENT COMPETITIVENESS

India has moved up on a global index of talent competitiveness to the 81st position, but remains a laggard among the BRICS nations, an annual study showed while warning that the country faces “**serious risk of worsening brain drain**”. While Switzerland continues to top the list released every year on the first day of the World Economic Forum (WEF) annual meeting in Davos, **India has improved its position from 92nd last year**. India was at the 89th place in 2016 on the index that measures how countries grow, attract and retain talent.

What

1. **India's ranking was the worst among the five BRICS countries in 2017** as well when China was ranked 54th, Russian Federation was placed at 56th, followed by South Africa (67) and Brazil (81). **China has moved up to 43rd now**, Russia to 53rd, South Africa to 63rd and Brazil to 73rd position.
2. As per the study released by Adecco, Insead and Tata Communications, the developed, high-income countries are still the global talent champions while Zurich, Stockholm and Oslo take the top spots in the cities' ranking.
3. Among the countries, **Switzerland is followed by Singapore and the US**. European countries dominate the top ranks, with 15 out of the top 25 places.
4. The report said that although in recent years we have witnessed a cooling off in the growth of emerging markets, the BRICS cannot be ignored in the global talent race and it is China (43rd) that leads the pack.
5. **India (81st) is the laggard of this group**. Formal Education (67th) and Lifelong Learning (37th) are keeping pace — and thus the pool of Global Knowledge Skills (63rd) is solid compared with other emerging markets.

NINE CITIES UNDER SCM

The government on 19 January 2018 decided to **add nine more cities to its existing list** of **proposed Smart Cities Mission (SCM)**. The nine new cities added by the Housing and Urban Affairs in the proposed list includes **Silvassa, Erode, Diu, Biharsharif, Bareilly, Itnanagar, Moradabad, Saharanpur, Kavaratti**.

What

1. Ministry of Housing and Urban Affairs adds nine cities__ Silvassa, Erode, Diu, Biharsharif, Bareilly, Itnanagar, Moradabad, Saharanpur, Kavaratti__ to the list of **existing 90 proposed Smart Cities**.
2. Under the Smart City Mission, ninety cities have so far been identified through three rounds of competition for implementing various projects.
3. Under the scheme, **each city will get Rs 500 crore as central assistance for implementing various projects**.
4. A total investment of Rs 1.91 lakh crore has been proposed by these 90 cities.

INDIA BECOMES THIRD LARGEST PRODUCER OF CRUDE STEEL

According to recent report published by **World Steel Association (WSA)**, India has overtaken US to become the **world's third largest steel producer in 2017**. India's crude steel production **has grown by 6.2% to 101.4 million tonnes (MT) in 2017** compared to 95.5 MT in the previous year.

What

1. **China has remained world leader by producing 831.7 MT in 2017**, up 5.7% from 786.9 MT in the year-ago period.
2. Japan is second largest global steel producer and had witnessed negative growth in steel output declined by 0.1% to 104.7 MT in 2017 from 104.8 MT in 2016.
3. **The Global steel production had reached 1,691.2 MT in 2017**, up by 5.3% compared to 2016 when output was 1,606.3 MT.
4. Crude steel production increased in all regions in 2017 except in CIS (Commonwealth of Independent States), which has remained stable.

World Steel Association (WSA)

1. **WSA is a non-profit organisation** and is one of the largest industry associations in world.
2. Its members represent approximately **85% of the world's steel production.**
3. It includes over 160 steel producers with 9 of the 10 largest steel companies, national and regional steel industry associations, and steel research institutes.
4. It was founded in July 1967 and is headquartered in Brussels, Belgium.

UIDAI ALLOWS FACE RECOGNITION

The UIDAI on 28 January 2018 allowed face recognition as additional means of Aadhaar authentication to be used in combination with existing ways such as fingerprint or iris scan. The move will **enable easy authentication for those individuals who face a difficulty in other biometric** authentication like fingerprint and iris. The facility is being allowed only in a "**fusion mode" that is along with other existing means of authentication**, and will be available by July 1, 2018.

What

1. **This facility is going to help in inclusive authentication of those who are not able to biometrically authenticate** due to their worn out fingerprints, old age or hard work conditions.
2. As of now, **two modes of biometric authentication, fingerprint authentication and iris authentication** are allowed under Aadhaar.
3. **The face authentication provides additional option for all residents to have inclusive authentication**. It shall be allowed only in fusion mode along with one more authentication factor combined with either fingerprint or iris or OTP to be able to successfully authenticate an Aadhaar number holder. The new method will also be allowed "on need basis".
4. This **move comes close on the heels of the biggest overhaul of Aadhaar system by the UIDAI** last week when it allowed individuals to create and use a virtual ID to avoid sharing their unique identity numbers, when using government and other services.
5. Users will, from March 1, **have the option of generating a 16-digit virtual identity mapped to their Aadhaar number** that can be shared with telecom companies and others at the time of authenticating their identity.
6. From June 1, 2018, it will be compulsory for all agencies, which undertake authentication, to accept the virtual IDs from their users.

INTERNATIONAL

INDIA ATTENDS ITS FIRST SCO MEETING

India, for the first time, took part in a meeting of the **international military cooperation departments of the Shanghai Cooperation Organisation (SCO)** since joining the bloc last year. An Indian delegation led by Major General Ajay Seth participated in the meeting, which discussed issues of practical cooperation among SCO nations. The two-day meeting concluded on 16 January 2018.

What

1. **This is the first meeting attended by India** in the field of defence cooperation under the SCO framework.
2. India and Pakistan were admitted last year into the grouping in which China plays an influential role.
3. **The SCO comprises of China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Uzbekistan, India and Pakistan**.
4. Both India and China look to SCO as a major platform for improving bilateral ties bogged down by a host of differences, including the 73-day military standoff at Doklam last year.

INDIA, SEYCHELLES SIGN REVISED AGREEMENT

After a hiccup in 2017, **India and Seychelles signed a revised agreement** that **will allow India to build military infrastructure on Assumption Island**. Foreign secretary S Jaishankar signed the agreement in Victoria on 27 January 2018. After meeting Jaishankar, the island nation's President, Danny Faure, said "**Today we will sign a revised version of the Agreement for the development of facilities on Assumption Island**.

What

1. **This project is of utmost importance to Seychelles** and it attests to the kinship and affinity that exists between our two countries.
2. **The agreement had been signed in 2015** during the visit of PM Modi but it ran into trouble because it had not been ratified by the Seychelles parliament by the previous president, James Michel.
3. **The first sign that the agreement was in trouble came in August 2017**, when Faure said in a press conference that it would have to be re-negotiated.
4. Faure worked with the opposition and after including **several amendments cleared it** with his cabinet on January 22.
5. **Cabinet agreed on the main purpose of the agreement** which is to provide a framework for assistance to the Government of Seychelles by the Government of India to enhance the military capabilities in control and maritime surveillance of our EEZ, protection of our EEZ and the outer islands and search and rescue in the region for the benefit of air and shipping traffic.
6. After the signing, the agreement would be ratified by Seychelles parliament. **The ratification is expected to be a formality because the new agreement** has been agreed to by both government and opposition.
7. **The agreement is very important for India**, as it works hard to mark a military presence on both Seychelles and Mauritius (Agalega island), in its drive to extend its strategic footprint in the Indian Ocean.

INDIA, CAMBODIA INK PACTS

India and Cambodia on 27 January 2018 signed four agreements, including one to **improve cooperation in prevention**, investigation of crimes and legal assistance in criminal matters, besides a line of credit from India to fund Cambodia's Stung Sva Hab water resources development project for USD 36.92 million. The pacts were signed after comprehensive talks between Prime Minister Narendra Modi and his Cambodian counterpart Samdech Hun Sen, who agreed to further enhance bilateral defence ties, including through **exchanges of senior-level defence personnel** and **capacity-building projects**.

What

1. **The two leaders also discussed exploring ways to intensify** the development partnership and boost ties in key sectors, including trade and investment, energy conservation agriculture, and tourism and culture.
2. India, Cambodia ink **four pacts** to strengthen bilateral ties PM Narendra Modi and his Cambodian counterpart Samdech Hu Sen at Hyderabad House.
3. India and Cambodia also signed a **MoU on the prevention of human trafficking** under which the two countries will see increase bilateral cooperation on the issues of prevention rescue and repatriation related to human trafficking.
4. **They also inked a pact for cultural exchanges through 2018-2020**. The agreement seeks to promote cultural exchange and strengthen the friendly relations between the two nations.
5. The mutual legal assistance in criminal matters seeks to "**improve the effectiveness of both countries in the prevention**, investigation and prosecution of crimes through cooperation and legal assistance in criminal matters," the pact stated.

WORLD WAR II BOMB DEFUSED

The Hong Kong Police on 28 January 2018 successfully defused a World War II bomb after an hour-long operation. No casualties or loss of property was reported. The 1,000-pound bomb was discovered by workers at a construction site in **Wanchai district in downtown Hong Kong** on 27 January 2018. **It is the second time that Hong Kong has found a WWII bomb** in the downtown area.

What

1. The police began the bomb disposal work on 27 January 2018 **after evacuating about 1,500 people**, and finished the operation on 28 January 2018 afternoon.

2. **Tony Chow, senior bomb disposal officer with the Explosive Ordinance Disposal Bureau**, said the entire bomb disposal team of the Hong Kong Police went to the construction site to carry out the operation.
3. It took a while for them to find a suitable point to cut open the device to burn out the explosives. Chow said the device was a general purpose bomb and fragmentation could extend from 1,000 to 2,000 meters.
4. Police said the bomb is believed to be a US AN-M65 device, dropped between 1941 and 1945.

INDIA, ISRAEL SIGN AGREEMENTS

India and Israel have signed nine agreements to boost cooperation in the areas of space, cyber security and oil and gas between both countries. The agreements were signed following delegation-level talks headed by Prime Ministers Narendra Modi and his Israeli counterpart Benjamin Netanyahu in New Delhi. **Netanyahu is first Israeli Prime Minister to visit India in span of last 15 years** and second one overall. Ariel Sharon was first and only Israeli Prime Minister to visit India in 2003.

List of agreement signed

1. Agreement on Film-co-production.
2. Protocol on Amendments to Air Transport Agreement
3. MoU on Cyber Security Cooperation between India and Israel
4. Memorandum of Intent (MoI) between Invest India and Invest in Israel
5. Medical Centre on Cooperation in field of Research in Homeopathic Medicine
6. Letter of Intent (LoU) between IOCL and Phinergy Ltd. For cooperation in area of metal-air batteries
7. MoU between the Ministry of Petroleum and Natural Gas and the Ministry of Energy on Cooperation inOil and Gas Sector
8. LoI between IOCL and Yeda Research and Development Co Ltd for cooperation in the area of concentrated solar thermal technologies and MoU between Central Council for Research in Homeopathy, Ministry of AYUSH and Centre for Integrative Complementary Medicine, Shaare Zedek
9. MoU between Indian Institute of Space Science and Technology (IIST) and Technion-Israel Institute of Technology for cooperation in field of space.

SAULI NIINISTO ELECTED FOR SECOND TERM

Finns have re-elected their popular and pragmatic president Sauli Niinisto, who is credited for maintaining a balanced relationship with the nation's powerful neighbour Russia at a time of simmering relations between Moscow the West,. He secured over 62 per cent of the vote with nearly all the ballots counted.

What

1. **Niinisto, 69, avoided the need for a second-round of voting and won**, a first since Finland introduced a two-round presidential election by popular vote in 1994.
2. The politician, who campaigned as an independent, has skilfully shifted the EU member state closer to NATO without antagonising Russia, with whom the Nordic nation shares the longest border in the bloc.
3. During his first term, Niinisto diligently cultivated ties with Russian President Vladimir Putin, who has been at odds with the West, particularly since Russia's 2014 annexation of Crimea.
4. Niinisto's main rival Pekka Haavisto of the Green party won just 12 per cent of the votes. Conceding defeat, he told reporters in Helsinki: "I admit that Saulu Niinisto clearly won warm congratulations to him."
5. **Born into a working-class family in the southwestern Finnish town of Salo in August 1948, Niinisto** - the youngest of four children - became a lawyer before entering politics as a member of the conservative National Coalition Party. An advocate of budgetary discipline, Niinisto helped pull Finland out of a deep recession in the 1990s and into the eurozone.

ECONOMY

ECONOMIC SURVEY 2017-18

The **Pink-color Economic Survey 2017-18 tabled in Parliament** on 29 January 2018 by the Union Minister for Finance and Corporate Affairs, Shri Arun Jaitley lays special emphasis on **Gender and Son meta-preference**, while providing an assessment of India's performance on gender outcomes relative to other economies. The Survey takes into account that **Gender equality is an inherently multi-dimensional issue**. Accordingly, assessments have been made based on three specific dimensions of gender, ie

1. **Agency** (relates to women's ability to make decisions on reproduction, spending on themselves, spending on their households and their own mobility and health)
2. **Attitudes** (relate to attitudes about violence against women/wives, and the ideal number of daughters preferred relative to the ideal number of sons)
3. **Outcomes** (relate to 'son preference' measured by sex ratio of last child, female employment, choice of contraception, education level, age at marriage, age at first birth and physical or sexual violence experienced by women) which aim to reflect the status, role and empowerment of women in the society.

The key findings of the assessment made in the Survey include

1. Over the last 10-15 years, **India's performance improved on 14 out of 17 indicators of women's agency**, attitudes, and outcomes.
2. On seven of them, the improvement has been such that India's situation is comparable to that of a cohort of countries after accounting for levels of development.
3. **The Survey encouragingly notes that gender outcomes exhibit a convergence pattern**, improving with wealth to a greater extent in India than in similar countries so that even where it is lagging, it can expect to catch up over time.
4. The Survey, however, cautions that on several other indicators, notably employment, use of reversible contraception, and son preference, India has some distance to traverse because development has not proved to be an antidote.
5. **Economic Survey 2017-18 states that within India**, there is significant heterogeneity, with the North-Eastern states (a model for the rest of the country) consistently out-performing others and not because they are richer; hinterland states are lagging behind but the surprise is that some southern states do less well than their development levels would suggest.
6. The Economic Survey 2017-18 notes the challenge of gender is long-standing, probably going back millennia, so all stakeholders are collectively responsible for its resolution.
7. The Survey thus recommends that India must confront the societal preference, even meta-preference for a son, which appears inoculated to development.
8. The skewed sex ratio in favor of males led to the identification of "missing" women. But there may be a meta-preference manifesting itself in fertility stopping rules contingent on the sex of the last child, which notionally creates "unwanted" girls, estimated at about 21 million, adds the Survey. Consigning these odious categories to history soon should be society's objective, opines the Survey.
9. The survey acknowledges that **government's Beti Bachao, Beti Padhao and Sukanya Samridhi Yojana schemes**, and mandatory maternity leave rules are all steps in the right direction.
10. The Survey states that just as India has committed to moving up the ranks in Ease of Doing Business indicators, a similar commitment should be endeavored on the gender front.

Interesting facts about Indian economy

1. **The Indian society has a strong desire for a male child** that makes parents continue to have children until they get the desired number of male children, the Economic Survey 2017-18 tabled in Parliament on Monday pointed out, among **key insights into the socio-economic patterns in Asia's third largest economy**. Based on analysis of data, the Survey made some startling revelations as well as pleasant surprises about the trends in the economy, some of which warrant urgent action by the executive.

Things to know

1. Ahead of the Union Budget, the finance ministry every year presents the economic survey which reviews the overall state of the economy in the last 12 months and highlights the policy initiatives of the government and the prospects of the economy in the short to medium term.
2. Last year, for the first time, the government presented a mid-term economic survey in the month of August.
3. The major attraction of the economic survey will be the growth rate of GDP for this financial year. The GDP rate came under scrutiny as it hit a 3-year low in the first quarter.
4. The government will also provide predictions on other key macroeconomic indicators like inflation, fiscal deficit and expectation from RBI on lending rates.
5. This year's economic survey is expected to be a sort of report card for demonetisation and GST, two economic reforms which created disruption in 2017-18 financial years.

2. **Among them, are the need for raising investments in the economy and cutting down avoidable tax litigation**? The Survey said that to re-ignite economic growth, raising investments is more important than raising savings.
3. The Survey has sent a strong reminder to tax officials on the need for being choosier about picking cases to fight.
4. Among exporting companies, the share of large firms is much smaller than that of their counterparts in other countries. Top 1% of Indian firms account for only 38% of exports, unlike in **Brazil where it accounts for 72% and in Germany where it is 68%**.
5. One surprising insight from the Survey is that the size of the formal part of the economy is bigger than earlier believed.
6. **When social security provisions like Employees' Provident Fund Organisation/Employees**' State Insurance Corp. are taken into account, the formal sector payroll was found to be about 31% of non-agricultural work force, the survey noted. If the formal sector of the economy is defined in terms of being part of GST net, such formal sector payroll share is 53%.
7. The Survey also pointed out that rebate of state levies has helped in boosting exports of readymade garments.
8. States and local bodies in India collect less direct tax than in other countries. This is significant considering that for improving standard of living as well as for making the smart city programme a success, financial health of states and local bodies is important.
9. The impact of extreme temperature rise and rain fall deficiency has been twice as large in un-irrigated areas as in irrigated ones, the data analysed in the Survey showed.

25TH GST COUNCIL MEET

GST Council, the apex decision making body on Goods and Services Tax (GST), on 18 January 2018 **revised rates on 29 items and 53 categories of services**, finance minister Arun Jaitley said after the council's 25th meeting held in New Delhi.

The revised items

1. **Council cuts GST on mehendi cones to 5 per cent** from 18 per cent earlier
2. GST Council cuts rates on sugar boiled **confectionery to 12 per cent from 18per cent earlier**.
3. GST Council cuts tax rate on **bio-diesel to 12 per cent from 18 per cent earlier**.
4. GST Council cuts tax rate on drinking water packed In 20 litres bottles to 12 per cent from 18 per cent.
5. Rice Bran will now attract 0 per cent tax from 5 per cent earlier.
6. GST Council cuts tax rate on velvet fabric to 5 per cent from 12 per cent earlier.

7. GST Council cuts tax rate on drip irrigation system, mechanical sprayer to 12 per cent from 18 per cent
8. GST Council cuts tax rate on domestic LPG by private companies to 5 per cent from 18 per cent earlier.
9. Motor vehicle will now attract 18 per cent tax from earlier 28 per cent

PUBLIC ADVISORY AGAINST CASH TRANSACTIONS

In an indication that **the government may get tough on cash transactions in the coming days**, the income tax department on 23 January 2018 warned people against accepting cash beyond a certain threshold in order to avoid penalty. **Through a public advisory in leading national dailies**, the IT Department also cautioned against giving more than Rs 2,000 in cash donations to a political party or a registered trust.

What

1. Say no to cash transaction. **Don't accept cash of Rs 2 lakh or more in aggregate from a single person in a day** or for one or more transactions relating to one event or occasion, the advisory said.
2. **Don't receive or repay Rs 20,000 or more in cash for transfer of immovable property**. Don't pay more than Rs 10,000 in cash relating to expenditure of business/profession.
3. The department said that any contravention to the threshold may result in lavy of tax on the entity involved or may even warrant a penalty.
4. The public notice comes in the wake of speculation that the government may impose a tax on cash transactions beyond a certain limit in order to accelerate digital transactions. According to a proposal, the government may restrict cash transactions to a maximum of five through bank branches.

ONGC GETS GOVT NOD TO SELL STAKE IN IOC

State-owned Oil and Natural Gas Corp (ONGC) has got approval from the government for **selling its stake in IOC and GAIL to help fund the Rs 369.15 billion** acquisition of HPCL. **ONGC holds 13.77 per cent stake in nation's biggest refiner Indian Oil Corp (IOC)**, which at today's (23 January 2018) trading price is worth over Rs 262 billion. It also holds 4.86 per cent stake in gas utility GAIL India Ltd, which is worth over Rs 38.47 billion. **Top sources with direct knowledge of the issue** said the government gave ONGC nod to sell its shareholding in **IOC and GAIL earlier** this month but the company is waiting for the right price to offload the shares.

What

1. **For the moment ONGC is funding the Rs 369.15 billion acquisition of government's 51.11 per cent stake in oil refining** and marketing firm Hindustan Petroleum Corp Ltd (HPCL) from the about Rs 120 billion cash it has and short- term borrowing.
2. **ONGC is a zero-debt company** and wants to retain that status. The short-term loan it is availing have provision to pre-pay without any penalty.
3. It plans to pre-pay the one-year tenure loan it is taking for HPCL buy by selling IOC and GAIL shares in due course.
4. ONGC had held talks with Life Insurance Corp of India (LIC) for selling IOC and GAIL shares but the state- owned insurer insisted on buying them at 10 per cent discount to the prevailing price. So, **ONGC has decided to offload the shares in open market**. ONGC acquiring HPCL would create India's first integrated oil company.
5. This would be ONGC's biggest acquisition and second buyout this fiscal after its Rs 77.38 billion acquisition of 80 per cent stake in Gujarat State Petroleum Corp's KG basin gas block.
6. The stake sale will help the government cross its sell- off target for the first time and would help stick to the fiscal deficit target of 3.2 per cent of GDP.
7. The government had set a target of Rs 725 billion from disinvestment proceeds this fiscal. Before the ONGC-HPCL deal, it had collected Rs 543.37 billion.

8. HPCL will add 23.8 million tonnes of annual oil refining capacity to ONGC's portfolio, making it the third-largest refiner in the country after IOC and Reliance Industries.
9. ONGC already is majority owner of MRPL, which has a 15- million tonne refinery.

GOVT SIMPLIFIES MAKE IN INDIA RULES

The **Ministry of Defence** has released the second part of the **simplified Make-II, the Make in India policy for the defence sector**, in order to attract more private industries for manufacturing arms and ammunition. It has also **initiated a first of its kind industry meet in Chennai** and launched a Defence Investor Cell to facilitate industry participation. Under the simplified form, **the industry can approach the defence departments on its own with products and ideas**, which will then be considered by the concerned defence agency. So far, the industry has been supplying products that have been sought by the divisions according to their requirement.

What

1. **Another feature is that once the prototype is submitted** and the department agrees to the product and its quality, a **Request for Proposal (RFP)** will be issued and there is a guarantee that the product will be purchased.
2. This will allay the concerns of the industry that whether the product will not be purchased even after spending time and developing it for defence.
3. First of its kind Defence Industry Development Meet in Chennai for forging a partnership with the industry for defence production.
4. **Make-II deals with industry-funded projects primarily for import substitution**, subsystems, and others. If it is an MSME (Micro, small and medium enterprise) or start-up, it will have government support if the prototype is under an outer limit of Rs 30 million.
5. The ministry is offering around 50 potential projects with an assurance of orders on prototype completion and foreclosure protection.
6. **The new Make-II will reduce the timeline by almost 50 per cent**, said Defence Production Secretary Ajay Kumar. The timeline will come down from around two to four years to one to two years.

INDIA RANKS NINTH IN MARKET PERFORMANCE

Despite gaining **over six per cent**, **India is not among the top five best-performing global markets in 2018**. **BRIC peers Brazil and China are among top performing markets**, with a gain of 10.3 per cent and nine per cent, respectively, in dollar terms. Even developed markets, including **Japan and Germany**, have gained more than India, gains in the US and other European markets are in line with the gains in the domestic market. Experts say the on-going exuberance in the domestic market is on account of a rising risk appetite among global investors.

What

1. **The key drivers are improving global growth**, strengthening commodities prices and weakening of the dollar. Global liquidity conditions also remain supportive, thanks to the ongoing bond-buying programme by the European Central Bank (ECB) and the Bank of Japan.
2. US-based Goldman Sachs said the **risk appetite currently is at its "highest level on record**" and is fuelling a rise in risky assets, with world market capitalisation gaining over $4 trillion this year.
3. **Foreign institutional investor (FII) inflows into the Indian markets are nearing $1.5 billion**. Asian peers such as Taiwan and South Korea are attracting more FII flows than India Asian peers such as Taiwan and South Korea are attracting more FII flows than India.
4. While high-risk appetite increases the risk of disappointment, we find historically that the signal from macro data tends to trump the signal from risk appetite.

INDIA'S RISING INCOME INEQUALITY

The richest 1% in India cornered 73% of the wealth generated in the country last year, a new survey showed, presenting a worrying picture of rising income inequality. Besides, 67 crore Indians comprising the **population's poorest half saw their wealth rise by just 1%**, as per the survey released by the international rights group Oxfam.

What

1. The situation appears even grimmer globally, **where 82% of the wealth generated last year worldwide went to the 1%**, while 3.7 billion people that account for the poorest half of population saw no increase in their wealth.
2. The annual Oxfam survey is keenly watched and is discussed in detail at the World Economic Forum annual meeting where rising income and gender inequality is among the key talking points for the world leaders.
3. Last year's survey had showed that India's richest 1% held a huge 58% of the country's total wealth—higher than the global figure of about 50%.
4. **This year's survey also showed that the wealth of India's richest 1% increased** by over Rs20.9 trillion during 2017—an amount equivalent to total budget of the central government in 2017-18.
5. The report titled Reward Work, Not Wealth, Oxfam said, reveals how the global economy enables wealthy elite to accumulate vast wealth even as hundreds of millions of people struggle to survive on poverty pay.
6. **2017 saw an unprecedented increase in the number of billionaires**, at a rate of one every two days. Billionaire wealth has risen by an average of 13 per cent a year since 2010 -- six times faster than the wages of ordinary workers, which have risen by a yearly average of just 2 per cent.
7. In India, **it will take 941 years for a minimum wage worker in rural India to earn** what the top paid executive at a leading Indian garment firm earns in a year, the study found.
8. **They control 51% of the total wealth of billionaires in the country**. It is alarming that the benefits of economic growth in India continue to concentrate in fewer hands.
9. The survey also showed that women workers often find themselves at the bottom of the heap and **nine out of 10 billionaires are men**.
10. In India, there are only four women billionaires and three of them inherited family wealth. "It would take around 17.5 days for the best paid executive at a top Indian garment company to earn what a minimum wage worker in rural India will earn in their lifetime (presuming 50 years at work).

MORE AMENDMENTS IN INSOLVENCY LAW

The insolvency law might be amended depending on recommendations of the panel reviewing issues related to the legislation, including those pertaining to home buyers, a senior government official said. While everything is **time-bound under the Insolvency and Bankruptcy Code (IBC)**, Corporate Affairs Secretary Injeti Srinivas said the issue is how the interests of stakeholders are to be balanced. **A 14-member panel, also chaired by Srinivas, is working to identify and suggest ways to address issues faced in the implementation of the IBC**, which came into force in December 2016.

What

1. **There is a feeling that this law is skewed a little too much in favour of financial creditors**. It is not adequately addressing the requirements or expectations of other stakeholders. It is a serious area we have to look at. The committee is looking at all the issues.
2. According to him, **competition, regulatory clearances, tax liabilities and other aspects would also be looked at**. It was felt that there was enough reason to have a comprehensive stock taking even though it is a one-year old law... Based on **recommendations of the Insolvency Law Committee**, in the future there may be changes in the IBC.
3. **A large number of cases have been filed under the IBC**, which provides for a market-determined and time-bound insolvency resolution process. There are also

apprehensions on whether this system (insolvency law) can be abused. Can somebody trigger this system for some sort of wrongful intent?

4. Among others, **issues such as whether the insolvency process should be governed by liquidation** value or enterprise value would also be looked into. “What are the rights of home buyers? **What is the capacity of insolvency professionals?** These are among the issues that have to be seen.
5. The panel members include **Insolvency and Bankruptcy Board of India (IBBI)** Chairperson M S Sahoo, RBI Executive Director Sudarshan Sen, former Lok Sabha Secretary General T K Viswanathan, Edelweiss Group Chairman and CEO Rashesh Shah, Shardul Amarchand Mangaldas and Co Executive Chairman Shardul Shroff and Xpro India Chairman Sidharth Birla.

FSAP RELATED REPORT 2017

The International Monetary Fund (IMF) and the World Bank have commended the **Reserve Bank of India (RBI) for its “remarkable progress in strengthening banking supervision**” saying the regulation by the central bank has improved in recent years. The IMF and the World Bank had released **two separate main Reports of the 2017 India Financial Sector Assessment Programme (FSAP) in December 2017**. In continuation, the IMF and the World Bank on 19 January 2018 released **two detailed assessment reports (DARs)** relating to the 2017 India FSAP.

What

1. The report providing ‘**Detailed Assessment of Observance— Basel Core Principles for Effective Banking Supervision**’ has been released by the IMF and the World Bank.
2. The report providing ‘Detailed Assessment of Observance of **Clearing Corporation of India Limited (CCIL)** Central Counter Party (CCP) and Trade Repository (TR)’ was released by the World Bank.
3. Securities and Exchange Board of India (Sebi) in a statement noted that the DAR on the observance of Basel core principles commends the Reserve Bank for the remarkable progress in strengthening banking supervision since the last FSAP.
4. It notes that the supervision and regulation by the Reserve Bank remain strong and have improved in recent years.
5. **The DAR states that the system-wide asset quality review (AQR)** and the strengthening of prudential regulations in 2015 testify to the authorities’ commitment to transparency and a more accurate recognition of banking risks.
6. The report also notes that most of the **Basel III framework (and related guidance) has been implemented and cooperation arrangements**, both domestically and cross-border, are now firmly in place.
7. The DAR, Sebi said, acknowledges that banking reforms, including the Indradhanush plan for revitalising the public sector banks and the Bank Board Bureaus have helped usher in an era of transparency and improved discipline and will go a long way in resolving the problem of bad loans in India.
8. **The DAR relating to the assessment of the CCIL on CCP system** and TR systems’ benchmarking against the applicable principles of financial market infrastructure concluded that the CCIL systems have a high degree of observance of the principles.

FUND FOR ISA

In order to kick-start **fund mobilisation under the International Solar Alliance (ISA)**, the Indian government **will set up a $350 million development fund for financing solar projects**. It was announced by R K Singh, minister of power and new & renewable energy at the first ever outreach program of ISA in Abu Dhabi's **World Future Energy Summit (WFES) 2018**.

What

1. **India has one of the fastest growing Renewable Energy programmes in the World** and the country would achieve its **target of 175 GW of installed Renewable**

Energy capacity well before 2020. ISA shall help mobilise sufficient funds for solar energy projects, Singh said in his address at WFES.

2. **Upendra Tripathy, Interim Director General of ISA** said the Letter of intentions/MoUS of nine solar-related projects from various company and bankers were signed at WFES.
3. The companies are: **Vyonarc Development Ltd**., Greenko Solar, Gensol Group and SOLARIG from Spain, Shakti Pump, Refex Energy, Amplus Solar, TATA Power, Jackson Solar and Zodiac Energy. **YES Bank committed financing solar projects of over $5 Billion**.
4. CLP India and NTPC Limited announced forging partnership deal with ISA and committed to make a voluntary contribution of $1 million each to ISA fund corpus. IEA and GCF also announced entering into a partnership with ISA.
5. On receipt of 15 ratifications, the '**ISA Framework Agreement' entered into force on the 6th December, 2017** thereby making ISA a de jure treaty-based international intergovernmental organisation.
6. **So far 19 countries have ratified** and **48 countries have signed the ISA Framework Agreement**. Over 100 projects shall be signed by April 2018 under ISA umbrella.

FUTURES CONTRACT IN BRASS

MCX, the leading exchange for non-agri commodity derivatives, is for the **first time in India planning futures contract in brass**. In another first for MCX, this metal contract, unlike other metals traded on the exchange, will be physical deliverable. Market regulator SEBI (Securities and Exchange Board of India) has already approved the contract's launch. **All other metal contracts on the exchange are cash-settled**. However, several small and medium units which wanted to hedge in metals wanted a contract which could be settled in physical delivery.

What

1. **The brass parts industry is largely centered in Jamnagar**. This area falls in the Saurashtra region of Gujarat and has emerged as an industrial hub.
2. **This exchange is now merging with the Reliance Capital-anchored ICEX**. MCX has already received approval for the deliverable rubber futures.
3. It has also applied to the Sebi for diamond contracts for which the exchange is expecting an approval soon. Once that is launched, it plans to move on diamond options. At present, diamonds are traded on ICEX. India is world's largest diamond processor.
4. Unlike other metal futures, the MCX brass contract will have a delivery window and any square off or carry forward has to be done before the contract enters the compulsory delivery contract.
5. Physically deliverable contracts are creating a buzz as NCDEX has asked the Sebi to allow it to carry out physically deliverable contracts in Aluminium and Nickel.
6. Apart from brass deliverable futures, MCX also will also ask for Sebi's approval for options in **crude oil, silver, a copper, and zinc**. **MCX's gold options have not picked up yet**. But, it has seen a few delivery cycles that were completed successfully, and hence, the exchange is proposing to launch some more options. It has also sought permission to introduce a liquidity enhancement scheme.
7. Globally, and also on **NSE in India, options trading has been a major revenue earner for exchanges**. An MCX spokesperson said that the option-to-future ratio should ideally be 50-60 per cent and achieve a 15-20 per cent ratio within 6 months of the launch of contracts.
8. However, MCX expect it to contribute 15-20 per cent over next 3-4 years as revenue is charged on premium, At present, MCX doesn't have any transaction charge on

options and will start only after volumes stabilize and volumes reach a particular scale.

INDIA KICKS OFF BIDDING OF OAL

India on 18 January 2018 **kicked off the bidding for the first round of Open Acreage Licensing programme (OAL)**, in which 55 blocks will be up for grabs. **This is the first major bidding round in India** after the **National Exploration Licensing Policy (NELP)** round in 2010. The bids will be closed on April 3, while blocks will be finally awarded by May. This bidding has seen many firsts, which included the fact that bidders carved out the area. Bidders have shown interest for the substantive area of 60,000 square kilometers, while in earlier times it used to be 25,000 sq km. The process will continue until April 3.

What

1. The highlights of the round include a **single licence for all forms of hydrocarbons** and simplified revenue sharing model with marketing and pricing freedom that at a time when the environment is investor friendly, the aim of the government is to bring maximum revenue to the exchequer.
2. Now, bidding will be there twice in a year. The first time, activities have increased in Kutch offshore.
3. It is a sign of collective effort. Investors have shown keenness in **Himalaya, Himachal Pradesh, and Uttar Pradesh too**.
4. Out of the total **311 exploration blocks awarded so far under-discovered field**, Pre-NELP and National exploration licensing policy (NELP) rounds; only 178 blocks are operational now.
5. According to petroleum ministry, after the ninth round of NELP in 2010, a total of 117 companies are operating in India, of which 48 are foreign companies.
6. Under the new regime, **during the first stage of bidding, companies submitted an expression of interest** for the areas they prefer covering all the sedimentary basins in the country.

SCIENCE AND TECHNOLOGY

SCIENTISTS CLONE MONKEYS

Chinese scientists have cloned monkeys using the same technique that produced **Dolly the sheep two decades ago**, breaking a technical barrier that could open the door to copying humans. **Zhong Zhong and Hua Hua**, two identical **long-tailed macaques**, were born eight and six weeks ago, making them the first primates – the order of mammals that includes monkeys, apes and humans – to be cloned from a non-embryonic cell.

What

1. It was achieved through a process called **somatic cell nuclear transfer (SCNT)**, which **involves transferring the nucleus of a cell**, which **includes its DNA**, into an egg which has had its nucleus removed.

Somatic cell nuclear transfer (SCNT)

1. **SCNT is a laboratory technique for creating an ovum with donor nucleus**.
2. In it, nucleus containing the organism's DNA of somatic cell (a body cell other than sperm or egg cell) is removed and rest of cell discarded.
3. **The nucleus of somatic cell is then inserted into enucleated egg cell** which reprograms somatic cell nucleus by the host cell.
4. The egg, now containing nucleus of somatic cell, is stimulated with a shock and will begin to divide forming blastocyst (an early stage embryo with about 100 cells) with almost identical DNA to original organism.
5. It can be used in embryonic stem cell research, regenerative medicine i.e. "therapeutic cloning."
6. It can also be used as first step in process of reproductive cloning.

2. Researchers at the Chinese Academy of Sciences Institute of Neuroscience in Shanghai said their work should be a boon to medical research by making it possible to study diseases in populations of genetically uniform monkeys. But it also brings the feasibility of cloning to the doorstep of our own species.
3. **Genetically identical animals are useful in research** because confounding factors caused by genetic variability in non-cloned animals can complicate experiments.
4. They could be used to test new drugs for a range of diseases before clinical use. The two newborns are now being bottle fed and are growing normally. The researchers said they expect more macaque clones to be born over the coming months.
5. **Since Dolly – cloning's poster child – was born in Scotland in 1996**, scientists have successfully **used SCNT to clone more than 20 other species**, including cows, pigs, dogs, rabbits, rats and mice. Similar work in primates, however, had always failed, leading some experts to wonder if primates were resistant.

GOLD MISSION CONTINUES

Commercial aerospace company **Arianespace which launched the SES-14 satellite carrying NASA's GOLD mission** on 26 January 2018 confirmed that despite an anomaly during the mission's ride into orbit, the probe is continuing. The aim of the **Global-scale Observations of the Limb and Disk, or GOLD, mission** is to study the dynamic region where space and Earth's uppermost atmosphere meet.

What

1. **The launcher's liftoff took place on January 25, 2018, at 5:20 pm EST**. A few seconds after ignition of the upper stage, the second tracking station located in Natal, Brazil, did not acquire the launcher telemetry. This lack of telemetry lasted throughout the rest of powered flight.
2. Subsequently, both satellites were confirmed separated, acquired and they are on orbit. **SES-14 and Al Yah 3** are communicating with their respective control centres.
3. **The GOLD mission aims to explore in unprecedented detail our near-space environment**, which is home to astronauts, radio signals used to guide airplanes and ships, and satellites that provide communications and GPS systems.
4. The more we know about the fundamental physics of this region of space, the more we can protect our assets there. The upper atmosphere is far more variable than previously imagined, but we don't understand the interactions between all the factors involved.

ARMY GIFTS T-55 BATTLE TANK

The Army gifted a Soviet-era T-55 battle tank to a private university run by Samajwadi leader and former UP minister, Azam Khan. **The battle tank will be displayed at the campus of Mohammad Ali Jauhar University in Rampur**. Khan is the chancellor and founder of the university. **The battle tank was used in the Battle of Basantar** during the 1971 Bangladesh Liberation War. It was reportedly inducted into the Indian Army in 1968 and was **in service till 2011**.

What

1. **The T-55 battle tank, which weighs 36 tonnes, is equipped with a 100 mm calibre gun** and two 7.62 calibre machine guns and one 2.7 mm anti-aircraft gun.
2. It is also enabled with night vision and protection from nuclear, biological and chemical explosions.
3. In 2017, Khan claimed the Army had "gifted" a battle tank to his private university.
4. The same year he was booked for sedition for his alleged derogatory comments against the Army.

NEW CYBER SECURITY BUSINESS

Alphabet Inc launched a new business unit that will **sell cyber security software to Fortune 500 companies**, the latest move by the parent of Google to become a big player in corporate computing. **The new unit, dubbed Chronicle**, is betting on the premise that machine learning software, **a type of artificial intelligence**, **can sift and analyze massive stores of data to detect cyber threats** more quickly and precisely than is possible with traditional methods.

What

1. **Chronicle also houses VirusTotal**, a virus-scanning tool Google acquired in 2012 that charges for premium features.
2. **The cyber security initiative reflects Alphabet's desire to expand beyond its core online advertising business** at Google and become a major player in enterprise computing technology.
3. Google is a distant rival to Amazon.com Inc in cloud computing infrastructure and lags far behind Microsoft Corp in workplace productivity software.
4. Chronicle, based at Alphabet's Mountain View, California, headquarters, becomes the third business spun out of the company's "X" research lab and into the holding company—a process it calls "graduating.
5. It follows healthcare unit Verily and self-driving vehicle company Waymo. Alphabet has also acquired companies that operate under its umbrella, including thermostat maker Nest.

GEM 3.0 LAUNCHED

Government e Marketplace (GeM), has been envisaged by Government of India **as the National Procurement Portal of India**. GeM strives to keep pace with ever-evolving technological challenges and stake holder aspirations and in line with this endeavour, **GeM is coming up with a scaled up third version**. **The GeM 2.0 was launched as a pilot in August 2016** and its success led to this massive transformation program - **GeM 3.0 which would offer standardised and enriched catalogue management**, powerful search engine, real time price comparison, template-based Bid and RA creation, demand aggregation, e-EMD, e-PBG, user rating, advanced MIS and analytics and more.

Some of the notable enhancements in the 3.0 version:

1. Market Based generic requirements across all government agencies
2. Standardisation of specifications of both products and services enabling empirical price comparability
3. Completely transparent transactions across all ranges
4. Generic standards established through universal service levels and cost comparison enabled
5. Open and dynamic market place with rating based on performance of user on website

National Sellers On-boarding Campaign

1. Coinciding with **the migration to the 3.0 version**, National Sellers On-boarding Campaign has been launched to train sellers/ service providers for transition **from GeM 2.0 to GeM 3.0**. **All MoU signed 20 State Capitals will be trained by GeM MSP trainers** along with Business Groups – CII, ASSOCHAM and PHDCII. Senior Officers from GeM will visit these states to facilitate the transition.
2. **GeM 3.0 has undergone a digital transformation** with superior technology and ability to scale from the previous version.
3. This will bring together many sellers and service providers for products and services across the country under one roof, truly making it a digital tool of empowerment and entrepreneurship.
4. **This initiative gives a huge uplift for growth of MSME's, manufacturers & service providers**. As Digital India aims to bring in maximum transparency by minimising Government's human transactional interface, the launch of the Sellers On-boarding Campaign will streamline the procurement of goods and services making it an easy, go-to portal for sellers and service providers.

GLOBAL FRAUD & RISK REPORT 2018

Fraud, cyber, and security risks are at an all-time high with India witnessing a significant increase in fraud cases in the last five years, according to a research report. The study states that **89 per cent of executives have reported that their companies were victim** to at least one instance of fraud over the past one year, up from 68 per cent in 2016. **As per the 2017/18 Kroll Annual Global Fraud & Risk Report**, levels of reported fraud have steadily risen every year since 2012, when the reported occurrence was just 61 per cent.

What

1. **The report pointed out India has also witnessed the highest incidence of fraud globally** across three categories – Theft of physical asset or stock (40 per cent), IP theft, piracy or counterfeiting (36 per cent) and Corruption and bribery (31 per cent).
2. An even greater percentage of executives surveyed (86 per cent) said their companies had experienced a cyber-incident or information theft, loss, or attack over the past 12 months, slightly up from 85 per cent in 2016.
3. Seven in 10 respondents (70 per cent) reported the occurrence of at least one security incident during the past year, compared to 68 per cent in the previous survey," stated the report.
4. **It also claimed that North America and Europe were the most affected with 92 per cent of respondents** affected by fraud, up from 83 per cent in 2016.
5. As many as 33 per cent of respondents in the country suggested that the extent of loss suffered by their company due to fraud was more than 7 per cent of the revenues.
6. **This is significantly higher than 23 per cent of respondents witnessed globally**. Mexico was the only country where a larger proportion of respondents suffered loss of over 7 per cent of revenues due to fraud (39 per cent respondents), the report stated.

MISCELLANEOUS

WORLD ENVIRONMENT AWARD FOR KISS

Kalinga Institute of Social Sciences (KISS) won the **18th Energy Globe World Award -2017** as the one and only organisation from India. The **Energy Globe World Award** is an international award in the field of environment instituted by the **Energy Globe Foundation annually to recognise projects** that make careful and economical use of resources and employ alternative energy sources.

What

1. It was presented to KISS at a ceremony, attended by over 60 countries and broadcast worldwide, **in Tehran, Iran** on 16 January 2018.
2. **KISS won the award in 'Fire' Category for green initiatives** undertaken by this institute that reduces the ecological footprint for large scale cooking.
3. As many as 2000 projects from 178 countries competed for this award in 5 categories including land, fire, water, air and youth. India, Thailand and Spain were chosen global finalists for the category 'Fire'. After a thorough evaluation, the high-level jury selected KISS for the award, making it the only organisation from India to win it.
4. **This rare achievement of KISS has brought pride and honour not only for KISS** but also for the entire country. As the world is on the brink of environmental hazard due to the menace of global warming, protection of the environment is being felt inevitable on part of each and every inhabitant of the earth.
5. KISS has modernized its preparation of food for 27000 students through biogas plant, steam-based cooking system, solar heating system and rainwater conservation system.

NATIONAL VOTERS' DAY OBSERVED

The **Election Commission of India (ECI) celebrated 8th National Voters' Day** across nation for enhanced participation of citizens in electoral process. The objective of the Day is **to increase enrollment of voters**, especially of newly eligible ones. It also spreads awareness among voters regarding **effective participation in electoral process.** The theme for this year's National Voters' Day is **'Accessible Elections'** to spread awareness among voters regarding effective participation in the electoral process.

What

1. Various events and **national level function were held in New Delhi.**
2. To mark the day, **Election Commission and Facebook also launched new feature on the social media Facebook** to send reminder to users aged 18 years and above to take the pledge to vote.

Background

1. **National Voters' Day was initiated in 2011** to commemorate the foundation day of the Election Commission of India (ECI) which came into existence on 25th January 1950.
2. This day is also utilized to spread awareness among voters regarding effective participation in the electoral process.
3. ECI is permanent and independent constitutional body established directly by Constitution of India to ensure fair and fair elections in the country.
4. It is multi-member body and currently has three members including Chief Election Commissioner (CEC).

NATIONAL YEAR OF MILLETS

Government has approved 2018 as National Year of Millets to boost production of the nutrient-rich millets and the sunrise agri industry involved in it. Earlier in November 2017, **India had forwarded proposal to United Nations (UN)** for declaring year 2018 as 'International Year of Millets'.

What

1. Observation of Year of **Millets will help in promotion of production and consumption of millets** will substantially contribute in fight against targeted hunger and mitigate effect of climate change in long run.
2. Popularizing millets will also benefit future generations of farmers as well as consumers.
3. Millets are smart food and good for consumers, farmers and planet multiple and has untapped uses such as food, feed, biofuels and brewing.

Millets

1. **Millet is a common term to categorize small-seeded grasses** that are often termed nutri-cereals or dryland-cereals.
2. It mainly includes sorghum, ragi, pearl millet, small millet, proso millet, foxtail millet, barnyard millet, kodo millet etc.
3. They are adapted to harsh environment of **semi-arid tropics.**
4. They require low or no purchased inputs, thus they are backbone for dry land agriculture.

UNIVERSITIES TO ALLOW OFFER ONLINE DEGREES

For the first time, India will allow nearly 15% of universities to offer online degrees allowing students and executives to learn anywhere, anytime. The courses, however, **will be non-technical in nature**, implying that they exclude degrees in engineering and medicine, human resource development minister Prakash Javadekar explained. Although some believe the move may compromise quality, **it will help India improve its low gross enrolment ratio (GER) in higher education** and address the problem of access to colleges, faced in several parts of India.

What

1. **Universities accredited by the National Assessment and Accreditation Council (NAAC)** and **rated A+** will be allowed to offer such courses. Others that want to offer such courses will be allowed a window of two years to achieve the A+ level in NAAC accreditation.
2. With mobile phone availability and usage on the rise, experts are hopeful that the existing ecosystem may be more welcoming to the idea of online learning.
3. **The annual status of education report (ASER)** published, which measures the learning ability of young people in the age group of 14-18 years, found that **73% used a mobile phone**.
4. However, the policy will face three key challenges. For one, **it will be in direct conflict with distance education**; second, **the experience worldwide is that open online courses have not been a spectacular success**; and three, **the evaluation of students will be a difficult task**. Besides, Indian higher education is not staffed sufficiently to manage the existing number of students.
5. This will be different from the regular correspondence course as it will allow students from outside the state—in case a state university is offering such courses—to sign up. At present, a state university cannot offer correspondence courses through distance mode to students residing outside the state boundary.
6. **The government wanted to improve the GER significantly**. Currently, some 25% of eligible students are pursuing higher education in India as against more than 70% in the US. Besides, the GER varies across several states. For example, while the proportion of students pursuing tertiary education is 14% in Bihar and 21% in Odisha, it is 47% in Tamil Nadu.
7. In 2016-17, India had more than 40,000 colleges, 11,669 stand-alone institutes and 864 universities catering to more than 35.7 million students.

INDIA BEATS CHINA

India accounts for one-fourth of the estimated 7.5 million **Bachelor of Science** and **engineering degrees** awarded across the world **in 2014**. However, it's the US that tops the charts in research and development spending, according to the **annual Science and Engineering Indicators 2018 report** of the National Science Foundation. China's growth in the science and engineering field continued at an exceptional pace.

What

1. **The US is the global leader in science and technology (S&T)**. However, its global share of S&T activities is declining as other nations -- especially China -- continue to rise.
2. According to the most recent estimates, in 2014, the US awarded the largest number of S&E doctoral degrees (40,000) of any country, followed by China (34,000), Russia (19,000), Germany (15,000), the United Kingdom (14,000) and India (13,000). In contrast, the US lags in bachelor's level degrees.
3. **India earned 25 per cent of the more than 7.5 million awarded S&E bachelor's level degrees in 2014**, followed closely by China (22 per cent), the EU (12 per cent) and the US (10 per cent). Nearly half of all degrees awarded in China are in S&E fields.
4. Since 2000, the number of S&E bachelor's degrees awarded in China has gone up by 300 per cent, the report said.
5. Among the major producers of S&E publications, the United Kingdom had the highest international collaboration rate (57 per cent) in 2016, followed by France (55 per cent) and Germany (51 per cent).
6. **The US followed with a 37 per cent international collaboration rate**, up 12 per cent from 2006.
7. The impact of S&E publications has also become more global. Between 2004 and 2014, the share of US publications with citations from abroad increased from 47 per cent to 56 per cent.

NEW CHIEF ELECTION COMMISSIONER

Om Prakash Rawat has been appointed as the **new Chief Election Commissioner (CEC)**, succeeding **incumbent Achal Kumar Jyoti** to the post, the Law Ministry said on 21 January 2018. **AK Joti** is expected to hand over the reigns of the **Election Commission to Rawat on January 23**.

What

1. **Rawat, in adherence to the rule, has been appointed as the 22nd CEC** by President Ram Nath Kovind on the recommendation of central government. Also, former finance secretary Ashok Lawasa has been appointed as election commissioner.
2. **As the commission consists of two commissioners besides the CEC**, Sunil Arora is the second election commissioner along with Lawasa.
3. **Rawat is a retired Indian Administrative Service (IAS) officer of Madhya Pradesh cadre (Batch 1977)**.
4. Prior to his appointment as Election Commissioner of India, Rawat had retired as Secretary to the Govt. of India, Ministry of Heavy Industries and Public Enterprises, Department of Public Enterprises on December 31, 2013 on superannuation.'
5. **In 1993, in his first stint at Centre, Rawat served as Director/Joint Secretary in the Defence Ministry**. During this tenure, he was deputed to South Africa in May, 1994 as United Nations election observer to oversee maiden elections in the country post-apartheid.

INDIA'S FIRST CIVIL PLANE IN SKY

The **14-seater civil aircraft programme, named after the Indian crane Saras**, was conceived in the 1990's as a **joint project between India and Russia**. A prototype of Saras, **India's first civil aeroplane**, flew on 24 January 2018 for nearly 40 minutes over the Bengaluru **skies for the first time in nearly a decade**, kindling hopes of a revival of a homegrown civil aircraft programme in the country.

What

1. **The Saras (PT-1N) plane was piloted by Wg Cdr U P Singh** and Group Captain B Panicker, pilots of the Aircraft and Systems Testing Establishment (ASTE), the Indian Air Force's elite school for test pilots, people familiar with the development said.
2. **The 14-seater civil aircraft programme**, named after the Indian crane Saras, was conceived in the 1990's as a joint project between India and Russia.
3. NAL took it on its own when Myasischev Design Bureau, the Russian state agency for civilian planes backed out due to the financial crisis that emerged after the breakup of the Soviet Union.
4. It took nearly two decades for scientists at NAL to fly the plane first in May 2004.
5. In 2009, the second prototype of Saras on a test flight crashed on Bengaluru outskirts killing three Indian Air Force pilots.

INDIAN CITIES FEATURE IN 'EMERGING WORLD CITIES' CATEGORY

After years of no show on the global annual survey, **for the first time, three cities from India** have featured amongst the top world order as a part of the **'Emerging World Cities' group**. This was revealed in **JLL's latest research entitled World Cities: Mapping the Pathways to Success**, which shows that amongst the Emerging World Cities category, **Delhi and Mumbai are deemed Megahubs** while **Bengaluru is high Enterprisers city**.

What

1. **The annual global survey is published in conjunction with The Business of Cities**.
2. The report maps top business destinations across the world categorizing them into various groups to understand the investor and development sentiments and potential for business growth to evaluate their strengths and opportunities for the real estate investors, developers and corporate occupiers. Over 80 cities globally are considered for evaluation fort this report and slotted into four categories and ten sub categories.

3. Indian cities performing better on global platforms, our cities are still far behind when compared to the elite seven or the contending cities, signalling a much needed shift towards higher productivity and transparency.
4. The reduction of the informal economy, tackling unsustainable patterns of sprawl and retrofitting of resilient infrastructure are also important to maintain a strong growth profile that will further push our cities towards the top global order.

India marks 69th Republic Day

India on 26 January 2018 celebrated its 69th Republic Day with its customary display of military might and cultural diversity in a parade that saw the rare attendence by heads of state and government from **10 Southeast Asian countries in a major departure from established practice**. Leaders of countries representing the Association of Southeast Asian Nations (Asean) took the stage along with their host, Prime Minister Narendra Modi, as President Ram Nath Kovind took the salute in New Delhi.

What

1. The invite to leaders from **Indonesia, Vietnam, Cambodia, Laos, Singapore, Myanmar, Thailand, Brunei, the Philippines and Malaysia** comes at a time when India is celebrating 25 years of partnership with the economically vibrant Asean.
2. On 25 January 2018, **Modi hosted all 10 Asean leaders at a commemorative summit** with the **theme Shared Values, Common Destiny during which the two sides agreed to scale up maritime cooperation** and outlined a road map for future partnership that included an enhancement of physical and digital connectivity besides increased economic linkages.
3. India's outreach to Asean comes as many countries in the world and Asia in particular are looking warily at the rise of an aggressive China. With China being a major trading partner of the 10-member grouping and many of the Asean members locked in maritime disputes with Beijing, these nations seem keen to broaden their linkages with countries such as India.
4. India's invitation to Asean member states as guests at the Republic Day parade and their attendence is a "manifestation of good neighbourliness and the comfort that Asean has with India as a multifaceted partner.

HINDI WORD OF 2017

Oxford Dictionaries has chosen 'Aadhaar' as the Hindi word of 2017. The word gained popularity due to Aadhaar card, which was in news last year and is likely to remain in highlight this year as well. The announcement was made at a session "**Oxford Dictionaries' Hindi Word of the Year**" during the ongoing Jaipur Literature Festival.

What

1. Other words such as **'Mitron', 'Notebandi' and 'Gau-Rakshak'** were also considered, but the widespread discussions and debates around 'Aadhaar' were the reason it was selected as the word of the year.
2. New words like **'Sleepawastha' (state of sleeping)**, **'Maukatarian' (opportunist)** should be coined to express certain moods. Chitra Mudgal objected to the suggestion and instead advocated for the correct use of languages.
3. If a person with lack of proper knowledge coins and expresses such words then it can be understood but this is not acceptable when educated people do this.
4. Poet and writer Ashok Vajpeyi said politicians use Hindi word 'Mitron' (friends) which is not grammatically correct, when in fact the correct word is 'Mitro' — an apparent reference to Prime Minister Narendra Modi who uses the term often in his speeches.

INDIAN SELECTED FOR CLIMATEFORCE ANTARCTICA EXPEDITION

Akshat Jain and his wife Sona Jain is making their dream a reality and embarks on their **voyage of a lifetime to Antarctica on Feb 28**. Akshat and Sona will be a part of an 80-member contingent of explorers, selected from all over the world, to visit Antarctica under the leadership of **Sir Robert Swan, the first person to have walked to the North Pole and South Pole**. The aim of this expedition is to raise awareness about Climate Change and Sustainability.

What

1. **This expedition aims to create a movement of energy/climate champions** who will amplify the message of urgency to combat the impact of climate change.
2. During the expedition they will survive through sustainable means, study the impact of climate change on Antarctica, visit research laboratories and undergo leadership training.
3. **Sona, who is originally from Rajasthan**, said as we learn more about climate change, we believe it is the most important issue facing mankind today.
4. **Global warming is having an impact on Antarctica with melting ice**, rising sea levels and icebergs breaking off the mainland. Such aspects could result in flooding of major coastal cities and mass displacement of human settlements across the globe.
5. **This Antarctica expedition will give us an opportunity to experience the impact of Climate Change** first hand and equip us with the knowledge to amplify the importance for immediate action.

PADMA AWARD 2018

Each year on the occasion of Republic Day, **the prestigious Padma Awards are bestowed upon individuals who have contributed immensely to society**. As India celebrates its **69th Republic Day on January 26**, the awards – **Padma Vibhushan, Padma Bhushan and Padma Shri** – will be given to eminent personalities from various fields such as literature and education, art, sports, social work, medicine, science and engineering, civil service, public affairs, trade and industry.

Padma Shri awardees:

1. Anwar Jalalpuri (Posthumous) – Literature and Education (Literature – Urdu)
2. Sitavva Joddati – Social Work
3. Manas Bihari Verma – Science & Engineering (Defence)
4. Abhay Bang (Duo) – Medicine
5. Rani Bang (Duo) – Medicine
6. Damodar Ganesh Bapat – Social Work
7. Prafulla Govinda Baruah – Literature and Education-Journalism
8. Mohan Swaroop Bhatia – Art-Folk Music
9. Sudhanshu Biswas – Social Work
10. Saikhom Mirabai Chanu – Sports-Weightlifting
11. Pandit Shyamlal Chaturvedi – Literature and Education-Journalism
12. Jose Ma Joey Concepcion III (Foreigner) – Trade & Industry
13. Langpoklakpam Subadani Devi – Art-Weaving
14. Somdev Devvarman – Sports-Tennis
15. Yeshi Dhoden – Medicine
16. Arup Kumar Dutta – Literature and Education
17. Doddarange Gowda – Art-Lyrics
18. Arvind Gupta – Literature and Education
19. Digamber Hansda – Literature and Education
20. Ramli Bin Ibrahim (Foreigner) – Art-Dance
21. Piyong Temjen Jamir – Literature and Education
22. Malti Joshi – Literature and Education
23. Manoj Joshi – Art-Acting
24. Rameshwarlal Kabra – Trade & Industry
25. Pran Kishore Kaul – Art
26. Bounlap Keokangna (Foreigner) – Others-Architecture
27. Vijay Kichlu – Art-Music
28. Tommy Koh (Foreigner) – Public Affairs
29. Lakshmikutty – Medicine-Traditional
30. Joyshree Goswami Mahanta – Literature and Education

31. Narayan Das Maharaj – Others-Spiritualism
32. Pravakara Maharana – Art-Sculpture
33. Hun Many (Foreigner) – Public Affairs
34. Nouf Marwaai (Foreigner) – Others- Yoga
35. Zaverilal Mehta – Literature and Education-Journalism
36. Krishna Bihari Mishra – Literature and Education
37. Sisir Purushottam Mishra – Art-Cinema
38. Subhasini Mistry – Social Work
39. Tomio Mizokami (Foreigner) – Literature and Education
40. Somdet Phra Maha Muniwong (Foreigner) – Others-Spiritualism
41. Keshav Rao Musalgaonkar – Literature and Education
42. Thant Myint – U (Foreigner) – Public Affairs
43. V Nanammal – Others-Yoga
44. Sulagitti Narasamma – Social Work
45. Vijayalakshmi Navaneethakrishnan – Art-Folk Music
46. I Nyoman Nuarta (Foreigner) – Art-Sculpture
47. Malai Haji Abdullah Bin Malai Haji Othman (Foreigner) – Social Work
48. Gobaradhan Panika – Art-Weaving
49. Bhabani Charan Pattanaik – Public Affairs
50. Murlikant Petkar – Sports-Swimming
51. Habibullo Rajabov (Foreigner) – Literature and Education
52. M R Rajagopal – Medicine-Palliative Care
53. Sampat Ramteke (Posthumous) – Social Work
54. Chandra Sekhar Rath – Literature and Education
55. S S Rathore – Civil Service
56. Amitava Roy – Science and Engineering
57. Sanduk Ruit (Foreigner) – Medicine-Ophthalmology
58. R Sathyanarayana – Art-Music
59. Pankaj M Shah – Medicine-Oncology
60. Bhajju Shyam – Art-Painting
61. Maharao Raghuveer Singh – Literature and Education
62. Kidambi Srikanth – Sports-Badminton
63. Ibrahim Sutar – Art-Music
64. Siddeshwara Swamiji – Others-Spiritualism
65. Lentina Ao Thakkar – Social Work
66. Vikram Chandra Thakur – Science and Engineering
67. Rudrapatnam Narayanaswamy Tharanathan (Duo) – Art-Music
68. Rudrapatnam Narayanaswamy Thyagarajan (Duo) – Art-Music
69. Nguyen Tien Thien (Foreigner) – Others-Spiritualism
70. Bhagirath Prasad Tripathi – Literature and Education
71. Rajagopalan Vasudevan – Science and Engineering
72. Panatawane Gangadhar Vithobaji – Literature and Education
73. Romulus Whitaker – Others-Wildlife Conservation
74. Baba Yogendra – Art
75. A Zakia – Literature and Education

Padma Vibhushan:

1. Illaiyaraja – Art-Music
2. Ghulam Mustafa Khan – Art-Music
3. Parameswaran Parameswaran – Literature and Education

Padma Bhushan awardees:

1. Pankaj Advani – Sports-Billiards/Snooker

2. Philipose Mar Chrysostom – Others-Spiritualism
3. Mahendra Singh Dhoni – Sports-Cricket
4. Alexander Kadakin (Foreigner/Posthumous) – Public affairs
5. Ramachandran Nagaswamy – Others-Archaeology
6. Ved Prakash Nanda (OCI) – Literature and Education
7. Laxman Pai – Art-Painting
8. Arvind Parikh – Art-Music
9. Sharda Sinha – Art-Music

‘BHARAT PARV’ AS PART OF REPUBLIC DAY 2018

As part of the Republic Day 2018 celebrations, the ‘Bharat Parv’ event is being organized by the Government of India at the Red Fort, Delhi from 26th to 31st January, 2018. **The prime objective of organizing the event is to generate a patriotic mood**, promote the rich cultural diversity of the country and to ensure wider participation of the general public.

What

1. **The Ministry of Tourism has been designated as the nodal Ministry for the event**, the highlights of which include Display of Republic Day Parade Tableaux, Performances by the Armed Forces Bands (Static as well as dynamic), a Multi-Cuisine Food Court, Craft Mela, Cultural Performances from different regions of the country and Photo Exhibition by the Directorate of Advertising and Visual Publicity (DAVP).
2. The Craft Mela with 50 stalls will showcase the diverse handicrafts of the country, arranged by the State Governments and Ministry of Textiles through the office of the Development Commissioner of Handicrafts.
3. **There will be Theme State Pavilions where each State would showcase their strengths along with tourism products**. DAVP is also setting up an exhibition on the theme “Naya Bharat Hum Karke Rahenge”. A live ‘Cookery Demonstration Area’ is being set up in the food court to promote cuisines of different States of India.

KEY TABLEAUX THEMES THIS YEAR

Gandhiji and Buddhism were the dominant themes of tableaux at the 69th Republic Day celebrations at the Rajpath on 26 January 2018. Unprecedented in India’s history, leaders of **all 10 ASEAN countries attended the parade which showcased the country’s military prowess** and rich cultural diversity.

What

1. **Twenty three tableaux**, including those representing various states, ministries, All India Radio (AIR) among others, rolled down the Rajpath.
2. States registering their presence **this year were Himachal Pradesh, Uttarakhand, Jammu and Kashmir, Tripura, Assam, Madhya Pradesh, Maharashtra, Karnataka, Gujarat, Chhattisgarh, Kerala, Punjab and Manipur**.
3. The ministries whose tableaux rolled down the Rajpath were External Affairs, Tribal Affairs, Youth Affairs and Sports.
4. The Income Tax department showcased its **anti-black money drive launched post demonetisation**. The armed forces tableaux were part of the colourful floats.
5. The Indian Navy’s tableau showcased the theme ‘**Indian Navy — Combat Ready Force for National Security**’ The force also showcased its Indigenous Aircraft Carrier (IAC) Vikrant, which will be commissioned in 2020, while the Defence Development and Research Organisation (DRDO) exhibited the Nirbhay missile and the Ashwini radar system.
6. The Indian Air Force tableau, led by three women officers, **was themed ‘Indian Air Force Encouraging Indigenisation**’ which displayed models of the Tejas Multi-role Fighter Aircraft, Rudra Helicopter, Arudhra Radar and the Akash missile system.

7. Among the 23 colourful floats were two tableaux, made by the Ministry of External Affairs, that portrayed historical, civilisational and religious links as the binding force between India and the Association of Southeast Asian Nations (ASEAN) countries.
8. **One of the tableaux depicted Nalanda University, a world-renowned centre** for learning and Buddhist studies in ancient times.
9. The second tableaux portrayed the Mahabodhi Temple and Bodhi tree at Bodhgaya, where Gautama Buddha attained enlightenment.
10. Himachal Pradesh's tableau showed status of Buddha in meditation along with some stupas and the monks resting there.
11. Similarly, Madhya Pradesh's tableau also had an underlying theme of Buddhism, showcasing Buddha sitting in meditation under the Boddhi Tree with four of his disciples.
12. Leaders sitting in the audience were seen applauding the tableaux of their respective States.
13. **For the first time, the All India Radio showcased its tableau depicting a historic event when Mahatma Gandhi made his maiden** and only broadcast through the public broadcast in the wake of post-partition communal riots.
14. **The Gujarat tableau showed Gandhiji weaving on his wooden spinning wheel and ashram inmates busy in daily activities**.
15. The tableau also showed Bapu's 'three monkeys' and various other things or places that were an integral part of Gandhiji's life.
16. Karnataka's natural bounty, Tripura's handicrafts, Uttarakhand's potential for rural tourism, livelihoods of Jammu and Kashmir's people, Assam's mask making craft, Sangat and Mangat-Punjab's mode of paying obeisance and community social service were showcased through various tableaux.

WORLD LEPROSY DAY

The **World Leprosy Day is observed internationally every year on last Sunday of January month** to raise global awareness of Leprosy. This year it was observed on 28 January. Observance of the day focuses on target of zero cases of leprosy-related disabilities in children. **The day was initiated by French philanthropist and writer, Raoul Follereau in 1954** as way to raise global awareness of this deadly ancient disease and call attention to the fact that it can be prevented, treated and cured.

What

1. **Leprosy (also known as Hansen's disease)** is one of the oldest diseases known to humankind.
2. **It is caused by by a slow-growing type of bacteria called Mycobacterium leprae** (M. leprae), which multiplies very slowly in the human body.
3. The bacterium has a long incubation period (on average 5 years or longer).
4. The disease affects nerve endings and destroys the **body's ability to feel pain and injury.**
5. It is chronic granulomatous disease that mainly affects skin and peripheral nervous system.
6. It can also affect the eyes and respiratory system. It is curable with multidrug therapy (MDT). Treatment provided in the early stages averts disability.

FIRST NEPAL PLAYER IN IPL

Sandeep Lamichhane on 28 January 2018 became the **first cricketer from Nepal to land a deal an IPL contract** when he was picked by **Delhi Daredevils in the ongoing players**. The 17-year-old, **the only Nepal player in the IPL auction**, was sold at his base price of Rs 20 lakh. The leg-spinner rose to prominence with a successful outing at the 2016 U-19 World Cup where he guided Nepal to a creditable eighth place.

What

1. He hogged the limelight by becoming the second-highest wicket-taker in the tournament with 14 scalps in six innings at an average of 17 and an economy of 4.67.

2. Sandeep had scalped five wickets in two warm-up games and was also part of Nepal's first match against New Zealand, which they won by 32 runs.
3. **Born in Syangja**, Sandeep had spent two-three years in India as a child when his father was working in the Indian railways.
4. During his stay in India, Sandeep got exposed to Indian cricketers such as the legendary Sachin Tendulkar and Rahul Dravid.
5. He was also inspired by Australian spin great Shane Warne.

ASIA'S LARGEST DRIP IRRIGATION PROJECT

Ramthal Marola project, **the largest drip irrigation project in Asia**, has been commissioned. The project, which has been **executed by Megha Engineering and Infrastructures Ltd**, is in Bhagalkot district of Karnataka. The project was inaugurated by M B Patil, Minister for Water Resources in Karnataka. **Netafim, an Israeli corporation, has provided technical assistance for this project**. MEIL will be in charge of operation and maintenance of this project for the next five years. About 2,150 km length of pipeline was laid for this project. Due to lack of naturally available water resources, farmers in Ramthal Marola region faced a lot of difficulties particularly those who had holdings at the edge of the ayacut. While farmers with holdings closer to the ayacut had two crops every year, those at the edge were not even able to cultivate one crop annually.

What

1. **MEIL, which successfully executed the Pattisam project in Andhra Pradesh**, implemented the drip irrigation project utilising the backwaters of Almatti project.
2. The farmers, who initially declined to handover their lands for project construction, were later convinced by explaining about the benefits they will receive in the future.
3. In the past, farmers with holdings at the edge of the ayacut were constantly protesting since they never received sufficient water.
4. **As part of this drip irrigation scheme**, every farmer will receive water through a cylinder installed in his respective farmland. All the required fertilisers and pesticides can also be mixed and put into the cylinder.
5. **This system will help in eliminating water wastage**. Technology used in this project will also purify the wastage that flows in the backwaters of River Krishna.
6. The project is expected to reduce water usage, pesticide usage, costs, and increase the yield for farmers. This project is based on Israeli drip irrigation technology. As against regular drip irrigation projects, pipeline system for this project was laid underground.
7. **Most of the pipes laid underground will not last for more than 10-15 years**. However, pipes used for this project are made of fibre optic material and will last for more than 50 years. In case of non-availability of backwaters from river Krishna, farmers are also given an alternative to use water from bore-wells installed in their farmlands.
8. After the operation and maintenance period, MEIL will hand over the project to the farmers, who in turn will collectively take over the management of the scheme.

INDIA 6TH WEALTHIEST COUNTRY

India has been ranked sixth in the list of wealthiest countries with total wealth of $8,230 billion, while **the United States topped the chart**, says a report. According to a report by **New World Wealth**, the United States is the wealthiest country in the world as the total wealth held in 2017 amounted to $64,584 billion, followed by China at the second place with $24,803 billion and Japan with $ 19,522 billion at third.

What

1. **Total wealth, refers to the private wealth held by all the individuals living in each country/city**. It includes all their assets (property, cash, equities, business interests) less any liabilities. The report, however, excludes government funds from its figures.
2. Others in the list include United Kingdom (4th, $ 9,919 billion), Germany (5th, $9,660 billion), France (7th, $6,649 billion), Canada (8th, $6,393 billion), Australia (9th, $6,142 billion) and Italy (10th, $ 4,276 billion).

3. The report further noted that **India was the best performing wealth market globally in 2017** as its total wealth swelled from $6,584 billion in 2016 to $8,230 billion in 2017, registering a 25 per cent growth.
4. Meanwhile, during the period under consideration China's wealth saw an increase of 22 per cent and global wealth rose by 12 per cent (from $192 trillion at the end of 2016 to $ 215 trillion at the end of 2017).
5. Over the past decade (2007-2017) India's total wealth increased from $3,165 billion in 2007 to $8,230 billion in 2017, a jump of 160 per cent.
6. The report further noted that **India, is home to 3,30,400 HNWIs (individuals with $1 million or more in net assets)**. **Globally, India was ranked 9th in this aspect** while US topped the list with 50,47,400 HNWIs (high-net-worth individuals).
7. India is also home to 20,730 multi-millionaires, 7th largest in the world. And in terms of resident billionaires, India with 119 such individuals was named among the top three countries globally, after the US and China.
8. **A billionaire is defined as individuals with $ 1 billion or more in net assets**.
9. In general, it was a good year for all W10 (wealthiest 10) markets, thanks to strong global stock market gains - the MSCI world index was up 23 per cent and the Dow Jones (DJIA) was up 26 per cent during the year (in $ terms), the report said, adding "wealth held in China, India, USA, Japan and Australia all grew strongly over the past year".

RENTED HOUSES IN URBAN INDIA DECLINED

A mere 28% of India’s city dwellers live in a rented house, which is a steep decline from the scenario in 1961 when a **majority of them (54%) used to live in a rented house** instead of owning one, according to a longitudinal analysis of India’s housing pattern undertaken by the **Economic Survey 2017-18**. While India is in the middle of a “**Housing for All” mission** that aims to build 3 million houses in urban areas alone, the survey flags the cost of over-reliance on house ownership at the expense of other models of dwelling. While reliance on renting as a practice has declined, there has been a dramatic rise in the number of houses lying vacant in cities across the country.

What

1. According to the survey’s analysis of census figures, **12% of the total housing stock in urban India remains vacant**. Mumbai has 500,000 vacant houses, followed by Delhi which has 300,000 vacant houses.
2. Clearly, **there are deep systemic problems in the rental market** and addressing them is important for solving India’s enormous housing challenge, the analysis pointed out.
3. **Tying the issue of housing with impediments to migration and economic activity**, the analysis observes that rental housing is important for both horizontal and vertical mobility as it allows people to access suitable housing without actually having to buy it.
4. Across the income spectrum, rental housing is an important foothold into a city for new arrivals, until they are able to, or choose to, purchase their own homes.
5. For rural migrants, in particular, whose financial portfolios may already be tied up in land and livestock, it is access to shelter that is more important than investing in another lumpy asset that is subject to local market risk, the survey said.
6. However, rent control, unclear property rights and difficulties with contract enforcement along with India’s encouragement of home ownership through socioeconomic policies have resulted in the present scenario.
7. **India’s housing requirements are “complex” and a broader set of policies are needed** than just building new houses and encouraging ownership, said the survey.