

# My Notes....

## NATIONAL

### SECURE HIMALAYA PROJECT

The Centre on 2 October 2017 launched a **six-year project** to ensure conservation of locally and globally significant biodiversity, land and forest resources in the high Himalayan ecosystem spread over **four states in India**. **Protection of snow leopard and other endangered species** and their habitats is one of the key components of the project which will **also focus on securing livelihoods of the people in the region** and enhancing enforcement to reduce wildlife crime.

#### What

1. The project - **called SECURE Himalaya** - was launched by the Union environment minister Harsh Vardhan **in association with the United Nations Development Programme (UNDP)** on the inaugural day of the **Global Wildlife Programme (GWP) conference**.
2. The **SECURE** - **securing livelihoods, conservation, sustainable use and restoration of high range Himalayan ecosystems** - is meant for specific landscapes.
3. It includes **Changthang (Jammu and Kashmir), Lahaul - Pangi and Kinnaur (Himachal Pradesh), Gangotri - Govind and Darma - Byans Valley in Pithoragarh (Uttarakhand) and Kanchenjunga - Upper Teesta Valley (Sikkim)**.
4. Enhanced enforcement efforts and monitoring under the project will also curb illegal trade in some medicinal and aromatic plants which are among the most threatened species in these landscapes.
5. The minister on the occasion also **launched India Wildlife mobile App** and released the **country's National Wildlife Action Plan for the period 2017-2031**.
6. The Plan focuses on preservation of genetic diversity and sustainable development through 103 wildlife conservation actions and 250 projects.
7. Strengthening and improving protected area network; landscape level approach for wildlife conservation; control of poaching and illegal trade in wildlife; mitigation of human-wildlife conflicts and management of tourism in wildlife areas are among the key focus areas of the national plan.
8. Besides India, **representatives and wildlife experts from 18 countries are participating in the Global Wildlife Programme conference**.
9. The Conference would provide a platform to build strategic partnerships among all the 19 nations and enable India to strengthen its enforcement mechanism to control wildlife trafficking.
10. **The Programme is a World-Bank led partnership** that promotes conservation and sustainable development by combating illicit trafficking in wildlife.

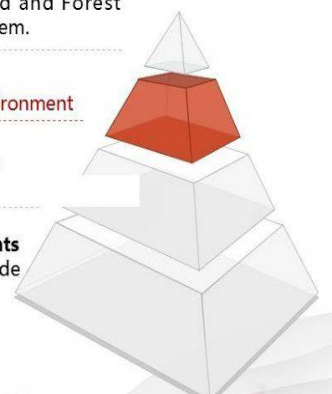
### SECURE Himalaya

Conservation of locally and globally significant Biodiversity, Land and Forest resources of Himalayan Ecosystem.

UNDP & Ministry of Environment

6 Year Project in 4 States  
J&K, UK, HP, Sikkim

Snow Leopard, Medicinal Plants  
which are threatend - illegal trade



### GHI 2017

India has a 'serious' hunger problem at hand, with **the country slipping three notches to 100th among 119 countries on the Global Hunger Index, 2017**. This is worse than the likes of North Korea, Bangladesh, and Iraq, and **better only than Pakistan and Afghanistan among Asian countries**. Over three-year duration, the country has seen a slide of **45 positions from 55th in 2014**. However, the rankings are **not strictly comparable as the current formula was introduced in 2015**. The earlier formula was used to calculate **Global Hunger Index (GHI) scores from 2006 to 2014**.

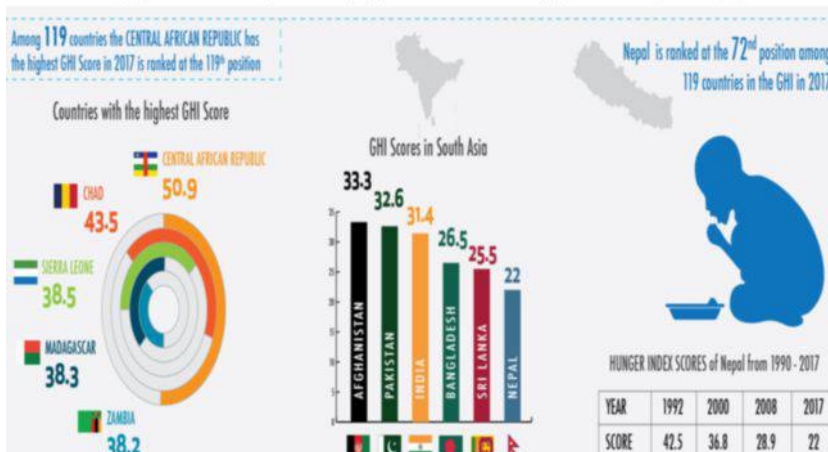
**What**

1. The primary difference is that the new formula **standardises indicator values**, and the **'child underweight' parameter has been replaced by 'child stunting' and 'child wasting'**.
2. The index shows that **more than a fifth of Indian children under the age of five weigh too little for their height** and a **third are too short for their age**.
3. At 31.4, India's 2017 GHI score is at the high end of the **"serious" category**, and one of the main factors pushing South Asia to the category of the worst-performing region on the index this year.
4. The region is followed closely by Africa South of the Sahara. **India is the third-worst in all of Asia** — better only than Afghanistan and Pakistan -- according to the **International Food Policy Research Institute (IFPRI)**, which prepared the report.
5. Of the 19 South, East, and Southeast Asian countries ranked in the report, Timor-Leste, Afghanistan, Pakistan, India and North Korea have the worst Global Hunger Index scores in Asia.
6. Worldwide, scores of the 119 countries in the report vary widely. A score of 9.9 or lower denotes low hunger; while scores between 35.0 and 49.9 denote alarming hunger, and a score of 20-34.9 means 'serious' problem of hunger.
7. With a **GHI score that is near the high end of the serious category**, it is obvious that a high GDP growth rate alone is no guarantee of food and nutrition security for India's vast majority.
8. **Inequality in all its forms must be addressed now if we are to meet SDG 2 of Zero Hunger for everyone by 2030**, says Nivedita Varshneya, Welthungerhilfe Country Director India.
9. Even with the **massive scale-up of national nutrition-focused programmes in India**, drought and structural deficiencies have left a large number of poor in the country at the risk of malnourishment in 2017.
10. As of 2015-16, more than a **fifth (21 per cent) of children in India suffered from wasting (low weight for height)** — up from 20 per cent in 2005-2006.
11. Only three other countries in this year's GHI — Djibouti, Sri Lanka, and South Sudan — showed child wasting above 20 per cent. **India's child wasting rate has not shown any substantial improvement in the past 25 years**.
12. By comparison, the country has made a considerable improvement in reducing its child stunting rate, down 29 per cent since 2000. But despite that progress, India has a considerably high stunting rate of 38.4.
13. Globally, the Central African Republic has the worst score (reflecting the highest hunger level) of any country ranked in the report, and is the sole country in the Index's "extremely alarming" category.



## GLOBAL HUNGER INDEX (GHI) 2017

The Global Hunger Index (GHI) is a tool designed to comprehensively measure and track hunger globally, regionally and by country. Each year, the International Food Policy Research Institute (IFPRI) calculates GHI scores in order to assess progress or the lack thereof, in decreasing hunger.



## SC CRIMINALISES SEX WITH MINOR WIFE

The Supreme Court on 11 October 2017 **criminalised sex with minor wife aged between 15 and 18 years**, saying **the exception in the rape law was arbitrary** and was violative of the Constitution. **Section 375 of the IPC**, which defines the offence of rape, has an exception clause that says intercourse or sexual act by a man with his wife, not below

15 years, is not rape. However, **the age of consent is 18 years**. The apex court said **the exception in the rape law was contrary to the philosophy of other statutes and violates the bodily integrity of a girl child**.

**What**

1. A bench comprising Justice Madan B Lokur and Justice Deepak Gupta also expressed **concern over the prevalent practise of child marriage in the country** and said that **social justice laws were not implemented with the spirit** with which they have been enacted by Parliament.
2. The bench clarified that it has not dealt with the **issue of marital rape as it was not raised before it by respective parties**.
3. Justice Gupta, who wrote a separate but concurrent verdict, said the age of marriage was 18 in all laws and the exception given in the rape law under the IPC is "capricious, arbitrary and **violates the rights of a girl child**."
4. The apex court said the **exception is violative of Article 14, 15 and 21 of the Constitution**.
5. It asked the Centre and the states to take proactive steps to prohibit child marriage across the country.
6. It voiced concern over **thousands of minor girls being married in mass wedding ceremonies on the occasion of Akshaya Tritiya**.
7. The court had earlier reserved the verdict while questioning the Centre how the Parliament could create an exception in law declaring that intercourse or a sexual act by a man with his wife, aged between 15 and less than 18 years, is not rape when the age of consent is 18.
8. The apex court had also **observed that child marriage cannot go on like this just because this illegal practice** was assumed to be legal and has been going on for ages.
9. The petitioners have sought a direction to **declare exception 2 to Section 375 of IPC as "violative of Articles 14, 15 and 21 of the Constitution"** to the extent that it permits intrusive sexual intercourse with a girl child aged between 15 and 18 years, only on the ground that she has been married."
10. One of the petitioners had argued that the exception to **section 375 of the IPC was defeating the purpose of Prohibition of Child Marriage Act** and was also in violation of international conventions to which India was a signatory.
11. They have also **referred to the provisions of the POCSO Act** and said these were contrary to the IPC provision.

## THE REVAMPED BIS ACT

A new Bureau of Indian standards (BIS) Act 2016 which was notified on 22nd March, 2016, has been brought into force with effect from 12th October, 2017. The Act **establishes the Bureau of Indian Standards (BIS) as the National Standards Body of India**. The Act has enabling provisions for the Government to **bring under compulsory certification regime any goods or article of any scheduled industry**, process, system or service which it considers necessary in the public interest or for the protection of human, animal or plant health, safety of the environment, or prevention of unfair trade practices, or national security.

**What**

1. Enabling provisions have also been **made for making hallmarking of the precious metal articles mandatory**.
2. The new Act also **allows multiple type of simplified conformity assessment schemes** including self-declaration of conformity against a standard which will give simplified options to manufacturers to adhere to the standards and get certificate of conformity.
3. The **Act enables the Central Government to appoint any authority/agency**, in addition to the BIS, to verify the conformity of products and services to a standard and issue certificate of conformity.
4. Further, there is provision for repair or recall, including product liability of the products bearing Standard Mark but not conforming to the relevant Indian Standard.

- The new Act will further help in ease of doing business in the country, give fillip to **Make In India campaign** and ensure availability of quality products and services to the consumers.

## SAMPOORNA BIMA GRAM YOJANA LAUNCHED

The Union Government has launched **Sampoorna Bima Gram (SBG) Yojana** and expanded coverage of **Postal Life Insurance (PLI)** in a bid to provide affordable life insurance services to people particularly those living in rural areas. With expansion, PLI will now cover professionals also apart from government employees.

### What

- Under **SBG Yojana**, at least one village (having a minimum of 100 households) will be identified in each of revenue districts of country to cover all households of identified village with minimum of one **RPLI (Rural Postal Life Insurance) policy each**.
- Coverage of all households in identified **Sampoorna Bima Gram village** is primary objective of this scheme.
- With expansion of PLI, **benefits of PLI will no more be confined to government** and semi-government employees only, but will also be available to professionals such as doctors, engineers, management consultants, **chartered accountants**, architects, lawyers, bankers etc. and to employees of listed companies of **NSE (National Stock Exchange)** and **BSE (Bombay Stock Exchange)**.
- It will enlarge cover of social security and bring maximum number of people under **protection of PLI**.

### About PLI

- PLI was introduced in 1884**. It is **one of oldest life insurance schemes** for benefit of government and semi-government employees.
- It covers employees of Central and state governments, Central and state public sector undertakings (PSUs), universities, government-aided educational institutions, nationalized banks, local bodies, autonomous bodies, joint ventures having a minimum of 10% Government/PSU stakes societies etc.
- It also extends facility of insurance to officers and staff of Defence services and para-military forces.
- It also manages group insurance scheme for extra departmental employees (Gramin Dak Sevaks) of Department of Posts.
- PLI offers 6 types of plans** viz. Whole Life Assurance (SURAKSHA), Convertible Whole Life Assurance (SUVIDHA), Endowment Assurance (SANTOSH), Anticipated Endowment Assurance (SUMANGAL), Joint Life Assurance (YUGAL SURAKSHA) and Children Policy (BAL JEEVAN BIMA).
- In all policies age limit is 19 to 55 years. Low premium and high bonus is unique feature of PLI scheme.

## SANKALP & STRIVE

The Cabinet Committee on Economic Affairs chaired by the Prime Minister Shri Narendra Modi, has approved **two new World Bank supported schemes** of Rs. 6,655 crore - **Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP)** and **Skill Strengthening for Industrial Value Enhancement (STRIVE)**.

### What

- SANKALP is Rs 4,455 crore Centrally sponsored scheme** including Rs. 3,300 crore loan support from World Bank whereas **STRIVE is a Rs. 2,200 crore - central sector scheme**, with half of the scheme outlay as **World bank loan assistance**.
- SANKALP and STRIVE are outcome focused schemes** marking shift in government's implementation strategy in vocational education and training from inputs to results.
- There has been a long felt need for a national architecture for promoting convergence, ensuring effective governance and regulation of skill training and catalysing industry efforts in vocational training space.



4. **The two schemes shall address this need by setting up national bodies for accreditation & certification** which shall regulate accreditation and certification in both long and short term **Vocational Education and Training (VET)**.
5. The architecture shall help, **for the first time in the history of vocational education in India**, to converge the efforts of various central, state and private sector institutions thereby avoiding duplication of activities and bringing about uniformity in vocational training thus, creating better impact.
6. Both the schemes are aimed at institutional reforms and improving quality & market relevance of skill development training programs in long and short term VET.

#### STRIVE

1. In past many government schemes such as **Vocational Training Improvement Project (VTIP)** have focussed on strengthening ITIs and over 1600 ITIs have already been modernized under the schemes.
2. **STRIVE scheme shall incentivize ITIs to improve overall performance** including apprenticeship by involving SMEs, **business association and industry clusters**.
3. The schemes aim to develop a robust mechanism for delivering quality skill development training by strengthening institutions such as **State Skill Development Missions (SSDMs)**, **National Skill Development Corporation (NSDC)**, **Sector Skill Councils (SSCs)**, ITIs and **National Skill Development Agency (NSDA)** etc.
4. The schemes shall support **universalization of National Skills Qualification Framework (NSQF)** including **National Quality Assurance Framework (NQAF)** across the skill development schemes of central and state governments thus ensuring standardization in skill delivery, content and training output.
5. The schemes shall provide the required **impetus to the National Skill Development Mission, 2015** and its various sub missions.
6. The schemes are **aligned to flagship Government of India programs such as Make in India and Swachhta Abhiyan** and aim at developing globally competitive workforce for domestic and overseas requirements. To this end, over 700 industry led institutions are being set up for providing job oriented skill training to lakhs of aspirants.
7. An innovative challenge fund model has been employed to select and support proposals to set up such institutions in identified sectors and geographies.
8. **66+ India International stalling institutions are being promoted to focus upon skill training as per global standards for overseas placements.**
9. Over 30,000 aspirants shall be trained in IISCs and get certificates from International Awarding Bodies (IABs). Upgrading 500 ITIs, as model ITIs across India and improving their industry connect, is also envisaged by ushering in reforms such as on-line examination, centralised admission, improving efficiency and transparency in the system.
10. National Policy of Skill Development and Entrepreneurship 2015 highlighted the need of quality assurance measures such as building a pool quality trainers and assessors.

#### SANKALP

1. **SANKALP envisages setting up of Trainers and Assessors academies with self-sustainable models.** Over 50 such academies are to be set up in priority sectors.
2. DOT, MSDE has already made significant progress in this direction by setting up a number of Institutes for Training of Trainers (IToT) in public and private sector, offering training in over 35 trades.
3. The schemes shall leverage such institutions for training the trainers in both long & short term VET thereby bringing about convergence. Additional trainer academies shall be set up on the basis of identified sectoral and geographical gaps.
4. Greater decentralization in skill planning will be ensured by institutional strengthening at the State level which includes setting up of **State Skill Development Missions (SSDMs)** and allowing states to come up with District and **State level Skill Development Plans (DSDP/SSDP)** and design skill training interventions to suit the local needs.
5. SANKALP aims at enhancement of **inclusion of marginalized communities including women**. Scheduled Castes (SCs), Schedule Tribes (STs) and Persons with Disabilities (PWD) to provide skill training opportunities to the underprivileged and marginalised section of the society.

6. The schemes will develop a **skilling ecosystem that will support the country's rise in the Ease of Doing Business index** by steady supply of skilled workforce to the industry.
7. The schemes will also work towards increasing the aspirational value of skill development programs by increasing the marketability of skills, through better industry connect and quality assurance.

## FIRST EVER AIIA

The **first ever All India Institute of Ayurveda (AIIA)**, modelled on the lines of AIIMS, will be inaugurated by Prime Minister Narendra Modi in the national capital on '**Ayurveda Day**' on **October 17**. Set up as an **apex institute under the Ministry of AYUSH**, the AIIA will bring in the **synergy between traditional wisdom of Ayurveda and modern diagnostic tools and technology**.

### What

1. The **All India Institute of Ayurveda**, set up on a total area of 10.015 acres on a budget of Rs 157 crore, is the **first medical institute under the AYUSH ministry** to hold the coveted **National Accreditation Board for Hospitals and Healthcare Providers (NABH) accreditation**.
2. The **Ayurvedic Standard Treatment Guidelines** developed by the ministry will also be released at the inaugural function.
3. The **present clinical specialities of hospital block** include neurological and degenerative disease care unit, rheumatology and musculoskeletal care unit, diabetes and **metabolic/allergic disorders care unit**, Yoga, Panchakarma clinic, Kriya Kalpa, diabetic retinopathy clinic and infertility clinic.
4. It also has pathology, biochemistry, microbiology and radiology laboratories and diagnosis facilities.
5. **Post-graduate programme (MD/MS) in Ayurveda at AIIA** started from the academic session 2016-17 and the PhD courses have been started for the session 2017-18.
6. The Ministry of AYUSH has requested all the state governments, Ayurveda teaching institutions, associations of Ayurveda practitioners and Ayurveda drug industries among others in India and abroad to observe '**Ayurveda Day**' on **October 17**.

## NOW IALA IS IGO

The Union Cabinet chaired by the Prime Minister Narendra Modi has given its approval for **International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA)** to change its status from **Non-Governmental Organization (NGO)** to **Inter-Governmental Organization (IGO)**. The move will facilitate "**to foster the safe, economic and efficient movement of vessels**". It will bring **IALA at par with International Maritime Organisation (IMO)** and **International Hydrographic Organisation (IHO)**.

### Flashback

1. The **IALA**, having headquarters at **St. Germainen Laye (France)** was established in **1957** under French law.
2. It is governed by a **General Assembly having 83 National members**, with its Council as the executive body.
3. The **IALA council consists of 24 National Members** and **India is one of the council members represented through the Directorate General of Lighthouses and Lightships (DGLL)**, Ministry of Shipping.
4. **DGLL establishes and maintains Aids to Navigation in general waters** along coast of India including A&N and Lakshadweep group of islands, as per Lighthouse Act 1927.
5. In its XII session held in La Coruna, Spain in May 2014, International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) General Assembly adopted a resolution stating its firm belief that the status of IALA from NGO to IGO will best facilitate IALA's aims in the 21st century.

## HEAD OF OBC PANEL

**Justice (retd) G Rohini** was appointed to head the commission to examine the **sub-categorisation of Other Backward Classes**. **President Ram Nath Kovind** made the

appointment under **Article 340 of the Constitution** under which the **Mandal commission**, which recommended 27 per cent reservation for socially and educationally backward classes, was appointed.

**What**

1. **The move is to ensure more equitable distribution of reservations in government jobs** and educational institutions so that the dominant groups among OBCs do not corner all benefits.
2. The exercise will involve sub-categorisation of the 5,000 castes in the central OBC list.
3. The commission members will include academic Dr J K Bajaj, Director, Anthropological Survey of India, Registrar General and Census Commissioner, and the Joint Secretary from the Ministry of Social Justice.

## NEW RULE FOR CAPF

The **home ministry has made changes to the mandatory six-month attachment of newly-commissioned paramilitary officers to Army units** by introducing a **stint with state police forces also**. From now, officers of **Central Armed Police Forces (CAPF)** will be attached to the Army for three months. **They will spend the remaining three months with state police forces** to gain a **better understanding of internal security challenges**, according to a recent directive of the Ministry of Home Affairs.

**What**

1. **There are five paramilitary forces in the country: Central Reserve Police Force (CRPF), Border Security Force (BSF), Indo-Tibetan Border Police (ITBP), Central Industrial Security Force (CISF) and Sashastra Seema Bal (SSB).**
2. **This is the first time that CAPF officers** will be serving with state police forces during **their probation period**. The officers were being attached to Army units for several decades now.
3. The **newly-appointed Assistant Commandants (ACs) of CAPFs will first serve with the Army for "three months** and the next three months with the state police.
4. **Explaining the rationale behind the move**, a senior CAPF official, said: "**The idea is to give the newly commissioned paramilitary officers equal exposure with the Army and the police** as they are the only ones who have diverse roles to play, **from guarding Indian borders to handling law and order.**"
5. **The CAPFs are the backbone of the country's internal security** as they are requisitioned every time there is a massive protest, elections, riots, mega event or any other such incident.
6. As part of the MHA directive, **the newly commissioned ACs will first train in counter-insurgency and counter-terror operations** for three months and then go on to understand the **nuances of regular policing, application of Indian Penal Code (IPC) provisions** and related things for the remaining three months.
7. The newcomers will be attached to various state police forces. They are expected to serve with sub-divisional police office and handle the work of junior ranks such as Inspector or Sub-Inspector, who are also investigating officers (IOs).
8. **About 10-lakh strong CAPFs, under the command of the MHA, hire entry-level officers as ACs through an all-India exam conducted by the Union Public Service Commission.**
9. These forces are deployed not on the borders but also in remote locations for undertaking anti-Naxal and counter- insurgency operations.

## MORE STATES DECLARED ODF

Five more States viz., **Madhya Pradesh, Maharashtra, Chattisgarh, Jharkhand and Haryana** have reached the **milestone of making all cities and towns 'Open Defecation Free'** as the **Swachh Bharat Mission completed three years** on 2 October 2017. This was announced by the Minister of Housing and Urban Affairs Shri Hardeep Singh Puri on the occasion of the **third anniversary of the mission**.

**What**

1. Giving an account of the progress towards Swachhata in urban areas of the country, Shri Puri informed that as against the target of building about 66 lakh individual household toilets in urban areas, 38 lakh toilets have already been built and



- construction of another 14 lakh toilets is in progress. Over two lakh community and public toilet seats have been built as against the mission target of five lakh toilet seats.
2. Stating that focus is now being laid on **Solid Waste Management**, Shri Puri said that efforts are on to generate over 500 MW of electricity and over 50 lakh tons of compost from municipal solid waste to enable processing of the entire solid waste being generated in urban areas.
  3. The Minister stressed on the need for **'life style change'** to realise the objective of Swachh Bharat as envisioned by Prime Minister Shri Narendra Modi.

## FIRST EVER MARINE POLICE TRAINING INSTITUTE

Prime Minister Narendra Modi on 7 October 2017 announced the **setting up of the country's first "Marine Police Training Institute"** at the newly created **Dev Bhoomi Dwarka district of Gujarat**. Modi, who arrived on a two-day tour of Gujarat, visited Dwarkadish temple at Dwarka and offered prayers. .

### What

1. **The country's first and biggest institute** that will train marine police from across the country will be set up at Dev Bhoomi Dwarka. **It will be set up near Modak.**
2. **The training will be different compared to the training to the police force**, because they will be connected to providing security within 5 kilometers boundary along the coastline.
3. The institute will train marine police force the way IAF (Indian Air Force) trains its pilots at Jamnagar.

## IMI LAUNCHED

Prime Minister Narendra Modi on 8 October 2017 launched the **Intensified Mission Indradhanush (IMI)** that **aims to reach every child under two years of age and pregnant women who have been left uncovered under the government's routine immunisation programme against preventable diseases**. The special drive will focus on select districts and cities to **ensure full immunization to more than 90% of children and pregnant women by December 2018**. The target of at least 90% coverage was to have been achieved by 2020. With the launch of IMI, the date has now been advanced.

### What

1. The government has **made immunization a people's and a social movement**, Modi said while launching IMI in Vadnagar, Gujarat.
2. With a sharpened focus on high priority districts and urban areas, under IMI, **four consecutive immunization rounds will be conducted for 7 days in 173 districts—121 districts and 17 cities in 16 states** and 52 districts in 8 north eastern states—every month between **October 2017 and January 2018**.
3. IMI will cover low performing areas in the selected districts and urban areas. These areas have been selected through triangulation of data available under national surveys, Health Management Information System data and **World Health Organization concurrent monitoring data**.
4. **Special attention will be**

**MISSION INDRADHANUSH**

MODI GOVERNMENT'S MOMENTOUS DRIVE TO ENSURE FULL IMMUNIZATION WITH ALL AVAILABLE VACCINES FOR CHILDREN UPTO 2 YEARS AND PREGNANT WOMEN

**HIGHLIGHTS**

- More than 2.53 crore\* children have been reached, of which nearly 66.16 lakh children are fully immunized
- Around 68.43 lakh\* pregnant women have been vaccinated with Tetanus Toxoid
- 528 districts have been covered in the four phases of the drive
- The first two phases of IMI have led to an increase of 6.7% in full immunization coverage within a year, as compared to 1% increase per year in the past

\* As on 22 August, 2017

**INTENSIFIED MISSION INDRADHANUSH (IMI) AIMS TO INCREASE FULL IMMUNIZATION COVERAGE TO ATLEAST 90% BY 2018**



- given to unserved/low coverage pockets in sub-centre and urban slums with migratory population. The focus is also on the urban settlements and cities identified under **National Urban Health Mission (NUHM)**.
5. The **4 phases of Mission Indradhanush have reached to more than 2.53 crore children** and 68 lakh pregnant women with life-saving vaccines including 5.21 lakh children and 1.27 lakh pregnant women in Gujarat.
  6. Through this mission, we have accelerated our progress towards **our target of 90% full immunization coverage**. Earlier the increase in full immunization coverage was **1% per year which has increased to 6.7% per year** through the first two phases of 'Mission Indradhanush'.
  7. **IMI will have inter-ministerial and inter-departmental coordination**, action-based review mechanism and intensified monitoring and accountability framework for effective implementation of targeted rapid interventions to improve the routine immunization coverage.
  8. **IMI is supported by 11 other ministries and departments**, such as **ministry of women and child development, panchayati raj, ministry of urban development, ministry of youth affairs** among others.
  9. The convergence of ground level workers of various departments like ASHA, Auxiliary nurse midwife (ANMs), Anganwadi workers, Zila preraks under National Urban Livelihood Mission (NULM), self-help groups will be ensured for better coordination and effective implementation of the programme.
  10. **IMI would be closely monitored at the district, state and central level at regular intervals**. Further, it would be reviewed by the cabinet secretary at the national level and will continue to be **monitored at the highest level under a special initiative, 'Proactive Governance and Timely Implementation (PRAGATI)'**.
  11. IMI is based on information received from gap assessment, supervision through government, concurrent monitoring by partners, and end-line surveys.
  12. Under IMI, special strategies are devised for rigorous monitoring of the programme. States and districts have developed coverage improvement plans based on gap self-assessment. These plans are reviewed from state to central level with an aim to reach 90% coverage by December 2018.
  13. An appreciation and awards mechanism is also conceived to recognize the districts reaching more than 90% coverage. **The criteria includes best practices and media management during crisis**. To acknowledge the contribution of the partners/Civil Society Organization (CSOs) and others, Certificate of Appreciation will be given.
  14. The Prime Minister during the launch also highlighted **other achievements of the government including the new National Health Policy 2017 which has been unveiled after 15 years**.

## FIRST EVER CONFERENCE OF PARTNER NGOS OF WCD

The **first ever conference of Partner NGOs of WCD Ministry was held in New Delhi**. The Minister of Women and Child Development, Smt Maneka Sanjay Gandhi inaugurated the conference titled **"Implementation of Policies, Schemes and Programmes for Women and Children: Challenges and Way Forward"**. More than 130 participants from various NGOs across the country attended conference aimed at sensitizing them about the various schemes of WCD Ministry and to give them an opportunity to share their experiences and insights.

### What

1. Addressing the participants, Smt Maneka Sanjay Gandhi said that **NGOs play a very vital role since a large numbers of schemes, programmes and policies of the government**, which are being implemented at

### The conference was based on the following broad themes:

1. Violence Against Women: Prevention and Facilitating Access to Justice
2. National Policy for Women: Policy Interventions for Gender Parity
3. Trafficking of Women and Children: Role of State Institutions
4. Cyber Crime and Children: Prevention and Harm Reduction
5. Implementation of JJ Act: Structural Challenges and Mainstreaming of Children

- the ground level with the help of NGOs.
2. The Ministry of Women and Child Development has taken up several new initiatives like **One Stop Centres, Beti Bachao Beti Padhao, Women Helpline, National Policy for Women, Bill against Trafficking, National Alliance against Child Abuse** amongst many such others, the Minister explained. She urged the NGOs to play an active role in the implementation of these initiatives as well as to give their suggestions for better delivery.
  3. The flagship scheme launched by the Prime Minister, **Beti Bachao Beti Padhao has shown a tremendous success since 104 out of 161 BBBP districts** have shown an increasing trend in Sex Ratio at Birth. This implies a clear cut change in attitude and urged the NGOs to come forward to ensure further success of the scheme.

## PANEL FOR BORDER RESIDENTS

With Pakistan frequently breaking the ceasefire, **the government has set up a panel to study the problems faced by people living along the border areas of Jammu and Kashmir.** The competent authority has approved the constitution of a study group for considering various problems being faced by the people residing near **International Border (IB) and Line of Control (LoC)** in the wake of regular threats of cross-border firing,” the Ministry of Home Affairs (MHA) order said.

### What

1. The **panel will submit a detailed report in two months after meeting the people in the area,** security forces, district administration officials and local public representatives.
2. It will also submit recommendations **on the remedial action** that needs to be taken to address these issues.
3. **Rina Mitra, special secretary in MHA will lead the panel.** The principal secretary (home) in the Jammu and Kashmir government, divisional commissioner of Jammu and divisional commissioner of Srinagar are members while the joint secretary (Kashmir) in the MHA is the member-secretary.
4. **India has a 3,323 km long border with Pakistan.**

## PAR PANEL FOR DOKALAM, ROHINGYA ISSUE

The **73-day Dokalam standoff and the Rohingya issue** will be examined by a **parliamentary panel on external affairs** headed by Congress MP Shashi Tharoor. **The panel, which also includes Congress vice-president Rahul Gandhi,** will deliberate on a number of key foreign policy issues at its next meeting which is likely to be held next month, one of its members said.

### What

1. Sino-Indian relations including the border situation and the **Dokalam stand-off,** relations with **Myanmar and the Rohingya issue** are among subjects selected by the panel for deliberations. Voting rights to NRIs, the crisis of the European Union in the wake of Brexit and its implications for India and performance of passport issuance system including issuance of e-passport are topics for discussions shortlisted by the panel for its year-long agenda.
2. Foreign Secretary S Jaishankar had in July briefed the panel on the Dokalam stand-off.
3. India and China had in August struck a deal to pull back from their most serious face-off in two decades.
4. The development had come a week before the BRICS summit in China which was attended by the Prime Minister Narendra Modi.

## DRAFT HAJ POLICY PROPOSAL

**Abolishing subsidy for Haj pilgrims and allowing women devotees above 45 to travel in a group** of at least four without a male are some of the key highlights of a proposed Haj policy drafted by a committee appointed by the Centre. **The proposed Haj Policy 2018-22,** by a panel headed by former secretary **Afzal Amanullah,** also recommends bringing down the number of **embarkation points (EPs)** from which pilgrims can take flights to Saudi Arabia from the present 21 to nine. The draft was submitted to Union Minority Affairs Minister Mukhtar Abbas Naqvi.

**What**

1. **The 2018 Haj pilgrimage will be in line with the new Haj policy.** It is a better policy, looking at the facilities proposed. It will be a transparent, people-friendly policy. It will ensure safety and security of pilgrims.
2. **The policy has been drafted in light of a 2012 Supreme Court order** asking the Centre to **abolish the Haj subsidy gradually by 2022.**
3. The policy is abolishing the subsidy. Besides, it proposes another major reform — of **allowing women aged above 45 to undertake journey without male Mehram in a group of four.**
4. Till now, **women devotees could not travel without a male Mehram.** The term **Mehram** refers to a male a woman cannot marry at anytime in her life (i.e. father, brother or son etc) Women aged below 45, however, will have to be accompanied by male Mehrams, according to the policy.
5. **It proposes to increase the quota for Mehrams from 200 to 500.** The cut in funds meant for subsidy will be used for educational empowerment and welfare of Muslims.
6. The policy suggests sending pilgrims by ship, relatively less expensive than flights. The policy says the Saudi government will be consulted regarding Haj travel by ship and thereafter floating an EOI (expression of interest) to gauge the market for such travel.
7. According to the policy, **the nine EPs will be Delhi, Lucknow, Kolkata, Ahmedabad, Mumbai, Chennai, Hyderabad, Bengaluru and Cochin.** It also proposes to build suitable Haj houses at these EPs “to which states and districts will be tagged properly”.
8. **EPs are being reduced keeping in mind ship journeys.** It proposes inviting global expressions of interest from vessel owners having a capacity of 4,000 plus passengers.
9. **India has an annual Haj quota of 1.70 lakh devotees.** The policy also proposes to ensure the stay of all Indian Haj pilgrims in Saudi Arabia within Mina.
10. The report will be examined in the ministry and shared with all concerned for implementation of the accepted recommendations from Haj 2018 onwards.

## INTERNATIONAL

**INDIA, ETHIOPIA SIGN AGREEMENTS**

**India and Ethiopia on 5 October 2017 signed agreements on trade, communication and media** to boost bilateral ties as President Ram Nath Kovind held talks with his Ethiopian counterpart Mulatu Teshome. Kovind and Teshome discussed economic relations, with the agreements on trade, communication and media signed in their presence. India also thanked Ethiopia for **its participation in the International Solar Alliance (ISA), established in 2015.** The aim of the ISA is to provide a dedicated platform for cooperation among solar resource rich countries and promote the use of solar energy.

**What**

1. **The president discussed Indian support to Ethiopia in the power sector, healthcare, and education.** He referred to India as among the top three sources of foreign direct investment for Ethiopia.
2. Kovind and Teshome also addressed the India- Ethiopia Business Dialogue and **released a book titled 'India- Ethiopia: 70 Years of Diplomatic Relations'.**
3. The India Business Forum is the first partner-country forum of its kind in Ethiopia and represents more than 100 Indian companies.
4. Indian investment has had a significant presence in manufacturing in Ethiopia and value addition to local resources, he said.
5. **Ethiopia has been the largest recipient of Indian concessional lines of credit in Africa,** with over USD 1 billion committed.
6. His visit is the **first by an Indian president to Ethiopia in 45 years since President V V Giri's trip in 1972.**

**SARIN TRACES IN SYRIA ATTACK**

The **global chemical weapons watchdog** says it has found **traces of sarin following an attack in northern Syria in late March,** days before a deadly strike using the same nerve agent in another Syrian town.

**What**

1. **The Organization for the Prohibition of Chemical Weapons** said 5 October 2017 that tests found traces of “**sarin or sarin-related chemicals**” in **Ltamenah** after a March 30 attack that injured 50 people.
2. Days later, an April 4 attack in the northwestern town of Khan Sheikhoun killed nearly 100 people.
3. Syria has denied responsibility for that attack. An OPCW-United Nations probe is expected to apportion blame later this month for the Khan Sheikhoun attack.

**HAMAS SIGN RECONCILIATION ACCORD**

Rival Palestinian factions **Hamas and Fatah signed a reconciliation deal** after **Hamas agreed to hand over administrative control of Gaza**, including the key Rafah border crossing, a decade after seizing the enclave in a civil war. The deal brokered by **Egypt bridges a bitter gulf between the Western-backed mainstream Fatah party** of Palestinian President Mahmoud Abbas and Hamas, an Islamist movement designated as a terrorist group by Western countries and Israel. Palestinian unity could also bolster Abbas's hand in any revival of talks on a Palestinian state in **Israeli-occupied territory**. Internal Palestinian strife has been a major obstacle to peacemaking, with Hamas having fought **three wars with Israel since 2008** and continuing to call for its destruction.

**What**

1. Hamas's agreement to transfer administrative powers in Gaza to a Fatah-backed government marked a major reversal, **prompted partly by its fears of financial and political isolation** after its main patron and donor, Qatar, plunged in June into a major diplomatic dispute with key allies like Saudi Arabia. They accuse **Qatar of supporting Islamist militants**, which it denies.
2. Israel viewed the Palestinian accord warily, saying it must abide by previous international agreements and terms set out by the Quartet of Middle East peace mediators – including the recognition of Israel and the disarming of Hamas.
3. **Israel will examine developments in the field and act accordingly**, said a statement from Prime Minister Benjamin Netanyahu's office.
4. Thousands of Palestinians took to the streets across Gaza in celebration of the unity pact, with loudspeakers on open cars blasting national songs, youths dancing and hugging and many waving Palestine and Egyptian flags.
5. Egypt helped mediate several previous attempts to reconcile the two movements and form a power-sharing unity government in Gaza and the West Bank, where Abbas and the Fatah-led Palestinian Authority (PA) are based.
6. **Hamas and Fatah agreed in 2014 to form a national reconciliation government**, but the deal soon dissipated in mutual recriminations with Hamas continuing to dominate Gaza.
7. The agreement calls for Abbas's presidential guard to assume responsibility of the Rafah crossing on Nov. 1, and for the full handover of administrative control of Gaza to the unity government to be completed by Dec. 1.
8. Hamas and Fatah are also debating a potential date for presidential and legislative elections and reforms of the Palestine Liberation Organization, which is in charge of long-stalled peace efforts with Israel.
9. **The last Palestinian legislative election was in 2006**, when Hamas scored a surprise victory. That sparked the political rupture between Hamas and Fatah, which eventually led to their short civil war in Gaza.

**US WITHDRAWS FROM UNESCO**

The United States on 12 October 2017 announced that **it is to withdraw from the United Nations Scientific and Cultural Organisation** accusing for the body of “**anti-Israel bias**”. Washington would establish an “**observer mission**” to **replace its representation at the Paris-based agency**, said State Department spokeswoman Heather Nauert. **The withdrawal will take effect on December 31, 2018**. The US will remain a full member of UNESCO until that time.



**What**

1. **This decision was not taken lightly**, and reflects US concerns with mounting arrears at UNESCO, **the need for fundamental reform in the organisation**, and continuing anti-Israel bias at UNESCO.
2. The Department of State notified United Nations Scientific and Cultural Organisation Director-General Irina Bokova of the US decision to withdraw from the organisation and to seek to **establish a permanent observer mission to UNESCO**.
3. The **US indicated to the Director General its desire to remain engaged** with UNESCO as a non-member observer state in order to contribute US views, perspectives and expertise on some of the important issues undertaken by the organisation, including the protection of world heritage, advocating for press freedoms, and promoting scientific collaboration and education.
4. **Paris-based UNESCO, which began work in 1946, is known for designating World Heritage sites**.
5. The U.S. decision marked a loss for multilateralism and for the UN family. The United States had cancelled its substantial budget contribution to UNESCO in 2011 in protest at a decision to grant the Palestinians full membership.

## ECONOMY

**FIRST CRUDE OIL CARGO**

**India got its first shipment of crude oil from America in 42 years** on 2 October 2017, at **Paradip port in Odisha**. This follows the recent commitment on US oil purchases by **Indian Oil Corporation (IOC)** and **Bharat Petroleum (BPC)**.

**What**

1. **IOC became the first Indian public sector refiner from India to source US crude**, has placed a cumulative order 3.9 million barrels from the US.
2. Hindustan Petroleum and BPC, India's two other public sector refiners, have also placed orders for about one million and 2.95 million barrels, respectively, for their **Vizag and Kochi refineries from the US**. The total volume of the crude presently contracted by Indian public sector refineries is 7.85 million barrels.
3. The three refiners are sourcing sweet, sour and heavy crudes for their refineries, which are equipped to handle complex mix of crude oils.
4. Indian companies, both public and private, have made sizeable investments in US shale assets, with a total investment of approximate \$5 billion. The domestic companies have also contracted for sourcing liquefied natural gas from the US and the first shipment is expected to be delivered to India in January 2018.
5. **The US and India are the world's largest and third largest consumers of energy respectively**. Rich in hydrocarbon assets, the US can be a significant supplier for Indian demand.

**Flashpoint**

1. IOC will process the crude at its east-coast base refineries located at Paradip, Haldia, Barauni and Bongaigaon.
2. IOC, which became the first Indian public sector refiner from India to source US crude, has placed a cumulative order 3.9 million barrels from the US
3. Indian firms, both public and private, have made sizeable investments in US shale assets, with a total investment of approximate \$5 billion

**FIRST STATE TO SLASH VAT ON FUEL**

**The Gujarat government has cut value-added tax (VAT)** on petrol and diesel, making it the **first state to follow the Centre's directions to do so**. Speaking at an event in Una as part of the 'Gaurav Yatra', Gujarat chief minister Vijay Rupani said that the government was set to reduce taxes on the retail fuel. Gujarat government is likely to make an announcement soon.

**What**

1. Recently, the union government cut basic excise duty on petrol and diesel by Rs 2 a litre.

2. Union oil minister Dharmendra Pradhan had recently stated that retail fuel prices were set to ease out, following which the Centre asked state governments to cut VAT on petrol and diesel to ease rates.
3. Gujarat currently levies a 28.96 per cent VAT on petrol and diesel.

## NEW EXPORT STRATEGY

After the **GST Council addressed the liquidity concerns of exporters**, the commerce and industry ministry plans to prepare a new export strategy to make overseas shipments a major driver of economic growth. **Exports contribute around 20% of India's gross domestic product.**

### What

1. At a four-hour consultation with export promotion councils, commerce and industry minister Suresh Prabhu gave a patient hearing to issues raised by them and asked them to submit a **sector-wise time-bound plan to promote exports.**
2. We are working on short, medium and long-term strategies. There can be short-term challenges but the future belongs to India. While evolving strategies for integrating with global value chain, domestic issues will also be addressed simultaneously.
3. The department may have to revise down its goods and services export target of \$900 billion by 2020 set in the foreign trade policy (FTP) because of the slow growth in exports in the initial years of the FTP.
4. The mid-term review of the FTP, which was supposedly on since Nirmala Sitharaman was the commerce minister, may not finally see the light of day.

## SHELL COMPANIES PROBED FOR MONEY LAUNDERING

In a major breakthrough in its fight against black money, **the government has zeroed in on 5,800 companies suspected to have laundered money after demonetisation**, a government statement said. The announcement comes after **13 banks submitted data on bank account operations** and post-demonetisation transactions of some of the 209,032 companies that had been struck off the Registrar of Companies earlier this year.

### What

1. **These 13 banks have submitted their first instalment of data.** The data received from them pertains to merely about 5,800 companies (out of more than 2 lakh that were struck off) involving 13,140 accounts. This in itself is a revealing figure.
2. A few of the companies have been found to have more than 100 accounts in their names. One company had as many as 2,134 accounts.
3. On 12 September, the ministry of corporate affairs (MCA) issued a statement saying that **it had identified 106,000 directors of companies** who did not file their financial statements or annual returns for three straight years, **violating provisions of the Companies Act, 2013.**
4. Prior to that, it struck off 200,000 firms that were suspected to be shell companies and directed banks to restrict operation of bank accounts of such companies by the directors of such companies or their authorized representatives.
5. **Shell firms, though not defined under the Companies Act**, are those that adhere to basic company laws and are used to avoid taxes and convert black money into white.
6. According to the government statement, the data shows that these companies had multiple accounts with negative or low balance prior to 8 November. The account balances, however, reflected transactions worth several crore rupees post-demonetisation and continued till the companies were struck off.
7. It is informed that, after separating the loan accounts, these companies were having a meagre balance of Rs 22.05 crore to their credit on 8th November, 2016.
8. However, from 9th November, 2016 i.e. after the announcement of demonetization, till the date of their being struck off, these companies have altogether deposited a huge amount of Rs 4,573.87 crore in their accounts and withdrawn an equally large amount of Rs 4,552 crore. With loan accounts there was a negative opening balance of Rs 80.79 crore.

## INSOLVENCY BODY AMENDS NORMS

**An insolvency resolution plan** will need to have a statement spelling out **how the interest of all stakeholders will be dealt with**, according to the amended regulations under the **Insolvency and Bankruptcy Code**. The move would help in ensuring more clarity in terms of taking into consideration interests of stakeholders, including home buyers, concerned during the insolvency process. With the latest amendment by the **Insolvency and Bankruptcy Board of India (IBBI)**, a resolution plan should have a statement about dealing with the interests of all stakeholders.

### What

1. A resolution plan shall include a statement as to **how it has dealt with the interests of all stakeholders**, including financial creditors and operational creditors, of the corporate debtor.
2. In this regard, **regulations pertaining to Insolvency Resolution Process for Corporate Persons** as well as to Fast Track Insolvency Resolution Process for Corporate Persons have been amended by the IBBI.
3. The Code, which became operational in December last year, provides for a market-determined and time-bound insolvency resolution process. A case is taken up for resolution under the Code only after receiving approval of the **National Company Law Tribunal (NCLT) for the same**.
4. The IBBI has also amended the rules for information utilities, providing more leeway for setting up such entities. Now, a listed Indian company can hold up to 100% stake in an information utility — which stores financial information that helps to establish defaults as well as verify claims expeditiously.
5. With the latest amendments, **a person can, either alone or together with persons acting in concert, have a maximum of 51% stake in an information utility for up to three years** from the date of its registration.
6. Besides, an Indian company listed in India can hold up to 100% of the paid-up equity share capital or total voting power of an information utility for three years from the date of inception.
7. Prior to these amendments, a person was allowed to hold up to 51% stake in an information utility for a maximum of three years.

## GST COUNCIL 22ND MEETING

**The GST Council, headed by Finance Minister Arun Jaitley** on 6 October 2017 made a **series of deliberations on the new tax regime** to provide relief to thousands of small firms and exporters. The meeting was the 22nd of its kind, held a day after Jaitley, Prime Minister Narendra Modi and BJP President Amit Shah went into a huddle, reportedly to discuss the economy.

### What

1. **E-wallet for exporters to be implemented by 1st April 2018**, till then they can file GST on the rate of nominal 0.1%.
2. Tax refunds of July and August for exporters to be processed from October 10.
3. **GST rates of 27 items reviewed by the GST Council**, including sliced dry mangoes, khakhra, unbranded namkeen, chapati have been cut. E-way bill to be implemented from April 1.
4. GST rate on some stationery items, **diesel engine parts has been reduced to 18% from 28%**.
5. Group of Ministers will study taxation regime for restaurants, especially on bifurcation on basis of AC & non-AC restaurants.
6. Reverse charge mechanism for transactions between registered and unregistered businesses has been deferred till March 31, 2018.
7. **Threshold for composition scheme in GST has been increased from Rs 75 lakh to Rs 1 crore** so as to reduce compliance burden on medium and small taxpayers.

## SCIENCE AND TECHNOLOGY

### ELUSIVE GIANT BLACK HOLE COUPLES

Astronomers including one of Indian-origin have identified **five pairs of supermassive black holes**, each containing millions of times the mass of the Sun, in the centres of galaxies. The findings could help **astronomers better understand how giant black holes** grow and how they may produce the strongest gravitational wave signals in the universe.

#### What

1. **These black hole couples formed when two galaxies collided** and merged with each other, forcing their supermassive black holes to come closer to each other.
2. The black hole pairs were uncovered by combining data from a suite of different observatories including **NASA's Chandra X-ray Observatory, the Wide-Field Infrared Sky Explorer Survey (WISE), and the ground-based Large Binocular Telescope in Arizona.**
3. Four of the dual black hole candidates were reported in a paper led by Satyapal that was published online in The Astrophysical Journal. **The other dual black hole candidate** was reported in a paper led by Sara Ellison of the University of Victoria in Canada which was published in the journal Monthly Notices of the Royal Astronomical Society
4. While scientists using the **Laser Interferometer Gravitational-Wave Observatory (LIGO)** detected the signals of merging black holes, these black holes were of the smaller variety weighing between about eight and 36 times the mass of the Sun.
5. **The merging black holes in the centres of galaxies are much larger.** When these supermassive black holes draw even closer together, they should start producing gravitational waves. The eventual merger of the dual supermassive black holes in hundreds of millions of years would forge an even bigger black hole.
6. This process would produce an astonishing amount of energy when some of the mass is converted into gravitational waves.

### FIRST DATA CENTRE OF GCP

**Google Cloud Platform (GCP)**, the cloud computing service run by **Alphabet Inc**, will open its **first data centre in Mumbai** by the end of this year. Responding to a query from DH, Google Cloud Asia Pacific Managing Director Rick Harshman said with the **Google Cloud India** region going live in Mumbai before the end of this year, enterprises in India will soon be able to take advantage of the high speeds, low latency and performance benefits uniquely offered by our **Google Cloud Platform services.**

#### What

1. The **Mumbai data centre will be the company's fifth in Asia** after Singapore, Tokyo, Sydney and Taiwan.
2. India has a huge potential in data centre services as the public cloud is gaining momentum in the country. Even though globally cloud adoption by **companies are only 5% of the total requirement.**
3. The data centre will help the company to deliver cloud services like storage, networking and data services out of Mumbai.
4. While Microsoft and AWS who joined the fray in 2008 and 2002 respectively are way ahead of the competition. AWS dominates the cloud market with about 34% of the market share. Other players including Microsoft, IBM and Google have a share of 11%, 8% and 5% respectively.
5. While Microsoft Azure and Google Cloud Platform (GCP) are doubling in size, IBM continues to dominate in the hosted private cloud and AWS is still over three times the size of its nearest competitor.
6. Google Cloud Platform has added new regions in Frankfurt (Germany) and Sao Paulo (Brazil).
7. **GCP has 12 regions, 36 zones and over 100 points of presence globally.** Along with India centre, GCP also plans to expand its presence in Los Angeles in the United States and Montreal in Canada.



## SUN-LIKE STAR THAT DEVOURED ITS OWN PLANETS

Astronomers have discovered that a **Sun-like star lurking around 350 light-years away consumed the rocky equivalent of 15 Earths**. Dubbed **Kronos** after the child-eating Titan of Greek mythology, the star is the clearest and most dramatic case yet of a Sun-like star consuming its own planets, said Semyeong Oh, astrophysicist at Princeton University in New Jersey and lead author of the study. Even **if our Sun ate the entire inner solar system**, it wouldn't come close to the anomaly we see in this star. The research did not begin as a hunt for a planet-eater. It was analysing a **catalog of new star data collected by the European Space Agency's Gaia spacecraft** for pairs of stars with similar speeds and trajectories. Such duos are typically twin stars that formed close together from the same ingredients.

### What

1. **The analysis ultimately led to the identification of Kronos and its lesser known brother Krios.**
2. Their official designations are **HD 240430 and HD 240429**, and they are both about 350 light years from Earth.
3. The keys to the discovery were **first confirming that the widely separated pair are in fact a binary pair**, and secondly observing Kronos' strikingly unusual chemical abundance pattern.
4. Most stars that are as metal-rich as Kronos "have all the other elements enhanced at a similar level," "whereas Kronos has volatile elements suppressed, which makes it really weird in the general context of stellar abundance patterns."
5. In other words, Kronos had an unusually high level of rock-forming minerals, including **magnesium, aluminium, silicon, iron, chromium and yttrium**, without an equally high level of volatile compounds — those that are most often found in gas form, like oxygen, carbon, nitrogen and potassium, the study said.

## EL NINO CAUSED RECORD CO2 SPIKE

Scientists have found that the impact of the 2015-16 **El Nino-related heat and drought occurring in tropical regions of South America, Africa and Indonesia** was responsible for the largest annual increases in **atmospheric carbon dioxide (CO2) concentration** seen in at least 2,000 years. **El Nino is a cyclical warming pattern of ocean circulation in the central and eastern tropical Pacific Ocean** that can affect weather worldwide. The findings, published in the journal Science as part of a collection of five research papers, are **based on analysis of the first 28 months of data from NASA's Orbiting Carbon Observatory-2 (OCO-2) satellite**. These three tropical regions released **2.5 gigatonnes (a billion tonnes) more carbon** into the atmosphere than they did in 2011, said lead author of the study Junjie Liu of NASA's Jet Propulsion Laboratory (JPL) in Pasadena, California. **OCO-2 data allowed us to quantify how the net exchange of carbon between land and "atmosphere** in individual regions is affected during El Nino years.

### What

1. **In 2015 and 2016, OCO-2 recorded atmospheric carbon dioxide increases** that were 50 per cent larger than the average increase seen in recent years preceding these observations. That increase was about **three parts per million of carbon dioxide per year** — or 6.3 gigatonnes of carbon.
2. In recent years, the average annual increase has been closer to two parts per million of carbon dioxide per year — or four gigatonnes of carbon. These record increases occurred even though emissions from human activities in 2015-16 are estimated to have remained roughly the same as they were prior to the El Nino.
3. **Using OCO-2 data, Liu's team analysed how Earth's land areas contributed to the record atmospheric carbon dioxide concentration increases.**
4. The team compared the 2015 findings to those from a reference year — 2011 — using carbon dioxide data from the **Japan Aerospace Exploration Agency's Greenhouse Gases Observing Satellite (GOSAT)**.
5. In 2011, weather in the three tropical regions was normal and the amount of carbon absorbed and released by them was in balance.

6. Understanding how the carbon cycle in these regions responded to El Nino will enable scientists to improve carbon cycle models, which should lead to improved predictions of how our planet may respond to similar conditions in the future.
7. The team's findings imply that if future climate brings more or longer droughts, as the last El Nino did, more carbon dioxide may remain in the atmosphere, leading to a tendency to further warm Earth.

## METHANE RAINSTORMS ON TITAN

Scientists have found that **intense methane rainstorms batter Saturn's largest moon Titan** much more frequently than expected, **creating massive floods in terrain** that are otherwise deserts. The **storms occur less than once per Titan year** — which is **29-and-a-half Earth years** — but they appear to have a key role in shaping Titan's icy surface. I would have thought these would be **once-a-millennium events**, said Jonathan Mitchell, Associate Professor of Planetary Science at University of California, Los Angeles (UCLA).

### What

1. **Titan's surface is strikingly similar to Earth's**, with flowing rivers that **spill into great lakes and seas**, and the moon has storm clouds that bring seasonal, monsoon-like downpours. But **Titan's precipitation is liquid methane, not water**.
2. The most intense methane storms in our climate model dump at least a foot of rain a day, which comes close to what we saw in **Houston from Hurricane Harvey this summer**.
3. The study also found that the **extreme methane rainstorms may imprint the moon's icy surface** in much the same way that **extreme rainstorms shape Earth's rocky surface**.
4. On Earth, **intense storms can trigger large flows of sediment** that spread into low lands and form cone-shaped features called **alluvial fans**.
5. In the new study, the scientists found that **regional patterns of extreme rainfall on Titan are correlated with recent detections of alluvial fans**, suggesting that they were formed by intense rainstorms. The finding demonstrates **the role of extreme precipitation in shaping Titan's surface**.
6. **Titan's alluvial fans were detected by a radar instrument on the Cassini spacecraft**, which began **orbiting Saturn in late 2004**.
7. The **Cassini mission ended in September 2017**, when NASA programmed it to plunge into the planet's atmosphere as a way to safely destroy the spacecraft.
8. The study suggests that the intense storms develop due to the sharp differences between the wetter, cooler weather in the higher latitudes and the drier, warmer conditions in the lower latitudes.

**Similar temperature contrasts on Earth produce intense cyclones in the mid-latitudes**, which is what creates the storms and blizzards that are common during the winter months across much of North America.

## MISCELLANEOUS

### NOBEL IN MEDICINE 2017

**Three US scientists** have won the **Nobel Prize in Physiology or Medicine** "for their **discoveries of molecular mechanisms controlling the circadian rhythm**," otherwise known as our biological clock. **Jeffrey C. Hall, Michael Rosbash and Michael W. Young** were awarded the prize for their research on how plants, humans and animals adapt their **biological rhythm to synchronize with our planet's day and night cycle**, as the earth rotates, in order to control their daily life.

### What

1. **All living organisms on Earth have an internal clock, known as the circadian rhythm**, which in humans underlies why we are awake during the day and sleep at night. But our biological clock also helps **regulate eating habits, hormone release, blood pressure and body temperature**.
2. The **US trio used fruit flies to discover a gene that controls this everyday rhythm** and further showed that the gene encoded a protein which "accumulates in

the cell during the night and degrades during the day," to regulate this cycle, the committee said in a statement.


3. According to the Nobel committee, a person's well-being is affected when there is a **"temporary mismatch between our external environment and this internal biological clock."**
4. For example, disruption to our clocks when someone travels across a number of time zones results in jet lag.
5. The committee explained **how an imbalance between lifestyle and rhythm could lead to increased risk for a number of diseases including metabolic diseases**, such as diabetes and cancer, and neurodegenerative diseases, such as Alzheimer's disease.

#### Researching fruit flies

1. The research rewarded with **this year's prize built on the work of scientist Seymour Benzer** and his student Ronald Konopka in the 1970s.
2. The pair highlighted how mutations in an unknown gene disrupted the circadian clock of flies, naming the gene "period."
3. Using fruit flies to investigate this further, this year's Nobel Laureates set out to reveal how this gene actually works -- and in turn controls the body clock.
4. They managed to isolate the period gene and soon discovered that levels of the protein this gene encodes, PER, increase during the night and degrade during the day, highlighting that the protein fluctuates over a 24 hour cycle.
5. **They then went on to discover the role of another gene, called "timeless,"** which encodes a protein called TIM, that works in combination with the PER protein to regulate the activity of the period gene and in turn the levels of the PER protein -- enabling this 24-hour oscillation.


### Clockwork Precision

The 2017 Nobel Prize in Medicine or Physiology was jointly awarded to Jeffrey C. Hall, Michael Rosbash and Michael W. Young for their discoveries of molecular mechanisms controlling the circadian rhythm




**Michael Rosbash**

- American geneticist
- Is a professor of chronobiology at the Brandeis University



**Jeffrey C. Hall**

- American geneticist
- Has focussed his research on neurology of the common fruit fly



**Michael W. Young**

- Chronobiologist and geneticist
- Has spent over three decades to research patterns of sleep and wakefulness in the common fruit fly


#### Findings

- Living organisms, including humans, have an internal biological clock that helps them adapt to the regular rhythm of the day

Professors Hall, Rosbash and Young peeked inside this clock (illustration) to find its way of operation. Their discoveries explain how plants, animals and humans adapt their biological rhythm to synchronise it with the earth's revolutions

- A rhythm misalignment leads to risk of diseases

#### The clock of human physiology



Source: The Nobel Committee for Physiology or Medicine

### NOBEL PHYSICS PRIZE 2017


Scientists **Rainer Weiss, Barry Barish and Kip Thorne** won the **2017 Nobel Prize for Physics** for decisive contributions in the observation of **gravitational waves**, the award-giving body said on 3 October 2017. The scientists were awarded the Nobel Prize **"for decisive contributions to the LIGO detector and the observation of gravitational waves"**, the Royal Swedish Academy of Sciences announced in Stockholm.

#### What

1. While **Rainer Weiss** has been awarded one half of the prize, Kip Thorne and Barry Barish will share the other half of the prize.
2. On September 14, 2015, the universe's gravitational waves

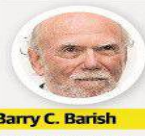
### Cosmic chirps

The 2017 Nobel Prize in Physics was jointly awarded to three persons for their contributions to detection of the gravitational waves arising from the collision between two black holes




**Rainer Weiss**

- U.S. citizen
- Emeritus Prof., MIT



**Barry C. Barish**


- Born in the U.S.
- Prof. at Caltech



**Kip S. Thorne**

- Born in the U.S.
- Prof. at Caltech

#### Gravitational waves from colliding black holes



- Gravitational waves are ripples moving in space-time
- They arise when heavy objects in space accelerate and generate disturbances in their gravitational fields
- Their effects are measurable when they reach the Earth but require sensitive antennae
- 101 years ago, Albert Einstein predicted the waves
- Waves were observed for the first time in 2015 by 'LIGO' — the most sensitive and the largest interferometer facility
- It took 1.3 billion years for the waves to arrive at Laser Interferometer Gravitational-Wave Observatory (LIGO)



were observed for the very first time. The waves came from a collision between two black holes. It took 1.3 billion years for the waves to arrive at the LIGO detector in the US.

3. This is something completely new and different, opening up unseen worlds, the Royal Swedish Academy of Sciences said in its statement on awarding the 9-million Swedish crown (\$1.1 million) prize.
4. A wealth of discoveries awaits those who succeed in capturing the waves and interpreting their message.
5. **Physics is the second of this year's crop of Nobel Prizes** and comes after Americans Jeffrey Hall, Michael Rosbash and Michael Young were awarded the Nobel Prize for Physiology or Medicine.

## NOBEL PRIZE 2017 IN CHEMISTRY

The **2017 Nobel Prize in Chemistry** was awarded to **France's Jacques Dubochet, Britain's Richard Henderson** and the **US scientist Joachim Frank**, for the development of a method called **Cryo-electron microscopy**. This can help detect and visualise complex biomolecule structures. This technique of studying molecules has ensured great applications in field of biochemistry. The 9-million-kronor (\$1.1 million) prize is shared by Dubochet of the University of Lausanne, Frank at New York's Columbia University and Henderson of MRC Laboratory of Molecular Biology in Cambridge, Britain.

### What

1. **Cryo-electron microscopy** gives scientists the opportunity to look at the **machinery of life in 3D form**.
2. This was something that was not possible with earlier forms of electron microscopes as more powerful beams would destroy the biological matter.
3. **The specific type of electron microscopy is based on the principle of forming a three-dimensional image** by collecting and combining thousands of projections of the biomolecules.
4. Specimens that are to be analysed remain in their native state without the need for dyes or fixatives. This allows the study of fine cellular structures, viruses and protein complexes at molecular resolution.
5. In the announcement ceremony held at the Royal Swedish Academy of Sciences, the committee explained how the technique allows researchers to **"freeze biomolecules mid-movement and visualize processes they have never previously seen."** The development, they said, "is decisive for both the basic understanding of life's chemistry and for the development of pharmaceuticals."
6. According to the committee's statement, Richard Henderson in 1990 was successful in using an electron microscope to generate a three-dimensional image of a protein at atomic resolution. Joachim Frank made the technology more widely applicable.
7. Jacques Dubochet helped with vitrification of water, which ensured that the biological sample retained its natural shape even in the vacuum and while frozen.
8. As the committee notes, the work produced by these three scientists has ensured that now researchers have access to 3D structures of biomolecules. This includes proteins which cause antibiotic resistance to seeing the surface of the Zika virus in full detail.



**Capturing life in 3D**

The 2017 Nobel Prize in Chemistry was jointly awarded to three persons for the development of cryo-electron microscopy (cryo-EM), which simplifies and improves the imaging of biomolecules

**Resolution before 2013** Resolution at present

The e<sup>-</sup> microscope's resolution has radically improved from shapeless blobs to visualising proteins at atomic resolution

• Zika virus' 3D model visualised by cryo-EM helped researchers to start searching for potential targets for pharmaceuticals

**1** Biomolecules such as proteins, DNA and RNA play important roles in the living cell but until the 1950s scientists had no idea what they looked like

**2** Breakthroughs in the following years helped them build 'limited' models of biomolecules

**3** Cryo-EM broke those limitations moving biochemistry into a new era

**Richard Henderson**  
In 1990, he succeeded in using an electron microscope to generate a 3D image of a protein at atomic resolution. This breakthrough proved the technology's potential

**Joachim Frank**  
Between 1975 and 1986 he developed an image processing method in which the electron microscope's fuzzy 2D images were analysed and merged to reveal a sharp 3D structure

**Jacques Dubochet**  
Liquid water evaporates in the e<sup>-</sup> microscope's vacuum. Dubochet succeeded in cooling water so rapidly that it solidified in its liquid form allowing the biomolecules to retain their natural shape even in a vacuum

Source: Royal Swedish Academy of Sciences



## NOBEL PRIZE 2017 FOR LITERATURE

British writer Kazuo Ishiguro has won the 2017 Nobel Prize for Literature. The novelist was praised by the Swedish Academy as a writer "who, in novels of **great emotional force**, has uncovered **the abyss beneath our illusory sense of connection with the world**". His most famous novels *The Remains of the Day* and *Never Let Me Go* were adapted into highly acclaimed films. He was made an OBE in 1995. The 62-year-old writer said the award was "**flabbergastingly flattering**". He has written eight books, which have been translated into over 40 languages.

### Who is Kazuo Ishiguro?

1. **Born in Nagasaki, Japan, in 1954**, he moved to England with his family when his father was offered a post as an oceanographer in Surrey
2. He read English and philosophy at the University of Kent after a gap year that included working as a grouse beater for the Queen Mother at Balmoral
3. **He studied an MA in creative writing at the University of East Anglia**, where his tutors were Malcolm Bradbury and Angela Carter
4. His thesis became his critically acclaimed first novel, *A Pale View of Hills*, published in 1982
5. **He won the Booker Prize in 1989 for *The Remains of the Day***

### 'A mix of Austen and Kafka'

**The Nobel Prize in Literature for 2017** has been awarded to British novelist and screenwriter Kazuo Ishiguro, "who, in novels of great emotional force, has uncovered the abyss beneath our illusory sense of connection with the world"

**1** Born in 1954 in Nagasaki, Japan, Ishiguro's family moved to Surrey, U.K., when he was five

#### Notable works:

- *An Artist of the Floating World*
- *The Remains of the Day*
- *When We Were Orphans*
- *Never Let Me Go*
- *Buried Giant*

**2** Education: English and Philosophy at Kent University, Creative Writing at University of East Anglia

**3** His most renowned novels, *The Remains of the Day*, and *Never Let Me Go* were adapted into critically-acclaimed feature films

#### Literary style

Renowned as a literary heavyweight with a massive appetite for sublime, lyrical prose, Ishiguro has deftly handled multiple genres – science fiction, history, surrealism and realism. His themes mostly revolve around dystopia, memory, time, alienation and self-delusion



There was another life that I might have had, but I am having this one

**Kazuo Ishiguro**

## NOBEL PEACE PRIZE 2017

Nuclear disarmament group, **International Campaign to Abolish Nuclear Weapons (ICAN)** won the Nobel Peace Prize on 6 October 2017, as the Norwegian Nobel Committee warned that the risk of a nuclear conflict is greater than for a long time. More than 70 years since atomic bombs were used on the Japanese cities of Hiroshima and Nagasaki, and as tensions flare over the North Korean crisis, the Nobel committee sought to highlight ICAN's tireless efforts to rid the world of nuclear weapons.

### What

1. **ICAN, a coalition of more than 300 NGOs, founded in Vienna in 2007** on the fringes of an international conference on the nuclear non-proliferation treaty, has tirelessly mobilised campaigners and celebrities alike in its cause.
2. **It was a key player in the adoption of a historic nuclear weapons ban treaty, signed in July by 122 countries.** However, the accord was largely symbolic as nuclear-armed states including the United States, Russia, China, Britain and France stayed out of the talks.

### Big push to disarmament

**The Nobel Peace Prize 2017** has been awarded to the International Campaign to Abolish Nuclear Weapons (ICAN) for its work to draw attention to the catastrophic humanitarian consequences of any use of nuclear weapons

**1** ICAN focusses on the threat to humanity posed by nuclear arms

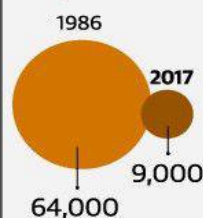


**2** Works on building global support for the abolition of nuclear weapons

**3** Founded in Vienna in 2007, ICAN has the support of more than 400 NGOs across the world

**4** It was a key player in the adoption of a historic nuclear weapons ban treaty, signed by 122 countries on July 7, 2017

Globally, nuclear weapon stockpiles have plummeted



Source: Bulletin of Atomic Scientists

**Now, more than ever, we need a world without nuclear weapons**



**ANTONIO GUTERRES**  
UN Secretary General

3. The Nobel prize seeks to bolster the case of disarmament amid nuclear tensions between the United States and North Korea and uncertainty over the fate of a 2015 deal between Iran and major powers to limit Tehran's nuclear programme.
4. **The prizes for achievements in science, literature and peace were first awarded in 1901** in accordance with the will of Swedish business tycoon Alfred Nobel, who bequeathed much of the fortune he generated from his discovery of dynamite.
5. The organisation will receive their prize, consisting of a gold medal, a diploma, and a cheque for nine million Swedish kronor (\$1.1 million, 945,000 euros), at a ceremony in Oslo on December 10, the anniversary of the death in 1896 of the prize's creator, Swedish philanthropist and dynamite inventor Alfred Nobel.

## NOBEL AWARD 2017 IN ECONOMICS

The **Nobel economics prize** has been awarded to **Richard Thaler** of the **University of Chicago** for his **contributions to behavioural economics**. The 9-million-kronor (USD 1.1-million) prize was awarded to the academic for his **"understanding the psychology of economics,"** Swedish Academy of Sciences secretary Goeran Hansson said. The Nobel committee said Thaler's work shows **how human traits affect individual decisions as well as market outcomes**.

### What

1. **Thaler, 72, "is a pioneer in behavioural economics,** a research field in which insights from **psychological research are applied to economic decision making,"** a background paper from the academy said. That **"incorporates more realistic analysis of how people think and behave when making economic decisions"**.
2. Thaler's **contributions have built a bridge between the economic and psychological analyses of individual decision-making**.
3. His empirical findings and theoretical insights have been instrumental in creating the new and rapidly expanding field of behavioural economics, which has had a profound impact on many areas of economic research and policy.
4. **Thaler is a Professor of Behavioral Science and Economics at University of Chicago Booth School of Business.** He is the co-author (with Cass R. Sunstein) of the global best seller *Nudge* (2008) in which the concepts of behavioral economics are used to tackle many of society's major problems.
5. The economics prize is something of an outlier, Alfred Nobel's will didn't call for its establishment and it honours a science that many doubt is a science at all.
6. The **Sveriges Riksbank (Swedish National Bank) Prize in Economic Sciences in Memory of Alfred Nobel was first awarded in 1969,** nearly seven decades after the series of prestigious prizes that Nobel called for.
7. Despite its provenance and carefully laborious name, it is broadly considered an equal to the other Nobel and the winner attends the famed presentation banquet.
8. **Last year, Oliver Hart and Bengt Holmström shared the prize for their contributions to contract theory.**
9. **Indian economist Amartya Sen won the Nobel in 1998 for his contributions to welfare economic.**

### A 'nudge' for behavioural economics

The Royal Swedish Academy of Sciences has decided to award the Nobel Prize in Economics, 2017, to Richard H. Thaler, University of Chicago, USA, "for his contributions to the field of behavioural economics"

- By exploring the consequences of limited rationality, social preferences and lack of self-control, Richard H. Thaler has shown how these human traits systematically affect individual decisions as well as market outcomes

#### Link with psychology

- Thaler has incorporated psychologically realistic assumptions into his analyses
- Insights from psychology into the field of economics were first laid out in his 1980 article "Towards a positive theory of consumer choice"

**1 Limited rationality:** Thaler explained how people simplify financial decision-making by creating separate accounts in their minds, focussing on the narrow impact of each individual decision rather than its overall effect

**2 Social preferences:** Thaler showed how consumers' concerns of fairness may stop big firms from raising prices in periods of high demand, but not so in the times of rising costs

**3 Lack of self-control:** Thaler explained that succumbing to short-term temptation is an important reason why an individual's plans to save for old age, or make healthier lifestyle choices, often fail



## NEW PRESIDENT OF IAA

Veteran adman **Ramesh Narayan** has been unanimously elected **President of the India Chapter of the International Advertising Association (IAA)** at its AGM held on September 28 in Mumbai. Narayan, who founded Canco Advertising, was inducted into the **IAA Hall of Fame in 2014** and was also, conferred the Lifetime Achievement Award by the Advertising Agencies Association of India (AAAI) in 2014.

### What

1. He has been President of The Advertising Club, the AAAI, and a director of the Audit Bureau of Circulation.
2. **He was Chairman of the Awards Governing Council of the Abby Awards at Goafest** for the last two years.

Narayan is currently Vice-President, IAA Global (Internal Communications) and a member of the Executive Committee of the Asian Federation of Advertising Associations.

3. He is also currently President of the Rotary Club of Bombay.

### Background

1. **The International Day of Older Persons** was instituted by **United Nations General Assembly** by adopting resolution in December 1990 for **raising awareness about issues affecting the elderly**, such as senescence and elder abuse.
2. It is also a day to appreciate the contributions that older people make to society.
3. The observance of the day is also focus of ageing organizations and the United Nations Programme on Ageing.

## VALUABLE NATION BRAND LIST

According to Brand Finance's recently released **Nation Brands 2017 report**, India was ranked **8th out of 100 countries on a list of most valuable nation brands**. This year India slipped by one spot compared to 7th rank in 2016 and ceded its previous spot to Canada.

### What

1. Top 10 Valuable Nation brands are **United States (1st)**, China (2nd), Germany (3rd), Japan (4th), United Kingdom (5th), France (6th), Canada (7th), **India (8th)**, Italy (9th) and South Korea (10th).
2. In terms of valuation, **India's National Brand Value in 2017 is \$2.04 trillion**, down by 1% from last year's \$2.06 trillion.
3. **India's brand rating has improved from 'AA-' to 'AA'**. Despite rating improvement, India has not feature in list of 10 best performing nation brands which is topped by Iceland topped.

### International Day of Older Persons

The **International Day of Older Persons (IDOP)** is observed every year on **October 1** to raise awareness about issues affecting elderly and to appreciate contributions that older

### Flashback

1. **Vayoshreshtha Samman is a Scheme of National Awards instituted by the Ministry of Social Justice & Empowerment**(D/o Social Justice & Empowerment) initially in 2005 and was **upgraded to the status of National Awards in 2013**, for institutions involved in rendering distinguished service for the cause of elderly persons especially indigent senior citizens and to eminent citizens in recognition of their service/achievements. Ministries of Social Justice & Empowerment, Health and Rural Development are running such useful schemes for the welfare of elderly persons.
2. **International Day of Older Persons is observed on 1st of October every year** pursuant to the adoption of a resolution by the **UN General Assembly to observe the year 1999 as the International Year of Older Persons** with the theme, "a society for all ages".
3. The Ministry has been conferring **"Vayoshreshtha Samman" every year on this day since 2005**, to eminent citizens and institutions in recognition of their outstanding services to the elderly people, especially indigent senior citizens.
4. The "Vayoshreshtha Samman" was elevated to the level of national awards in 2013 under 13 categories.



people make to society. It also seeks to raise awareness about issues affecting elderly, such as senescence and elder abuse.

#### What

1. The theme for this year is **“Stepping into the Future: Tapping the Talents, Contributions and Participation of Older Persons in Society”**.
2. It aims to explore effective means of promoting and strengthening the participation of older persons in various aspects of social, cultural, economic and civic and political life.

### VAYOSHRESHTHA SAMMAN 2017

The President of India, Shri Ram Nath Kovind, presented the **Vayoshreshtha Samman – a scheme of National Awards for senior citizens** today (October 9, 2017) at a function held in New Delhi. Speaking on the occasion, the President said that **there is a healthy tradition of respecting and taking care of elders in our country**. He added according to the last census, **the population of senior citizens in our country was approximately 10.5 crore, which was about 8.5% of our total population**. The average life expectancy has increased in recent decades due to improvement in health services and other reasons. It is estimated that by the year 2050, the number of senior citizens will be approximately 19% of our total population.

#### What

1. The Government of India has taken several steps for the welfare of elderly persons. These include the **National Programme for Healthcare of the Elderly** wherein specialised services will be provided for their treatment.
2. **Under the National Health Insurance Scheme** implemented with the help of State Governments, additional health insurance is being provided.

### INTERNATIONAL DAY OF NON-VIOLENCE

The **International Day of Non-violence is celebrated every year on 2 October** throughout world on the birth anniversary of Mahatma Gandhi, leader of Indian independence movement and also pioneer of **philosophy of non-violence (ahimsa)**. This day seeks to promote principles of non-violence through education and public awareness and is observed by all countries of the UN. In India, this day is celebrated as Gandhi Jayanti.

#### What

1. The day was instituted by the **United Nations General Assembly (UNGA)** by adopting resolution in June 2007 **to disseminate the message of non-violence**, including through education and public awareness.
2. The resolution reaffirmed universal relevance of principle of non-violence and the desire to secure a culture of peace, tolerance, understanding and non-violence.

#### World Standards Day

**The World Standards Day is observed every year on 14 October** across the globe to mark the development of voluntary engineering and scientific standards. The theme for year 2017 is **“Standards make cities smarter”**

#### What

1. This day honours contributions of all those **who have developed technical agreements** that are published as international standards.
2. It also seeks to raise awareness regarding significance of standardization in global economy, among regulators, industry and consumers.
3. This day is mainly celebrated by members of organisations like **ISO (International Organisation for Standardization)**, **IEC (International Electrotechnical Commission)**, **ITU (International Telecommunication Union)** and **IETF (Internet Engineering Task Force)**.

#### Background

1. The **first World Standards Day was celebrated on 14 October, 1970**.
2. On this day in 1946, representatives from **25 countries gathered in London for first time** with the aim of creating an international organization solely focused on facilitating standardization.
3. The ISO was formed a year later in 1947.



## FIRST STATE TO INCORPORATE SKILL DEVELOPMENT PROGRAMME

**Rajasthan became first state in the country** to incorporate skill development programme in higher education. In this regard, **Indira Gandhi National Open University (IGNOU)** in collaboration with state's Department of College Education has prepared 16 courses for entrepreneurship and skill development for colleges in the state.

### What

1. Under the project, **12 certificates and 4 diploma courses** will be run and each college will be required to choose five courses.
2. **94 colleges have already joined the project** and 5656 students have registered themselves in it.
3. Under it, practical training of the students pursuing the skill development courses will be done in different government departments.

## NCCRD INAUGURATED

**National Centre for Combustion Research and Development (NCCRD)** was inaugurated at **Indian Institute of Technology (IIT)**, Madras in Tamil Nadu. It is **world's largest combustion research centre** and one of best diagnostic centres in the country to understand combustion.

### What

1. **NCCRD is supported by state-run Science and Engineering Research Board (SERB)** of Department of Science and Technology (DST), Ministry of Science and Technology.
2. It will develop **state-of-the-art capabilities in combustion research** involving experts in the country.
3. NCCRD's research interests will cover automotive, thermal power and aerospace propulsion, besides fire research and microgravity combustion to minor extent.
4. It will provide impetus to research in '**Alternative Energy and Environmental Protection**' by focusing on effective utilisation of combustion as means of thermo-chemical energy conversion.
5. NCCRD has been set up as nodal centre in region and any institute and industry can work with it as it is **totally IT-enabled and possess a strong simulation facility**.
6. Many industrial and R&D organisations like Mahindra, Shell, BHEL, ISRO, DRDO (DRDL, GTRE, CFEES), TVS, AVL, GAIL, GE, NAL, Forbes-Marshall, Siemens, Thermax, Cummins, Tata Power etc are working closely with NCCRD.
7. **NCCRD will impart major boost to Indian scientific community.**

## INTERNATIONAL DAY FOR DISASTER REDUCTION

The **International Day for Disaster Reduction (IDDR)** is observed every year on October 13 **to promote a global culture of risk-awareness and disaster reduction**. The observance of day seeks to encourage citizens and governments to take part in building more disaster resilient communities and nations.

### What

1. It also celebrates **how people and communities around world** are reducing their exposure to disasters and raising awareness about the importance of reining in risks that they face.
2. The 2017 theme is "**Home Safe Home: Reducing Exposure, Reducing Displacement**".
3. It seeks to raise global awareness about effective actions, policies and practices taken to reduce exposure to disaster risk at community level, thereby contributing to saving homes and livelihoods.

### Background

1. The **International Day for Disaster Reduction** was instituted by UN General Assembly (UNGA) in 1989 to promote a global culture of risk-awareness and disaster reduction.
2. Earlier, **this day was celebrated annually on the second Wednesday of October**.
3. But in 2009, the UNGA formally designated 13 October as the annual date by adopting Resolution.

## MITRA SHAKTI 2017

The **5th India-Sri Lanka joint training exercise “Mitra Shakti 2017”** was held Aundh Military Station in Pune, Maharashtra. The two weeks exercise (October 13 and 25) is based on **Counter Terrorist Operations (CTO)** and Infantry company from both countries are participating in it.

### What

1. The aim of joint training is **to exchange best of military practices of two countries** and build strong **military-to-military (M2M) relation between two armies**.
2. It also aims at developing joint strategies by sharing the expertise of conducting operations, especially in counter-insurgency and counter terrorism (CI and CT) environment under UN mandate. The training module of exercise will include weapons training, basic military tactics and complex battle strategies.
3. Background
4. The Mitra Shakti series of exercise between India and Sri Lanka had started in 2012, mainly as a response to China's efforts to increase its influence in South Asia and Indian Ocean region. The armies of India and Sri Lanka also serve together in the United Nations Peacekeeping missions. The fourth edition of exercise was held at Sinha Regimental Centre in Ambepussa, Sri Lanka, in 2016 with main focus to enhance inter-operability in CI and CT operations under the UN mandate.

## NEW CHAIRMAN OF FTII

**Bollywood filmmaker and actor Anupam Kher** is the new chairman of the **Film and Television Institute of India (FTII), Pune**. The Information and Broadcasting (I&B) Ministry on 11 October 2017 announced **the appointment of Kher about eight months after actor Gajendra Chouhan completed his term as the FTII chairman**. Chouhan, a television actor and a BJP member, had a contentious term as the FTII chairman since his appointment in September 2015.

### What

1. Before **his term as FTII chairman came to an end in February this year**, Chouhan approached the I&B Ministry seeking an extension of his tenure on the ground. The ministry, however, did not accept his request.
2. **Kher has served as the Chairman of the Central Board of Film Certification (CBFC) in past**. He also served as the **director of National School of Drama from 2001 to 2004**. He is an **alumnus of the National School of Drama (1978 batch)**.
3. He made his acting debut in Hindi film Aagman in the 1982 and has appeared in over 500 films so far.
4. Kher, who was the **recipient of the Padma Shri in 2004** and the **Padma Bhushan in 2016** for his contribution to the field of cinema and arts, has won several national and international awards and recognitions during his career in film industry.
5. He has won the 'Filmfare Award for Best Performance in a Comic Role' five times.
6. Kher, who appeared in several acclaimed international films, also appeared in more than 100 plays.
7. He also authored a book **'The Best Thing About You Is You'**.

## NEW DIRECTOR GENERAL OF UNESCO

Former French Culture Minister **Audrey Azoulay (45)** was elected as new **Director General of UNESCO** – the UN's education, science and culture agency. With this, she becomes first Jewish Director of UNESCO. She will succeed outgoing **Director-General Irina Bokova** of Bulgaria.

### What

1. **Azoulay was born on 4 August 1972 in Paris to a Moroccan Jewish family** from Essaouira.
2. She is the daughter of Andre Azoulay, an adviser to **King Mohammed VI of Morocco**.
3. She had earned master's degree in management sciences from Paris Dauphine University in 1994 and master's degree in business administration from Lancaster University.
4. She was France's Minister of Culture from February 2016 to May 2017.