

My Notes...

NATIONAL

2nd commitment of Kyoto Protocol

India has ratified the second commitment period of the Kyoto Protocol that commits countries to contain the emission of greenhouse gases, reaffirming its stand on climate action. In a brief statement, India's Permanent Mission to the UN said that India deposited its Instrument of Acceptance of the Doha Amendment to the Kyoto Protocol under the **UN Convention on Climate Change**. With this, **India became the 80th country** to accept the amendment relating to the **second commitment period of the Kyoto Protocol**, the international emissions reduction treaty.

What

1. **India's acceptance reaffirms our continued commitment to climate action**, the Indian mission said in a statement. India's Permanent Representative to the UN Ambassador Syed Akbaruddin—who handed over India's Instrument.
2. The **Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change (UNFCCC)**, which commits its Parties by setting internationally binding emission reduction targets.
3. The **Kyoto Protocol was adopted in Kyoto, Japan, in December 1997** and **entered into force in February 2005**.
4. The **first commitment period under the Kyoto Protocol was from 2008–2012**. The Doha Amendment to the Kyoto Protocol was adopted in Qatar in December 2012.
5. The amendment includes new commitments for parties to the Kyoto Protocol who agreed to take on commitments in a **second commitment period from January 2013 to December 2020** and a revised list of greenhouse gases to be reported on by Parties in the second commitment period.
6. The Cabinet chaired by Prime Minister Narendra Modi had in January given its approval to ratify the second commitment period of the international treaty.

Kyoto Protocol Progress

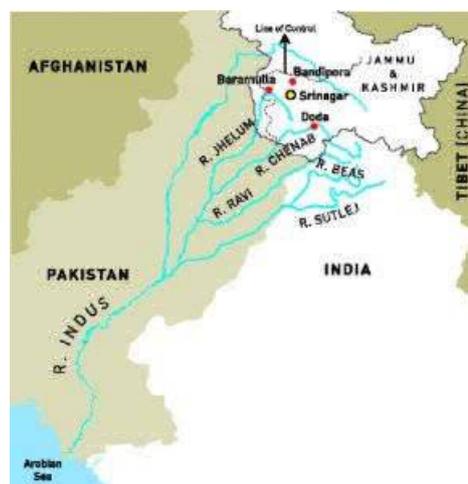
- Entered into force February 16, 2005
- 5% below 1990 levels in aggregate to be achieved by 2008-2012 – 1st Commitment Period
- By 2005, each country must have made 'demonstrable progress.' (Art. 3.2)
- COP to initiate consideration of commitments for subsequent periods in 2005 (Art. 3.9)
- First COP/MOP – Montreal, November 2005
- Second COP/MOP – Nairobi, November 2006
- Now negotiating 2nd commitment period targets

India permitted to construct Kishanganga projects

Under the Indus Waters Treaty, India is permitted to construct **hydroelectric power** facilities on tributaries of the **Jhelum and Chenab rivers** with certain restrictions, the World Bank have said. Pakistan opposes the construction of the **Kishanganga (330 megawatts)** and **Ratle (850 megawatts) hydroelectric power plants** being built by India, it said in a fact sheet issued at the conclusion of secretary—level talks between the two countries over the **Indus Waters Treaty (IWT)**.

What

1. The two countries disagree over **whether the technical design features of the two hydroelectric plants contravene the treaty**; The IWT designates these two rivers as well as the Indus as the "Western Rivers" to which Pakistan has unrestricted use.
2. "Among other uses, India is permitted to construct **hydroelectric power facilities on these rivers subject to constraints specified in Annexures to the treaty,**"



the Bank said in its fact sheet as it noted that the secretary—level discussions between **Indian and Pakistan on the technical issues of the IWT took place this week** “in a spirit of goodwill and cooperation”.

3. The parties have agreed to continue discussions and reconvene **in September in Washington, DC**.
4. On the other hand, **India had asked for the appointment of a neutral expert to look into the issues**, contending the concerns Pakistan raised were “technical” ones.
5. **The IWT was signed in 1960 after nine years of negotiations between India and Pakistan** with the help of the World Bank, which is also a signatory.
6. The World Bank’s role in relation to “**differences**” and “**disputes**” is limited to the designation of people to fulfill certain roles when requested by either or both of the parties.

Scheme to provide legal aid easily

The Centre in association with the **National Legal Service Authority (NALSA)** launched ‘**Tele-Law**’ scheme in Bihar with an aim to provide an opportunity for the common man to access legal aid easily. Under the scheme, **villagers can have access to legal consultation with the help of para legal volunteers at Common Service Centre (CSC)** which will be equipped with computers and Internet facility.

What

1. A person in need of legal aid **can get consultation through video-conferencing at a CSC** from empanelled lawyers of district and state legal service authority.
2. Rs 30 will be charged for the legal consultation, but in case of BPL people, this amount would be returned to their account.
3. **The Tele-Law scheme was launched in the presence of Supreme Court Justice Dipak Misra**, who is also executive chairman of NALSA, Union Law and Justice and IT minister Ravi Shankar Prasad and Bihar Chief Minister Nitish Kumar.
4. The services of the **Right of Public Service Act and Public Grievance Redressal Act** will be available at CSCs.
5. Besides, various other services like making Aadhaar card, PAN, applying for passports, reservation of train berths and bill payments can be done from CSCs.
6. The scheme was already launched in **Uttar Pradesh, Assam and Jammu and Kashmir**.

States for transformative change

In a major push to competitive, **cooperative federalism**, NITI Aayog announces partnership with **three States** each to radically transform their **Health and Education sectors**. NITI Aayog has selected **Uttar Pradesh, Assam, and Karnataka** to improve healthcare delivery and key outcomes in these States. **In Education, Madhya Pradesh, Odisha, and Jharkhand** have been selected for support to better learning outcomes. The six States have been chosen after a rigorous competitive process based on comprehensive metrics to determine potential for impact and likelihood of success.

What

1. States were called to, **first, express intent of collaborating with NITI Aayog to better their Health and Education indices**.
2. States then made presentations for each sector which was assessed by a committee comprised of senior members of NITI Aayog and Health and Education ministries.
3. The States highlighted the initiatives undertaken by them thus far, their willingness to accelerate improvement and justified why they should be selected for the institutional support being offered by NITI Aayog.
4. On thorough technical evaluation, **the chosen States have committed to time-bound, governance reforms in both sectors**. A Program Management Unit to push for efficiency and efficacy in governance structures and service delivery will now be available in the six chosen States for a period of 30 months.
5. It is expected that these three years of focussed attention and support from the premier think tank will lead to a marked transformation and also provide a model for other States to replicate and adapt.

6. This three-way partnership between NITI, State Governments and a knowledge partner for each of the sectors is part of the **Sustainable Action for Transforming Human Capital (SATH)** initiative of NITI Aayog.
7. NITI Aayog has been working to foster co-operative federalism by ranking states through health, water, education, and agricultural indices.
8. SATH has been launched to go beyond ranking states and to handhold them in improving their social sector indicators.
9. SATH is a challenging and ambitious initiative as the baseline of various indicators and parameters of education and health in the States are in public domain.
10. **It defines a new dimension for cooperative federalism**, where NITI Aayog and its knowledge partner will actively aid implementation of their recommendations, in addition to just policy inputs.

SC forms panel to improve widows lives

The Supreme Court on 11 August 2017 **formed a six-member panel to suggest a common working plan within two months for “bringing sunshine into the life” of destitute widows** living in Vrindavan and other places in the country.

What

1. A bench of Justices Madan B Lokur and Deepak Gupta gave two months to the panel, **comprising civil society members, to study various reports and give its suggestions.**
2. The court asked it to deliberate on the need to encourage widow remarriage. This is a subject of hope that might enable our society to give up the stereotype view of widows,” the bench said.
3. **There can be little or no doubt at all that widows in some parts of the country** are socially deprived and to an extent ostracized. Perhaps this is the reason why many of them choose to come to Vrindavan and other ashrams where, unfortunately, they are not treated with the dignity they deserve.
4. **The court directed the National Commission for Women to assist the committee.**

Intensified Mission Indradhanush

With the **aim to accelerating the full immunization coverage** and provide greater focus on **urban areas and other pockets of low immunization coverage**, the Ministry of Health and Family Welfare has drawn up an aggressive action plan **to achieve the target by 2018**. According to the plan, States will conduct **Intensified Mission Indradhanush** drives for 7 working days from 7th day of every month starting from **7th October 2017 for four consecutive months** excluding Sundays, holidays and Routine Immunization days. A total of 118 districts, 17 urban areas and 52 districts of North East states will be targeted under **Intensified Mission Indradhanush**.

What

1. **Under Intensified Mission Indradhanush**, greater focus will be given on urban areas which were one of the gaps of Mission Indradhanush.
2. This will be done through mapping of all underserved population in urban areas and need-based deployment of ANMs for providing vaccination services in these areas.
3. Mobility support to field staff for deployment to such areas in urban as well as rural areas will be provided.
4. **Intensive monitoring and strong accountability mechanism** is being established at all levels with Cabinet Secretary at national level and the Chief Secretary at state level reviewing the preparations and progress.
5. Every district identified for **Intensified Mission Indradhanush** will be monitored by partners through an identified nodal person for each district.
6. **Universal Immunization Programme (UIP)** of India prevents mortality and morbidity in children and pregnant women against 12 vaccine preventable diseases.

No to blanket ban on commercial surrogacy

Rejecting a blanket ban on commercial surrogacy as proposed in The Surrogacy (Regulation) Bill, 2016, a parliamentary standing committee has said such a move could trigger a black market in surrogacy services in India. By banning compensated surrogacy, **there could be a black market in surrogacy services**. The whole surrogacy service could go underground and would lead to increased exploitation with no mechanism for protection of any of the parties involved in the surrogacy arrangement.

What

1. **There is also the likelihood of surrogacy** being driven underground involving illicit inter-country movement of women to be surrogate mothers into foreign nations or safe surrogacy havens globally for monetary returns.
2. This may subject the surrogate to worst sufferings. Hence, a prohibition of commercial sector is likely to hurt the very people it seeks to protect," the committee said.
3. **The proposed bill seeks to allow only altruistic surrogacy by a woman who is a close relative and genetically related to the intending couple**. It makes no provision of any monetary incentive, except medical expenses.
4. The committee said this would be like **"forced labour"** because non-payment of any compensation is against Article 23 of the Constitution of India.
5. **Pure altruistic drive for any substantial and meaningful contribution of someone** else's life is unreasonable to expect in today's economic and social environment. Endorsing altruistic surrogacy will enforce emotional and social pressure on close female relatives without any compensation for immense emotional and bodily labour of gestation involved in surrogacy as well as loss of livelihood.
6. A woman should not be expected to act as a surrogate and go through all the trial and tribulations of physical and emotional tolls of this arrangement free of cost and only out of compassion," the committee said.
7. The bill aimed at safeguarding the rights of surrogate mothers was introduced in November 2016 in the Lok Sabha.

ICGS Shaurya commissioned

Indian Coast Guard Ship (ICGS) Shaurya was commission in Vasco, Goa. It is an **offshore patrol vessel** designed and built indigenously by **Goa Shipyard Ltd (GSL)**. It will be based at Chennai under administrative and operational control of Commander Coast Guard Region (East).

What

1. **ICGS Shaurya is fifth of a series of six OPVs** designed in-house and built by GSL.
2. It is 105-metre long and capable of cruising at a speed of 23 knots. It has a range of 6000 nautical miles.
3. It is powered by **twin diesel engines and carries four boats for boarding party operations**.
4. The ship has **capacity to carry twin engine light helicopter** and five high speed boats including quick response interceptor boats for quick boarding operations, search and rescue, law enforcement and maritime patrol.
5. It is also capable of carrying pollution response equipment to combat oil spill contamination.

Banking Regulation (Amendment) Bill, 2017 passed

Parliament has passed the **Banking Regulation (Amendment) Bill, 2017** with the Rajya Sabha approving it. The Lok Sabha has already passed it. The bill will **replace the Banking Regulation (Amendment) Ordinance, 2017** promulgated by President in May 2017.

What

1. The bill seeks **to amend the Banking Regulation Act, 1949** to insert provisions for handling cases related to stressed assets or non-performing assets (NPAs) of banks.
2. Stressed assets (NPAs) are loans defaulted by borrower in repayment or the loan which has been restructured by changing the repayment schedule.

3. It will **enable the Central government to authorize the RBI** to direct banking companies to resolve specific stressed assets by initiating insolvency resolution proceedings under the **Insolvency and Bankruptcy Code, 2016**.
4. It empowers RBI to issue directions to banks for resolution of stressed assets from time to time.
5. **It enables RBI to specify committees or authorities to advise banks** on resolution of stressed assets. RBI will appoint or approve members on such committees.
6. **It inserts provision to make above provisions applicable to the SBI** and its subsidiaries and also Regional Rural Banks (RRBs)

Indra tri-services exercise

First time, **India and Russia are going to conduct Indra tri-services exercise**, involving their armies, navies and the air forces in October 2017 to further ramp up military ties. It will be for the first time India will participate in a **tri-services exercise with a foreign country** with such large scale participation by Army, Navy and Air Force.

What

1. The Indra exercise 2017 will be held in **Russia** including in mountainous Vladivostok region.
2. The primarily focus of exercise on **achieving coordination between forces of the two countries** in a tri- services integrated theatre command scenario.

Committee constituted to make drugs more affordable

The **Union Ministry of Chemicals and Fertilisers** has constituted a committee of joint secretaries for ensuring enhanced affordability, availability and accessibility of drugs for the citizens. The committee will suggest ways to make pricing policy in favour of poor patients.

What

1. The committee **will review the scope of Drugs (Price Control) Order 2013 (DPCO 2013)** and suggest ways for strengthening the regulatory provisions of the order.
2. It will also **suggest ways to make DPCO 2013** more comprehensive in light of past experience of implementing the order.
3. It will also delve into making the **existing mechanism for collection of market based data** on prices of medicines more robust.
4. It will also suggest ways for strengthening the existing pharmaceutical database management system.
5. It will also look at procedural improvements and process of re-engineering in **National Pharmaceutical Pricing Authority (NPPA)** to ensure better and quicker implementation of the government policy and bring greater transparency to reduce litigations and review petitions.

NCRB merged with BPRD

The Union Home Ministry has merged **National Crime Records Bureau (NCRB)** with **Bureau of Police Research and Development (BPRD)**. The merger **aims at improving administrative efficiency** and optimal utilisation of resources for development works related to policing. It will also boost crime data collection and research efforts.

What

1. Now **BPR&D will oversee all the data collection related to Crime in India**, Suicides and Accidental Deaths, Prison Statistics and Fingerprints which was earlier done by NCRB.
2. The **BPRD Director General (DG) will be the head of the merged new entity**, where the NCRB Director, an Additional DG rank post will report to the former.

About NCRB and BPRD

1. The **NCRB was established in 1986** as the central police organisation to collect crime data, on various parameters, from across all the states of the country.
2. **The BPRD was established in 1970** as the national police organisation to study, research and develop on subjects and issues related to policing.
3. Both the organisations were functioning under the aegis of Union Home Ministry.

3. **BPR&D has been given charge of NCRB** so that there is more research based and methodological data collection in future as data collection by NCRB as of now was that of taken from states and was sometimes inaccurate.

India's first private missile production facility

India's first private sector missile sub-systems manufacturing facility **Kalyani Rafael Advanced Systems (KRAS)** plant was inaugurated in Hyderabad, capital of Telangana. It is 51:49 joint ventures between **India's Kalyani Group** and **Israel's Rafael Advanced Defence Systems Ltd.** It has been established line with the 'Make in India' initiative and Government's policy to encourage private sector participation in defence production.

What

1. **KRAS aims to be a one-stop solution provider to locally** re-design, develop, re-engineer and manufacture various land and airborne products and systems in India.
2. It has invested in designing, developing and manufacturing of weapon systems including Spike **Anti-Tank Guided Missile (ATGM)** systems and remote weapon systems.
3. It will develop a **wide range of advanced capabilities** that include command control and guidance, remote weapon systems, electro-optics, precision guided munitions and system engineering for system integration.
4. It will be supplying defence equipment to the Indian Army and also export to South East Asian countries.

The localisation content of the plant is 90% and most of the vendors are in and around Hyderabad.

INTERNATIONAL

India-ASEAN Youth Summit

The **India-ASEAN Youth Summit** began in **Bhopal, Madhya Pradesh** to commemorate **25th anniversary of Association of Southeast Asian Nations (ASEAN)**-India dialogue partnership in the ongoing year. **The first of its kind event** was organised by Union Foreign Ministry, Union Sports Ministry, Madhya Pradesh government and India Foundation.

What

1. The theme of summit is "**Shared Values, Common Destiny**".
2. Madhya Pradesh was chosen for this event as the **Sanchi stupa located here** strengthens the state's cultural affiliation with the ASEAN countries.
3. Around 100 delegates from ASEAN countries Indonesia, Singapore, Philippines, Malaysia, Brunei, Thailand, Cambodia, Laos, Myanmar and Vietnam are going to participate in the summit. It will also have participation of **75 youth leaders from India**.

Framework for crafting code on SCS

Foreign ministers of **Southeast Asia and China** adopted on 6 August 2017 a negotiating **framework for a code of conduct in the South China Sea (SCS)**, a move they hailed as progress but seen by critics as tactic to buy China time to consolidate its maritime power.

What

1. **The framework seeks to advance a 2002 Declaration of Conduct (DOC) of Parties in the South China Sea**, which has mostly been ignored by claimant states, particularly China, which has built **seven manmade islands in disputed waters**, three of which are equipped with runways, **surface-to-air missiles and radars**.

About ASEAN

1. **ASEAN regional organisation comprising 10 south east Asian countries** that aims to promote intergovernmental cooperation and facilitates economic integration amongst its members.
2. It came into existence on **August 8, 1967** after ASEAN declaration (also known as Bangkok declaration).
3. Its 10 members are Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. Its motto is "One Vision, One Identity, One Community".

2. All parties say the **framework is only an outline for how the code will be established** but critics say the failure to outline as an initial objective the need to make the code legally binding and enforceable, or have a dispute resolution mechanism, raises doubts about how effective the pact will be.
3. Chinese Foreign Minister Wang Yi said the adoption of **the framework created a solid foundation for negotiations that could start this year**, if “the situation in the South China Sea is generally stable and on the premise that there is no major interference from outside parties.”
4. He told reporters there had been “**really tangible progress**” so there was “a need to cherish momentum on the South China Sea”.
5. Signing China up to a legally binding and enforceable code for the strategic waterway has long been a goal for claimant members of the **Association of South East Asian Nations (ASEAN)**, some of which have sparred for years over what they see as China’s disregard for their sovereign rights and its blocking of fishermen and energy exploration efforts.
6. Beijing insists its activities are for defence purposes, in areas it considers its waters. **Malaysia, Taiwan, Brunei, Vietnam and the Philippines**, however, all claim some or all of the South China Sea and its myriad shoals, reefs and islands.
7. Some critics and diplomats believe China’s sudden interest in the code after 15 years of delays is to drag out the negotiating process to buy time to complete its strategic objectives in the South China Sea, through which more than \$3 billion of ship-borne trade passes annually.
8. It urges a commitment to the “**purposes and principles**” of the **United Nations Convention on the Law of the Sea (UNCLOS)** but does not specify adherence to it, for example.
9. A separate ASEAN document, dated May and seen by Reuters, shows that Vietnam pushed for stronger, more specific text in the framework, wanting mention of a dispute resolution mechanism and respecting “sovereignty, sovereign rights and jurisdiction”.
10. Sovereign rights cover entitlements to fish and extraction of natural resources. Several ASEAN countries, including Vietnam and the Philippines, have said they still favour making the code legally binding, something experts say China is unlikely to agree to.

15th BIMSTEC meeting

The **15th edition of Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)** ministerial meeting was held in **Kathmandu, Nepal**. The two-day meet was inaugurated by Prime Minister of Nepal Sher Bahadur Deuba. India was represented by External Affairs Minister Sushma Swaraj.

What

1. The meeting was reviewed **the progress and achievements in the identified areas of cooperation** and discuss the ways to accelerate the partnership under the BIMSTEC process. The key areas expected to be focused in the meeting are trade, investment, energy, transport, tourism, poverty alleviation and counter-terrorism.
2. The main agenda of this edition of the meeting is **to finalise a free trade agreement among the BIMSTEC member countries**.

About BIMSTEC

1. The **BIMSTEC is a sub-regional grouping** comprising of **seven countries of South Asia and South East Asia**.
2. It was established on **6 June 1997 through the Bangkok Declaration**.
3. It is headquartered at Dhaka, Bangladesh.
4. BIMSTEC mainly comprises of seven countries viz. Bangladesh, Bhutan, India, Nepal, Sri Lanka, Myanmar and Thailand lying in the littoral and adjacent areas of the Bay of Bengal.
5. Its objectives are technological and economical cooperation among south Asian and south East Asian countries along the coast of the Bay of Bengal.
6. It also covers cooperation in commerce, technology, investment, agriculture, tourism, human resource development, fisheries, transport and communication, textiles, leather etc.

3. It was also include negotiations on market access for professionals and reducing the duty on trading goods.

First Arab state to offer permanent residency to non-citizens

Qatar's Cabinet has approved a **draft law making permanent residency available to some non-citizens**. It marks a partial shift from Qatar's heavy reliance on its longstanding visa-sponsorship system. With this **Qatar becomes first Gulf Arab state** to make permanent residency available to some non-citizens.

What

1. Under the new law, **residency permits will be granted to children of Qatari women** married to foreigners.
2. It will be also granted to people who offered valuable services to the country and those with special skills.
3. **The residency permit will give holders similar rights as Qataris in terms of property ownership** and run some businesses without needing a Qatari partner.
4. It will also entitle them Free State education and healthcare services.
5. The interior ministry of Qatar will establish committee to review requests of granting permanent residency ID in line with the provisions of the law.

GhanSat-1 starts orbiting

In a boost to the space and science community in the country, **Ghana's first satellite, GhanaSat-1** began its orbit recently. With this, **Ghana has become the first Sub-Saharan African country to send a satellite** into orbit around the earth. Built by a group of **Ghanian students at All Nations University**, the satellite was launched from **NASA's International Space Station** in July.

What

1. **GhanaSat-1 weighs 1 kg** and will **orbit 400 kms above the Earth**.
2. The satellite has cameras that will be used to **closely monitor Ghana's coastlines**.
3. The launch that happened in July was closely watched by the engineers and 400 people had gathered to catch the live updates. The first signal from the satellite was received shortly afterwards.
4. The satellite will send the signals to the ground station at the university's laboratory, the place where it was initially developed by Benjamin Bonsu, Ernest Teye Matey, and Joseph Quansah.
5. The team of engineers started working on the launch in 2015 and received support from the Japan Aerospace Exploration Agency.
6. The **launch of GhanaSat-1 shows Africa's growing interest in space exploration**. Few reports also suggest that post the successful launch of GhanSat-1, there are plans to soon launch GhanSat 2 into the space.
7. The next satellite will be equipped with better cameras and closely follow deforestation and the usage of water in the country.

Asia's tiger cubs

The Japanese financial services major has dubbed **India and ASEAN-5 (Indonesia, Malaysia, the Philippines, Thailand and Vietnam)** as "**Asia's tiger cubs**", and said FDI inflows to these nations will increase from around \$100 billion per year now to around \$240 billion by 2025. Moreover, sources of FDI to these nations are also witnessing a significant shift with more inflows expected from countries as China and Japan.

What

1. Unlike in the past, when **the US and EU accounted for bulk of FDI flows into the 'cubs'**, we expect a growing regional bias as the source of **FDI changes from the west to east**, and especially from high-saving Japan and China," the report said.
2. Rising labour costs in China and an **ageing population in Northeast Asia have disincentivised foreign direct investment (FDI)** and they are in search of new destinations and "**India and the ASEAN-5 are well placed to emerge as that destination**".

3. **Factors that are expected to encourage FDI into India and ASEAN-5 include** - large and growing domestic markets; reforms focussed on improving infrastructure and the ease of doing business; a more open and liberal FDI regime; **sound economic management and political stability; and availability of low-cost labour.**
4. In terms of equity market implications, FDI is expected to flow into sectors that need growth capital (infrastructure, banks, e-commerce and hospitals) and those with strong long-term growth prospects (retail, automobiles, pharmaceuticals and diagnostics).
5. **FDI inflows will be largely negative for listed companies in e-commerce** due to increased competition, those in auto component, retail, hospital, infrastructure and capital goods segments should benefit.

Three contracts signed on NNP

India and Russia have signed contracts for priority design works and supply of main equipment for **units 5 and 6 of the Kudankulam nuclear power plant in Tamil Nadu**, two months after the **main framework agreement for these units** was signed during Prime Minister Narendra Modi visit to Russia. Three main contracts were signed between state-owned **Nuclear Power Corporation of India (NPCIL)** and Russia's JSC Atomstroyexport for priority design works, working design and supply of the main equipment for stage III of Kudankulam NPP.

What

1. **JSC Atomstroyexport** is a key foreign trade engineering company of **State Corporation "Rosatom"** for construction of nuclear power facilities abroad.
2. **The project for construction of Units 5 and 6 of Kudankulam NPP** is passing to the practical implementation phase. Designing begins, as well as development of procurement procedures of the main equipment of the Russian production to complete Stage III of the Indian nuclear power plant.
3. After overcoming initial hurdles, **India and Russia signed the General Framework Agreement (GFA)** and credit protocol for Units 5 and 6 of the Kudankulam NPP on June 1, a major outcome of the annual summit talks between Modi and Russian President Vladimir Putin in St Petersburg.
4. The Kudankulam NPP was the outcome of an inter-governmental agreement between the erstwhile **Soviet Union and India in 1988.**
5. It is the single largest nuclear power station in India. The power station was envisaged to have six units with total capacity to generate 6,000 MW of electricity (1,000 MW each).

ECONOMY

Bharat-22 ETF

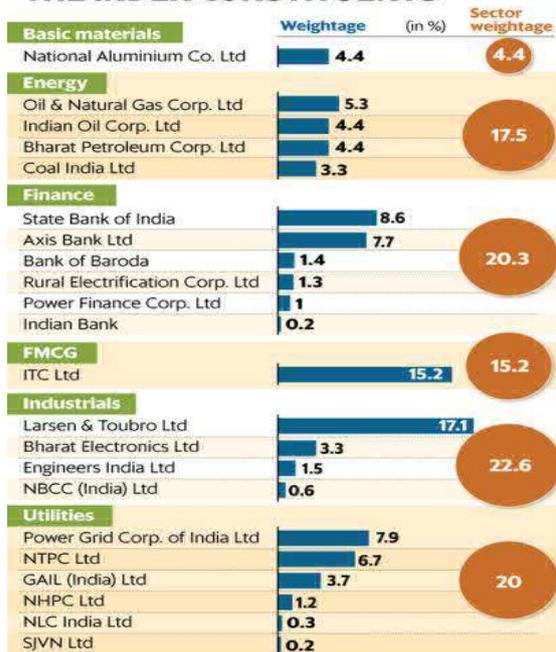
The government, on 4 August 2017, announced a **new exchange traded fund (ETF), comprising stocks of 22 state-owned companies, public sector banks (PSBs), and private sector companies** in which the government owns substantial stakes. The **new CPSE ETF, named Bharat-22**, draws companies from six sectors. The constituents of the basket are Nalco, ONGC, IndianOil, Bharat Petroleum, Coal India, State Bank of India (SBI), Axis Bank, Bank of Baroda, Rural Electrification Corp, Power Finance Corp, Indian Bank, ITC, Larsen & Toubro (L&T), Bharat Electricals, Engineers India, NBCC (India), Power Grid Corp, NTPC, Gail (India), NHPC, NLC India (formerly Neyveli Lignite), and SJVN.

What

1. The instrument, which is **the government's second CPSE ETF**, will have a diversified portfolio of six sectors such as energy, fast-moving consumer goods, finance, basic materials, industrials and utilities.
2. **This compares with 10 stocks in the first CPSE ETF, launched in early 2014,** and drawing mostly from the energy space.

3. The stocks with the highest weight in the ETF basket are L&T (17.1 per cent), ITC (15.2 per cent), SBI (8.6 per cent), PowerGrid (7.9 per cent), Axis Bank (7.7 per cent), and NTPC (6.7 per cent).
4. **The other stocks have weights ranging from 5.3 per cent to 0.2 per cent.** The Centre holds minority stakes in Axis Bank, L&T, and ITC through the Specified Undertaking of Unit Trust of India (SUUTI).
5. The Centre is pitching Bharat-22 as a diversified offering, with exposure to six sectors, ensuring spreading of risk and diversification. It hopes that the ETF will provide better returns and yields not just compared to the first CPSE ETF, but also compared to other ETFs.
6. The inclusion of three state-owned banks in the new ETF was “consistent” with government policy.
7. The government’s stake can go down to 52 per cent in PSBs and whenever possible, we will look for possible consolidation.
8. **The first CPSE ETF was launched in March 2014.** It is managed by Reliance Mutual Fund and has so far garnered Rs 11,500 crore for the exchequer in three tranches. A fourth tranche is expected later this year.
9. **An ETF is a security that tracks an index,** a commodity or a basket of assets like an index fund, but trades like a stock on an exchange. It provides diversification to investors and is cheaper than investing in a fund.

THE INDEX CONSTITUENTS



Source: Press Information Bureau

India’s first gold options contract

Multi Commodity Exchange Ltd (MCX) has received markets regulator Securities and Exchange Board of India’s (SEBI) approval to launch **India’s first gold options contract**. The gold futures contract will have bi-monthly duration. The option will also have the existing gold kilo futures contract as its underlier.

What

1. The launch of gold options is **one of the major reforms SEBI** has taken for the commodity derivatives market.
2. Earlier in June 2017, SEBI had allowed options trading in commodities to deepen the market but permitted each exchange to launch options on futures of only one commodity initially.
3. SEBI is going to put strict eligibility criteria and options could be launched on futures contract of only those commodities that are among the top five in terms of total trading turnover value of previous 12 months.
4. It also has stipulated necessary guidelines with regard to the **product design and risk management**

About MCX

1. The **MCX is the country’s largest metals and energy commodity bourse**.
2. It is **country’s first listed commodity futures exchange that facilitates online trading**, and clearing and settlement of commodity futures transactions, thereby providing a platform for risk management.
3. **It began functioning in November 2003** and operates within the regulatory framework of the **Forward Contracts Regulation Act, 1952 (FCRA, 1952)**.
4. It offers futures trading in bullion, ferrous and non-ferrous metals, energy, and a number of agricultural commodities (mentha oil, cardamom, potatoes, palm oil and others).
5. Globally, MCX ranks no. 1 in silver, no. 2 in natural gas, no. 3 in crude oil and gold in futures trading.

framework to be adopted for trading in options on commodity futures.

GeMSamvad

An MoU was signed between Government eMarketplace (GeM) SPV and the Confederation of Indian Industry (CII), in the presence of Smt Nirmala Sitharaman, Commerce & Industry Minister at Udyog Bhawan, New Delhi. Smt S Radha Chauhan, CEO GeM and Sh Chandrajit Banerjee, DG, CII signed the MoU on behalf of GeM SPV and CII respectively. **This MoU between GeM and CII is aimed at establishing GeM Samvaad-** a participative and collaborative approach with the industry for promoting Indian industry and entrepreneurship.

As part of this initiative

1. **Create GeM related awareness and onboard industry members from across the country.**
2. Create a GeM-Industry Forum for collaboration with the Indian Industry for, seeking inputs on the technical specifications of products and SLAs of services to be procured by the Government agencies, improving the quality of products/services procured especially from the MSMEs, organize annual Public Procurement Convention of all stakeholders and set up GeM Resource Centres at CII Regional Offices
3. The Hon'ble Minister congratulated GeM and CII for having taken this path-breaking initiative, that will go a long way in promoting the Indian industry and entrepreneurs from across the country.
4. **MoUs on similar lines shall also be signed in the future with other Industry associations.**

Common use items exempt from e-way bill

LPG, kerosene, jewellery and currency are among the common use items that have been exempted from the requirement of obtaining electronic permits for transportation under the GST regime. **The Goods and Services Tax (GST) regime, rolled out from July 1**, mandates obtaining permits called e-way bills for transporting goods consignment of more than Rs 50,000 in value with a view to checking tax evasion. A finance ministry official said the GST Council in its last meeting approved a **list of 153 items that have been exempted from the requirement of obtaining e- way bills.**

What

1. These include domesticated animals like live **bovine animals, swine and fish, fruits and vegetables, fresh milk, honey, seeds, cereals and flour.**
2. Also exempted is movement of betel leaves, **non-alcoholic toddy, raw silk, khadi, earthen pot and clay lamps, puja samagri and hearing aids.**
3. Human hair, semen including frozen semen and condoms and contraceptives has also been exempted.
4. The official said cooking gas (LPG) for supply to households and kerosene for sale under public distribution system (PDS) too have been exempted from the requirement of getting the consignment registered online before moving them.
5. On the exempt list is also postal baggage as also currency, jewellery and used personal and household effects, he said.
6. **E-way bill is also not required if goods are transported by non-motorised conveyances.** Goods transported from international ports to hinterland ports for clearance by customs have been exempted from the requirement.
7. The e-way bills, which can be checked by designated tax officials by intercepting a transporting vehicle, are aimed at helping authorities keep track of goods and inter-state commerce.

Economic Survey volume-2

Achieving the upper end of projections for economic growth at 6.75-7.5 per cent for FY18 may be difficult, cautioned part two of the Economic Survey for 2016-17, which was tabled for the first time after the financial year ended. It said there are downward risks to economic growth projected in Volume One of the Survey tabled in January.

Highlights

Monetary Management and Financial Intermediation

1. The **fiscal outcome of the Central Government in 2016-17 was marked by strong growth in tax revenue**, sustenance of the pace of capital spending and a consolidation of non-salary/pension revenue expenditure.
2. The Budget for 2017-18 introduced a number of procedural reforms, including: **the integration of the Railway Budget with the Union Budget; advancing of the date of the Union Budget to February 1**, almost by a month; **elimination of the classification of expenditure into 'plan' and 'non-plan'**; and, **restructuring of the Medium Term Expenditure Framework Statement with projected expenditures** (revenue and capital) for each demand for the next two financial years.

Monetary Management and Financial Intermediation

1. The Reserve Bank of India cut the policy rate by 50 basis points during 2016-17. However, it shifted its **monetary policy stance from accommodative to neutral in February 2017**. As of August 2017 Repo rate stood at 6.00 per cent and reverse repo rate at 5.75 per cent.
2. Financial inclusion is proceeding apace under the **Pradhan Mantri Jan Dhan Yojana**. Zero balance accounts under PMJDY has declined consistently from nearly 58 per cent in March 2015 to around 24 per cent as of December 2016.

Prices and Inflation

1. **Significant moderation in CPI headline inflation during the last three years.** CPI inflation fell to a series low of 1.5 percent in June 2017.
2. Broad based decline in all commodity groups during 2016-17, the most significant being decline in food.
3. Food inflation, which was the main driver of inflation in the past, declined significantly during the year because of improvements in supply of pulses and vegetables on the back of a normal monsoon. Core inflation-indicative of underlying trends -- too declined in the last few months.
4. Convergence between CPI and WPI inflation in the last few months.
5. **Most States/UTs witnessed sharp decline in CPI inflation in 2016-17 as compared to the previous year.**
6. Both rural and urban inflation have declined in 2016-17 and the gap between rural and urban inflation has narrowed down in recent months.

Climate Change, Sustainable Development and Energy

1. **India ratified the Paris Agreement on 2nd October, 2016.** India's actions for the post-2020 period are based on its Nationally Determined Contribution (NDC).
2. **India's NDC targets to lower the emissions intensity of GDP by 33 - 35 per cent by 2030** from 2005 levels, to increase the share of non-fossil based power generation capacity to 40 per cent of installed electric power capacity(cumulative) by 2030, and to create an additional carbon sink of 2.5-3 Gt CO₂e through additional forest and tree cover by 2030.
3. There is an urgent need to further increase the access of the poor to more efficient energy resources. Many schemes have been implemented by the government to tackle this like **Pradhan Mantri Ujjwala Yojana, PAHAL scheme, Deen Dayal Upadhyaya Gram Jyoti Yojana**. A large number of focused initiatives have been taken in various sectors of the economy to ensure a pathway of lower emission and climate resilient development.
4. India is at a stage of development that requires it to grow at a fast rate and lift the large number of their citizens from below the poverty line. Energy deprivation levels for a sizeable portion of population remain at high levels. **The SDG 7 is to ensure access to affordable, reliable, sustainable and modern energy for all.**

Agriculture and Food Management

1. **The average farm size in India is small, and declining since 1970-71.** The predominance of small operational holdings is a major limitation to reap the benefits of economies of scale in agriculture operations.

2. The progress in agriculture needs to be evaluated in terms of outcomes such as catching up with global yields of various crops as a means to increase incomes of farmers.
3. Credit is an important mediating input for agriculture to improve productivity. The predominance of informal sources of credit for farmers is a concern. There is regional disparity in the distribution of agricultural credit which also needs to be addressed.
4. The key challenge that the horticulture sector faces in India are post-harvest losses, availability of quality planting material and lack of market access for horticultural produce of small farmers.
5. Industry and Infrastructure
6. **Industrial performance has shown a moderation from 8.8 percent during 2015-16 to 5.6 percent in 2016-17.**
7. Industrial growth as per Index of Industrial Production (IIP) new series of 2011-12 shows overall IIP growth at 5 percent in 2016-17 as compared to 3.4 percent last year.
8. **The Index of Eight Core Industries growth during 2016-17 was 4.8 percent as compared to 3.0 percent in 2015-16.**
9. The Government in 2016 **introduced imposition of Minimum Import Price (MIP) to counter dumping of Steel into Indian markets.** Steps taken by the government have borne fruit since imports of Steel by India have declined by 36.2 percent while exports have risen by 102 percent in 2016-17.

Services Sector

1. **The services sector remains the key driver of India's economic growth, contributing almost 62 per cent of its gross value added growth in 2016-17.** However, the growth of this sector has moderated to 7.7 per cent in 2016-17 compared to 9.7 per cent achieved in the previous year, though it continues to be higher than the other two sectors and nearly at the top among the 15 major economies.
2. The services growth moderation is mainly due to deceleration in growth in two services categories- trade, hotels, transport, communication and services related to broadcasting (7.8 per cent), and financial, real estate & professional services (5.7 per cent). The share of services sector in total gross capital formation (GCF), at current prices has increased consistently over the last four years from 53.3 per cent in 2011-12 to 60.3 per cent in 2015-16.
3. There has been a significant growth in FDI equity inflows in 2014-15 and 2015-16 in general (27.3 per cent and 29.3 per cent) and to the services sector in particular (67.3 per cent and 64.3 per cent for top 15 services). However, in 2016-17, the growth rate of total FDI equity inflows moderated and FDI equity inflows to the services sector (top 15 services) declined.
4. **India's and world's services export trend growth were almost flat in the pre-crisis period,** while in the post-crisis period, the deceleration in trend growth of India's services was sharper than world services export growth. In 2016-17, services exports recorded a positive growth of 5.7 per cent with pick up in some major sectors like transportation, business services and financial services; and good growth in travel. However, Software services exports, accounting for around 45.2 per cent of total services, declined though marginally by 0.7 per cent.

Social Infrastructure, Employment and Human Development

1. The deterioration in quality learning in primary education sector and achievement of targeted enrolment level in the middle education is a challenge
2. Employment in India poses a great challenge in terms of its structure which is dominated by informal, unorganized and seasonal workers, and is characterized by high levels of under employment, skill shortages, with the labour markets impacted by rigid labour laws, and the emergence of contract labour.
3. The health sector in India faces many challenges in the form of declining role of public delivery of health services, high Out of Pocket (OoP) expenses on health and issues of accessibility and affordability of health services for many.

4. **The Government's Swachh Bharat Mission has had remarkable progress since its inception.** With its focus on cleanliness and Open Defecation Free (ODF) India, there has been a significant decline in the number of people who defecate in the open, which is estimated at less than 35 crores.

SCIENCE AND TECHNOLOGY

Committee constituted to for data protection

The Union **Ministry of Electronics & Information Technology (MEITY)** has constituted an expert Committee to study and identify **key data protection issues** and recommend methods for addressing them. The ten-member committee will be **headed by Supreme Court Judge (retired) Justice B N Srikrishna** and comprise of members from government, academia and Industry. The committee will study and identify key data protection issues and recommend methods for addressing them. It will also suggest a draft Data Protection Bill.

e-RaKAM portal launched

The Union Government has launched **e-Rashtriya Kisan Agri Mandi (e-RaKAM) portal** to provide a platform for farmers to sell agricultural produce. **e-RaKAM is a first of its kind initiative** that leverages technology to connect farmers from the smallest villages to the biggest markets of the world through internet.

What

1. **e-RaKAM is a digital initiative** that aims to bring together the farmers, PSUs, civil supplies and buyers on a single platform to ease the selling and buying process of agricultural products.
2. It has been developed by state-run-auctioneer MSTC Limited and **CRWC (Central Railside Warehouse Company) Limited**.
3. Under this initiative, **e-RaKAM centres are being developed throughout the country in a phased manner** to facilitate farmers for online sale of their produce.
4. The farmers will be paid through e-Payment directly into their bank accounts under the e-RaKAM initiative.

World's first plant-based Zika vaccine

Scientists from US have developed the **world's first plant-based Zika vaccine** that may be more effective, safer and cheaper than other vaccines against the mosquito-borne Zika virus. It was developed **using proteins derived from Tobacco** plant. Currently, there are no licensed vaccines or therapeutics available to combat Zika.

What

1. The plant-based Zika vaccine works against DIII (a part of a **Zika viral protein** that plays a key role for the virus to infect people).
2. **All flaviviruses have the envelope protein** on the outside part of the virus.
3. It has three domains. **The domain III has a unique stretch of DNA for the Zika virus.**
4. The vaccine uses **smallest and most unique part of the Zika virus** that can still elicit a potent and robust immune response.
5. It produces a potent protective immune response against Zika Virus and also not produces antibodies that may be cross reactive for **West Nile fever, Dengue, Yellow fever or others.**

About Zika virus

1. Zika virus is **vector borne disease transmitted primarily by Aedes aegypti mosquitoes**, the same mosquito that **transmits dengue, West Nile fever, Yellow fever.**
2. The virus has been named after **Zika forest in Uganda where it was first isolated in 1947.**
3. The worldwide **Zika threat first emerged in 2015**, infecting millions in South America.
4. The World Health Organization (WHO) had declared the disease as epidemic and global health emergency but later revoked it after the outbreak was brought under control.

Glowing water atmosphere discovered

Scientists have for the first time discovered glowing water molecules in the atmosphere of a giant Jupiter-like planet located 900 light years from Earth that is hot enough to boil iron. **This is the first evidence of an exoplanet stratosphere** - the layer of atmosphere where temperature increases with higher altitudes. Previous research spanning the past decade has indicated possible evidence for stratospheres on other exoplanets.

What

1. **The atmosphere WASP-121b - a gas giant exoplanet commonly referred to as a "hot Jupiter"** - was observed using NASA's Hubble Space Telescope.
2. **The stratosphere of WASP-121b so hot** it can make water vapour glow, which is the basis for our analysis.
3. To study the gas giant's stratosphere, scientists used spectroscopy to analyse how the planet's brightness changed at different wavelengths of light.
4. Water vapour in the planet's atmosphere, for example, behaves in predictable ways in response to certain wavelengths of light, depending on the temperature of the water.
5. At cooler temperatures, water vapour blocks light from beneath it. However, at higher temperatures, the water molecules glow.
6. The water molecules in the atmosphere of **WASP-121b similarly give off radiation as they lose energy**, but it is in the form of infrared light, which the human eye is unable to detect.
7. Theoretical models have suggested that stratospheres may define a **special class of ultra-hot exoplanets**, with important implications for the atmospheric physics and chemistry, said Tom Evans from the University of Exeter in the UK.
8. **The exoplanet orbits its host star every 1.3 days** and the two bodies are about as close as they can be to each other without the star's gravity ripping the planet apart.
9. This close proximity means that the top of the atmosphere is heated to a blazing hot 2,500 degrees Celsius - the temperature at which iron exists in gas rather than solid form.
10. **This super-hot exoplanet is going to be a benchmark for our atmospheric models**, and will be a great observational target moving into the Webb era, said Hannah Wakeford, a research fellow at the University of Exeter.

Accurate measurement of dark matter

Scientists have made the **most accurate measurement ever of the dark matter in the present-day universe**, providing support to the theory that the **elusive particle makes up majority of the cosmos**. The measurements of the amount and "**clumpiness**" (or distribution) of dark matter were made with a precision that, for the first time, rivals that of inferences from the early universe by the **European Space Agency's orbiting Planck observatory**.

What

1. The new results from the **Dark Energy Survey (DES)** collaboration is close to "forecasts" made from the Planck measurements of the distant past, allowing scientists to understand more about the ways the universe has evolved over 14 billion years.
2. Most notably, the result supports the theory that **26 per cent of the universe is in the form of mysterious dark matter** and that space is filled with an also-unseen dark energy, which is causing the accelerating expansion of the universe and makes up **70 per cent**.
3. Paradoxically, it is easier to measure the **large-scale clumpiness of the universe in the distant past than it is to measure it today**.
4. In the first 400,000 years following the Big Bang, the universe was filled with a glowing gas, the light from which survives to this day.
5. Planck's map of this cosmic microwave background radiation gives us a snapshot of the universe at that very early time. Since then, the gravity of dark matter has pulled mass together and made the universe clumpier over time. However, dark energy has been fighting back, pushing matter apart.

6. Using the Planck map as a start, cosmologists can calculate precisely how this battle plays out over 14 billion years.
7. The DES measurements, when compared with the Planck map, **support the simplest version of the dark matter/dark energy theory.**
8. **The primary instrument for DES is the 570-megapixel Dark Energy Camera,** one of the most powerful in existence, able to capture digital images of light from galaxies eight billion light-years from Earth. Scientists on DES are using the camera to map an eighth of the sky in unprecedented detail over five years.

TRAPPIST-1 older than solar system

The ultra-cool dwarf star of the intriguing **TRAPPIST-1 planetary system** is up to twice as old as our solar system, a study has found. **TRAPPIST-1 is a system of seven Earth-size planets orbiting an ultra-cool dwarf star about 40 light-years away.** In a new study, researchers found that the **TRAPPIST-1 star is quite old:** between 5.4 and 9.8 billion years. This is up to twice as old as our own solar system, which formed some 4.5 billion years ago. At the time of its discovery earlier this year, scientists believed the TRAPPIST-1 system had to be at least 500 million years old. "Our results really help constrain the evolution of the TRAPPIST-1 system, because the system has to have persisted for billions of years," said Adam Burgasser, an astronomer at the University of California, San Diego in the US.

What

1. **This means the planets had to evolve together,** otherwise the system would have fallen apart long ago," said Burgasser, first author of the research published in The Astrophysical Journal.
2. **It is unclear what this older age means for the planets' habitability.** On the one hand, older stars flare less than younger stars, and researchers confirmed that TRAPPIST-1 is relatively quiet compared to other ultra-cool dwarf stars.
3. On the other hand, since the planets are so close to the star, they have soaked up billions of years of high-energy radiation, which could have boiled off atmospheres and large amounts of water, researchers said.

Largest volcanic region on Earth discovered

Scientists have uncovered the largest volcanic region on Earth – consisting of almost 100 volcanoes – **two kilometres below the surface of the vast Antarctic ice sheet.** Researchers at Edinburgh University in the UK revealed a staggering 91 volcanoes, adding to the 47 others that had been discovered previously, with **the highest as tall as the Eiger, which stands at almost 4,000 metres, in Switzerland.**

What

How Does The GSLV Launch Make India A Unique Space Power ?

1. **The equivalent of an Earth ocean may have evaporated from each TRAPPIST-1 planet** except for the two most distant from the host star: planets g and h, they said.
2. However, old age does not necessarily mean that a planet's atmosphere has been eroded, said Eric Mamajek, deputy programme scientist for NASA's Exoplanet Exploration Programme.
3. **Given that the TRAPPIST-1 planets have lower densities than Earth,** it is possible that large reservoirs of volatile molecules such as water could produce thick atmospheres that would shield the planetary surfaces from harmful radiation.
4. A thick atmosphere could also help redistribute heat to the dark sides of these tidally locked planets, increasing habitable real estate, researchers said. "If there is life on these planets, I would speculate that it has to be hardy life, because it has to be able to survive some potentially dire scenarios for billions of years.

1. **The newly discovered volcanoes range in height from 100 to 3,850 metres.** All of them are covered in thick layers of ice.
2. **These active peaks are concentrated in a region known as the west Antarctic rift system,** which stretches 3,500 km from Antarctica's Ross Ice Shelf to the Antarctic Peninsula.
3. We also suspect there are even more on the bed of the sea that lies under the Ross ice shelf, it is very likely this region will turn out to be the densest region of volcanoes in the world, greater even than east Africa, where mounts Nyiragongo, Kilimanjaro, Longonot and all the other active volcanoes are concentrated," said Bingham.



- Researchers said that any activity of this range may have crucial implications for the rest of the planet.
4. **If one of these volcanoes were to erupt it could further destabilise west Antarctica's ice sheets.** Anything that causes the melting of ice – which an eruption certainly would – is likely to speed up the flow of ice into the sea," said Bingham.
 5. Researchers also pointed to an alarming trend that most volcanism in the world at present is in regions that have only recently lost their glacier covering – after the end of the last ice age.
 6. **This could happen in west Antarctica, where significant warming in the region caused by climate change has begun to affect its ice sheets,** researchers said.

NAVIC system to rival US GPS

To ensure that strategic and crucial sectors are not dependent on US-made GPS, India took a major step towards **indigenisation as ISRO's regional positioning system 'NAVIC' will now rely on Indian atomic clocks.** ISRO's ISTRAC cell and the **National Physical Laboratory** have signed a MoU under which the latter will help authenticate precise timings for the space agency, crucial for its satellites, and also end its dependence on American GPS.

What

1. **The NPL, an institute under the Council of Scientific and Industrial Research (CSIR),** is one of oldest in the country, founded before India's independence, and provides high precision **Indian Standard Time (IST)**, through its atomic clocks.
2. These atomic clocks are synchronised with the atomic clock of the **International Bureau of Weights and Measures (BIPM), France,** which provides the Universal Time Coordinated (UTC) to the world.
3. There are some 400 atomic clocks in the world and India has 4-5 of them. These clocks are so precise that the margin of error in their functioning is just of a second in 100 million years.
4. Such high precision timings, where nanoseconds also matter, are very crucial for ISRO's satellites. The space agency is working to build its own Indian version of GPS – the NAVIC – and has launched its own **Indian Regional Navigation Satellite System (IRNSS).**
5. The accuracy of satellite navigation system depends on the proper synchronisation of on-board clocks and at least four satellites are needed to know someone's position accurately.

The long-term plan is to emphasis on using NAVIC in India. For that, we cannot rely on the GPS.

MISCELLANEOUS

Controversy over Article 35A

Article 35A of the Constitution of India, unknown to the public domain till recent times, has raked up an intense debate in the country. Political narrative has a paradigm shift.

What

- Article 35A of the constitution empowers J&K legislature to define state's "permanent residents" and their special rights and privileges.**
- It was added to the constitution through a presidential order of 1954 with the then J&K government's concurrence
- Through 1927 and 1932 notifications**, Dogra ruler of the princely state of J&K, Maharaja Hari Singh imposed a law that defined state subjects and their rights. The law also regulated migrants to the state. J&K joined India through instrument of accession signed by its ruler Hari Singh in October 1947.
- After J&K's accession, popular leader Sheikh Abdullah took over reins from Dogra ruler.** In 1949, he negotiated J&K's political relationship with New Delhi, which led to the inclusion of Article 370 in the Constitution.
- Article 370 guarantees special status to J&K, restricting Union's legislative powers over three areas: defence, foreign affairs and communications.
- However, under the 1952 Delhi Agreement between Abdullah and Nehru, several provisions of the Constitution were extended to J&K via presidential order in 1954. Article 35A was inserted then.
- J&K's Constitution was framed in 1956.** It retained Maharaja's definition of permanent residents: All persons born or settled within the state before 1911 or after having lawfully acquired immovable property resident in the state for not less than ten years prior to that date. All emigrants from Jammu and Kashmir, including those who migrated to Pakistan, are considered state subjects. The descendants of emigrants are considered state subjects for two generations.
- Permanent residents law prohibits non-permanent residents from permanent settlement in the state, acquiring immovable property, govt jobs, scholarships and aid.
- It was also interpreted as discriminatory against J&K women. It disqualified them from their state subject rights if they married non-permanent residents. But, in a landmark judgment in October 2002, J&K high court held that women married to non-permanent residents will not lose their rights. The children of such women don't have succession rights.

Why Being Debated

- An NGO, We the Citizens, **challenged 35A in SC in 2014 on grounds that it was not added to the Constitution through amendment under Article 368.**
- It was never presented before Parliament, and came into effect immediately, the group argued.
- In another case in SC last month, two Kashmiri women argued that the state's laws, flowing from 35A, had disenfranchised their children.
- Fear that it would lead to further erosion of J&K's autonomy and trigger demographic change in Muslim majority valley.
- Political parties say Kashmir resolution lies in greater autonomy; separatists fan paranoia against possibility of Hindus 'flooding' the valley.
- However, in the last 70 years, demography of Kashmir Valley has remained unchanged even as Hindu majority in Jammu and Buddhists in Ladakh have rights to buy property and settle in the Valley.

ICT Figures 2017

India and China are home to 39 per cent of the 830 million young people worldwide who use the Internet, according to a UN report. The data released by **the International Telecommunication Union (ITU)**, the United Nations specialised agency for **Information and Communication Technologies (ICTs)**, shows that of the 830 million young people online worldwide, 320 million, or 39%, are in China and India.

What

1. The ITU's ICT Facts and Figures 2017 also shows a **significant increase in broadband access and subscriptions with China** leading the way. The ICT data shows that youths (15-24 years old) are at the forefront of Internet adoption.
2. In **Least Developed Countries (LDCs)**, up to 35% of individuals using the Internet is aged 15-24, compared with 13% in developed countries and 23% globally.
3. The Figures shows that great strides are being made in expanding Internet access through the increased availability of broadband networks.
4. **Digital connectivity plays a critical role in bettering lives**, as it opens the door to unprecedented knowledge, employment and financial opportunities for billions of people worldwide.
5. Most of the increase in **high-speed fixed broadband subscriptions in developing countries** can be attributed to China, which accounts for 80% of all fixed-broadband subscriptions at 10 Mbit/s or above in the developing world.
6. Mobile broadband prices, as a percentage of gross national income per capita, dropped by half between 2013 and 2016.
7. In 2017, **the global Internet penetration rate for men stands at 50.9% compared to 44.9% for women.**
8. International Internet bandwidth grew by 32% between 2015 and 2016, with Africa registering an increase of 72% during this period, the highest of all regions.

USCIS report

More than 21 lakh Indian technology professionals have applied for **H1B work visas** in the last **11 years**, an official report has said. The report of the **US Citizenship and Immigration Services (USCIS)** has also refuted the impression that those who applied for the visa were not highly qualified. On an average, **their salary over the last 11 years** has been \$92,317 and an overwhelming majority of them are masters or bachelor's degree holder. According to the report since 2007 till June this year, the USCIS received 3.4 million (34 lakh) H1B visas applications, of which people from India accounted for 21 lakh.

What

1. During the same period, **the US issued H1B visas to 26 lakh people**, the USCIS said in its report, which however does not give countrywide breakdown.
2. In terms of number of H1B applications between 2007 and 2017, India is followed by a distant China with 296,313 H-1B applications, Philippines (85,918), South Korea (77,359), and Canada (68,228).
3. **The report said majority (23 lakh) of the beneficiary of H1B visas** was in the age group of 25-34, and 20 lakh came from the computer related occupation category.
4. Computer was followed by architecture, engineering, and surveying (318,670), education (244,000), administrative specialisations (245,000), and medicine and health (185,000).
5. In all these 11 years, more than 2,000 foreign nationals of more than 65 years of age received H1B visas. This year alone so far 122 H1B visas have been allocated to those above 65 years.
6. The report said custom computer programming services industry received the maximum number of 999, 901 H1B visas in these years. It was followed by computer systems design services (287,000) and college universities and professional schools (229,00).

7. Contrary to the general perception, **the average salary of H1B visas have increased significantly since 2007** when it was \$68,159. In 2017, the average salary of H1B visas holder foreign guest worker is \$92,317.

45th Chief Justice of India

Justice Dipak Misra, the senior-most judge in the Supreme Court, will be the **45th Chief Justice of India (CJI), succeeding incumbent J S Khehar**. An official notification announcing Misra's appointment was issued by the law ministry. One of the most eloquent judges in the apex court, Justice Misra, 63, has been a part of several key verdicts, such as sending **Mumbai blasts convict Yakub Memon**. He will have tenure of over 13 months as the CJI after he takes over on August 28 has a sensitive assignment on hand — the vexatious title dispute in the Ram Mandir and the Babri Masjid case.

360-degree appraisal system

A **parliamentary panel has suggested making partial disclosure to civil services** officers of their performance appraisal report on the lines of the process followed by the Army. It said the newly innovated "**360-degree appraisal system**" for the appointment of bureaucrats at the top level in the central government need to be made more transparent and rule based. The **committee noted the concerns raised by various stakeholders** that the empanelment under the Central Staffing Scheme is not providing a level playing field to all participating services, **especially the non-IAS services**.

What

1. All the institutions or **bodies involved in the empanelment** and appointment process of joint secretary and above level posts under the Government of India, predominantly comprise officers of only one service, the IAS, the Department Related Parliamentary Standing Committee on Personnel, Public Grievances, Law and Justice said in its report tabled in Parliament.
2. **This is perceived by non-IAS services** to have tilted the balance in favour of the IAS in the empanelment and placement process.
3. The committee felt there was a need to make the process broad-based by associating officers of other services in the empanelment and placement process for appointment to the posts of joint secretary and above and stressed that.
4. It favoured making the appraisal process consultative and transparent but also appreciated the difficulty for anyone to be truly objective "if his/her assessment is to be disclosed to the person reported upon".
5. The panel said some amount of sanctity should be brought back to the appraisal system by devising a mechanism wherein the entire report is not disclosed to the appraisee, but "there is a partial disclosure only".
6. The committee, therefore, desires that **the government should look into the aspect of the limited disclosure**, somewhere between the Annual Confidential Report and Annual Performance Appraisal Report to retain the best of both the procedures.
7. The committee was informed by "experts and stakeholders", in their submissions, about the appraisal system in the Army.
8. The committee said the 360-degree appraisal system — that includes **assessing bureaucrats on integrity and reputation**, through a **comprehensive background check**, before their empanelment — is an innovation of the government for appointment of bureaucrats at the top level in the central government.

New Chairman of CBFC

The **Centre has removed Pehraj Nihalani from the post of the Chairman of the Central Board of Film Certification (CBFC)**. Noted lyricist and screenplay writer **Prasoon Joshi was appointed as the new CBFC chief** by the Government to replace Nihalani in a surprise move. The Information and Broadcasting (I&B) Ministry also **reconstituted the film censor board** by inducting several new members including popular Bollywood actress Vidya Balan. Kannada film director TS Nagabharana, filmmaker Vivek Agnihotri, author Narendra Kohli, popular actresses Gautami Tadimalla and Jeevitha Rajasekhar are other new members of the reconstituted CBFC.

What

1. **46-year old Joshi, who was conferred Padma Shri by the Government in 2015** for his contributions towards the field of arts, literature and advertising, will remain at the helm of affairs at the CBFC as its chairman for a period of three years.
2. The Central Government is pleased to appoint Praseon Joshi as Chairperson of the Central Board of Film Certification in an honorary capacity from **11th August, 2017 for a period of three years or until further orders, whichever is earlier.**
3. The **23-member Central Board of Film Certification (CBFC)**, which is commonly referred to as the censor board, has been mired in controversy ever since the Nihalani took over as its chief in January 2015. Several filmmakers have complained of arbitrary objections and cuts sought by the board in the recent past.

World Elephant Day 2017

World Elephant Day is an annual global event celebrated across the world on August 12, dedicated to the preservation and protection of elephants. The goal of World Elephant Day is to create awareness about the plight of elephants and to share knowledge and positive solutions for the better care and management of captive and wild elephants. **African elephants** are listed as “vulnerable” and Asian elephants as “endangered” in the **IUCN Red List of threatened species**. As per the available population estimates, there are about 400,000 African elephants and 40,000 Asian elephants.

What

1. **World Elephant Day** is celebrated to focus the attention of various stakeholders in supporting various conservation policies to help protect elephants, including improving enforcement policies to prevent illegal poaching and trade in ivory, conserving elephant habitats, providing better treatment for captive elephants and reintroducing captive elephants into sanctuaries.
2. **The elephant is part of India’s animal heritage** and the Government celebrates this day to spread awareness about the conservation of the species.
3. Though a **nation-wide population census exercise for elephants is conducted every five years, this is the first time than an all-India synchronised elephant census was carried out one year in advance**, to avoid errors in estimation arising from the significant movement of elephants across different states.
4. The field operations of the census were completed in May 2017 and data has been compiled on direct count, indirect count (dung count), waterhole and salt lick observations. Elephant distribution mapping has also been done.
5. **World Elephant Day was conceived in 2011 by Canadian filmmakers Ms. Patricia Sims and Mr. Michael Clark of Canazwest Pictures** and the Secretary-General of the Elephant Reintroduction Foundation of Thailand, Sivaporn Dardarananda.
6. It was officially funded, supported and launched by Ms. Sims and the Elephant Reintroduction Foundation on August 12, 2012. Since then, Ms. Sims continues to lead and direct World Elephant Day, which is now supported by over 65 wildlife organisations and many individuals in several countries across the globe.
7. Union Environment, Forest and Climate Change Minister, Dr. Harsh Vardhan, launched ‘**Gaj Yatra**’, a nationwide campaign to protect elephants on the occasion of World Elephant Day. **The campaign is planned to cover 12 elephant range states.**
8. **The Environment Minister released the All India Census 2017 Report on elephants** as also the Agreed Points of Action on Trans-Boundary Conservation of Elephants by India and Bangladesh and a document titled ‘Right of Passage’ on elephant corridors in India.
9. A compilation, ‘**Glimpses of Initiatives Taken for Elephant Conservation in India (2012-2017) based on Parliamentary Questions and Replies**’ by ENVIS Centre, WWF-India and the Project Elephant Division, MoEF&CC, was also released.

10. **The 'Gaju' mascot**, which was released by the Ministry in 2012, will be helm the campaign. The campaign will be led by the Wildlife Trust of India.

International Biodiesel Day

The **International Biodiesel Day (IBD)** is celebrated every year on **August 10** in a bid to create awareness about **non fossil-fuels (Green Fuels)**. The day also honours the research experiments by **Sir Rudolf Diesel who ran an engine with peanut oil in the year of 1893**. His research experiment had predicted that vegetable oil is going to replace the fossil fuels in the next century to fuel different mechanical engines.

About Biodiesel

1. The **Biodiesel is an alternative fuel** which can be used in place of fossil fuels.
2. It is manufactured from **vegetable oils, recycled grease, algae, and animal fat**.
3. It is produced through a chemical process called transesterification, in which glycerine is separated from the vegetable oil or fat.
4. It can be seen as alternative to conventional fossil fuels.

Benefits of Biodiesel

1. **Biodiesel is a renewable fuel.**
2. It can be used in diesel engines with little or no modification. It can be produced locally.
3. It is **biodegradable, sustainable, non-toxic environment friendly fuel**.
4. On burning, it emits 60% less carbon dioxide (CO₂).
5. The energy produced by biodiesel on combustion is approximately 90% of that of energy produced by petroleum diesel.
6. It is also used in non-engine applications such as to remove paint etc.
7. **Byproducts—methyl esters and glycerine** obtained during production of biodiesel can be used preparation of soaps and other products.

Global Retirement Index 2017

India was ranked last at 43rd position in Global Retirement Index (GRI) 2017 published by French asset Management Company Natixis Global. **The index ranks 43 countries on the basis of four factors viz. the material means to live comfortably in retirement** (Material Well-being); **access to quality health services** (Health); **access to quality financial services to help preserve savings value** and **maximize income** (Finances) and a clean and safe environment (Quality of Life).

What

1. The 43 countries include members of the **Organization for Economic Co-operation and Development (OECD)**, International Monetary Fund (IMF) advanced economies and the BRIC countries (Brazil, Russia, India and China).
2. Top three countries in **GRI 2017** are Norway, Switzerland and Iceland. India ranks 43rd and has the same score compared to 2016 GRI.
3. India also ranks the lowest among the BRIC economies.
4. India's rank in all sub-indices is also in the bottom five. India position in all sub-indices is Material Well-being (41st), Health (43rd), Finances (39th) and Quality of Life (43rd).
5. India has the lowest income per capita of all countries in the GRI.
6. **India ranks first in old-age dependency, second in tax pressure and sixth in interest rates.**
7. Interm of governance indicator India ranks as the fifth worst among all countries in the GRI.
8. It also has the **tenth-lowest score for the bank non-performing loans indicator**.
9. India ranked last in the Quality of Life sub-index.
10. India's environmental factors indicator has improved due to progress in CO₂ emissions per GDP.

45th Chief Justice of India

President Ram Nath Kovind has appointed **Justice Dipak Misra (63)**, senior-most judge of the Supreme Court as the next Chief Justice of India. **He will be 45th CJI** and succeeds Justice JS Khehar. He will have tenure of over 13 months till October 2018. He will be the third person from Odisha to be appointed the CJI, after Justices Ranganath Misra and G B Pattanaik.

What

1. **Justice Dipak Misra was born on 3 October 1953.**
2. He is the nephew of Justice Ranganath Misra who was CJI from September 1990 – November 1991.
3. He had enrolled as an advocate in 1977 and had practised in constitutional, civil, criminal, revenue, service and sales tax matters in the Orissa High Court and Tribunals before was elevated to the High Court bench.
4. He was appointed **Additional Judge of the Orissa High Court in January 1996** and later was transferred to the Madhya Pradesh High Court in March, 1997 where he became a permanent judge.
5. He had led the SC bench which rejected the 1993 Mumbai serial blasts convict Yakub Memon's appeal to stop his execution.

How goldfish make alcohol

Scientists have uncovered how the goldfish produce alcohol to survive **harsh winters beneath frozen lakes**, a remarkable ability that makes it one of the most resilient pets under human care. **Humans and most other vertebrate animals die within a few minutes without oxygen.** Yet goldfish and their wild relatives, **crucian carp**, can survive for days, even months, in oxygen-free water at the bottom of ice-covered ponds. During this time, **the fish are able to convert anaerobically produced lactic acid into ethanol**, which then **diffuses across their gills into the surrounding water and avoids a dangerous build-up of lactic acid in the body.**

What

1. Scientists at the **University of Oslo in Norway and University of Liverpool in the UK** found the molecular mechanism behind this highly unusual ability, which is unique among vertebrates and more commonly associated with brewer's yeast.
2. The team has shown that **muscles of goldfish and crucian carp contain not just the usual one**, but two sets of the proteins normally used to channel carbohydrates towards their breakdown within a cell's mitochondria – a key step for energy production.
3. **While one set of these proteins appears very similar to that in other species**, the second set is strongly activated by the absence of oxygen and shows a mutation that allows channelling of metabolic substrates to ethanol formation outside the mitochondria.
4. **During their time in oxygen-free water in ice-covered ponds**, which can last for several months in their northern European habitat, blood alcohol concentrations in crucian carp can reach more than 50 mg per 100 millilitres, which is above the drink drive limit in these countries. However, this is still a much better situation than filling up with lactic acid, which is **the metabolic end product for other vertebrates, including humans, when devoid of oxygen.**
5. **The ethanol production allows the crucian carp to be the only fish species surviving** and exploiting these harsh environments, thereby avoiding competition and escaping predation by other fish species with which they normally interact in better oxygenated waters.

International Youth Day

The **International Youth Day is observed across the world on 12 August** to draw attention to a given set of cultural and legal issues surrounding youth. **The theme for this year is 'Youth Building Peace'.**

What

1. It aims at **celebrating young people's contributions in preventing conflicts** and bringing about transformations along with **social justice, inclusion and sustainable peace.**
2. It also reaffirms the important role youth

Background

1. The International Youth Day (IYD) was instituted by the United Nations General Assembly (UNGA) by passing resolution **in December 1999.**
2. It was first observed on 12 August, 2000.
3. The day was instituted by UNHA on the recommendation made by the World Conference of Ministers Responsible for Youth held in Lisbon (Portugal) from 8 to 12 August 1998.

can play in deterring and resolving conflicts, and are key constituents in ensuring the success of both peacekeeping and peacebuilding efforts.

13th Vice President of India

Former Union Minister **M Venkaiah Naidu was sworn in as 13th Vice President of India**. He was administered the oath of office by President Ram Nath Kovind at a special function at Rashtrapati Bhavan. After the swearing in **he took charge as the Chairman of Rajya Sabha**. He also chaired the proceedings of the Upper House. He was elected as the Vice President after defeating opposition candidate Gopal Krishna Gandhi.

National Handloom Day

The **National Handloom Day was observed every year on 7 August** to honour the handloom weavers in the country and also carter an impetus to **India's handloom industry**.

What

1. This year it was **third edition of the National Handloom Day** after it was instituted in 2015.
2. The celebration of the day **seeks to highlight the contribution of handloom to the socioeconomic development of the country**.
3. It promotes handlooms to increase income of weavers and also enhance their pride.

New Vice Chairman of NITI Aayog

The Union Government has appointed **economist Rajiv Kumar as the new vice-chairman of National Institution for Transforming India (NITI) Aayog**. Rajiv Kumar will succeed Arvind Panagariya. As Vice Chairman of NITI Aayog he will hold cabinet minister rank. Prime Minister is ex-officio Chairperson of the Aayog. Government also appointed Vinod Paul, head of the Pediatrics department at AIIMS as a member of the NITI Aayog.

Interim PM of Pakistan

Pakistan's Petroleum Minister **Shahid Khaqan Abbasi was elected the 18th Prime Minister of Pakistan** by the National Assembly. Abbasi, nominee of ruling Pakistan Muslim League (N) secured 221 votes in the House of 342. **Abbasi succeeds Nawaz Sharif** who was disqualified by the Supreme Court over the Panama Papers scandal. He will be **interim PM of Pakistan**. He will vacate the position for Nawaz Sharif's brother Shahbaz Sharif, Punjab Chief Minister gets elected to the National Assembly.

Background

1. The Union Government had declared **7 August as the National Handloom Day in July 2015** with the objective to generate awareness about importance of India's handloom industry.
2. **The date August 7 was chosen to commemorate the Swadeshi Movement** which was launched on this date in 1905 in the Calcutta Town hall to protest against partition of Bengal by the British Government.
3. The movement had aimed at reviving domestic products and production processes.
4. **The first National Handloom Day was inaugurated on 7 August 2015** by Prime Minister Narendra Modi at Chennai, Tamil Nadu.