



## INDIAN POLITY

### 1. Right to access Internet cannot be curtailed, says SC

#### Why in news?

- Citizens have the **right to access the Internet** to gain information, wisdom and knowledge and their right cannot be curtailed unless it encroaches into the boundary of illegality.
- The **fundamental right of expression** includes “the right to be informed and the right to know and the feeling of protection of expansive connectivity” the Internet offers on the click of a button.
- A general prohibition on all online content about pre-natal sex determination will curtail the fundamental right to know of a genuine information-seeker.

#### Section 22

- The prohibition should kick in only if the content found online is violative of **Section 22 (prohibition of advertisement relating to pre-natal determination of sex)** under the **Pre-conception and Pre-natal Diagnostic Techniques (Prohibition of Sex Selection) (PCPNDT) Act of 1994**.
- The Centre said the prohibition under Section 22 should be only on paid ads for sex determination or online advertisements masquerading as information.

#### Assurance to SC

- The three Internet search engines — **Microsoft, Google India and Yahoo! India** — gave their assurances to the Supreme Court that they would neither advertise nor sponsor advertisements violative of the **PNPCDT Act**.
- The trio said they had already **appointed ‘in-house’ experts to spot illegal content** and pulls them down.
- The centre said **nodal officers had been appointed** at State levels to keep tabs on the Net for offensive material contravening **Section 22** of the Act.
- In case the nodal officers **detect illegal online content**, they would communicate with the **search engine’s experts**, which would take it off within the next 36 hours of receiving the information.
- These experts would then follow it up by providing the nodal officers concerned with an action taken report.

### 2. Can't ban MPs from other professions: SC

- Chief Justice of India said, finding no merit in a petition to ban legislators from practicing other professions, especially law.
- SC dismissed a petition filed by advocate Ashwini Upadhyay despite strong arguments raised by the latter that beedi or liquor barons eventually become MPs and sit on committees to influence the destiny of their businesses.
- The Chief Justice said he had a valid point, but the court could not frame policies.

- The petition that the restriction imposed on public servants and judges against engaging in other professions should apply to lawmakers.

### **3. Rail regulator sees green light**

- The Centre cleared the decks for setting up an independent rail regulator.
- The move will improve the services offered to passengers, provide comfort to investors in the rail sector and will enhance transparency and accountability.

#### **Rail Development Authority**

- It will be based in Delhi with an initial corpus of Rs. 50 crore and will be set up through an executive order.
- The RDA will act within the parameters of the **Railway Act, 1989** and only make recommendations to the Ministry which will take a final call on passenger and freight fares.
- The Authority's primary functions will be to
  - Recommend tariff "commensurate with costs,"
  - Frame principles for social service obligation,
  - Ensure a level playing field for stakeholders by suggesting policies for private investment.
  - Fixing efficiency standards and
  - Resolve disputes related to future concession agreements.
  - It will also **collect, analyze and disseminate information and statistics** concerning the rail sector.
- The need for a regulator has been emphasized by various committees, including the **Dr. Bibek Debroy Committee** on Mobilization of Resources for Major Railway Projects and Restructuring of Railway Ministry in 2015, the **National Transport Development Policy Committee (NTDPC)** in 2014 and **Expert Group** under the Chairmanship of Dr. Rakesh Mohan in 2001.

### **4. Centre hands over to SC accreditation guidelines for NGOs, VOs**

- The new guidelines framed for accreditation of nearly 30 lakh NGOs and voluntary organizations (VOs) in the country was submitted by centre to the SC
- Ministry of Rural Development framed the accreditation guidelines to regulate "manner in which the VOs/NGOs, which are recipient of grants, would maintain their account, the procedure for audit of the account, including procedure to initiate action for recovering of the grants in case of misappropriation and criminal action.

#### **Nodal agency**

- NITI Aayog has been **appointed as the nodal agency** for the purpose of registration and accreditation of VOs/NGOs seeking funding from the Government of India.
- The Aayog has been also tasked with maintaining of database systems to manage and disseminate information relating to NGOs/VOs.
- The existing portal at NITI Aayog (NGO-Darpan) shall be strengthened and aligned with **accreditation-like functions** which should also provide a snapshot of the NGO with regard to its ongoing and past work, particularly with respect to public and foreign funds so as to facilitate grant making authorities on the bona fides.

- The registration system should facilitate the seamless operation of the IT Act and the FCRA with respect to NGOs without the need for cumbersome and intrusive processes, which create mutual distrust and scope for misuse.
- The formulated guidelines demand grantee institutions to upload photographs in support of the performances and geo-tag assets to help monitoring of their activities.

### **Monitoring Progress reports**

- The periodical progress reports from grantee institutions should be incorporated in the NGO scheme work flow on the website of the ministry, with the grantee institution making data entry under a login and password.
- The progress report in a processed form shall also be available in the public domain preferably with a GIS interface.

### **Criminal prosecution**

- The Supreme Court had in January directed the government to audit nearly 30 lakh NGOs which received public funds but consistently failed to explain how they spent the money.
- The court had ordered that any NGO, found in the audit, to have cooked its books or indulged in misappropriation of the public funds should be subject to immediate criminal prosecution.
- Besides, the government should initiate civil recovery proceedings from these rogue NGOs.
- The court had demanded that the government file a compliance report by March 31, 2017.
- The judicial order was unprecedented as defaulting NGOs were till then only subjected to blacklisting by the government.

## **5. Suicide isn't a criminal act**

### **Mental Healthcare Bill**

- The new act decriminalizes suicide
- Instead of punishing him/her under **Section 309 of the Indian Penal Code** (attempt to suicide) with an open trial, a fine (even though in most cases a token amount) or imprisonment extending to a year, the new Bill reinvents the state in the role of a caregiver to the survivor of the suicide attempt.
- The goal is to prevent the person from trying the act again. One clause in the new Bill says the government "shall, in particular, plan, design and implement public health programmes to reduce suicides and attempted suicides."
- However, the new Bill does not define suicide. Differences among suicide researchers as to what constitutes suicide remain.
- The Law Commission of India called Section 309 "monstrous". Criminalization of suicide was not in tune with the global wavelength, the Supreme Court once said.

### **International scenario**

- Unlike the Supreme Court's Constitution Bench which concluded in the **Gian Kaur case** that the right to life does not include the right to die, international case laws tolerate even euthanasia.
- In McKay v. Bergstedt (1990), the Supreme Court of Nevada took the view that the desire of a patient for withdrawal of his respirator did not tantamount to suicide but was rather an exercise of his constitutional and common law right to "discontinue unwanted medical treatment"

- In **Gian Kaur vs. State of Punjab**, a five judge Constitutional Bench held that the "right to life" is inherently inconsistent with the "right to die" as is "death" with "life". In furtherance, the right to life, which includes right to live with human dignity, would mean the existence of such a right up to the natural end of life. It may further include "death with dignity" but such existence should not be confused with unnatural extinction of life curtailing natural span of life. In progression of the above, the constitutionality of Section 309 of the I.P.C, which makes "attempt to suicide" an offence, was upheld, overruling the judgment in **P. Rathinam's case**

## 6. Ethnic pressure and a fragile peace

### The Naga question

- A rollback of the creation of new districts will obviously appease the Nagas in the hills.
- The Kukis got a new district, **Kangpokpi** (culled out from areas of Naga-dominated Senapati district).
- The UNC operates under the patronage of the **National Socialist Council of Nagalim (Isak-Muivah)** with which the Centre signed a "framework agreement" in 2015 to solve the decades-old Naga insurgency.
- Nagas want all Naga-inhabited territories in Manipur, Assam, Arunachal Pradesh and Nagaland to come under "Greater Nagalim" which all States barring Nagaland vehemently oppose.
- Nagas "**shared sovereignty**" condition won't please the **Meiteis** in the valley who comprise roughly 60% of the population but live in a tenth of the area of Manipur.
- The hill tribes are roughly 40% of the population and they live in hill districts which are spread over 90% of Manipur's total area.
- Even if the problem with the NSCN(I-M) is sorted out, there's the **NSCN (Khaplang) faction**, which broke the ceasefire with the Centre, to contend with — and a host of other insurgent groups each fighting their own cause including the valley-based People's Liberation Army.
- State government will be under pressure to get the Centre to repeal the **Armed Forces (Special Powers) Act**, which has been in place in the State since 1980.

### Inner Line permit issue

- It's a Meitei demand, that outsiders be allowed access to the State only by using Inner Line permits, and since they, despite being in a majority, already feel constricted in their own State, their voice has to be heard.
- On the other hand, the Nagas and Kukis, who have long complained that the administration is leaning towards Meiteis, are uneasy about it, and there have been widespread protests for and against it.

## 7. Electoral reforms: Crowd funding parties

- The government will soon launch the **electoral bonds scheme** to fund political parties as proposed in this year's Budget.
- He defended the decision to lift the cap on **corporate funds** to political parties
- It was an improvement from the current situation where companies siphon funds from their business activities to fund parties with 'unclean money.'
- The amendments introduced in the Finance Bill abolished the funding cap of 7.5% of previous three years' net profits under the Companies law.

- The reforms aimed at giving 'some protection to identities (of donors), expanding the constituency of donors and encouraging clean money' coming into politics.
- He suggested at least all major political parties should collect their donations through online payment.
- These changes need to be seen in conjunction with the amendments to the **Foreign Contribution (Regulation Act)** made last year to change rules that labelled an Indian company as a foreign source of funds if it had some NRI or foreign shareholders.
- Now when sectoral caps have been lifted in almost every sector to 74% and 100%, you won't find ten donors in India who won't get covered by that definition.

## **8. Changes in Motor vehicle act**

- **The Motor Vehicles (Amendment) Bill** passed by the Lok Sabha will take a little more time to come into force, since it has not cleared the Rajya Sabha in the Budget session.

### **Changes**

- The Centre assumes a direct role in the reforms.
- It will introduce guidelines that bind State governments in several areas, notably in creating a framework for taxicab aggregators, financing insurance to treat the injured and to compensate families of the dead in hit-and-run cases, prescribing standards for electronically monitoring highways and urban roads for enforcement and modernizing driver licensing.

### **Need of the Reforms**

- There is a dire need to have clear rules and transparent processes in all these areas, since transport bureaucracies have remained unresponsive to the needs of a growing economy that is witnessing a steady rise in motorization.
- The bottleneck created by their lack of capacity has stifled regulatory reform in the transport sector and only encouraged corruption.
- The comprehensive recommendations of the **Sundar Committee on road safety** have been left on the back burner for nearly a decade.

### **Concerns**

- There is some concern that it overly emphasizes the concurrent jurisdiction of the Centre at the cost of State powers.
- The IIT Delhi's Road Safety in India report of 2015 points out that imposing stricter penalties tends to reduce the level of enforcement of road rules.
- The amendments to the MV Act set enhanced penalties for several offences, notably drunken driving, speeding, jumping red lights and so on, but periodic and ineffective enforcement, which is the norm, makes it less likely that these will be uniformly applied.
- Without an accountable and professional police force, the ghastly record of traffic fatalities, which stood at 1,46,133 in 2015, is unlikely to change.
- State governments must prepare for an early roll-out of administrative reforms prescribed in the amended law, such as issuing learner's licences online, recording address changes through an online application, and electronic service delivery with set deadlines.
- Indeed, to eliminate corruption, all applications should be accepted by transport departments online, rather than merely computerizing them.
- Protection from harassment for good Samaritans who help accident victims is something the amended law provides, and this needs to be in place.

## **9. Mental health bill**

- The Mental Healthcare Bill approved in the Lok Sabha following Rajya Sabha approval in August 2016.
- It aims to provide for mental healthcare and services for persons with mental illness and ensure these persons have the right to live a life with dignity by not being discriminated against or harassed.
- The Bill defines “**mental illness**” as a substantial disorder of thinking, mood, perception, orientation or memory that grossly impairs judgment, behaviour, capacity to recognize reality or ability to meet the ordinary demands of life, mental conditions associated with the abuse of alcohol and drugs.
- But it does not include mental retardation which is a condition of arrested or incomplete development of mind of a person, specially characterized by subnormality of intelligence.
- It marks a paradigm shift in the care and treatment of persons with mental illness in India.
- Instead of viewing persons with mental illness as objects of fear, pity and charity, the new Bill recognizes them as citizens with health rights, including the right to quality mental health care.
- A person with mental illness shall have the **right to confidentiality** in respect of his mental health, mental healthcare, treatment and physical healthcare.
- The photograph or any other information pertaining to the person cannot be released to the media without the consent of the person with mental illness.
- It will repeal the existing Mental Health Act, 1987.

### **Treatment gap**

- 150 million Indians need treatment for mental illness but nearly 80-90% receive NO treatment (so-called treatment gap).
- We spend less than 1% of the public health budget on mental health although mental health problems constitute nearly 13% of the health burden.
- Recognising this historic neglect, the Bill makes provision for universal access to a range of mental health-care services in the community, at the district level, through the public health system.
- The Bill also makes it compulsory for insurance companies to include mental illness cover in medical insurance policies.

### **Empowering options**

- Some concerns have been expressed about the provision of **Advance Directive (AD)** and **Nominated Representative (NR)** in the Bill.
- AD allows all citizens, not just persons with mental illness, to state (when they are well) their treatment choices in the event a future mental illness takes away their ability to make treatment-related decisions.
- This is not a compulsory requirement but it is a hugely empowering option.
- No one will be left untreated because they did not write an AD but many will recognise its importance, especially those who are wary of unscrupulous medical practice or who have indeed suffered from such practice in the past.
- Similarly, the Bill has provisions for individuals to appoint a nominated representative to make decisions on their behalf when they are unwell and cannot make decisions for themselves.

- This too is an option and if no such appointment is made, family members are the default NR.
- Both provisions give a measure of control back to individuals with mental illness, particularly women, allowing them to actively participate in decision-making about their care and treatment.

### **Mental Health Authority**

- The Bill empowers the government to set-up **Central Mental Health Authority** at national-level and State Mental Health Authority in every State.
- Every mental health institute and mental health practitioners including clinical psychologists, mental health nurses and psychiatric social workers will have to be registered with this Authority.
- These bodies will (a) register, supervise and maintain a register of all mental health establishments,(b) develop quality and service provision norms for such establishments, (c) maintain a register of mental health professionals, (d) train law enforcement officials and mental health professionals on the provisions of the Act, (e) receive complaints about deficiencies in provision of services, and (f) advise the government on matters relating to mental health.
- A Mental Health Review Board will be constituted to protect the rights of persons with mental illness and manage advance directives.

### **Mental Health treatment**

- The Bill also specifies the process and procedure to be followed for admission, treatment and discharge of mentally-ill individuals.
- A medical practitioner or a mental health professional shall not be held liable for any unforeseen consequences on following a valid advance directive.
- A person with mental illness **shall not be subjected to electro-convulsive therapy without the use of muscle relaxants and anaesthesia**. Also, electro-convulsive therapy will not be performed for minors.
- Sterilization will not be performed on such persons.
- They shall not be chained in any manner or form whatsoever under any circumstances.
- A person with mental illness shall not be subjected to seclusion or solitary confinement. Physical restraint may only be used, if necessary.

### **Suicide is decriminalized**

- A person who attempts suicide shall be presumed to be suffering from mental illness at that time and will not be punished under the Indian Penal Code.
- The government shall have a duty to provide care, treatment and rehabilitation to a person, having severe stress and who attempted to commit suicide, to reduce the risk of recurrence of attempt to commit suicide.

### **10. Passage without scrutiny**

- In the Budget session of Parliament there were several instances when Parliament failed to perform its role in scrutinizing Bills before passing them.
- This Session, 20 Bills were introduced, and to date none of these have been referred to standing committees of Parliament; one Bill — the constitutional amendment to create a national commission for backward classes — was passed by Lok Sabha and then referred by Rajya Sabha to a select committee.

- In the last three years, just 29% of Bills have been referred to parliamentary committees. This is in contrast to the 60% and 71% of bills examined by committees in the 14th and 15th Lok Sabhas, respectively.
- The important contribution of committees is evident in the progress of the Bills referred to them.
- **The Mental Healthcare Bill** passed this session and the **Motor Vehicles (Amendment) Bill** passed by Lok Sabha this week incorporated most of the changes recommended by the committees.

### Some problematic Bills

- The Specified Bank Notes (Cessation of Liabilities) Bill follows up on the demonetization exercise.
- It provides a limited time period for citizens who were abroad between November 9 and December 30 to exchange their notes.
- Indian residents could do that until the end of March 2017, and NRIs till June.
- The Bill also made it an offence to hold more than 10 pieces of the old notes (25 for research or numismatic purposes).
- This Bill raises two significant constitutional issues. First, the notification of November 8 that denotified the notes allowed time till December 30 for depositing these, and said that any person unable to do so would be given further time to deposit them at specified RBI branches.
- On December 30, an ordinance was issued (the Bill is identical to the ordinance) that provided further time only to citizens who were abroad till that date.
- This is akin to expropriation of property without any compensation and may violate Article 300A of the Constitution.
- Also, if holding the notes is made a criminal offence on December 30, and a person having them that day cannot deposit or exchange them, then this is effectively making an action an offence with retrospective effect and may be seen as a violation of a fundamental right.

### The second Bill is the Finance Bill.

- Other than amending tax rates, it allowed the process of appointment, removal and service conditions of members of appellate tribunals to be determined by rules.
- That is, the terms of engagement of quasi-judicial bodies will be determined by the Central government by notification instead of being specified in the Act.
- This provision may contravene several judgments that lay out the independence of the judiciary as a basic feature of the Constitution.
- Another provision of the Finance Bill permits income tax officers to refuse to disclose to any court or tribunal the information that formed the basis for a raid; this may contravene the principle of judicial review of executive action.

The third Bill is the **Enemy Property Bill** which vests the rights over enemy property with the Central government.

- This amendment has been made with retrospective effect (going back four decades), and will affect all property that may have been sold (and resold) since then.
- The Bill also bars any court from hearing cases related to enemy property. These provisions may not adhere to principles of due process and judicial review.



## Taxation Laws Bill

- It was introduced in Lok Sabha and passed within a week, too raises some concern.
- It makes several amendments related to the introduction of the Goods and Services Tax.
- In addition, it adds a section to the Customs Act, which requires various authorities to disclose to the customs officer any information required.
- The question is whether Lok Sabha examined the appropriateness of giving such powers to the customs officer.

## ECONOMICS

### 1. Panama paper leaks

#### What is Panama Paper leak issue?

- The Panama paper leak investigation was carried out by **International Consortium of Investigative Journalists**.
  - The ICIJ spearheaded a team of over 300 reporters, spread across six continents, to expose the offshore tax havens used by high-profile individuals across the world.
  - The ICIJ is a Washington based non-profit organization.
- Over 11 million leaked documents from Mossack Fonseca revealed how the law firm had helped individuals **set up shell companies to evade paying taxes**.
- In India, The Indian Express revealed the names of over 500 Indians who figured in the Fonseca's list of offshore companies, foundations and trusts.

#### What Is Difference Between Tax Avoidance, Tax Evasion And Tax Planning?

- **Tax Planning** is reducing tax liability using laws to minimize the tax liability. For example, Government allows rebate on income tax for investments in fixed deposits or government bonds.
- **Tax avoidance** is legal management to avoid tax. In other words, it uses loopholes in the laws, rules, treaties etc. to reduce tax liabilities.
  - Most popular tools of tax avoidance include stashing money in tax havens, treaty shopping, round tripping, transfer pricing, thin capitalization etc.
- **Tax evasion** is illegal means to reduce tax liabilities. This includes falsifying accounts, suppression of income, overstatement of deductions etc.

#### What Are Tax Havens?

- It refers to the countries or territories where tax is either very low or not levied at all.
- Switzerland, Luxembourg, Isle of Man, British Overseas Territory, Bermuda, British Virgin Islands, Cayman Islands, Puerto Rico etc. are some of the popular tax havens around the world.

#### What Are Offshore Shell Companies? Why They Are Used?

- **Offshore shell companies** are legal entities incorporated or registered in a tax haven or offshore financial centre (OFC).
- These companies are statutorily exempt from taxation in their jurisdiction of registration **if they do not carry out business with persons resident in that jurisdiction**.

- Offshore companies are used for a variety of commercial and private purposes, legitimate as well as illegitimate activities including money laundering, tax evasion, fraud and several forms of white collar crimes.

## 2. UDAN Scheme

- It refers to **The Regional Air Connectivity Scheme (RCS)** i.e. UDAN (Ude Desh Ka Aam Nagarik).
- It has been launched to provide connectivity to **un-served and under-served airports** of the country through revival of existing air-strips and airports.
- It has been launched as per the vision in new **Civil Aviation Policy** which had capped the passenger fares for flight journeys from un-served and underserved airports at Rs.2500 per hour of flying for around 500 kilometers under RCS scheme.
- It has **been rolled out in January 2017 for a period of 10 years**.
- As of now, 128 routes have been identified and declared in the RCS map of India and the first flight under UDAN is yet to take place.

### **Objectives**

- To revive the existing under-served and un-served airports/airstrips in smaller towns and provide them connectivity so that persons in those towns are able to take affordable flights.
- Provide viable and profitable business to operators.
- Promote tourism, increase employment, promote balanced regional growth

### **Salient Features**

- RCS is applicable on route length between 200-800 kilometers with no lower limit set for hilly, remote, island and security sensitive regions.
- The business model of the scheme is based on Government subsidy and viability gap funding (VGF).
- The central government will provide concessions of around 2% excise on VAT and service tax at 1/10th rate along with liberal code sharing for regional connectivity airports.
- The airlines are required to commit around 50% of the seats as RCS seats on RCS flights.
- The fund for this scheme would come from a **Regional Connectivity Fund (RCF)** created by levying certain charges on certain flights.
- States will need to contribute around 20% to this fund.
- For balanced regional growth, the allocations will be spread equitably across five regions in the country viz. North, South, East, West and North East with a cap of 25%.

### **How the scheme works**

- The scheme will be in operation for 10 years with individual contracts for 3 years.
- The interested operators submit initial route proposals and the government compensates gap in cost and revenue through Viability Gap Funding (VGF).
- To determine the least VGF, government will select airline operators on the base of Market-based reverse auction mechanism.
- Implementing agency for the scheme is Airports Authority of India.

### **Role of Central and State Governments**

- The central government will fund 80% of the losses incurred by the airlines by flying on regional routes.
- The rest of the loss will be covered by the states.
- The states will also incentivize the airlines in the form of lower excise duty at 2% and VAT at 1% on aviation turbine fuel at RCS airports.
- The VGF will be funded by charging a cess per departure on domestic flights at a rate decided by the aviation ministry from time to time.
- The VGF will be shared between the aviation ministry and the states in the ratio of 80:20. In case of the North Eastern States the ratio will be 90:10.
- VGF will be provided for a term of three years from the beginning of operations of such RCS flights.

### **3. Confusion reigns on CAG audit of GST data**

- The crucial question is how and where auditors should get access to GST data
- Hundreds of CAG auditors are being put through specialized training in anticipation of the implementation of the new tax regime from July 1.
- The **GST Network (GSTN)** is the nationwide electronic backbone of the tax regime
- For full implementation of the GST regime, to decide the compensation for States and to determine their revenue share, auditors of the CAG (Comptroller and Auditor General) will require access to two different datasets of GSTN, which are proving difficult to come by.
- One of them is data pertaining to revenue that would accrue to States from alcohol and petrochemicals, both of which are outside GST for now.
- The second issue of where and how CAG auditors will get access to the GST data
- The GSTN has refused to give the CAG access to its network, saying it is only holding the data in a fiduciary capacity since the tax data originally belongs to the Centre and States.
- The GSTN is owned by a private company, and thus cannot be audited by CAG.
- The GSTN claims it is a private company as 51% stake in the company is held by private companies such as HDFC and ICICI Bank.
- The CAG has pointed out that under the new Companies Act, GSTN can be counted as government-controlled company since its strategic control will be with the government.
- Like any PSU, the CAG could depute chartered accountants to audit GSTN
- There is no way out, other than auditors getting access to the entire GST data in a centralized location.
- All tax data, whether it belongs to States or Centre, is already available to CAG under existing constitutional provisions.

### **Data from Individual State**

- Meanwhile, the auditors would be using data available from individual States to assess their share of taxes earned from alcohol and petrochemicals, which would be kept out of GST.
- Under the agreed terms, the States will be given full compensation for the first five years for any shortfall in revenue because of GST.
- The States' revenue in 2015-16 will be used as the basis for calculating the compensation, with an assumption of 14% revenue growth in the subsequent five years.
- The total revenue of a State would be the total of income of States and local bodies from sales tax, value added tax, purchase tax, central sales tax, octroi etc

#### **4. Sharpen the focus on growth**

- As of now the prospects are not encouraging. The Central Statistics Office's second advanced estimates indicate that the growth rate of GDP for 2016-17 will be 7.1% as against 7.9% in 2015-16.
- The growth rate of gross value added at basic prices in 2016-17 will be 6.7% as against 7.8% in 2015-16.
- The growth rates projected for 2016-17 do not capture the impact of demonetization, which when taken into account may bring down the projected growth rate by around 0.5%.
- The decline in the growth rate is not a recent phenomenon. It started in 2011-12.

#### **Determinants of growth**

- The investment rate and the efficiency in the use of capital
- The growth rate is equal to the investment rate divided by the incremental capital-output ratio.
- The **incremental capital-output ratio (ICOR)** is the amount of capital required to produce one unit of output. The higher the ICOR, the less efficient we are in the use of capital.
- As we look at the Indian performance in the last five years, two facts stand out.
  - One is a decline in the investment rate and
  - Second is a rise in ICOR; both of which can only lead to a lower growth rate.
- As growth was coming down sharply initially, the investment rate was falling only slowly, implying a rising ICOR.
- ICOR is a catch-all expression which is determined by a variety of factors including technology, skill of manpower, managerial competence and also macroeconomic policies.
- Thus delays in the completion of projects, lack of complementary investments in related sectors and the non-availability of critical inputs can all lead to a rise in ICOR.
- The Economic Survey of 2014-15 reported that there were in all 746 stalled projects, with 161 in the public sector and 585 in the private sector of a total value of Rs. 8.8 lakh crore.
- As of 2015-16, there were still 404 stalled projects, 162 in the public sector and 242 in the private sector with a total value of Rs. 5.5 lakh crore.
- In the short run, the biggest gain in terms of growth will be by getting "stalled projects" moving.

#### **Declining investment rate**

- India's investment rate reached a peak in 2007-08 at 38.0% of GDP.
- One sees a steady decline in the investment rate since then.
- The decline in the rate was small initially but has been more pronounced in the last two years.
- According to the latest estimates, the gross fixed capital formation rate fell to as low as 26.9% in 2016-17.
- With this investment rate, it is simply impossible to achieve a growth rate in the range of 8 to 9%.

#### **Why did the investment rate fall? Why are not new investments forthcoming?**

- First is "**Policy paralysis**", pointing to the inability of the government to take policy decisions because of "coalition compulsions".

- The external environment was also not encouraging. The growth rate of the advanced economies remained low and the recovery from the crisis of 2008 was tepid which had an adverse impact on exports.
- For almost three years beginning 2010, India had to cope with a high level of inflation which also had an adverse impact on investment sentiment.

### Solutions

- Private investment is weak, so raise **public investment** which can take a longer term view.
- In the best of times, public investment has been 8% of GDP.
- The Central government's capital expenditures even after some increase in the last two years, is only 1.8% of GDP.
- About 3 to 4% of GDP comes from public sector undertakings and the balance from State governments.
- What is needed now is for public sector undertakings to come out with an explicit statement indicating the extent of investment they intend to make during the current fiscal.
- However, it is also necessary to enhance **private investment**, and that too private **corporate investment**.
- During the high growth phase, corporate investment reached the level of 14% of GDP. Since then it has fallen.
- Three things need attention.
  - First, reforms related to ease of doing business
  - Some steps in this regard: GST Bill, passing of the Bankruptcy Act, and enlarging the scope of foreign direct investment.
  - Second, all **viable "stalled" projects** must be brought to completion.
  - Third, financial bottlenecks need to be cleared. The banking system is under stress. The **non-performing loans** of the system have risen and are rising.
- This has squeezed the profitability of banks with some showing loss. More distressing is the minimal flow of new credit.
- The problem is often referred to as the **twin balance sheet problem**. If corporate balance sheets are weak, automatically the banks' balance sheets also become weak. Really speaking, it is two sides of the same coin.
- There is need to have institutions focused on **long-term lending** such as IDBI and ICICI as they were before 1998.

### 5. Foreign investor norms a barrier

- Indian regulations on foreign ownership in e-commerce, banks, insurance and other online-related services were major barriers for overseas investors.
- The findings were part of the report on foreign trade barriers from the Office of the **United States Trade Representative (USTR)**.
- The annual report points to a list of trade irritants in 63 nations.
- India allows for 100% foreign direct investment in **business-to-business (B2B) electronic commerce**, but largely prohibits foreign investment in **business-to-consumer (B2C) electronic commerce transactions**.
- Foreign direct investment is allowed in a **market-based electronic retailing model**, but not in the **inventory-based model**.
- The only exception that was granted was to **single-brand retailers**.
- Single-brand retailers who meet certain conditions including the operation of physical stores in India may undertake to trade through electronic commerce.

- This narrow exception limits the ability of the majority of potential B2C electronic commerce foreign investors to access the Indian market.
- India's **tax (6% equalisation levy) on foreign online advertising platforms** was not par with the international norms. (Also called as google tax to handle BEPS)
  - India recently began assessing an '**equalisation levy**', which is an additional 6% withholding tax on foreign online advertising platforms, with the ostensible goal of "equalising the playing field" between resident service providers and non-resident service providers.
- However, its provisions do not provide credit for tax paid in other countries for the service provided in India.
- The levy would result in taxes on business income even when a foreign resident does not have a permanent establishment in India or when underlying activities are not carried out in India.
- Internationally accepted principles provide that **digital taxation mechanisms** should be developed on a multilateral basis in order to prevent double taxation.

### Issues related to Data storage

- The Indian requirements of storage of data within India reduce productivity, dampen domestic investment and undermine the ability of information and communications technology companies to offer cutting-edge services.
- **The 2012 National Data Sharing and Accessibility Policy**, issued by the Ministry of Science & Technology, which requires that all data collected using public funds — including weather data — be stored within the borders of India.
- It also pointed out the Department of Electronics and Information Technology (DEITY) guidelines requiring **cloud computing** service providers to store data within India to qualify for bidding for government procurements.

### Issues of FDI on Insurance and Banking

- The report stated that ownership restrictions in terms of insurance and banks, was a hurdle for foreign investors.
- Even though the FDI limit in insurance has been increased to 49%, the regulatory requirement for the appointment of directors and other operational requirements are a concern.
- The report also highlighted **Insurance Regulatory and Development Authority's (IRDA)** discussion paper that called for the **compulsory public listing of life insurers** that have been in operation in India for seven years or more.
- **Foreign banks** are required to submit their internal branch expansion plans on an annual basis, and their ability to expand is hindered by non-transparent limitations on branch office expansion.
- Foreign banks also face restrictions on direct investment in Indian private banks.

## 6. Centre mulls nodal body for transport

### Logistics and Integrated Transport Board

- It will be a nodal body for all transport-related matters across modes including aviation, railways, surface transport and waterways.

- The proposed '**Logistics and Integrated Transport Board**' will initially work on improving inter-ministerial co-ordination to facilitate an efficient multi-modal transport system in India.
- The aim, however, is to gradually set up a single unified transport ministry by merging the ministries of Aviation, Railways, Surface Transport and Shipping to ensure greater ease of doing business and boost India's internal and external trade.
- Present system leads to red-tapism, as well as delays and higher cost in transport and logistics, consequently hurting India's trade.

### **National Transport Development Policy Committee**

- Centre is considering the report of the National Transport Development Policy Committee (2014), chaired by Rakesh Mohan.
- The report had pointed out that "nearly all of the 100 largest economies Ministry of Transport or similar integrated equivalent.
- India needs to have a single unified ministry with a clear mandate to deliver a multi-modal transport system.
- It can contribute to the country's larger development goals including economic growth, expansion of employment, geographic expansion of opportunities, environmental sustainability, and energy security.

### **Multi-modal logistics parks**

- Government is working to implement specific programme for development of 35 **multi-modal logistics parks** by investing more than 50000 crore, together with **multi modal transport facilities**.
- In a bid to link India to global supply chains and logistics, the Union Cabinet had last month approved India's accession to the **United Nations TIR Convention**.
- It will help Indian traders to have access to hassle free global system for movement of goods by road or multi- modal means across the territories.

## **7. Bad banks welcome but where is the capital**

- The total stress in the Indian banking system is about 14 lakh crore.
- This is the amount for which loans have been given to industry and for which there is now no certainty of repayment.
- The figure is set to increase with the banking regulator recently raising a red flag over the indebtedness of the telecom sector and asking banks to increase standard asset provisioning.
- This means that even if the account is not a non-performing asset (NPA), banks have to set aside higher capital.
- RBI has asked banks to identify stressed sectors and to make higher provisions to prepare for bad days ahead.

### **Bad loans**

- According to Reserve Bank of India data, gross **NPA**, as a percentage of gross advances, went up to 9.1% in September 2016 from 5.1% in September 2015.
- In the same period, **stressed assets** (which is gross NPA plus standard restructured advances and write-offs) moved up from 11.3% to 12.3%. Some estimates suggested it had doubled since 2013.

- Public sector banks share a disproportionate burden of this stress. Stressed assets in some public sector banks have approached or even exceeded 20%.

### **Public Sector Asset Rehabilitation Agency (PARA)**

- The government and the RBI are drawing up strategies on how to operationalise such a scheme.
- The economic survey of 2016-17 pointed out the **twin balance sheet problem** and advocated a centralized **Public Sector Asset Rehabilitation Agency (PARA)** be established to deal with the bad loans problem.
- A professionally-run central agency with government backing while not without its own difficulties can overcome the difficulties that have impeded progress.
- Capital will be the biggest challenge in setting up a '**bad**' bank. At least ₹25,000 to ₹30,000 crore of capital will be required to set up a bad bank in the initial stages.

### **Two models**

- RBI deputy governor Viral Acharya recently suggested two models to solve the problem of stressed assets.
- The first, **Private Asset Management Company (PAMC)**, is said to be suitable for sectors such as telecom and textiles where the stress is such that assets are likely to have economic value in the short run, with moderate levels of debt forgiveness.
- In this model, each resolution plan would get vetted and rated by at least two credit rating agencies to assess the financial health and in terms of timeline, the banking sector may be asked to resolve and restructure, say, its 50 largest stressed exposures in these sectors, by December 31, 2017.
- The second model is the **National Asset Management Company (NAMC)**, which would be necessary for sectors such as power sector where the problem is not just one of excess capacity but possibly also of economically unviable assets in the short- to medium-term.

## **8. Who are Le-Pen voters**

- Far-right leader Marine Le Pen is a frontrunner with just days to go until France votes in the first round of its presidential election.
- Ms. Le Pen has positioned herself as a protector of France who would pull the country out of the EU, slash immigration, make it harder to get French nationality and crack down on suspected Islamists.
- Migrants are in unfortunate [situations], but there are people from France struggling and they must be helped urgently.
- Security is a worry for the French in the wake of the string of attacks that have killed more than 230 people since the beginning of 2015.
- France's unemployment rate has hovered near 10% in recent years, despite promises from its last two Presidents to spur growth.

## **9. State entities can seek loan overseas**

- Large infrastructure projects being executed by State government entities will find it easier to tap international funds from bilateral financing agencies.
- Cabinet enabling state entities them to directly access funding from such agencies on the basis of a central government guarantee while keeping such loans off States' books.



- The funding arrangements that bilateral agencies such as **Japan International Cooperation Agency (JICA)** provide, is either with State governments or central PSUs — State entities are not allowed.
- If any State entity needs funding for its projects, it has to approach the State government and any such funding would be included under the State's borrowing limits set by the **Fiscal Responsibility and Budget Management (FRBM law)**.
- So based on some conditions, a section of State entities with revenue of Rs. 1,000 crore or more, who are working on infrastructure projects worth over Rs. 5,000 crore, have been permitted to directly take money from such funding agencies on the basis of a central government guarantee.
- All repayments of loans and interests to the funding agencies will be directly remitted by the concerned borrower.
- The concerned State Government will furnish guarantee for the Loan.
- The Government of India will provide counter guarantee for the loan.
- State Budgets also have pressure to spend on welfare schemes. If international funding is coming in, if that gets included in the FRBM calculations, then infrastructure projects will suffer.
- It must be used prudently for select projects in a State as taking such financing out of the FRBM framework could tempt States to borrow too much for all sorts of projects.

#### **10. Equity in debt**

- The advice of the expert committee to review the **Fiscal Responsibility and Budget Management (FRBM) Act of 2003** requires attention, given India's track record.
- Excessive and unsustainable borrowing by the government is obviously perverse as it entails a cost on future generations while crowding out private investment.
- In the past, fiscal irresponsibility has cost jobs, spiked inflation, put the currency in a tailspin and even brought the country to the brink of a default.
- The possibility of default may have resulted in the liberalization of the economy in 1991, but the key trigger was irrational public spending on borrowed money in the late-1980s.
- Less than a decade later, with fiscal discipline faltering and the deficit shooting up to 10% of GDP the FRBM law was enacted to 'limit the government's borrowing authority' under **Article 268** of the Constitution.
- But the target to limit the fiscal deficit to 3% of GDP (by 2009) was abandoned after the 2008 global financial crisis as a liberal stimulus reversed the gains in the fiscal space.
- The FRBM Act's deficit target is now only likely to be met next year.
- The committee's proposal to maintain the 3% target till 2019-20 before aiming for further reduction is pragmatic, demonetisation happened during its tenure.
- Such an event, the committee has said, could trigger an escape clause from fixed fiscal targets in its proposed rule-based framework.
- Fiscal and Revenue deficit numbers should be brought down to 2.5% and 0.8% of GDP respectively by 2023.
- The panel has called for paring India's cumulative public debt as a proportion to GDP to 60% by 2023 — from around 68% at present.
- The latter, a simpler measure for solvency purposes, should inspire confidence among rating agencies.
- A fiscal deficit range could be targeted instead of absolute numbers, the Finance Minister has committed to the 3% target for the next two years, from the 3.2% target for 2017-18.

- A clear fiscal policy framework in tandem with the monetary policy framework already adopted could act as a powerful signal of commitment to macroeconomic stability.
- The Centre must swiftly take a call on the panel's recommendations including for a new debt and fiscal responsibility law, and the creation of a Fiscal Council with independent experts that could sit in judgment on the need for deviations from targets.
- It is equally critical that States are brought on board, as the 60% debt target includes 20% on their account. Their finances are worsening again.

## SCIENCE AND TECHNOLOGY

### 1. New ways to fight drug resistant TB

#### What is TB?

- Tuberculosis is a contagious infection caused by Mycobacterium tuberculosis and it usually attacks the lungs.
- It can also spread to other parts of the body like the brain and spine.
- It spreads through the air, much like cold or flu.

#### What is drug resistant TB?

- It can be MDR or XDR or TDR.
- TB which is resistant at least to **isoniazid** and **rifampicin** the two most powerful firstline anti-TB drugs is called the **Multidrug resistant tuberculosis (MDR TB)**.
- It develops because the when the course of antibiotics is interrupted and the levels of drug in the body are insufficient to kill 100% of bacteria.
- In the **XDR TB** the rate of multidrug resistance in a particular area becomes very high and the control of tuberculosis becomes very difficult.
- **TDR** refers to totally drug resistant tuberculosis (TDRTB). It is a form of tuberculosis which is resistant to all currently used drugs.
  - In January 2012, TDR TB has been reported in India. Thus, India is the second country to have identified this deadly form of the disease after Iran.
  - TDRTB is caused as a result of the latest mutation of the **bacilli bacteria** after Multidrug Resistant TB and Extensively Drug Resistant TB diagnosed earlier.

#### TB Scenario in India

- Nearly 5 lakh patients succumbed to the disease last year.
- The tuberculosis epidemic affects 28 lakh Indians; another 79,000 people suffer from type of TB resistant to most antibiotics.
- The unchecked rise of multidrug-resistant tuberculosis (MDR TB) in India will threaten the progress made globally.
- The two new WHO recommended drugs for DR TB, **Delaminid & Bedaquiline**, are not currently available in Indian national TB programme.
- While Delaminid is yet to be registered in India, Bedaquiline is available at only 6 States in the country, under compassionate use.

## **National plan**

- Indian government will soon be releasing the **National Strategic Plan for TB Control (2017-2025)**, with an overarching framework to achieving the elimination goal.

## **Recent developments**

- Investigators on the Nix-TB trial in Cape Town and Johannesburg treated 61 patients of drug resistance TB with three relatively new drugs: **Bedaquiline**, **Pretomanid** and **Linezolid (BPaL)**.
- The majority of the patients recovered, and did so earlier than doctors expected.

## **2. All about bit coins**

### **What is Bit coin?**

- Bitcoin is a piece of digital code which is also used by people as currency. It was started in 2009 by Satoshi Nakamoto.

### **How can one get bitcoins?**

- Mining: Bitcoins are hidden in data blocks created by Satoshi and spread across the internet.
- They can be mined by solving these data blocks using special computer software. Solving one data block fetches 25 Bitcoins currently.
- Exchange: They can be bought from a person/company who has already mined them.
- Special websites called "Bitcoin exchanges" have come up for such buying/selling of bitcoins.

### **How do people use bitcoins?**

- It is an electronic or digital currency that works on a peertopeer basis.
- it is decentralised and has no central authority controlling it. Like currency notes, it can be sent from one person to another.
- The system depends on cryptography to control the creation of the currency.
- The system itself is designed in such a way that the network maintains a foolproof system of the record of every transaction as well as tracking issuance of the currency.
- Bitcoin's transaction is anonymous. This anonymity is lacking in other forms of digital payment such as online banking or ewallets.

### **How does the payment system work?**

- When you send a bitcoin to a receiver, the transaction is included in the blockchain and broadcast to the network.
- The blockchain ensures that the same bitcoin is not spent twice by the same user.
- A computer network validates the transaction using algorithms so that the transaction becomes unalterable.
- Once validated, the transaction is added to others to create a block of data for the ledger.

### **Benefits of bitcoin over fiat money**

**Fiat money** is defined as any money that is declared by government to be legal tender. Rupee, dollar, euro are examples of fiat money.

- Low transaction costs

- High divisibility, The lowest denomination of bitcoin is 0.0000001 (10<sup>-8</sup>) bitcoin, also called 1 Satoshi. Thus, it is possible to divide bitcoin in many small parts.
- Account keeping easier and more accurate, Since all transactions are digital in nature, there is no need to manually enter any records in paper account books.
- Durability more than paper currency
- Harder to counterfeit than paper currency because bitcoins are created by crypto-currency mathematical algorithm.

### Disadvantages

- Very less acceptability
- Highly fluctuating value of bitcoins
- Less cognizability
- Selling of illegal goods and services like drugs, arms etc. by online gambling websites.
- Provide terrorists an alternative way of buying arms and weapons
- Law enforcement agencies have raised apprehensions of bitcoins being used for money laundering.

### Current status of Bitcoins in India and legal and regulatory issues

- There are several **bitcoin exchanges** that have opened up in India.
- However, even then the recognition and acceptance of bitcoins in absolute terms is still very small.
- Bitcoins per se are not illegal in India, but how one deals with them may be a matter of legality.
- For goods exported from India, payment cannot be received in bitcoins if they are parked outside.
- Proceeds of exports must be repatriated to India in terms of foreign exchange through normal banking channels.
- If Bitcoins are sold for a price in terms of 'money', the **Sale of Goods Act** would apply.
- But accepting Bitcoins against goods should not attract the provisions of Sale of Goods Act. Provisions of **Foreign Exchange Management Act (FEMA)** would not be triggered if the transaction is intra-India.
- If someone buys bitcoins and keeps them for a long time, then sells them and gets a profit, he should pay capital gains tax.
- If someone accepts Bitcoins for service rendered, he should pay the applicable income tax after converting Bitcoins into rupees.
- RBI recently issued a public advisory against the use of bitcoins.
- Indian Bitcoin community formed trade and lobbying association called **Bitcoin Alliance India (BAI)**.

### 3. Scientist in US developed first detailed global internet atlas

- Scientists have developed the first global Internet Atlas, including a detailed map of the Internet's physical structure in India.
- **Internet Atlas** is developed by researchers from **University of Wisconsin-Madison** in the U.S. and their collaborators.
- Physical Infrastructure of Internet include things like submarine cables buried below the ocean floor run between continents to enable communication.

- Data centres in buildings all over the world are packed with servers storing many types of data.
- Traffic exchange occurs between different service providers at internet exchange points.
- Improving connectivity
- It contains over 1,200 maps worldwide including India. All the data are connected using web search.
- Much of the data used to create the Internet Atlas comes from publicly available information, such as what Internet service providers publish on their websites.
- It can help guard the infrastructure from terrorism or extreme weather events.
- Mapping the physical Internet helps stakeholders boost performance and guard against a number of threats, from terrorism to extreme weather events like hurricanes.
- A lot of infrastructure is by major right-of-ways, like railroad lines, meaning that an event like a train derailment could end up disrupting Internet communications.

#### **Shared risk**

- The project has helped direct attention to the problem of shared risk.
- Physical infrastructure is commonly shared by multiple networking entities, so damage to any particular piece of infrastructure can impact more than one entity.
- There is a lot of infrastructure sharing happening in the Internet today.
- Many service providers do this to save deployment costs by signing leases with other service providers.

#### **4. Ultra light device can be charged with movement**

- Researchers from Georgia Institute of Technology in the U.S. and Chongqing University in China have developed a light-weight, paper-based device that can harvest energy from body movements to power sensors and watches.
- Portable electronic devices, such as watches, hearing aids and heart monitors, often require only a little energy.
- Earlier, scientists created **tribo-electric nanogenerators (TENGs)** that can harness the mechanical energy all around us, such as that created by our footsteps, and then use it to power portable electronics.
- However, most TENG devices take several hours to charge small electronics, such as a sensor, and they are made of acrylic, which is heavy.
- Researchers then turned to an **ultra light**, rhombic paper-cut design a few inches long and covered it with different materials to turn it into a power unit.
- The four outer sides, made of gold- and graphite-coated sand paper, comprise the device's energy-storing super capacitor element.
- The inner surfaces made of paper and coated in gold and a fluorinated ethylene propylene film, comprised the TENG energy harvester.
- Pressing and releasing it over just a few minutes charged the device to 1 volt, which was enough to power a remote control, temperature sensor or a watch.

## INTERNATIONAL RELATIONS

### 1. INDIA-BANGLADESH RELATIONS: Hasina's visit

- India extended lines of credit worth \$5 billion to Bangladesh and exchanged 22 agreements here on Saturday.
- It was a testimony to India's official policy of "neighbourhood first."
- The two sides were unable to make any progress on the contentious Teesta water sharing agreement, but India assured Bangladesh of early resolution

#### **Talks on trade**

- Both sides agreed to work together on ways to advance issues like trade, connectivity, and regional cooperation.
- Sub-regional cooperation in the areas of power, water resources, trade, transit and connectivity for mutual benefit.
- In this context, they noted the progress made by the Joint Working Groups on Sub-Regional Cooperation between Bangladesh, Bhutan, India and Nepal (BBIN) on Water Resources Management and Power/Hydropower and on Trade, Transit and Connectivity
- A major aspect of the visit has been the defence component which includes an MoU on defence framework, and a \$500 million Line of Credit for defence procurement for the Bangladesh military forces.
- That apart, two different MoUs were signed between defence training institutes of India and Bangladesh. Both sides also sealed an MoU coastal route and protocol route.
- Bilateral technology cooperation by signing of the inter- Governmental Agreement for cooperation in the field of Civil Nuclear Energy and other agreements related to nuclear cooperation
- A highpoint of the bilateral talks held on Saturday was the Line of Credit: 4.5\$ billion. It is the largest given by India to any country.
- The LoC would be used to build 17 projects including port upgradation work in Mongla, Chittagong and Paira ports.
- The two will work for peaceful borders and zero tolerance of terrorism
- Both sides also supported international campaign against terrorism under the umbrella of the United Nations General Assembly by early adoption of a Comprehensive Convention on International Terrorism by the UNGA.

#### What is the problem with sharing of Teesta waters

##### **What is it?**

- Teesta river, which originates in the Himalayas and flows through Sikkim and West Bengal to merge with the Brahmaputra in Assam and (Jamuna in Bangladesh),
- It is perhaps the most contentious issue between two friendly neighbours, India and Bangladesh.
- The river covers nearly the entire floodplains of Sikkim, while draining 2,800 sq km of Bangladesh, governing the lives of hundreds of thousands of people. For West Bengal, Teesta is equally important, considered the lifeline of half-a-dozen districts in North Bengal.
- Bangladesh has sought an "equitable" distribution of Teesta waters from India, **on the lines of the Ganga Water Treaty of 1996**, but to no avail.

- The failure to ink a deal had its fallout on the country's politics, putting the ruling Awami League in a spot.

#### **History till now:**

- A deal in 1983, **when nearly equal division of water** was proposed, the countries hit a roadblock. The transient agreement could not be implemented. Talks resumed after the Awami League returned to power in 2008 and the former Indian Prime Minister Manmohan Singh visited Dhaka in 2011.
- Officials were directed to conclude the "[interim] agreements" on a "fair and equitable basis," as per the joint statement.
- As both countries are gearing up for another general election, Teesta remains an unfinished project and one of the key stakeholders — West Bengal Chief Minister Mamata Banerjee — is yet to endorse the deal. Her objection is connected to "global warming."
- Many of the glaciers on the Teesta basin have retreated.
- A significant amount of this water flows during the wet season, between June and September.
- The importance of the flow and the seasonal variation of this river is felt during the lean season (from October to April/May) as the average flow is about 500 million cubic metre (MCM) per month.
- Consequently, there are floods during monsoons and droughts during the dry periods
- The West Bengal Chief Minister opposed an arrangement in 2011, by which India would get 42.5% and Bangladesh 37.5% of the water during the lean season, and the plan was shelved.

#### **What next?**

- The answer, according to leading Bangladeshi hydrologist is the construction of giant artificial reservoirs, where the monsoon water can be stored for the lean season.
- The reservoirs need to be built in India as the country has some mountain-induced sites favourable to hosting dams with reservoirs, unlike Bangladesh
- Ms. Banerjee, however, cannot be sidestepped as water is a State subject.

## **2. Syrian gas attack**

- A suspected chemical attack in a town in Syria's northern Idlib province killed dozens of people on Tuesday
- The province of Idlib is almost entirely controlled by the Syrian opposition.
- It is home to some 900,000 displaced Syrians, according to the United Nations. Rebels and opposition officials have expressed concerns that the government is planning to mount a concentrated attack on the crowded province.
- Claims of chemical weapons attacks, particularly the use of the chlorine agent, are not uncommon in Syria's conflict. The worst attack was what a U.N. report said was an attack by toxic sarin gas in August 2013 on the Damascus suburb of Ghouta that killed hundreds of civilians.
- The New York-based Human Rights Watch has accused the Syrian government of conducting at least eight chemical attacks using chlorine gas on opposition-controlled residential areas during the final months in the battle for Aleppo last year that killed at least nine civilians and injured 200./
- Also, a joint investigation by the United Nations and the international **chemical weapons watchdog** determined the Syrian government was behind at least three attacks in 2014 and

2015 involving chlorine gas and the Islamic State group was responsible for at least one involving mustard gas.

### **3. 'SASEC Group can add \$70 bn. to GDP'**

- Finance Ministers of the member-countries of the **South Asia Subregional Economic Cooperation (SASEC)** grouping said the growing cooperation between them could generate an incremental **\$70 billion in GDP** and additional employment of 20 million annually by 2025.
- The joint statement, made in Delhi following a meeting of the Finance Ministers from Bangladesh, Bhutan, India, Nepal, Maldives, and Sri Lanka, also welcomed Myanmar into the coalition.
- An estimated \$70 billion in incremental GDP and 20 million in incremental aggregate employment by 2025
- To do this, the countries will leverage natural resource-based industries by tapping into latent industrial demand in the subregion and promote subregional industry- to-industry links to develop regional value chains and enhance the area's competitiveness.
- The Finance Ministers also committed to enhance the connectivity within the member countries and between them to improve productivity.

#### **Myanmar's role**

- Myanmar has recently joined the SASEC family. We recognize Myanmar's important role in linking South Asia, and Southeast and East Asia—a vital imperative in boosting economic activity in Asia in this time of subdued global growth

### **4. INDIA-AUSTRALIA relations**

#### **Three focus areas**

- During the visit we will focus on three areas of our relationship that show great potential: **our economic, knowledge and strategic partnerships.**

#### **1. Trade:**

- India is inspiring the world with its explosive economic growth. This is a big opportunity for Australia. From Mumbai to Melbourne, from Bangalore to Brisbane, India will be in the market to buy some of the best things Australia has to offer.
- Two-way trade is \$20 billion with lot of potential.

#### **2. Knowledge:**

- The Government will announce the results of the tenth round of the Australia-India Strategic Research Fund. Worth more than \$100 million, this initiative has enabled our sharpest minds to collaborate in areas such as food security and health,
- **To advance the boundaries of human knowledge in quantum computing, nanotechnology and astronomy.**
- Australia is the second-most popular study destination for Indian students. Through the **Government's New Colombo Plan**, they want more Australians choosing India as a place to study and boost their own qualifications and experience.
- Australia can help the India in aiming to train 400 million people by 2022.



- Collaboration between our institutes on high-end research, innovation, science and technology are central to developing our knowledge partnership.

### 3. Strategic

- The security and stability of the Indo-Pacific is fundamental to both of us and my visit provides an opportunity to discuss key regional and geostrategic issues and strengthen our engagement. As liberal democracies, we can work together to encourage free trade and prosperity and to help safeguard security and the rule of law in our region.

### 5. INDIA-NEPAL ties

- Energy Secretary-level talks — known as the joint steering committee (JSC) meeting — concluded in Kathmandu.
- MoM:
  - It was decided to endorse the detailed project report of the **400 kV Butwal-Gorakhpur cross-border transmission line**.
  - Nepal is short of power and will need to import power for some years to accelerate its economic growth.
  - India has surplus capacity at present. In the years to come, it can fruitfully import flexible hydropower from Nepal to balance its fast growing renewable generation and also provide a market for Nepal's electricity.
  - It was only in 2014 when India and Nepal signed a **Power Trade Agreement** that the doors opened for Nepal developers/traders to access the Indian power market.
  - At first, Nepal was apprehensive that it would not get a fair deal trading with a large neighbour, but power is now traded in India on exchanges transparently and the price is known to all, thus assuaging some of Nepal's apprehensions.

#### **What the data show**

- Out of an economically viable and technically feasible potential of 43.5 GW, only 0.8 GW had been developed by March 2016. By selling power to India, Nepal could have developed its economy at a faster rate.
- Bhutan has reaped the benefit of power export to India and its per capita income in purchasing power parity adjusted for international dollars increased from \$475 in 1980 to \$7,860 in 2015. India's was \$5,730 in 2015.
- Nepal's electricity supply in 2015-16 was around 5,100 GWh, of which 3,300 GWh was domestic generation and remaining 1,758 GWh was import from India. Import has increased steadily from 746 GWh in 2011-12 to 1,758 GWh in 2015-16, an almost threefold increase.
- Nepal also exports electricity to India in some periods, although in very small quantity. Per capita electricity consumption in Nepal is one of the worlds lowest, at 119 kWh in 2012. It has an ambitious target of reaching 16,500 MW of hydro capacity by 2030, which includes the **joint project with India at Pancheshwar**.

### 6. Nepal amendment to Constitution: Another crisis

#### **[This is a reference article only]**

- Madhesi parties have decided to boycott local polls scheduled for May 14, Nepal is heading for another political crisis. The boycott decision came after the Communist Party of Nepal (Maoist-Centre)-led government tabled fresh amendments to the Constitution in Parliament.

- Ever since the country adopted the new post-monarchy Constitution in September 2015, Madhesi parties have been demanding a redrawing of federal boundaries to reflect the fact that the community, residents of the Terai area, and other minority groups are in a majority in some new provinces.
- The government led by CPN(M-C) chairman Pushpa Kamal Dahal, with the Nepali Congress part of the coalition, came to power in 2016 on the promise of accommodating these demands to the extent possible and forging a reasonable consensus across the political spectrum.
- The government had also initiated amendments that went some way in addressing Madhesi concerns, such as the formation of a federal commission to look into a redrawing of federal boundaries, and the recognition of local languages as national ones.
- These amendments were, however, rejected by Madhesi parties, which stuck to a maximalist position.
- The opposition Communist Party of Nepal (Unified-Marxist-Leninist) also rejected them, though for being too giving. Unable to forge any consensus, the government came up with the fresh amendments as a signal that it is willing to concede some of the Madhesi demands in return for their participation in the long-pending local polls. But the absence of substantive efforts to address the federal question has resulted in a Madhesi boycott.
- Nine years have passed since elections to the first Constituent Assembly were held. Beyond Nepal's transition from a constitutional monarchy to a republic, the lack of consensus on other issues pushed the finalisation of the Constitution far beyond the original remit of the Constituent Assembly, which was to have concluded the process in two years.
- The new Constituent Assembly elected in 2013 was less amenable to changes, especially to the state structure, and the Madhesi parties refused to accept the finalised Constitution in 2015. The impasse on the state restructuring issue has given rise to disturbing trends — jingoism, that sees Madhesi concerns as reflecting the interests of external actors such as India, and voices of secessionism among Madhesi forces who suggest that the Nepali polity is incapable of addressing the plain-dwellers' concerns.
- This political battle of wits has taken away much-needed focus from the dire state of the economy, which is yet to recover from the shock of the devastating earthquake of 2015.
- Local elections are seen as a way to allow for a much-needed administrative presence everywhere, but this cannot happen without the participation of all political forces, especially Madhesis. The government has its task cut out to manage a compromise.

## **7. Cyprus sees role for India**

- President of the Republic of Cyprus, Nicos Anastasiades, will ask Prime Minister Narendra Modi if there is any way he can help in his country's efforts to reunify the northern and southern parts of Cyprus
- Since India is close to Turkey, India can give the strongest hand in our efforts

### **Background:**

- In 1974 Turkey invaded Cyprus, overran parts of it and has since stationed troops in the north. There is a ceasefire line that cuts across Cyprus, monitored by U.N. troops.
- His remarks assume importance considering the Turkish leader Erdogan will be in New Delhi following at the heels of the visit of President Anastasiades.

### **Promises concessions**

- India can play a constructive role in speaking to our partners to give the most favourable treatment for India
- Cyprus is looking for India's help in developing a technology park along the lines of Silicon Valley
- Cyprus is pitching itself as both an investment destination and as a bridge to both Europe and the Gulf region, given both its location as well as its relations with the countries in the region.
- India used Cyprus's help to help evacuate its citizens from Lebanon in 2006
- We are members of the Commonwealth as well as the European Union and so we might be quite helpful for Indian interests [in this region].
- We can play a constructive role in encouraging our partners to give the most favourable treatment to India
- India is not a threat to any of her neighbours. India is a stabilising factor.
- **Cyprus supports India in its bid to enter the UN Security Council as a permanent member. It supports India's efforts on the Nuclear Suppliers Group.**
- Cyprus has consistently spoken in favour of India in various international fora on Kashmir.
- The President's visit is likely to see further steps being taken to deepen the bilateral engagement.

### **8. Logistics pact with U.S. 'almost done'**

#### **LEMOA gives mutual access to designated military facilities for refueling and enables joint exercises**

- In just about two days, India is expected to notify the operationalizing of the Logistics Exchange Memorandum of Agreement (LEMOA) with the U.S.
- India and the U.S. concluded the logistics agreement, the first of the three foundational agreements between the two nations, last August.

#### **Delayed work**

- However, its implementation has been delayed, as India was unable to streamline administrative procedures to enable its operationalization.
- LEMOA gives access to both countries to designated military facilities on either side for refueling and replenishment in primarily four areas — port calls, joint exercises, training and humanitarian assistance and disaster relief.
- The other foundational agreements are the **Communications Compatibility and Security Agreement (COMCASA)** and the **Basic Exchange and Cooperation Agreement for Geospatial Information and Services Cooperation (BECA)**.
- The notification includes designating the points of contact for the U.S. military to work with and setting up a common account for payments.
- The U.S., which has similar agreements with several countries, has already notified the details.

**SOCIAL ISSUES****1. Vulnerable tribes lost in classification trap****Why in news?**

- A recent **Anthropological Survey of India (AnSI)** publication has revealed that no base line surveys have been conducted among more than half of the **Particularly Vulnerable Tribal Groups (PVTGs)**
- Of the 75 PVTGs, base line surveys exists for about 40 groups, even after declaring them as PVTGs
- Base line surveys are done to precisely identify the PVTG families, their habitat and socio-economic status,
- So that development initiatives are implemented for these communities, based on the facts and figures.

**PVTG's in India**

- Among the 75 listed PVTG's the highest number are found in Odisha (13), followed by Andhra Pradesh (12), Bihar including Jharkhand (9) Madhya Pradesh including Chhattisgarh (7) Tamil Nadu (6) Kerala and Gujarat having five groups each.
- The remaining PVTGs live in West Bengal (3) Maharashtra (3), two each in Karnataka and Uttarakhand and one each in Rajasthan, Tripura and Manipur.
- All the four tribal groups in Andamans, and one in Nicobar Islands, are recognised as PVTGs.

**Welfare Schemes**

- Regional and State-specific variations in welfare schemes for PVTGs has also been highlighted.
- While Odisha has established exclusive micro-projects for the PVTGs, there are none such in for the five PVTGs in Gujarat.
- In Tamil Nadu, development schemes are being monitored through the Tribal Research Centre, Ooty, and implemented by the State government.
- However, in Karnataka, all affairs of two the PVTGs are handled by the Social Welfare Department, barely receiving any professional advice.
- In some cases, a PVTG receives benefits only in a few blocks in a district, while the same group is deprived in adjacent blocks.

**Demographics**

- There is a huge variation in the number of PVTGs.
- Ranging from a few individuals as in case of Great Andamanese, Onge and Sentinelese and about a little more than a thousand people as in the case of Toda of Nilgiris
- Although PVTGs are slowly witnessing decadal increase in their population, quite a few still face stagnation such as the Birhor in central India.
- Some are declining like the Onge and Andamanese.
- Smallest population size among the PVTGs are the Senteneles
- The Great Andamanese (57 persons) and the Onge (107 persons in 2012 as per Andaman Adim Janjati Vikas Samiti) are the dwindling populations.

- The Toto of West Bengal (314 families with 1,387 persons as per 2011 census) and the Toda of Tamil Nadu (1,608, inclusive of 238 Christian Todas as per TRC, Udagamandalam [Ooty], 2011)) have population less than 2000 persons.
- The Saharia people of Madhya Pradesh and Rajasthan are the largest among the PVTGs with population more than 4 lakhs.

### **Literacy rate**

- Literacy rate among the PVTGs has gone up significantly over the past.
- From a single digit literacy rate, the figures have increased to 30 to 40 % in many of the PVTGs.
- However, as is the case with entire India, female literacy rate is still considerably lower compared to male counterpart.
- There has been a **considerable increase in the age of marriage among PVTGs**.
- The incidence of girl child being married while still being a minor, among these tribes has been decreasing.

### **2. Labour participation rate of women in India visibly low, says World Bank**

- Despite high growth rate during the economic reform period, women's ability to access job opportunities in the new economy has been "precarious".

### **India's Female Labour Force Participation (FLFP) rate**

- International Labour Organization ranks India's FLFP rate at 121 out of 131 countries in 2013, one of the lowest in the world.
- India had the lowest FLFP rate in South Asia, with the exception of Pakistan. Globally, only parts of the Arab world held a lower FLFP rates than India.
- In 2013, FLFP rate for India was 27% against China's 63.9%, and it was 56.3% in the U.S., 79.9% in Nepal, 57.4% in Bangladesh, 35.1% in Sri Lanka, 24.6% in Pakistan, 23.3% in the Arab world.
- FLFP dropped by 19.6 million women from 2004–05 to 2011–12. Participation declined by 11.4% — from 42.6% to 31.2% — from 1993–94 to 2011–12.
- **Approximately 53% of this drop occurred in rural India, among those aged between 15 and 24.**
- An **increase in educational enrolment among the younger cohort**, attainment of socio-economic status, and household composition largely contributed to the drop.
- Stability in family income, as indicated by the increasing share of regular wage earners and declining share of casual labour in the composition of family labour supply
- When the two periods between 1993–94 to 2004–05 and 2004–05 to 2011–12 are compared, most of the drop in FLFP was found during the second period.

### **3. The Treatment of Terminally Ill Patients Bill, 2016**

- It recognizes the validity of **advance medical directives** by terminally-ill patients, which physicians will be bound to respect while treating them.
- It emphasizes the need to **account for palliative care when making end-of-life-care decisions**.

### Provisions related to physician-assisted suicide for terminally-ill patients

- The draft Bill fails to protect the constitutional rights of patients who wish to have their decisions about medical treatment respected.
- In its judgments in the Aruna Shanbaug and Gian Kaur cases, the Supreme Court has stated that the law currently only permits **passive euthanasia**, i.e. withdrawal of life-saving treatment.
- The administration of a lethal drug dose by a physician (**active euthanasia**) or by the patient herself (assisted suicide) would constitute attempts to commit or abet suicide under the Indian Penal Code, 1860.
- However, in both these judgments, the court stated explicitly that assisted suicide was only illegal in the absence of a law permitting it.
- Therefore, assisted suicide could be legalized if legislation was passed by Parliament to that effect.

### Right to assisted suicide

- It recognizes the **right of terminally-ill patients** to withhold and **refuse medical treatment**, and to express their desire to a medical practitioner to assist them in committing suicide.
- Once the practitioner is satisfied that the patient is competent and has taken an informed decision, the decision will be confirmed by a panel of three independent medical practitioners.
- It moves away from decision-making based on the 'best interests' of the patient and recognizes the right to die with dignity.

### Towards a law on euthanasia

- This Bill adopts a modified definition of "**terminal illness**" from a draft Medical Treatment of Terminally Ill Patients Bill.
- It defines the term as a persistent and irreversible vegetative condition under which it is not possible for the patient to lead a "meaningful life".
- The use of this subjective phrase would require second parties to decide whether a person in a permanent vegetative state is living a life that is meaningful.
- Persons with disabilities, in particular, are likely to be disadvantaged by such an understanding of "terminal illness".
- It also gives rise to the practical question of how a person in a permanent vegetative state will be able to self-administer the lethal dosage of drugs to commit suicide.
- The case of incompetent patients, or competent patients who have not taken an informed decision about their medical treatment,
- Once the medical practitioner and independent panel are satisfied that euthanasia is medically advisable, permission would have to be sought from the High Court.
- The practitioner would then have to receive clearance from the Medical Council of India (MCI).
- Such a procedure is advisable for an act like assisted suicide which might be prone to abuse.
- However, it would be a violation of patient autonomy if it were applied to instances of merely withholding or withdrawing medical treatment.
- Further, given that the MCI has been affected by corruption and institutional incompetence, and likely to be overhauled completely, it is not advisable to place complete reliance on it.

### The way ahead

- Efforts to allow assisted suicide have been legalized in Albania, Colombia and Germany and Switzerland in various forms.
- Even in India, the debate over euthanasia, patient autonomy and the interests of the state in preserving the life of persons is currently playing out in various fora.
- There is a need to debate how such a law would be operationalized.
- This will help to ensure the constitutionally guaranteed right to bodily integrity and autonomy, and to minimise misuse of the law.

#### 4. Digital push should be disability inclusive

- Around 8-10% of India's population lives with disabilities, with an equal number constituting the aged.
- ICT have the potential to facilitate access of services available to them and allowing them to handle a wide range of activities independently,
- Enhance their social, cultural, political and economic participation.
- Poor accessibility due to lack of focussed information and political will has led to social exclusion of people with disabilities,
- Smart Cities Mission and Digital India should also be inclusive
- Incorporation of accessibility principles across all new developments will also complement the **Accessible India Campaign**,
  - AIC aims at achieving universal accessibility for all citizens and creating an enabling and barrier-free environment.
- India was one of the first countries to ratify the United Nations Convention on the Rights of Persons with Disabilities.
- The recently passed **Rights of Persons with Disabilities Act, 2016** mandates adherence to standards of accessibility for physical environment, transportation, information and communications, including appropriate technologies and systems, and other facilities and services provided to the public in urban and rural areas.
- The Act also mandates incorporation of **Universal Design principles** while designing new infrastructure, electronic and digital media, consumer goods and services.
- Most importantly, **the Act sets timelines to ensure implementation of the above and punitive action in the event of non-compliance.**
- Accessibility therefore forms the common thread weaving together the Accessible India Campaign, the Rights of Persons with Disabilities Act, the Smart Cities Mission and the Digital India campaign
- If principles of Universal Design are incorporated at the design stage, cost implications are negligible. Retrofitting, on the other hand, has huge cost implications
- Exclusion of persons with disabilities from education, employment and participation on account of a hostile infrastructure and inaccessible technology has huge economic implications.
- **UN agencies put this cost at around 7% of national GDP.**
- **Accessible services and business premises can broaden the customer base**, increasing turnover and positively impacting the financial health and social brand of the company.
- Recent research pegged the market size of different product categories needed by persons with disabilities in India at a whopping Rs. 4,500 crore.

**MISCELLANEOUS****1. Chennai NASHRI tunnel****Why in news?**

- Prime Minister inaugurated **country's longest road tunnel that links Kashmir Valley with Jammu** and provide all-weather route to commuters travelling from Jammu and Udhampur to Ramban, Banihal and Srinagar.
- The 9-km-long tunnel passes through the lower Himalayan mountain range on Jammu-Srinagar National Highway 44.
- It cuts the distance between Jammu and Srinagar to around 250 km from the current 350 km.

**Key Facts about NASHRI tunnel**

- It has been built at an altitude of 1,200 meters.
- It is also Asia's longest bi-directional highway tunnel.
- It is India's first tunnel equipped with world class **Integrated Traffic Control System (ITCS)** through which ventilation, signals, fire control, communication and electrical systems are automatically actuated.
- Air quality monitors every 12 metres will keep a check on carbon dioxide and carbon monoxide, guiding exhaust fans and air purification.
- 92.7 FM is mandatory for vehicles where emergency messages will be relayed
- 6,000 LED multiple colour lights will be used to break monotony
- GSM phones will work inside the tunnel. 118 SOS boxes have been set up, one every 150 metres on both sides
- Smoke and heat dampeners will react quickly in fire incidents
- It reduces travel time by three to four hours. The also reduces road distance between Chenani and Nashri to 10.9 km from earlier long route of 41 km.

**2. Ken betwa link hits green hurdle****About Ken Betwa Project**

- The Ken-Betwa ILR project aims to transfer surplus water from the Ken River to the Betwa basin through concrete canal to irrigate India's worst drought-prone Bundelkhand region.
- The project will benefit Uttar Pradesh and Madhya Pradesh in terms of meeting irrigation, drinking water and electricity needs of people across 6 districts in the two states.
- The apex court in February 2012 had directed Centre to implement this project in a time-bound manner and also had appointed a high-powered committee for its planning and implementation.

**Why in news?**

- **The Forest Advisory Committee (FAC)**, the apex environment ministry authority has imposed tough conditions on the Ken-Betwa river interlinking project.
- The H18,000 crore river interlinking project requires 4,141 hectares of forest in the heart of the **Panna Tiger reserve**, and some more besides, to build a dam and a 230-km canal to transfer water to Bundelkhand.



- As compensation for the pristine tiger habitat that would be inundated by the project, the Water Ministry had agreed to acquire about 8,000 hectares of forest land from the Madhya Pradesh government and revive them as forest.
- But the FAC said this land was not good enough as it was fragmented, and, to meaningfully revive a forest that is part of tiger habitat, the land acquired ought to be contiguous.
- This would require, according to the FAC, “revenue lands/non-forest lands by way of purchase or otherwise by the project proponents and the government”.
- While a State can relatively allocate forest land for Central projects, transferring private or revenue land is harder, time-consuming and costly.
- The FAC has also asked for the project’s main canal to be re-aligned.
- FAC clears requests for diverting forest land for projects, usually rejects or recommends a proposal, sometimes with conditions, for the diversion of forest land.
- The FAC’s recommendations are passed on to the environment minister, who can abide by them or reject them.

### **3. Raja ravi verma**

#### **Why in news?**

- **The Raja Ravi Varma Heritage Foundation** will hold a five-week exhibition of his lithographs from July 8 at the National Gallery of Modern Art in Bengaluru. This curated work will later travel to other countries.
- Most of his lithographs were printed after his demise in 1906.
- **Bharani Thirunal Rukmini Bayi Varma**, a member of the 6th generation of the family of the painter, lives in the city. She had set up the foundation.
- Experts estimate that Ravi Varma had completed 134 lithographs. But only 131 are available.
- Every lithograph (at the exhibition) will carry a curatorial note and explain the idea behind the picture, highlight its meaning both overt and subtle, and where necessary be critical of its limitation.
- Lithostones, paints, pictures of the press, and other objects of Ravi Varma will also be on display leading to a total of 262 exhibits in addition to the 131 lithographs.

#### **Raja Ravi Varma**

- Raja Ravi Varma hailed from the princely state of Travancore and is best known for depiction of scenes from Indian mythology and epics.
- Raja Ravi Varma (1848-1906) tried to re-establish Indian art through western methods and technique.

#### **Salient Features of Paintings of Raja Ravi Varma**

- His iconic and figural portraits of Indian women, mythological gods, royal life, literary figures and national heroes and heroines were an amalgamation of the European Realism, technique and material but were Indian in subject as well as narration.
- Raja Ravi Varma modified the European style of perspective and composition with the Indian Iconography and used oil painting.
- The oil painting was an inexpensive technology and coupled with Raja Ravi Varma’s oleographs, his paintings gained immense popularity due to their mass production and cheap prices.
- Varma's paintings are energising, as he used human forms to convey beauty and perfection without adopting distortion.

#### **4. Common duct policy soon**

- A common duct will be laid across a city and service providers such as telcos and digital TV players can lease these ducts to pass their fibre through it to offer services to consumers.
- Telecom Regulatory Authority of India is carrying out pilots in Deoghar in Jharkhand.
- It could reduce operational cost of firms, remove right of way challenges, while eliminating the need for frequent digging up of roads.
- This will also result in additional revenue for the municipalities and remove issues related to right of way.
- A common duct will be created for about 20 years. Once the duct is made, no service provider will be allowed to dig the road.