

GS SCORE

CURRENT

Q & A

For Civil Services Examinations

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1
POLITY
&
GOVERNANCE

Make 'POINTERS' for 'REVISION'

1.1 DEATH PENALTY OF INDIA REPORT ON CONVICTED FOR CAPITAL PUNISHMENT



(Q) Discuss the main findings of the Death penalty of India report. What do they highlight about the Indian judicial system? What can India do to provide equal and fair justice to its citizens?

o **Context:**

- ▶ National Law University, Delhi has released the 'Death Penalty India Report' recently.
- ▶ The Socio-economic profile of prisoners sentenced to death in India and provides an in-depth understanding of their interaction with the criminal justice system. Seeks to develop a "body of knowledge that will enable us to have a comprehensive and in-depth understanding of the manner in which the death penalty is administered in India".

o **Findings of the report:**

- ▶ Most are from economically vulnerable sections, backward communities and religious minority groups.
- ▶ Over 80% of prisoners facing capital punishment had not completed school and nearly half had begun working before the age of 18.
- ▶ A quarter of the convicts were either juveniles or between the age of 18 and 21 or above 60 years when the crime was committed.
- ▶ Dalits and Adivasis constituted 24.5% (90 prisoners) among those on death row, while members of religious minorities were over 20% (76 prisoners).
- ▶ The study also gives a state-wise break-up of the prisoners and the trial process, which reveal wide disparities in various states that a significant proportion of the convicted belong to the minorities and economically vulnerable communities.

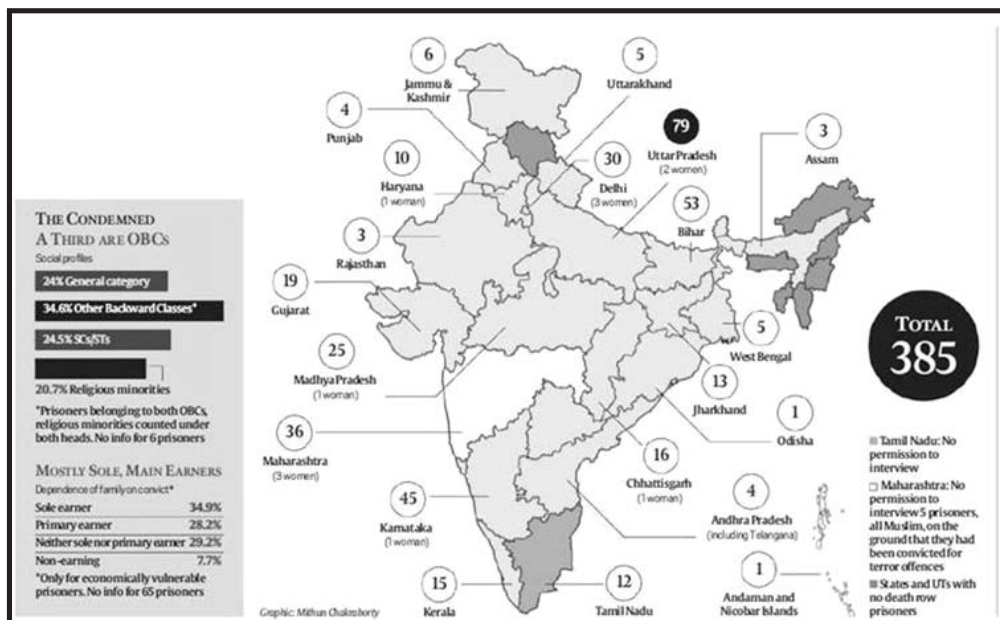


Fig: 1.1

o **What do the findings say about Indian justice system?**

- ▶ Major structural flaws in the criminal justice system, including access to legal services. For instance, less than 5% of death sentences awarded by trial courts between 2000 and 2015 were confirmed by the Supreme Court. In a total of 1,486 cases, only 73 persons were on death row at the end of the appeal process.
- ▶ The trials of 34% prisoners have lasted more than 5 years while those of 14.4% continued for more than 10 years. This denotes the delays in the judicial process and presents a

large number of pending cases before the judges. It is a grave violation of speedy justice.

- ▶ The awarding of death penalty more to economically backward and marginalised sections denotes that it disproportionately affects those who have least capabilities to negotiate the criminal justice system.
- ▶ The data reveals major structural anomalies in the legal system, which causes the miscarriage of justice.
- ▶ The findings confirm that the criminal justice system is disproportionately harsh on the poorer, less educated and socially backward sections.
- ▶ The fact that less than 5% of the death sentences given by lower courts were confirmed by the Supreme Court raises the suspicion that the lower judiciary is not sufficiently diligent in following the principle of pronouncing death only in the rarest of the rare cases.

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o Related details:

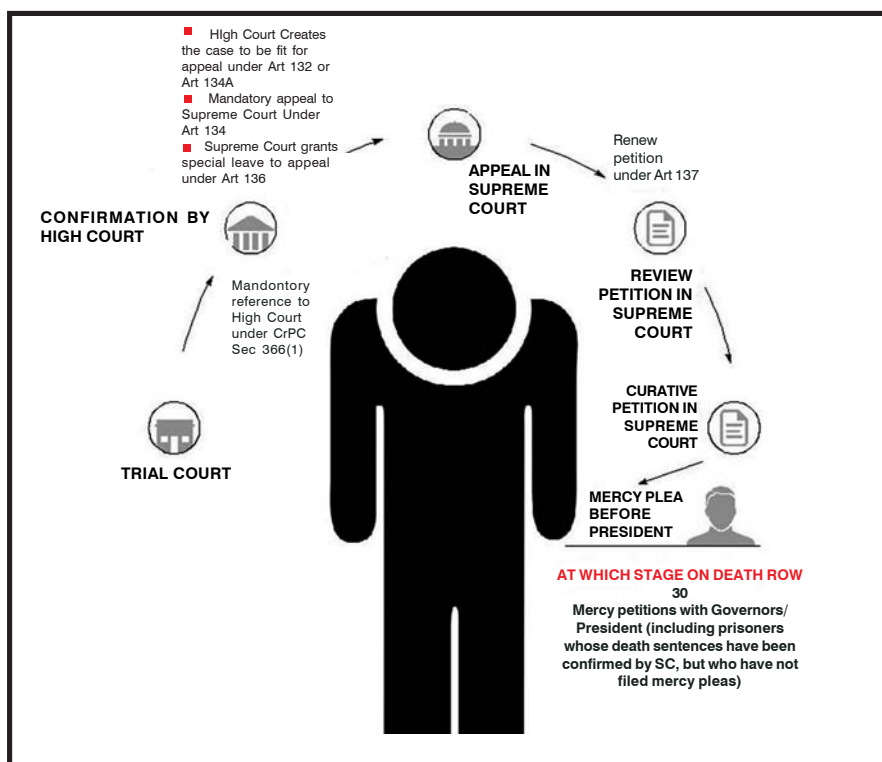


Fig: 1.2

o Way forward:

- ▶ Administration of criminal justice in India is in "Deep Crisis". It cites a lack of resources, an overstretched police force and ineffective prosecution as among the reasons. As a result, the administration of capital punishment is vulnerable to misapplication.
- ▶ The prisoner on death row suffers from extreme agony, anxiety and debilitating fear arising out of an imminent yet uncertain execution. Even The Mercy powers have failed in acting as a final safeguard against a miscarriage of justice.
- ▶ The awarding of more death penalties to poor and downtrodden sections of the society reflects the discrimination in justice system. Although, the capital punishment is justified in heinous and rarest of the rare crimes but in no way it is justified to impose it on minority sections and the economically poor who cannot afford to pay for the legal services.
- ▶ One can argue about the effectiveness of the death penalty generally. But when it comes to rarest of the rare crimes, concerns should be paramount. Thus, the capital punishment should be given after establishing fair trials else it would amount to gross violation of the right to seek legal aid.

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1.2 RULE - 213 OF RAJYA SABHA

Context of the news:

Rajya Sabha Chairman Hamid Ansari has rejected the resignation letter submitted by its member Vijay Mallya.

What does the rule say?

As per Rule 213 of Rajya Sabha procedures, the resignation submitted by a member must be voluntary and genuine.

Procedure of resignation:

- ▶ A Member who intends to resign his seat in the Council shall intimate in writing under his hand addressed to the Chairman, his intention to resign his seat in the Council.
- ▶ If a Member hands over the letter of resignation to the Chairman personally and informs him that the resignation is voluntary and genuine and the Chairman has no information or knowledge to the contrary, the Chairman may accept the resignation immediately.
- ▶ If the Chairman receives the letter of resignation either by post or through some other person, the Chairman may make such inquiry as he thinks fit, to satisfy himself that the resignation is voluntary and genuine. If the Chairman, after making a summary enquiry either himself or through the agency of the Rajya Sabha Secretariat or through such other agency as he may deem fit, is satisfied that the resignation is not voluntary or genuine, he shall not accept the resignation.
- ▶ A Member may withdraw his letter of resignation at any time before it is accepted by the Chairman.
- ▶ The Chairman shall, as soon as may be, after he has accepted the resignation of a member, inform the Council that the member has resigned his seat in the Council and he has accepted the resignation.

1.3 HEART OF ASIA CONFERENCE BEGINS IN NEW DELHI

- ▶ The Heart of Asia (HoA) conference began in New Delhi with the objective of 'bringing peace and stability to Afghanistan and spreading up its reconstruction with a focus on enhancing investment and connectivity to the country.'
- ▶ The conference was attended by the officials of a number of countries and is likely to deliberate on a host of a issue like combating challenge of extremism and terrorism.

Key Issues of the Conference:

- ▶ The key elements of HoA process have been to device a sustained, incremental approach to implementation of the Confidence Building Measures (CBM) like security, political and economic cooperation in Afghanistan, its neighbors and regional partners.
- ▶ It will also seek to speed up reconstruction in Afghanistan with a focus on enhancing investment and connectivity to the country.
- ▶ Energy, infrastructure and investment deals to shore up economic growth of Afghanistan may consider in detailed manner.

About the Heart of Asia Conference:

- ▶ HoA Conference is a part of the Istanbul Process established in 2011 which provide a platform to discuss an agenda of regional cooperation with Afghanistan at its centre to tackle the threats including counter terrorism. Counternarcotics, poverty and extremism.
- ▶ The 14 member countries of HoA engage in result-oriented cooperation for a peaceful and stable Afghanistan and by extension, a secure and prosperous region as a whole.

The 14 participating countries in HoA process are:

- ▶ Afghanistan, Azerbaijan, China, India, Iran, Kazakhstan, Kyrgyz Republic, Pakistan, Russia, Saudi Arabia, Tajikistan, Turkey, Turkmenistan and UAE.

◦ **The supporting countries include in HoA :**

- ▶ Australia, Canada, Denmark, Egypt, Finland, France, Germany, Italy, Iraq, Japan, Norway, Poland, Spain, Sweden, U.K., and the E.U.

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1.4 INDIA RANKED LOW IN PRESS FREEDOM INDEX

- ▶ India ranks profoundly low at 133 among 180 countries in the latest 2016 World Press Freedom Index released by Reporters Without Borders (RWB). India jumped 3 spot from the 136th position it had in 2015.
- ▶ Index is led by Finland, which retained its top spot for the 6th consecutive year, followed by Netherlands and Norway, similarly the USA is ranked (44) and Russia is placed at (176). Among India's neighbouring countries- Pakistan ranks (147), Sri Lanka (141), Afghanistan (120), Bangladesh (144), Nepal (105), Bhutan (94) and China stood in ranked (176) respectively.
- ▶ In the country like India, journalist and bloggers are attacked and anathematized by various religious groups that are quick to take offense, at the same time, it is hard for journalist to cover regions such as Kashmir that are regarded as sensitive by the Government.
- ▶ According to the index, Prime Minister Narendra Modi seems 'indifferent' to the threats against journalists and there is no mechanism for protecting journalists in the country. In this virtue, rather, in a desire to increase control of media coverage, Government envisage opening a journalism university run by former propaganda ministry officials, without substantiating what it refers to deal with the actual issue.
- ▶ The report shows that, there has been a deep and disturbing decline in respect for media freedom at both the global and regional levels.

1.5 SUPREME COURT PANEL TO MONITOR MCI LODHA COMMITTEE



(Q) The MCI suffers from many flaws and questions have been raised on its functioning? What are the major reforms needed in MCI? Discuss the mandate of Lodha committee recently appointed by SC to reform MCI?

◦ **Context:**

- ▶ SC has appointed a 3 member committee headed by former Chief Justice of India R M Lodha to oversee MCI.
- ▶ The British Medical Journal (BMJ) and the Parliamentary Standing Committee in their recent report have called for a 'radical prescription' to reform the Medical Council of India (MCI) in order to eliminate corruption and lack of ethics in healthcare. MCI has been criticised for being a "biased" organisation, acting "against larger public health goals" and an "exclusive club" of medical doctors from corporate hospitals and private practice.

◦ **Background:**

- ▶ The MCI was established under the Indian Medical Council Act-1933 and given responsibility for maintaining standards of medical education, providing ethical oversight, maintaining the medical register, and, through amendments in 1993, sanctioning medical colleges has failed to deliver quality and integrity in the health services across India.
- ▶ The Medical Council of India (MCI) is a statutory body entrusted with the responsibility of establishing and maintaining high standards of medical education in India.

◦ **What are the major reforms needed in MCI?**

- ▶ There is a need to restructure the MCI. It should not be an elected body dominated by vested interest but should represent all stakeholders through nomination. The MCI, as presently elected, neither represents professional excellence nor its ethos. The current composition of the Council reflects that more than half of the members are either from 21 corporate hospitals or in private practice.

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- ▶ The MCI currently sets standards for recognition; inspects and licenses medical colleges; oversees Registration and Ethical Conduct of Doctors. It now proposes to undertake accreditation as well. Such concentration of powers creates a serious conflict of interest and provides a fertile ground for misuse of authority. So there is a need to create a transparent system of licensing of medical colleges.
- ▶ There should be bifurcation of the functions of MCI and recommends that different structures be created for discharging different functions.
- ▶ There is a need to revisit ICT tools and revisit minimum standards which are required under the Act to establish medical colleges.
- ▶ A code of ethics which is in line with the international standards needs to be developed for the medical professionals to reduce the corrupt practices.
- ▶ It needs to see a balance between the number of seats available for medical courses at undergraduate and postgraduate level.

◉ Mandate of Lodha committee

- ▶ Lodha Committee would have complete authority to oversee all statutory functions under the MCI Act.
- ▶ All policy decisions of the MCI will need approvals from the Committee. It will also be free to issue remedial directions.
- ▶ The Committee will function for 1 year, unless a suitable mechanism is brought in earlier by it.
- ▶ Initially the panel will function for a year, unless suitable mechanism is brought in place earlier which will substitute the said committee.

◉ Way forward:

- ▶ The abysmal doctor-patient ratios in India's rural areas and poorer districts, the sanctioning of new medical colleges without ensuring trained medical faculty, the failure to produce adequate specialist doctors, and corruption in the conduct of inspections and in granting sanctions to medical colleges have wrecked the MCI's credibility. So, there is a need to bring back the integrity which MCI has lost over the years.
- ▶ Whether Lodha Committee manages to inculcate the changes needed in MCI or ends up being one of the numerous other attempts at cleaning up the medical education scene remains to be seen.

1.6 RAJYA SABHA CLEARS MINING LAW AMENDMENT



(Q) Do you think the new mining law amendments will help to address the problems in previous legislation? Discuss the key features of the changes that are proposed in the new legislation.

◉ Context:

The Government has passed the amendments to the Mines and Minerals Development and Regulation (MMDR) Act in the Rajya Sabha.

◉ Provisions of the Bill

- ▶ It adds 4th Schedule to the Mines and Minerals (Development and Regulation) Act, 1957 in order to include bauxite, iron ore, limestone and manganese ores notified minerals.
- ▶ It creates a new category of mining license i.e. the prospecting license-cum-mining lease, which is a two stage-concession for the purpose of undertaking prospecting operations (exploring or proving mineral deposits) followed by mining operations.
- ▶ It allows the Union Government to increase the area limits for mining, instead of providing additional leases.
- ▶ It changes the lease period for all minerals other than coal, lignite and atomic minerals. Mining leases for minerals shall be granted for a period of 50 years. On expiry of the lease, the leases shall be put up for auction, instead of being renewed.

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- ▶ It states that state governments shall grant mining leases and prospecting license-cum-mining leases for both notified and other minerals. All leases shall be granted through auction by competitive bidding, including e-Auction.
- ▶ It states that union government shall prescribe the terms and conditions and procedure for auction for the selection of bidders. For mining leases, the Government may reserve particular mines for a specific end use and allow only eligible end users to participate in the auction.
- ▶ It states that the holder of a mining lease or prospecting license-cum-mining lease may transfer the lease to any eligible person, with the approval of the state government and as specified by the Union government. Only mineral concessions granted through auction will be allowed for transfer.
- ▶ It provides for the creation of a District Mineral Foundation (DMF) and a National Mineral Exploration Trust (NMET). The DMF is to be established by the state government and NMET shall be established by the union government for regional and detailed mine exploration.

○ **What were the problems in previous legislation?**

In 2015, the government brought The Mines and Minerals (Development and Regulation) Amendment Bill, replacing a 1957 legislation which stipulated that mining licences could only be auctioned. This amended law allowed transfer of mines allotted through auctions but was silent on captive mining licences handed out in the past on the basis of recommendations of a screening committee. That discouraged deals among companies.

○ **Significance:**

- ▶ This amendment paves the way for transfer of captive mines in the country without the need for auction and will unclog a number of stuck deals in the mining sector.
- ▶ This will mean higher number of Merger and Acquisition (M&A) deals of steel and cement companies reeling in the aftermath of the collapse in global commodity prices.
- ▶ The legislation will also help alleviate a bad-loan crisis afflicting commercial banks, many of which have heavy exposure to steel and cement companies.
- ▶ Under the new mining law, the entirety of minerals extracted under a lease will have to be utilised by a single company. This is likely to impact the cement industry since it will be prohibited from the sale of surplus limestone.

1.7 UNION RAILWAYS MINISTRY LAUNCHES E-ENABLED PMIS APP FOR MONITORING OF PROJECTS

○ **Context:**

- ▶ Recently Railway Ministry has launched an e-enabled application Project Management & Information System (PMIS) which will be used for proper monitoring and management of all the Railway projects throughout the country.
- ▶ It is a web-enabled IT- Application to create a technology and knowledge platform to manage the entire lifecycle of complex railway projects.

○ **Key features of PMIS app**

- ▶ It will contain all the information about the ongoing projects which will help in reducing the completion time of the project.
- ▶ The application will also help in fixing the responsibility for delay in projects and help to watch over the life cycle of any project of the railways.
- ▶ Under the programme, officers would be awarded for timely/early completion of projects which will incentivise them to perform better.
- ▶ It is a web-based application, meeting the requirements of the Personnel Department of Indian Railways, manages the career event of employees starting from induction to superannuation. The major modules include Service Record, Promotion, Transfer, Training, Court Cases, D&AR, Dak and File, Staff Grievances, Industrial Relations, Welfare, Policy etc.

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◦ **Significance:**

- ▶ The Indian Railways has numerous big projects throughout the country which are of crores of rupees and have many complexities. The proper monitoring and management of these big projects is the demand of the Indian Railways. The app will look into this aspect by monitoring the progress of the projects.
- ▶ In the present world, digitization has become critical for proper monitoring of the lifecycle of the projects.
- ▶ It is a step in leveraging resources and to empower railways & stakeholders in transforming the way projects are designed, built and commissioned.
- ▶ By bringing all the projects on PMIS platform, railways can provide for online monitoring and mid-course correction to ensure faster execution, repository of design, drawings, resources, schedules etc. will help in better estimation and planning, improved designs and standardization of drawings, Optimal utilization of resources and faster decision making.

◦ **Present status:**

- ▶ Currently, PMIS is being implemented in the Udampur-Srinagar-Baramulla Rail Link (USBRL) project. It will be phased out in all parts of the country gradually.

1.8 BOMBAY HIGH COURTS ALLOWS BEEF IMPORTS INTO MAHARASTRA

◦ **Context:**

- ▶ Recently Bombay High Court has ruled for, decriminalizing possession of beef in Maharashtra which may lead to the import of beef from the neighbouring states of Karnataka, Goa, Andhra Pradesh and Telangana.
- ▶ The court has struck down Sections 5(d) and 9(b) of the Maharashtra Animal Preservation (Amendment) Act which criminalized possession of beef, saying they infringed upon a person's right to privacy.
- ▶ The court also struck down a provision in the Maharashtra Animal Preservation (Amendment) Act, 1976, which put the burden on a person found to be in possession of beef to prove his innocence.

◦ **Background:**

- ▶ March 2015, a ban was enforced on beef in the state which had created an atmosphere of fear among beef eaters and hotels.
- ▶ It made the sale or possession of beef an offence punishable by a 5-year jail term or a 10,000 Rupee fine.
- ▶ The decision led to banning cow slaughter and also included a ban on slaughter of bulls and bullocks. It also criminalized possession of beef, notwithstanding where it came from.
- ▶ The objective of the ban was to protect the cow and its progeny, and not to prevent citizens from eating beef that may be brought from a state or a country where there is no prohibition on cow slaughter.
- ▶ The ban had impacted Maharashtra's farmers, especially those in drought-hit regions. But in regions like Marathwada and Vidarbha, the farm cattle do not have fodder to eat and keeping them has become unaffordable for the farmers. The ban took away an option which they could use to get some cash.
- ▶ In April 2015, HC directed the state Government not to take coercive action against those found in possession of beef for 3 months but refused to strike down the relevant sections of the Act which criminalized possession of beef.

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- **What is the status in neighbouring states?**
- **Laws on cow slaughter**
 - ▶ **Fully banned**
Andhra Pradesh, Telangana , Bihar, Chattisgarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, J&K, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand
 - ▶ **Allowed with slaughter certificates**
Assam, Tamil Nadu, West Bengal
 - ▶ **No ban**
Arunachal Pradesh, Kerala (animals above 10 years), Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura
- **Significance:**
 - ▶ Consumption of food which is not injurious to health is part of an individual's autonomy or his right to be left alone. Hence, it is an infringement of his right of privacy to force him not to eat food of a particular type.
 - ▶ It provides relief to beef eaters and hotels in Mumbai who specialize in making beef dishes.
 - ▶ Though the decision provides for not criminalising possession of beef but it would be difficult for the police to identify the source of beef coming into Maharashtra.
 - ▶ The relief extended by the court ruling may lead to import of beef from those neighbouring states where cow slaughter is allowed or partially allowed.
 - ▶ The decision to enforce a ban on meet was one of the strictest such laws in India. The relaxation aims to provide some relief.
 - ▶ The ban on imported beef was considered to be "an infringement of right of privacy, which is a fundamental right. So oppositions were raised from many sections of society. The recent decision provides people with a choice to enjoy freedom regarding possessing and consuming food of his choice.
 - ▶ The court has, however, upheld the constitutional validity on ban of slaughter, transport or export of products made from bovine flesh within the state.
- **Conclusion:**
Such a burden is unreasonable and subjects the accused to a grave hardship and oppression. Though, the states's concern to prevent slaughter of animals and prevention of cruelty to them is justified but the people have a fundamental right to privacy under the constitution. The government should try to make other stringent laws so that it strikes to maintain a balance between the two aspects.

2

**INTERNATIONAL
RELATION**

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2.1 ITALIAN MARINE ISSUE



- (Q) The absence of legal mechanism to try Italian marine in India has delayed the proceedings for the crime they have done. Critically analyse the issue keeping in mind the jurisdiction of various courts in India.
- (Q) Outline the issue of Italian Marines who are under trial for killing two Indian Fishermen in the Indian Ocean.

- ▶ The first of its big verdict pronouncement the Permanent Court of Arbitration, The Hague has given the decision to return Italian Marine to their home.
- ▶ Two Italian marines - Massimiliano Latorre and Mr. Girone are facing the charge of murdering two Indian fishermen in 2012 off the Kerala coast. The fishermen were killed when the marines on duty aboard MV Enrica Lexie, an Italian-flagged oil tanker, fired at them.
- ▶ Mr. Latorre is back in Italy after a stroke in 2014 while Mr. Girone is staying at the Italian embassy in India.
- ▶ However, differences have cropped up between the two countries over the details of the verdict which will govern the marine's return. While India has claimed that the verdict upholds the Supreme Court's authority, Italian officials have said it is a vindication of their position that India has no jurisdiction.
- ▶ The Tribunal left it to the Supreme Court of India to fix the precise conditions of Sergeant Girone's bail. This could include him reporting to an authority in Italy designated by our Supreme Court, surrendering his passport to Italian authorities and not leaving Italy without the permission of our Supreme Court. Italy shall apprise our Supreme Court of his situation every 3 months,"
- ▶ India's argument in this case have been "recognised". "The authority of the Supreme Court has been upheld and hoped that the issue of jurisdiction will be determined in favour of India.
- ▶ From the Italian Government side, The UN tribunal has ruled in favour of Girone by allowing him to leave for Italy while India maintained that the tribunal left it to the Supreme Court to fix the precise conditions of Girone's bail and noted that while the marine may return to Italy during the present arbitration, he would remain under the authority of India's apex court.
- ▶ On March 30, Italy had sought the return of Mr. Girone as a "provisional measure" as the arbitration could go on for the next few years. Not doing so, Italy argued would amount to "deprivation of liberty" for him as he has been in India since 2012.
- ▶ "The Italian government expects India to take a constructive attitude, also in the subsequent phases, including with regard to the jurisdiction of the dispute."

o The issue so far:

- ▶ The MV Enrica Lexie was travelling from Singapore to Egypt with a crew of 34 including 19 Indians and accompanied by 6 Italian navy marines, Captain of the St Antony, Freddie Louis claimed that his vessel was returning from its fishing expedition in the Laccadive Sea when men on board the Enrica Lexie began firing at them without provocation for approximately 2 minutes.
- ▶ According to the Indian Coast Guard and crew of the St Antony, the incident occurred at approximately 16:30 IST on 15 February 2012 when the St Antony was approximately 20.5 nautical miles off the Indian coast within the Contiguous Zone (CZ) area of India's Exclusive Economic Zone (EEZ).
- ▶ Indian Coast Guard intercepted the Enrica Lexie in the Lakshadweep archipelago and compelled them to precede Kochi port.
- ▶ The 2 Marine were remanded to judicial custody for interrogation on charges of homicide under Section 302 of the Indian Penal Code. Based on the postmortem carried out on 16 February 2012, Kerala Police charged the 2 marines with murder.
- ▶ On 4 April 2013, the Indian National Investigation Agency (NIA) filed an FIR against the 2 Italian marines in relation to charges including murder, attempted murder, mischief and conspiracy.

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- ▶ In January 2014, India decided to prosecute the Italian marines under the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA).
- ▶ The SUA Convention was passed in 1988 with the goal of suppressing international terrorism. Italy criticised the prosecution pursuant to the SUA Convention as equating the incident to an act of terrorism.
- ▶ On 7 March 2014, India dropped the SUA charges against the marines. On 7 February 2014, the charges were downgraded from murder to violence meaning the marines would not face the death penalty if convicted.
- ▶ Legal delays caused by both India and Italy have kept the marines case on the burner. Now an international arbitration tribunal has ruled on May 2nd 2016, that Sergeant Salvatore Girone can return to Italy until it decides a dispute raised by Italy about India's jurisdiction to try him and his colleague.
- ▶ The order allowing Sergeant Girone to return may seem like a legal setback to India's attempts to bring the 2 marines to justice. (The other marine, Massimiliano Latorre, is already back in Italy.) However, the order of the Arbitral Tribunal in the Permanent Court of Arbitration in The Hague has enough safeguards to ensure that Sergeant Girone will return to face trial in India in the event that it decides India has the jurisdiction to try him.
- ▶ Italy has given a solemn assurance to this effect. The question before the tribunal is crucial: whether India breached international law by asserting jurisdiction over the Italian oil tanker, Enrica Lexie, or whether Italy alone has exclusive jurisdiction.
- ▶ An unfortunate impression has been created that India's legal and judicial system is under-equipped to handle such cases. The process should have been sustainable and credible from the beginning, instead of being marked by doubt and uncertainty.
- ▶ Nationalist sentiment and the constraints of domestic politics played an excessive role in influencing the manner the case was dealt with. India and Italy should cooperate, without further delay or diplomatic wrangling, in the interests of justice. The case must be settled on purely legal grounds, and without the kind of political one-upmanship that has contributed to the delay over the past 4 years.

2.2 INDIA-PAKISTAN FOREIGN SECRETARIES TALK



- (Q) India Pakistan relation is the most bitter and eventful of challenges involved in it. Discuss in the line of recent secretary level talk which both the country has claimed to be failed. Suggest what needs to be done to improve the relationship?
- (Q) Meeting on the sidelines of Heart of Asia Conference in New Delhi the Foreign Secretaries of India and Pakistan have failed to find common ground to kickstart the Comprehensive Bilateral Dialogue process, or even agree on timeline and has officially confirmed the talk as failure.

- ▶ India raised its concerns about Pathankot, the 26/11 investigation and consular access to alleged spy Kulbhushan Jadhav. Pakistan brought up alleged Indian interference in Balochistan and its concern about investigation in the Samjhauta Express blast.
 - ▶ Both the officials have discussed ways to move the dialogue process forward in a productive way. The only way to do this is to schedule structured meetings at the secretary level for the next few months, even as the 2 National Security Advisors take up issues related to terrorism in the wake of the Pathankot attack.
 - " Pakistan has been particularly reluctant for a full-fledged discussion on terrorism, but given that it hosts the SAARC summit this year, it may be willing to be more flexible in framing the talks agenda.
 - " Despite many setbacks, there have been numerous occasions over the past year to encourage hope that dialogue will acquire some sort of permanence.
- ◉ **The Dialogues between two countries:**
- ▶ To begin with, the meeting in Ufa between the two Prime Ministers that drew up an ambitious road map for talks, the subsequent meeting in Paris, and Prime Minister

Narendra Modi's unscheduled Christmas Day visit to Lahore surprised each time and pulled ties out of a deep freeze.

- ▶ External Affairs Minister Sushma Swaraj's December visit to Islamabad, when a new Comprehensive Bilateral Dialogue between the Foreign Secretaries was announced, as well as the sustained contact between the National Security Advisers, gave an impression of momentum towards a historic summit in November 2016.
- ▶ Importantly, Prime Ministers Modi and Nawaz Sharif, who have deliberately kept a direct line of conversation alive all these months, have expressed their vision of bilateral ties with clarity.
- ▶ It is now for both the Governments - which in Pakistan's case also means the military establishment - to work towards realising that vision. In a world where the U.S. and Cuba have restored ties, Russia and China have formed a close partnership, and Iran has emerged from isolation, it is not too much to hope that India and Pakistan can at least discuss key issues.

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o **The need of the hour:**

- ▶ What is therefore most needed today is new thinking, rather than a mere change in style. Conventional wisdom stipulates that conflicting nations hold talks to settle their differences. This has been the dictum that has driven leaders of India and Pakistan till now.
- ▶ New thinking should begin by reviewing and revising the current code of conduct for relations with Pakistan. This must involve adoption of a 'minimalist' approach, including limiting trade relations and restricting movement of people between the 2 countries. More importantly, India must evolve a new 'Counter Force Doctrine'.
- ▶ However, the Ministry of External Affairs said that, both sides exchanged ideas during the meet on how to take the relationship forward. "A Relationship goes forward through such exchanges & let's remain hopeful for the future concern."

2.3 CHINA, INDIA AND WHAT A NEW 'RED TELEPHONE' WOULD MEAN FOR THE WORLD



- (Q) Examine the causes for the establishment of a "red telephone" a military hotline between India and China in the line of white house and Kremlin.
- (Q) Examine how Sino-India relation is flourishing in recent decade?

- ▶ India and China happens to be the World's 2 largest, most populous, most durable Asian Countries, for most of their collective history, have lived alongside each other with an almost studied indifference to the military, economic and cultural activities of the other. This dynamic began to change in the postcolonial period, but slowly, unevenly and with as much backtracking as forward progress.
 - ▶ The recent news that Delhi and Beijing may be establishing a military hotline-reminiscent of the admittedly apocryphal 'red telephone' between the White House and the Kremlin- has shown how much the Sino-Indian relationship has expanded and matured in recent years and also how much distance still remains.
 - ▶ The decision has been taken with respect to rising frequent confrontation from Chinese side to cross the border (LAC) and intrude in Indian Territory causing damage to India's sovereignty and territorial land.
- #### o **India - China Relations:**
- ▶ The greatest impediment in India-China relations is the trust deficit. By engaging with each other swiftly, the leaders of both sides have demonstrated since independence that they are determined to address and reduce the trust deficit.
 - ▶ Throughout the history, Geography was the primary reason that the 2 countries maintained a diplomatic distance, keeping their interests separate and avoiding substantial political and economic exchanges.
 - ▶ Then, as the modern era dawned, China descended into domestic chaos and India found itself a direct colony of Britain, precluding any deeper ties as long as those

conditions persisted. Only in the early 1950s did China and India begin to interact as modern Governments in a sustained way, bonding over their shared former status as the exploited and downtrodden of Western Imperialism and the newly-emancipated developing world.

- ▶ The People's Republic of China (PRC) was established on October 1, 1949, and India was the first Non-communist country to establish an Embassy in PRC. On April 1, 1950, India and China established diplomatic relations. The two countries also jointly expounded the Panchsheel (Five Principles of Peaceful Co-existence) in 1954.
- ▶ But their lack of deep ties allowed disputes to escalate, culminating in the 1962 Sino-Indian War, which left them with diplomatic differences until the early 1990s.
- ▶ However, that relationship has been changing rapidly. The last decade has seen a flurry of Sino-Indian diplomacy, trade and exchange, even as military tensions between both the countries remain substantial. The occasional border skirmish and bilateral interaction are tainted by their divergent views on relations with Pakistan, still-archival of India and an increasingly close ally of China.
- ▶ India and China have stepped up functional cooperation in all areas. The two foreign ministries have instituted dialogue mechanisms on issues relating to counter-terrorism, policy planning and security, besides strategic dialogue and regular consultations. There are also close cooperation in areas as diverse as water resources, judiciary, science & technology, audit, personnel, finance, labour etc.
- ▶ The resultant growth in China and India's international diplomatic and economic influence has also increased the significance of their bilateral relationship. Cultural and economic relations between China and India date back to ancient times. The Silk Road not only served as a major trade route between India and China, but is also credited for facilitating the spread of Buddhism from India to East Asia.
- ▶ However, India and China both wants Nepal to be stable. A stable neighbour is more in India's interest for establishing peace and prosperity in the region with the pace of development which is much in Nepal' need.
- ▶ India too must share some responsibility for the political crisis in Nepal. However, Nepal's blame game over India for Nepal's own political condition is more of a flake. The Nepali street is particularly conducive to rumours about Indian interference, even if much of this has no basis in fact. Regardless, this is enough reason for New Delhi to quickly adopt a more open and more energetic outreach, one that is aimed at nothing more than the overall progress of the Himalayan republic.

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2.4 BREXIT



- (Q) What do you mean by Brexit? What are its pros and cons for UK as well as EU?
- (Q) How Brexit will make EU weaker in economic and geopolitical terms? Analyse its consequences on EU?
- (Q) Trace the reason for UK joining European Union in 1973. What were its advantages and disadvantages? How Brexit will help UK in reasserting its bottlenecks from EU?
- (Q) Brexit in overall term is an opportunity to reassert British National Sovereignty and in a sense to liberate Britain from the bottlenecks of EU, both politically and financially. Comment.

- ▶ Brexit is an abbreviation of British Exit similar to the term Grexit. It refers to the possibility that Britain will withdraw from the European Union. An in-out referendum has been set for execution on Britain's European Union Membership on June 23.
- ▶ The idea for the European Union first got conceptualized by the Maastricht Treaty on November 1st 1993, with the aim of ending the frequent and bloody wars between neighbours, which culminated in the Second World War. Though, European Union is not the result of one day but of a gradual integration since World War - II. Originally founded by

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the 6 member countries in 1951, confined to Western Europe, the EU undertook a robust expansion into central and Eastern Europe in the early 21st century.

- ▶ The treaty of Maastricht was designed to enhance European political and economic integration by creating a single currency (the Euro), a unified foreign and security policy and common citizenship rights and by advancing cooperation in the areas of immigration, asylum and judicial affairs. The EU was awarded the Nobel Prize for Peace in 2012, in recognition of the organization's efforts to promote peace and democracy in Europe.
- ▶ On January 1st, 1973, Denmark, Ireland and United Kingdom joined the European Union raising the number of member states to 9. Today it has the membership of 28 nations. Britain joined the EU as a way to avoid its economic decline. The UK's per capita GDP relative to the EU founding members' declined steadily from 1945 to 1972. However, it was relatively stable between 1973 and 2010. This suggests substantial benefits from EU membership especially considering that, by sponsoring an overpowered integration model, Britain joined too late, at a bad moment in time, and at an avoidably larger cost.
- ▶ The movement for Brexit was founded in 1991 (under a different name) to oppose Britain's EU membership and saw its popularity surge in 2013. The 2 campaigns, "Britain Stronger in Europe" and "Vote Leave", that are likely to form the official lobby group for each side in the referendum.

◉ **Article 50 (of the Treaty on European Union):**

This Article allows European Union member states to notify the EU of its withdrawal and obliges the EU to try to negotiate a 'withdrawal agreement' with the state. The form of any withdrawal agreement would depend on the negotiations and there is therefore no guarantee the UK would find the terms acceptable. The EU Treaties would cease to apply to the UK on the entry into force of a withdrawal agreement or, if no new agreement is concluded, after two years, unless there is unanimous agreement to extend the negotiating period.

◉ **Arguments in favour of Brexit:**

- ▶ **Trade:** The Brexitters feel, it can secure better trade deals with important countries like China, India and the US. It will negotiate a new EU relationship without bound by EU laws.
- ▶ **EU Budget:** Britain can stop sending £350 million (equivalent to half England's school budget), to Brussels every week. This money could be spent on scientific research and New Industries.
- ▶ **Regulation:** The general feeling is prevailing that leaving EU could mean better and greater regulation, especially in areas like employment laws and health & safety.
- ▶ **Immigration:** Eurosceptics believe that leaving EU could help Britain reform its policies in this regard by having a sensible regime for the movement of people over skilled and non-skilled people. Britain can change the expensive and out of control system that could offer an open door to EU and Non EU immigrants, who could contribute to Britain.
- ▶ **Influence:** Those in favour of Brexit believe that leaving the EU would allow Britain to regain their seat on international bodies where EU represents them, and use their greater international influence to push for greater international cooperation.

Overall, it is an opportunity to reassert British National Sovereignty and in a sense to liberate Britain from the bottlenecks of EU, both politically and financially.

◉ **Arguments against Brexit:**

- ▶ **Trade:** Britain avoids exporter tariffs and red-tape, which is important because nearly 45% of its trade goes to EU. Another benefit is that being a member, Britain can obtain better trade terms, because of the EU's size. Brexit would damage Britain's export competitiveness.
- ▶ **EU Budget:** On the budget front, the Stronger In Campaign contends that the benefits outweigh the costs. Its annual contribution to the EU is equivalent to £340 for each household, according to the Confederation of British Industries, all the trade,

investment, jobs and other prices gave £3,000 per year benefit to each household because of EU membership.

- ▶ **Regulation:** By staying in EU, Britain can better negotiate for changing regulation. Most EU regulations, they argue is standardized and effectively collapses 28 national standards into one European standard, thus reducing red-tape and benefit businesses.
- ▶ **Immigration:** Pro-EU campaign says that leaving the EU will not stop immigration to the UK. Countries such as Norway and Iceland, which are not a part of EU, as per the European Free Trade Association, have to accept free movement and have higher rate of immigration including from EU countries than Britain.
- ▶ **Influence:** Pro-EU campaigners' rests on the fact that Britain is represented twice in international organizations by foreign secretary and EU High Representative. Staying in Europe might only result in better cooperation, which has helped them tackle issues of global concerns like Ebola and piracy in Africa.

Overall, Britain will also undermine London's position as Europe's financial centre. But in a post-Brexit world, Frankfurt and Paris may overtake that position from Britain.

o **Brexit consequences on EU:**

- ▶ If we see the trade pattern then 51.4% goods export to EU from Britain in return to 6.6% from EU to Britain. A post-Brexit Britain will have to form a set of trading and institutional relationship with it to secure above mentioned export.
- ▶ EU will become smaller and weaker both in economic and geopolitical terms.
- ▶ The EU share of the world population will fall from 7.0 to 6.1%. In terms of world GDP, in purchasing power parity, the EU share will decrease from 17.0% to 14.6%, and in current international dollars from 23.8 to 20.0%. The EU share in global exports of goods and services at current prices and exchange rate will fall from 33.9% to 30.3%.
- ▶ The transition process may take several years. It would greatly increase legal and economic uncertainty, not only in the UK but also in EU.
- ▶ The political and economic shock created by Brexit could be a step towards further disintegration of the union. Given the increasing strength of Eurosceptic parties in many EU member states.
- ▶ It will further aggravate problems with completing the Banking Union, or accepting the burden sharing mechanism to tackle the refugee crisis. Due to its opt-out clauses the UK does not participate in these projects and there are other EU member states that are reluctant to accept larger degree of burden and sovereignty sharing related to them.
- ▶ The free movement of people, goods and services has been affected by the Brexit from other EU member states.
- ▶ Attracting and retaining this foreign talent will become harder after Brexit, when EU workers moving to Britain will no longer be able to take their pension rights with them, and the other conveniences of a single labour market which are lost.

2.5 BANGLADESH HANGS JAMAAT CHIEF MOTIUR RAHMAN FOR 1971 WAR CRIMES:



(Q) International Human Rights groups say a climate of intolerance in Bangladeshi politics has both motivated and provided cover for perpetrators of crimes of religious hatred. Analyze in the context of various punishment announced by the International War Crime Tribunal of Bangladesh.

- ▶ Top Jamaat-e-Islami party leader Motiur Rahman Nizami on May 11, 2016 executed for war crimes committed during the country's 1971 War of Independence against Pakistan on the order of Bangladesh's war crime tribunal for triggering violence outside the court.
- ▶ Three Molotov Cocktails thrown by suspected Anti-Government activists exploded outside the courthouse in Central Dhaka as Abdus Subhan, a vice president of one of Bangladesh's largest parties, Jamaat-Islami, was found guilty of murder, genocide and torture.

- ▶ The verdict is expected to further inflame tensions in Bangladesh where an alliance of opposition parties, including Jamaat, is trying to topple the government of Prime Minister Sheikh Hasina.
- ▶ At least 87 people have died since early January when the leader of the main opposition Bangladesh Nationalist Party (BNP) called on supporters to blockade roads, railways and waterways to force Hasina to call new polls.
- ▶ "The International Crime Tribunal" found him guilty of 6 out of 9 charges and awarded the death sentence. As a leader of Jamaat, he collaborated with Pakistan Army and carried out in the name of Islam.
- ▶ The Supreme Court's decision cleared the final legal hurdle for the government to hang the Jamaat-e-Islami chief, and the mercy petition has also been rejected by the President Abdul Hamid.

◉ **International Crime Tribunal (Bangladesh):**

- ▶ It is a domestic war crime tribunal established in 2009 to investigate and prosecute suspects for the genocide committed in 1971 Bangladesh Liberation War by the Pakistan Army and their local collaborators, Razakars, Al-Badr and Al-Shams.
- ▶ The Tribunal is a domestic judicial mechanism set up under national legislation and it is meant to try internationally recognized crimes and that is why it is known as 'International Crimes Tribunal'.
- ▶ The International Crimes (Tribunals) Act, 1973 (Act no. XIX of 1973), was enacted by the sovereign parliament of Bangladesh to provide for the detention, prosecution and punishment of persons responsible for committing genocide, crimes against humanity, war crimes and other crimes under international law .
- ▶ The Tribunal constituted under the Act shall have the power to try and punish any individual or group of individuals or organizations, or any member of any armed, defense or auxiliary forces irrespective of his nationality, who commits or has committed, in the territory of Bangladesh, whether before or after commencement of this Act, any crimes mentioned in sub section [2] of section 3 of the Act. Under section 6 of the Act the government may, by notification in the official gazette, set up one or more tribunals each consisting of a Chairman and not less than 2 and not more than 4 other Members.
- ▶ 5 opposition politicians, including 4 Jamaat-e-Islami leader, have been executed since late 2013 after being convicted by the tribunal.

◉ **Human Rights issues:**

- ▶ Modeled after the Nuremberg trials, the tribunal, which has commenced in 2010, repeatedly faced criticism from the international community about the fairness and the openness of the trials.
- ▶ International Human Rights groups say a climate of intolerance in Bangladeshi politics has both motivated and provided cover for perpetrators of crimes of religious hatred terming the tribunal's procedures being short of international standards. The government of Bangladesh denies the accusations.
- ▶ The US department of state said that while it supported justice being carried out for the 1971 atrocities, it was vital that the trials of those accused are free, fair and transparent and conducted in accordance with international agreements.
- ▶ "While we have seen limited progress in some cases, we still believe that further improvements to the process could ensure these proceedings meet domestic and international obligations," says Bangladesh. "Until these obligations can be consistently met, we have concerns about proceeding with executions."

2.6 BEIJING UNVEILS DOCTRINE TO COUNTER U.S. 'PIVOT'



- (Q) What do you understand by Pivot to Asia policy of US? Mention what steps China has taken to counter this rebalancing strategy of US. Can India balance between China and America in this regard?
- (Q) India has been building partnerships with the United States, Japan and other middle powers in the Asia-Pacific to balance China as it grows in strength—a policy shaped by India's own objective conditions, rather than American designs. How India can balance its stand between China and America?
- (Q) The US strategic plan is to continue providing global security with emphasis on "rebalance toward the Asia-Pacific region." Such a pivot is not new, but has been in play since the end of the Cold War. Comment.

- ▶ China has formally invited its neighbours to pursue a regional security doctrine led by Beijing pointing out the failure of the 'Rebalance' strategy of the United States in a Foreign Ministerial Conference on Interaction and Confidence Building Measures in Asia (CICA).
- ▶ In the welcome ceremony of CICA conference in Beijing, Chinese President urged participants to build consensus and step up dialogue to foster a security governance model with Asian features. It also mentioned that the 'New Model' is the latest contribution China has made to regional governance.
- ▶ However, the basic details that what could emerge as China-centric collective security architecture in the Asia-Pacific are still in dilemma. The People's Daily commentary (One of leading Chinese Newspaper), for instance, only mentioned that, 'Asian features' include openness and inclusiveness, as China strongly opposes exclusivity.

○ Pivot to Asia:

- ▶ It is one of Obama Administration's central foreign policy initiatives. Simply put, the pivot is meant to be a strategic "Re-balancing" of US interests from Europe and the Middle East towards East Asia. It is, however, a vast and dynamic increase in US focus and depth of engagement in the region. To benefit from this shift in global geopolitical dynamism and sustainably grow its economy, the United States is building extensive diplomatic, economic, development, people-to-people and security ties with the region.
- ▶ By utilizing 'forward deployed diplomacy', the United States has sought to provide reassurance of its lasting commitment in order to cultivate an open, fair, stable and predictable political, economic, and security operating environment across a vast region spanning from India to the United States.
- ▶ From friends in Asia, the United States seeks nothing less than their active commitment to building and sustaining this effort on all fronts, so that all countries in the Asia-Pacific region play their part in finding and implementing solutions to shared regional and global challenges, from the proliferation of dangerous weapons to the impacts of climate change.
- ▶ Nevertheless, the Obama administration's policy toward the region has been only a partial success. The rebalance was necessary but not sufficient to meet the challenges confronting US policymakers in the region, chief among them the pressures produced by China's growing influence.

○ China's assertive action against the Pivot to Asia:

- ▶ The write up asserted that the launched of the Asia-Pacific rebalance strategy by the US in recent years did not bring Asia Peace, but only uncertainty. It added that a US led alliance system is not the right option to safeguard the peace and stability of Asia. Instead, a system of security governance with Asian features, as suggested by China, will be best for Asian development.
- ▶ Tensions between the U.S. and China have spiked after the Chinese responded to the 'pivot' with fresh activism in the South China Sea, including construction of artificial islands within waters claimed and controlled by Beijing. Washington has dubbed the

growing Chinese assertion as a danger to "freedom of navigation" which could hamper the \$5.3 trillion trade that passes through the South China Sea- a charge that Beijing denies.

- ▶ Aware of the linkage between the disputes and the acceptance of its doctrinal counter to the U.S. 'pivot', the commentary points out that Chinese leaders, during the CICA conference, had "a frank talk about the South China Sea issue and reiterated China's 'dual-track approach', calling for relevant countries to work together with China to safeguard peace and stability".
- ▶ In the run up to the espousal of its new doctrine, the Chinese have launched a regional diplomatic offensive to reinforce that an Asian home-grown solution was the best way to resolve maritime disputes confronting the region. Last month Chinese Foreign Minister Wang Yi embarked on a whirlwind visit to Cambodia, Laos and Brunei, to cull out what the Chinese Foreign Ministry described as "an important consensus" on the South China Sea issue, which would be relevant to the Association of South East Asian Nations.

◉ Can India balance between China and America?

- ▶ India has been building partnerships with the United States, Japan and other middle powers in the Asia-Pacific to balance China as it grows in strength-a policy shaped by India's own objective conditions, rather than American designs, considering India's adjacency to China, their power asymmetry, unresolved territorial disputes that erupted into full-scale conflict in 1962, China's growing strategic partnership with a nuclear-capable Pakistan (which remains a "national obsession" for India) and Chinese maritime ascendancy in the Indian Ocean.
- ▶ "Adjacency" between two states is, according to the ancient Indian principle, a "fruitful source of rivalry and differences." This principle appears relevant in the case of India-China relations. Both are simultaneously rising with divergent aspirations in the Asia-Pacific, increasing their mutual security dilemma. The proximity of China and Pakistan to India, and their strategic alignment, would require India to forge close ties with the United States and other outside powers to preserve balance.
- ▶ At the same time, India's growing economic, political and military relations with actors in the Asia-Pacific are doing more than balancing against China-they are serving its great-power ambition. Therefore, India has many reasons to cooperate and coordinate with entities in the Indo-Pacific, including motives that are not directly related to China.

2.7 OBAMA DOCTRINE



(Q) It is widely said that Obama Doctrine influences India's policy framework. Do you think so? Why?

- ▶ Obama Doctrine is a term used to describe the foreign policy of United States and its several principles initiated during the presidencies of Obama. Though the Doctrine is not a specific foreign policy introduced by the executive but, rather a phrase used to describe Obama's general style of Foreign Policy unlike the Munroe and Bush Doctrine.
- ▶ The central part of this Doctrine emphasizes the negotiation and collaboration rather than confrontation and unilateralism in international affairs.
- ▶ In 2008, the term Obama Doctrine was used by Lynn Sweet of the Chicago Sun-Times in a comment on speech given by then senator Obama at the Woodrow Wilson Center on July 15. Here Obama listed the 5 pillars of his foreign policy; and should he be elected which gained fame as Obama Doctrine:
 - Ending the war in Iraq responsibly;
 - Finishing the fight against Qaeda and the Taliban;
 - Securing all Nuclear Weapons and materials from terrorists and rogue states;
 - Achieving true energy security
 - Rebuilding alliances to meet the challenges of the 21st Century.
- ▶ Lynn Sweet pointed out that these ideas were a reiteration of the essay "Reviewing American Leadership" that Obama had written for Foreign Affairs Magazine in the summer of 2007.

- ▶ However, the Obama Doctrine could be summarised as: "The United States will remain impassive in the face of genocide", where Obama said that "the United States cannot use its military to solve humanitarian problems" and that "preventing a potential genocide in Iraq isn't a good enough reason to keep U.S. forces there."
- **India's concern of this doctrine:**
 - ▶ India-U.S. relationship has much flourished in the recent decade. President Bill Clinton demonstrated a tilt towards India during his term, subsequently the George Bush presidency brought about a transformational shift in the relationship. Relations have been on an upswing ever since, with the Obama presidency proceeding on the same course.
 - ▶ The difference, according to strategic analysts, lies in their approach. Mr. Bush acted more on the basis of his instincts - an outstanding example being the manner in which he went out of his way to ensure the successful conclusion of the India-U.S. Civil Nuclear Deal without seeking any quid pro quo. Analysts argue that Mr. Obama is more a practitioner of real politics and tends to see most issues through this prism.
 - ▶ From India's standpoint, there are several aspects of concern relating to the Obama Doctrine. India may need to "deep dive" into what exactly the doctrine signifies, at a time when the U.S. is anxious to firmly establish a strategic hand clasp, to "counter China's assertiveness in the South and East China Seas".
 - ▶ India has no conflict of interest as far as the South and East China Seas are concerned. It risks provoking China if it gets more deeply engaged on U.S. insistence. Under the Obama Doctrine, the U.S. cannot be expected to come to India's aid in the event of an India-China conflict along the disputed land border or anywhere else.
 - ▶ We can already discern how the doctrine is being played out to India's North-west. The U.S. has been willing to sell F-16 fighters and attack helicopters to Pakistan, so that Pakistan can fight its battles in Afghanistan and the region - despite India's concerns about this move.
 - ▶ The U.S. has also been willing to placate Pakistan on the nuclear issue, even implying that Pakistan's tactical nuclear weapons programme was possibly a response to India's Cold Start doctrine.
 - ▶ U.S. Defence Secretary Ashton Carter, during his recent visit, spoke of the strategic confluence between India and the U.S. as one of the defining moments of the 21st century. He also referred to the new Framework for the India-U.S. Defence Relationship (signed in June 2015) as intended to increase strategic cooperation to help safeguard security and stability across the region and around the world.
 - ▶ In the light of the Obama Doctrine, it might, hence, be worthwhile to take a closer look at such entanglement with the U.S. India must be careful that its approach to China is not conducted through the prism of U.S. strategic interests. We need an independent policy in keeping with our national interests in the region and beyond.

2.8 NEPAL CRISIS



- (Q) Nepal declared itself a democratic republic in 2008, since then the political turmoil prevailing in the state followed by the 2001 palace massacre, and was hoped to be stable by adopting the most needed constitution in 2015. But the situation has become more than the worse. Explain.
- (Q) Nepal has gone through a 65 years long crisis in terms of insurgent uprisings, political turmoil, and the recent earthquake & constitutional crisis. Examine.

- ▶ Once again, Nepal appears to be on the brink of leadership change. The past few days have seen frenetic activity, driven by Maoist leader Prachanda's desire to oust Prime Minister K.P. Sharma Oli just months after he took charge. While the attempt has been stalled for the moment, it may be only a matter of time before the number-crunchers get to work to forge an alternative coalition in the 601-member Parliament.
- ▶ Oli rose to power with the backing of the Maoists after promising to resolve protests against a new constitution by southern plains dwellers and to step up efforts to rebuild homes destroyed by earthquakes last year.

- ▶ But he finds himself embattled so early in his tenure is also the result of failing to deliver on 3 important promises. The first is that of a more equitable Constitution and polity, that accommodates the sensitivities of Madhesis, Janjatis and other marginalised groups. The second is that of reversing the estrangement with India.
- ▶ Third, and possibly most pressing, responsibility that Nepal's government has failed its people entirely: speeding up reconstruction after last year's earthquake that killed nearly 9,000 people. NGOs estimate that only about 1% of the 7,70,000 destroyed houses have been properly reconstructed; millions are living in damaged, unsafe homes or in temporary shanties.
- ▶ At this rate, another winter may well come and go without children returning to proper schools, and without hospitals acquiring the facilities to serve Nepal's most wanting. It is a mystery why Mr. Oli's government has been so lethargic in drawing up a comprehensive plan to spend the billions of dollars committed by the world community.

○ **Background:**

- ▶ Nepal adopted its first democratic Constitution on September 19, 2015, a historic step for a nation that has seen war, a palace massacre and devastating earthquakes since a campaign to create a modern state began more than 65 years ago.
- ▶ Minority Madhesis, who live along the border with India, had imposed a blockade in protest at a proposal through constitution to carve Nepal into 7 federal states. They say it would divide their homeland and deprive them of a fair say in running the country.
- ▶ A root problem is that the demands of Madhesis, backed by India, are in direct opposition to the demands of 2 other groups, which puts Kathmandu in a quandary. Two separate low caste groups the Tharu and the Kiranti have been enforcing a general strike / blockade and agitating for full autonomy from Kathmandu.
- ▶ Clauses over citizenship in the country of 28 million people were some of the most contentious with critics saying they discriminate against women who marry foreigners, and that their children are denied equal access to citizenship.
- ▶ Madhesis have had clashes with Tharu protestors in addition to government forces, yet all these groups accuse Kathmandu's various Maoist parties of ordering excessive use of force by the police.
- ▶ Landlocked Nepal, due to Himalayan geography and extremely basic and fragile infrastructure depends on India for almost all its import needs. In 1989, India had closed 19 of the 21 border crossings, after a dispute over renegotiation of lapsed trade and transit treaties between the two countries. Nepal's increasing cooperation with China, including its purchase of Chinese weaponry, was seen as a major factor behind this blockade.

○ **India's Concern:**

- ▶ For the past 6 months, New Delhi has raised the ante with Kathmandu. New Delhi has criticised Nepal's Constitution, banding with other countries at the UN Human Rights Council as well as with the European Union to rebuke Nepal's government. Behind the scenes, Foreign Ministry and PMO officials have expressed their discomfort with Mr. Oli's leadership and his overtures to China.
- ▶ Madhesis share strong Socio-cultural ties to the neighbouring Indian states of Bihar and Uttar Pradesh. India had expressed concerns over the violent protests, and had asked Nepal to take Madhesi interests into consideration.
- ▶ However, a stable neighbourhood is more in the positive interest of neighbouring countries and the same applies to Nepal also. The porous and open borders of Nepal can infiltrate violence and evil elements if the instability prevails for long.

2.9 NUCLEAR SECURITY SUMMIT



- (Q) What is Nuclear Security Summit (NSS)? Outline the outcomes of NSS 2016.
- (Q) The threat of nuclear and radiological terrorism remains one of the greatest challenges to international security, and the threat is constantly evolving. Analyse.

On March 31st and April 1st, leaders of 52 countries including India came together in Washington DC for the 4th Nuclear Security Summit (NSS).

◉ What is Nuclear Security Summit?

- ▶ The Nuclear Security Summit is a world level summit aims to adopt measures for preventing access to Nuclear Weapons by terrorist organisations like ISIS, Al Qaeda and other similar factions.
- ▶ Considering Nuclear terrorism one of the greatest threat to international security, the US President Barak Obama hosted the 1st Nuclear Security Summit (NSS) in Washington DC in the year 2010, in order to draw attention of the world leaders to secure Nuclear materials and thus prevent Nuclear terrorism.
- ▶ Since then, the world leaders have met 4 times, Washington DC in 2010, Seoul in 2012, The Hague in 2014 and again the Washington DC in 2016.
- ▶ The first summit was concerned with making political agreements, while the follow up in Seoul focused on the progress made in implementing these agreements. The third NSS, in The Hague was centered on the outcomes achieved during previous years and the future concerns.

◉ The fourth Nuclear Security Summit: 2016

- ▶ In the fourth summit US President summed up what has been achieved in the 6 years since this efforts started. He added that the initiative has now removed or secured all the highly enriched uranium and plutonium from more than 50 facilities in 30 countries - more than 3.8 tons, which is more than enough to create 150 nuclear weapons.
- ▶ Endorsing the central role of the IAEA in promoting nuclear security, 4 detailed action plans relating to key components of nuclear security regime were adopted which are not binding in nature.
- ▶ The summit adopted 4 action plans pertaining to the UN, Interpol, the Global Initiative to Combat Nuclear Weapons and the Global Partnership Against the Spread of Nuclear Weapons and Materials of Mass Destruction.
- ▶ Security and cooperation to the personnel working in the nuclear facility, monitoring of radiation level and surveillance at borders for preventing trafficking of nuclear related materials.
- ▶ Non-Proliferation of Nuclear, continued reduction in the use of Highly Enriched Uranium (HEU) and plutonium in civil nuclear facilities to minimize the possible leakage of weapon use.
- ▶ The summit also focused on the possible link between nuclear security and cyber security. Interpol's initiative like "Operation Fail Safe" deals with the potential dangerous nexus between cyber attacks and nuclear risks.
- ▶ Rather than attempt to negotiate a new treaty, the NSS 2016 process has focussed on urging states to tighten national laws, rules and capabilities by using best practices and international cooperation. Establishing global centers of excellence (like the one in India), launching the Nuclear Security Fund, and expanding the activities of the International Atomic Energy Agency's (IAEA's) Nuclear Security Training and Support Centers are some of the outcomes.

◉ India's concern

- ▶ India's profile in the NSS process is natural given our concerns about global terrorism and the growing threat posed by terrorists seeking to acquire weapons of mass

destruction. Since 2002, India has been introducing a resolution on terrorism and weapons of mass destruction in the United Nations General Assembly, adopted by consensus every year. It laid the groundwork for the legally binding Security Council Resolution 1540 adopted in 2005.

- ▶ Therefore when President Obama highlighted this threat in his famous Prague speech in 2009 and called upon the international community to ensure the securing of all vulnerable nuclear materials within four years, a positive Indian response was natural.
- ▶ There is another reason too. Nuclear power today constitutes a small part in India's electricity generation, but this is due to change. Currently, the twenty nuclear power plants in operation have a capacity of 4.8 GW, out of a total installed power generation capacity of 240 GW.
- ▶ A quarter of India's population does not have access to electricity and energy poverty has been identified as a major obstacle to economic growth. The Integrated Energy Policy visualises the installed capacity rising to 1200 GW by 2035, with nuclear power contributing 60 GW. This will be 5%, but it is critical in terms of reducing fossil fuel dependence and mitigating the carbon footprint.
- ▶ Any breach in nuclear safety or security that could undermine public confidence in nuclear energy would have grave repercussions on India's long-term energy planning. For India, therefore, nuclear security is not a new objective, but has always been a priority along with nuclear safety.

o Threats of Nuclear Terrorism:

- ▶ With the emergence of global jihadi threats like al-Qaeda and the Islamic State, nuclear security has taken on additional urgency. 3 potential nuclear terrorist threats have been identified. First is the threat of terrorists making or acquiring a nuclear bomb and exploding it; second is the possibility of sabotaging an existing nuclear facility to create an accident; and finally, third is the possibility of use of radioactive material to create a 'dirty bomb' or a radiological dispersal device.
- ▶ The last is often considered the easiest for a suicide squad, given the fact that there are millions of medical devices and other equipment that contain small amounts of radioactive substances (cobalt-60, americium-241, caesium-137) which are widely distributed and do not have the kind of security normally associated with nuclear reactor facilities.
- ▶ Irrespective of the number of fatalities, a dirty bomb can create widespread panic and cost billions in cleaning-up operations. Insider support by a radicalised sympathiser could render a nuclear facility vulnerable to sabotage.
- ▶ It is well established that in the past al-Qaeda has not only considered and pursued all the 3 options, but also had access to nuclear expertise. Al-Qaeda may have been weakened today but the IS is also known to harbour similar ambitions.
- ▶ Often there is some confusion in India about our role because nuclear security is neither nuclear disarmament nor non-proliferation, nor is it nuclear safety. This leads some to downplay its significance or suspect that it is a ploy to constrain India's nuclear programme.
- ▶ Neither perception is correct; in fact, as a responsible nuclear weapon state, it is incumbent on India to ensure that all nuclear materials and facilities (both civilian and military) are subjected to the highest levels of security.
- ▶ Simply put, it would cover preventing unauthorised access to nuclear materials, facilities and technologies; timely detection, were a breach to take place; and finally, effective responses to such acts of terror and sabotage.

2.10 A BRIDGEHEAD TO SERVICE SILK ROAD



- (Q) What do you mean by the Silk Road Economic Belt and the 21st Century Maritime Silk Road? Trace its evolution and present concern for China as well as India.
- (Q) Briefly explain about 'One Belt One Road' strategy of China and the recent developments related with the same?

- ▶ A brand new industrial zone, which will service an extensive hinterland with well connected transport nodes, occupies an area of 1700 square km, tucked away in the Qin Wangchuan Basin in North Western China, The Lanzhou New Area (LNA) is being developed into a vast industrial hub that is becoming a bridgehead for threading Central and West Asia in Beijing's lofty One Belt One Road (OBOR) connectivity project.
 - ▶ Leveraging its location as a transportation hub along the OBOR, regular freight trains already pass through LNA on their way to Hamburg. A rail connection with Lhasa in Tibet is already operational. Trains also run regularly to the coastal industrial hub of Guangzhou.
 - ▶ Along the ancient Silk Road, connections exist with Xian, the starting point of this ancient highway, as well as with nearby Xining, capital of the mountainous Qinghai province.
 - ▶ The vast empty spaces show that LNA is still a work in progress. Around 120 companies have been registered in the zone so far, out of which, 20 are solely into international trade.
 - ▶ Being located at the transportation hub along the OBOR, the industrial zone will be a stationing point for traders trading through silk route with the facility of Free Trade Zone (FTZ) at the heart of the LAN. Registration with the FTZ allows duty free imports and exports, along with possibilities of storage in warehousing facilities, in this 3.39 square km cluster.
 - ▶ The FTZ stands at a logical advantage as the main airport is at a distance of only 2 km away, while a railway cargo terminal located at a distance of 12 km.
- **The issue and the Plan B:**
- ▶ The fate of this industrial zone will depend on the corporations who are involved in developing the space to match the ambitious plans. The area surrounding having stiff competition, already, the LNA is not untouched by some of the headwinds that are confronting the Chinese Economy - overcapacity and shrinking overseas market size.
 - ▶ As China's economy is in transition phase, the planners of the LNA do have a plan B possibly as a holding operation in anticipation of an eventual industrial rush. The land can be used for agriculture, in case the going is slow as the area is suitable for organic farming and medicinal plants that are used in Traditional Chinese Medicine (TCM)
 - ▶ The Gansu province, of which the LNA is a part, is already the second largest producer of TCM products. The Chinese side is also collaborating actively with Kyrgyzstan as the gateway to the TCM in Central Asia.
- **Silk Road:**
- ▶ The Silk Road initiative announced by Chinese President Xi Jinping in 2013 and implemented, beginning year 2015, contemplates so vast an investment in highways, ports and railways that it will transform the ancient Silk Road into a ribbon of gold for the surrounding countries. "The Silk Road Economic Belt and the 21st Century Maritime Silk Road", the project also has the shorter title, "One Belt, One Road".
 - ▶ China's foreign ministry claims that the new road is open to any country that accepts Chinese investment in its infrastructure. Any country that participates in these colossal infrastructure undertakings will enjoy unprecedented Chinese investment and the official pronouncements from China emphasise the positive connotations of the Silk Road.
 - ▶ Historically, the Silk Road was not just about trade, cultural exchange and tolerance. On multiple occasions, powerful dynasties based in China and India sent troops to Central Asia to fight military confederations that threatened their security and to conquer rebellious rulers in Central Asia.

- ▶ The last time that India sent troops successfully to the region was in the 1st Century AD, when the Han dynasty was suffering a prolonged decline. Chinese dynastic histories report that the Kushans sent an Army of 70,000 to modern-day Xinjiang.
- ▶ The number defies belief it is simply not credible that such a large force could have gone such a great distance but the Kushans certainly exercised influence in the region.
- ▶ Their soft power, evidenced in the spread of Buddhism throughout Central Asia and to China, would be the envy of any minister today. Documents in Gandhari written in the Kharosthi script dating to the 3rd and 4th centuries have been found at the Chinese site of Niya in south-western Xinjiang.
- ▶ Some analysts see these as evidence of Indian rule in earlier periods, but it is more plausible that a small group of migrants left Gandhara and crossed the Pamirs before arriving in Niya.
- ▶ In the following centuries, different Chinese dynasties, most importantly the Tang dynasty (618-907), exercised considerable influence in Central Asia.
- ▶ The Chinese recruited local men to join their armies. Sometimes the Chinese troops succeeded and defeated their enemies; in those cases, they stationed troops to govern the conquered territory.
- ▶ The Silk Road trade boomed in those periods in which Chinese armies were active in Central Asia. When they were defeated, the Chinese withdrew from the region, which is why maps of China's territory show Central Asia as sometimes controlled by China, sometimes not.
- ▶ Between 1000 and 1500, Central Asia both the Stans and the region of modern Xinjiang - Islamicised. That brought real change in the region.
- ▶ Rulers who converted to Islam required their subjects to convert as well. This was not true of the earlier Silk Road rulers, largely Buddhists, who had allowed their Christian, Manichaeen and Zoroastrian subjects to practise their own beliefs as long as they paid their taxes.

◉ The present concern of Silk Road:

▶ For China

- One stated goal is to help balance the economic inequities between the highly developed coastal region, where most of China's 650 million middle class live, and the interior, where income levels are considerably lower.
- The unstated goals are more worrisome. China is heavily dependent on the sea trade; 82% of its imported crude oil was shipped via the Straits of Malacca in 2013, a region where the United States maintains control.
- If China were to go to war however remote the likelihood, almost everyone envisions a scenario involving the US as an opponent then it would have no dependable energy supplies. If China can right the balance and increase overland shipments even by a percentage point or two, that will help it strategically.
- When the Chinese proclaim the One Belt, One Road as a win-win policy, more careful analysts will see this as yet another attempt to increase Chinese influence around the world. The Silk Road initiative is aptly named. Just as China used the Silk Road to expand its sphere of influence in the past, it is doing exactly the same thing now.

▶ For India

- There is an incipient effort to co-opt Russia on the one hand and Europe on the other to confine the US to the American hemisphere. The playing out of this story has major implications, because in case China succeeds with the global strategy underlying OBOR, India may well be consigned to the margins of both land and maritime Asia or become, by compulsion or by choice, a subordinate component of the Chinese-dominated network that is, in the words of Foreign Secretary S. Jaishankar, "hard-wiring" the new world.
- Currently, India has neither the resources nor the political and economic weight to put in place competitive and alternative connectivity networks on a global scale.

- Therefore, for the time being, it may be worthwhile to carefully evaluate those components of the OBOR which may, in fact, improve India's own connectivity to major markets and resource supplies and become participants in them just as we have chosen to do with the AIIB and the NDB.
- There has been much talk about India launching a Spice Route, Cotton Route and even a Mausam Project tying the countries around the Indian Ocean bound together by the monsoon winds. Instead of spreading our limited resources thinly over these mostly rhetorical ripostes to China's OBOR, it may be more prudent to focus on limited but strategically key routes and ports along our adjacent seas and islands to safeguard our most important equities.

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3

ECONOMY

3.1 REAL ESTATE ACT COMES INTO FORCE



(Q) Experts believe that until and unless States do not reform the state laws regarding land and real estate, the impact of real estate Act in improving the situation of real estate sector would be limited. Critically Comment

o Context

Real Estate Bill which was passed by parliament in march has come into force recently.

o Why the Bill was brought?

- ▶ The absence of a single regulator for the real estate sector is partly responsible for poor grievance redressal in this sector.
- ▶ Project delays are one of the major issues currently plaguing the real estate sector. In the residential property sector, a delay of 3 to 4 years is the accepted norm; in certain cases, it is more than 7 to 8 years. Over-leveraging by developers is the primary reason for such delays.

o Salient features of the Act

- ▶ The Bill regulates both commercial and residential real estate projects. It seeks to set up Real Estate Regulatory Authority (RERA) in states and union territories to oversee real estate transactions.
- ▶ It makes registration of real estate projects and real estate agents with the authority mandatory. It mandates that builders should disclose details of all registered projects, including those about the promoter, project, layout plan, land status, approvals, agreements along with details of real estate agents, contractors, architect, structural engineer etc. All these details should be uploaded on the website of the RERAs. Real estate agents also need to register with the RERAs.
- ▶ The bill makes it mandatory for the builders to park 70% of the amount collected from buyers for a project in a separate bank account. This must only be used for construction of that project. However, The state government can alter this amount to less than 70%.
- ▶ It seeks to establish fast track dispute resolution mechanisms for settlement of disputes through adjudicating officers and Appellate Tribunal. The Bill Bars Civil Courts from taking up matters defined in it. However, consumer courts are allowed to hear real estate matters. There are 644 consumer courts in the country. The more avenues for grievance redressal would mean lower litigation costs for the buyers. Promoters are barred from changing plans and design without consent of consumers.
- ▶ If the promoter does not register his property, he will have to pay up to 10% of the project cost as penalty. If he dodges order issued by the RERA, he faces imprisonment for up to three years, and/or an additional fine of 10% of the estimated cost of the project. In case the builder violates any other provision of the Act, he will have to pay up to 5% of the estimate cost of the project, reckons PRS Legislative. Meanwhile, the fine for the agents is Rs 10,000 per day during the period of violation of provisions.

o Analysis

▶ Significance of the Bill

- The Real Estate market is largely non-transparent. Most stakeholders operate in their own silos. This is true especially among developers. The absence of a regulator is to a great extent responsible for this plight. With a regulator in place, the sector will be more efficient, prices will be more rationalized and most importantly, the regulator will ensure that malpractices are weeded out well in time.
- This Act is a step in the right direction in an industry where builders are known to take the money from unsuspecting (usually middle class) buyers and then making them pay in so many ways - in time lost due to delays, higher interest payments on home loans, missed quality specifications and other aspects that violate the letter or spirit of purchase agreements.

- At present, rights of both the developer and the home buyer emanate from the agreement for sale. But these agreements are heavily loaded in favour of the developer. For example, interest on late payments for consumers is as high as 18%, but the compensation to them by developers in case of a project delay, is abysmally low and varies across contracts. Henceforth, both developers and consumers will have to pay the same rate of interest for delays on their respective parts. Developers will now have to deliver on time, adhering to the level of quality stated in the information provided to the regulatory authority during registration. This will create level playing field.
- To counter issues related to building defects and promote good practices in the sector, some developers provide a warranty for structural damages for 1-3 years. Extending this period, the Bill states that the liability of the developers for structural defects will now be 5 years from the date of handing over possession. This will lead to development of better quality buildings.

► Challenges /Criticism

- Inconsistencies with state laws regulating real estate :The Bill provides that states can continue to apply their laws regulating Real Estate, to the extent that these laws are not inconsistent with the Act. However, several states have enacted or are in the process of enacting laws that have provisions that are inconsistent with the Bill. These provisions will be superceded by the Bill for example While the central Bill mandates establishing a statutory regulatory authority to register projects in a state, West Bengal has delegated this function to a Government department. While the central Bill mandates that 70% (or less, as determined by state governments) of the funds collected from buyers of a project be used only for construction of that project, certain state governments have allowed for greater flexibility in usage of funds. The Maharashtra Housing Regulation and Development Act, 2012 mandates that the entire amount collected from buyers be kept in a separate account and be used for purposes collected. The draft Haryana Real Estate (Regulation and Development) Bill, 2013 mandates that 70% of the amount collected from buyers for a project be used for that particular real estate project. 6 States such as Punjab, West Bengal and Uttar Pradesh have stated that they would prefer to continue existing laws to regulate real estate.
- The cost of a real estate project includes the cost of land and the cost of construction (and the profit margin):The Bill mandates that 70% (or less, determined by states) of the amount collected from buyers for a particular project be deposited in a separate bank account and be used only for construction of the project. The provision seeks to address the practice of builders using money from an existing project for other projects, resulting in delays in completion. However, this provision could lead to an increase in the cost of the project. In some cases, the cost of land may be higher than 30% and the cost of construction less than 70% of the total cost of the project. Mandating that 70% of the amount collected from buyers for a project should be used only for construction of that project, could lead to part of the money collected remaining unutilised. At the same time, the developer may need to borrow funds to finance the cost of purchasing land. The interest cost on these funds would increase the project cost, which may have to be borne by the buyers.
- Developers cannot make alterations or additions in the sanctioned plans and specifications of the building or the common areas without the consent of at least two-thirds of buyers. Such provisions in the Bill will ensure that home buyers are getting the exact apartment for which they have paid and have a say in layout revision. However, this provision of obtaining consent of two-thirds of buyers may cause delay. Buyers may raise unnecessary objections and it may result in legal proceedings.
- One of the key justifications for the RERA is that the real-estate sector is unorganised and unregulated. To rectify the alleged problem, a new round of registrations, regulations and clearances are being created. While there are strict penalties, including imprisonment, for developers if they slip up, there is

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hardly any provision to make the various government authorities, entrusted to oversee and enforce regulations, more accountable. This will create problems. For example, there are clauses for delays in securing various NOCs. Anyone who has had to get an NOC from a government agency knows it's not just dependent on whether all criteria have been met. Often, obtaining an NOC is dependent on meeting the needs of the authorities as well. As a result, the RERA could very well increase the disputes between developers and authorities, which would in turn increase the cost of compliance and the cost of the project. Over time, such costs would get built into the project cost, thus increasing the price of property.

- The RERA also lays out a dispute settlement mechanism. But given the experience of consumer courts, it's only a matter of time before the new mechanism gets as clogged as some of the others. The fact is that regulators and regulations can hardly be a substitute for a vibrant and dynamic market.

◉ Conclusion:

While this Act is a step in right direction it will definitely make the real estate sector more transparent and will create level playing field between Developers and buyers. However the problems of real estate sector are too complicated and all of its problems cannot be solved by this Act. Some of the issues plaguing this sector include lengthy approval process for Project clearance, lack of clear land titles and prevalence of black money in this sector however all of the issues comes under the jurisdiction of state government thus state government will have to rectify these issues so that this Act could make a significant impact on real estate sector.

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3.2 ECONOMIC INEQUALITY IN INDIA: AN ANALYSIS



(Q) Recent IMF data reveals that economic inequality in India is increasing since the launch of economic reforms. Highlight the causes behind this trend. What are the likely consequences of economic inequality for India and what should be done to arrest this trend?

◉ Context

New data released in recent weeks shows that inequality in India is of Latin American rather than East Asian proportions.

◉ What does the IMF data say?

- ▶ In its Asian regional economic outlook released last week, the International Monetary Fund (IMF) has put out new data that shows how the 2 most successful Asian economies after 1990-China and India-have seen inequality rise in tandem with economic growth.
- ▶ IMF has based its analysis on the Gini coefficient, a standard measure used by economists to measure inequality.
- ▶ The IMF estimates that the Gini coefficient for India has gone up from 45 in 1990 to 51 in 2013. China has done even worse. Its Gini coefficient has climbed from 33 to 53 in the same period.
- ▶ The IMF inequality estimates are very similar to the results from a new global study by the LIS Data Centre in Luxembourg, which has recently said that India has a Gini coefficient of 50. These numbers are far higher than the official estimates of inequality that are mistakenly based on consumption rather than income.
- ▶ Last year a report released by Credit Suisse revealed that the richest 1% Indians owned 53% of the country's wealth, while the share of the top 10% was 76.30%. To put it differently, in a manner that conveys the political economy of this stunning statistic, 90% of India own less than a quarter of the country's wealth.
- ▶ This phenomenon is in contrast with the experience which many Asian countries like Taiwan, Korea and Singapore had faced in the previous decades where they were able to push up average incomes without making inequality worse.

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◦ WHY inequality is growing in India?

- ▶ There are several possible explanations for growing income inequality—from the nature of technological progress to the lack of opportunities due to the caste system, to ineffective government spending programmes and lack of infrastructure that connects people in the interiors to markets.
- ▶ Jobless Growth is one the main reason why inequality is growing in India. Even after 25 years of economic reforms we have not been able to create enough jobs in the Manufacturing sector and Service Sector.
- ▶ Inequality in India has two extra facets that deserve attention. First, there is difference in productivity growth between the urban and rural areas. Second, there is the income gap within the cities between those who have been able to connect to the global economy and those who have not. One practical illustration of this is the millions of farmers who remain trapped in a stagnant agricultural sector. Those who have managed to escape tend to eke out a living in tiny enterprises that have no access to formal credit, growing markets, technology or modern management. The countries of East Asia managed to evade this trap through labour-intensive industrialization that moved millions of poor people from farms to modern factories.
- ▶ Of the large many at the bottom rung of incomes, a very great proportion lives in the poor backward states regions, and most of the few at the top live in the high- income states regions. Since economic reforms most of the Private and Foreign investment has went to more developed less populated states and this also played a role in increasing income inequality as earlier Public sector used to play a major role in Country's investment and they used to intentionally invest in backward regions to bring inclusive growth in the nation however this is not the case with Private sector whose importance has been increasing over the years.
- ▶ India's high-income population enjoys better opportunities, and its top talent can compete with the world's best (many leave to do so). Numerous Indian CEOs represent a growing elite class, and those who remain in the country are handsomely compensated. Such success can inspire young Indians, but in excess it exacerbates inequality. According to one analyst, CEO compensation in is higher in India than the United States, when measuring by dollar of revenue. India also has the world's third highest number of billionaires, and even a handful of lavishly compensated executives can impact Gini coefficients.
- ▶ The other reason for the surge in income equalities in India, like in most Asian countries, is the limited access that the poor Had to health, education and financial services. This is especially dangerous as it sows the seeds for larger income disparities in the future. Interestingly the sharp disparity in educational attainments have also been identified as an important factor contributing to growing income inequalities.

◦ Likely Consequences of growing economic inequality

- ▶ The uneven growth will set forces in motion to restore a greater degree of balance, even (in some cases) actions that may thwart the growth process itself. For example Rising caste conflict in India arising out of demand for reservations in jobs is an illustration of the tunnel effect. Huge inequality in wealth distribution within the Patidar group in Gujarat has led some of them to demand reservations in government jobs. Tunnel effect was also at play during the Gujjar-Meena clashes in Rajasthan.
 - ▶ The higher inequality can reduce support for reforms that are critical for sustaining the pace of growth. This is because political parties may be forced to implement populist policies to reduce the rising disquiet among the people and would be left with scant political capital to confront the real issues facing the economy.
 - ▶ Political Domination: The rich dominate the political machinery, and they use it to promote their own exclusive interests. This results in corruption, graft and social injustice.
- " Suppression of Talent: It is said that 'slow rises merit by poverty depressed'. It is not easy for a poor man to make his way in life, however brilliant he may be. It is a great social loss that brainy people without money are unable to make their due contribution to social welfare.

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o How can we tackle growing inequality in India?

- ▶ Creating more Manufacturing jobs is must in India to reduce economic inequality for which Government is taking steps like Make in India, Stand up India programme ,MUDRA and improving the ease of doing business.
- ▶ Other steps include raising and enforcing statutory wages, expanding taxation of the rich, enhancing public investments in education, health and the small farm agriculture, enlarging social protection for the aged, infirm and disabled, enhancing maternity and child benefits, protecting indigenous and socially disadvantaged groups, ensuring water, sanitation and basic utilities to the rural poor and urban slums, and protecting the rights of workers.
- ▶ We should also provide a greater voice to traditionally oppressed and suppressed groups, including by enabling unions and association, and making public and corporate private activity more transparent and accountable to the people generally.
- ▶ High Taxes on Luxuries: All conspicuous consumption by the rich may be ruthlessly crushed by means of heavy taxation of the consumption of luxuries by them. This will take away from the rich the power to display their wealth. This will also take away the incentive to amassing wealth for exclusive private enjoyment.
- ▶ Equality of Opportunity: The Government may devise and set up some sort of machinery which may provide equal opportunities to all rich and poor in getting employment or getting a start in trade and industry. In other words, something may be done to eliminate the family influence in the matter of choice of a profession. For example, the government may institute a system of liberal stipends and scholarships, so that even the poorest in the land can acquire the highest education and technical skill.

3.3 INDIA - MAURITIUS AMENDS TAX TREATY



(Q) What do you understand by DTAA? How was the Indo-Mauritius DTAA misused? Also highlight how the current amendment will improve the situation?

o Context

India recently signed the protocol amending the Double Taxation Avoidance Agreement (DTAA) with Mauritius.

o What is DTAA?

A DTAA, also referred to as a Tax Treaty, is a bilateral economic agreement between two nations that aims to avoid or eliminate double taxation of the same income in two countries.

o Example citing the working of a DTAA:

An NRI individual living in a country (Say X) maintains an NRO account with a bank based in India. The interest income on the amount in the NRO account is deemed as income that originates in India and hence is taxable in India. In case, India and X nation are contracted under the DTAA, this income will have tax implications in accordance with the rate specified in the agreement. Otherwise, the interest income will attract tax @ 30.90 % i.e. the current withholding tax.

o Why there was need for Amendment?

- ▶ Under the bilateral agreement between the two nations signed in 1983, capital gains from sale of securities can be taxed only in Mauritius. While gains on sale of shares held for less than 12 months are treated as short-term capital gains and attract a 15% short-term capital gains tax, the gains on sale of shares after holding for 12 months are treated as Long-Term Capital Gains (LTCG) and, currently, attract zero tax. Since India has a Double Taxation Avoidance Agreement (DTAA) with Mauritius, entities operating out of Mauritius escaped even paying short-term capital gains tax on shares transfers.

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- ▶ The DTAA was a major reason for a large number of Foreign Portfolio Investors (FPI) and foreign entities to route their investments in India through Mauritius. Between April, 2000 and December, 2015, Mauritius accounted for \$ 93.66 billion or 33.7% of the total foreign direct investment of \$ 278 billion.
- ▶ It is a move in line with the government's initiatives to curb black money in the system, money laundering and tax avoidance. The protocol would tackle issues of treaty abuse and round-tripping of funds attributed to the India-Mauritius treaty, curb revenue loss, prevent double non-taxation, streamline the flow of investment, and stimulate the flow of exchange of information between India and Mauritius.

◉ **Key changes in the Treaty**

- ▶ The protocol gives India the right to tax capital gains arising from sale or transfer of shares of an Indian company acquired by a Mauritian tax resident, it proposes to exempt investments made until March 31, 2017, from such taxation.
- ▶ The shares acquired between April 1, 2017 and March 31, 2019 will attract capital gains tax at a 50% discount on the domestic tax rate - i.e., at 7.5% for listed equities and 20% for unlisted ones. The full tax impact of the protocol will fall on investments beginning April 1, 2019, when capital gains will attract tax at the full domestic rates of 15% and 40%.

◉ **Significance of the changes**

- ▶ The original bilateral agreement between the two nations created an anomaly, thanks to a double taxation avoidance agreement under which business entities operating out of Mauritius escaped even paying short-term capital gains tax on share transfers. This has been exploited even by domestic Indian investors, who have resorted to routing their equity investments via Mauritius to avoid the tax liability at home. Under the amended treaty, the government has provided a level playing field for domestic and foreign investors, and the incentive for an Indian investor to channel investments via Mauritius has been neutralized.
- ▶ The amended tax regime will also apply to capital gains of Singapore-based companies, due to the direct linkage of the Singapore Double Taxation Avoidance Agreement (DTAA) clause with the Mauritius DTAA. These two locations account for roughly two-thirds of all investments, using P-notes, into India. P-notes are financial instruments used by overseas investors who wish to invest in India's capital markets without registering themselves with the Securities and Exchange Board of India (SEBI).
- ▶ With the tax arbitrage possibility doused, it can be expected that foreign portfolio investment data would improve in quality as it is likely to reflect faith in the strength of India's macroeconomic fundamentals.
- ▶ Instead of a sudden and retrospective change, the government has chosen to give ample time for all investors to adjust. The amended tax provisions will come into effect 11 months later and existing investors, who acquire shares before April 1 2017 will not be taxed. Further, firms in Mauritius and Singapore will be taxed at a concessional rate for the first two years, until March 31 2019, to help them transition to the new regime.
- ▶ The DTAA amendment will also ensure India's conformity to the Organisation for Economic Cooperation and Development and G20-led guidelines on combating base erosion and profit shifting. In 2015, the OECD had spelt out a series of measures countries needed to take to curb abusive tax avoidance by multinational enterprises - including steps to tighten double taxation avoidance treaties.

◉ **Likely impact on Investment and Participatory notes (P-Notes) in short run**

- ▶ The imposition of capital gains tax on the acquisition of shares of Indian companies after March 31, 2017 could, however, result in a slowing of the flow of investments.
- ▶ There have been concerns in the market that imposition of capital gains tax will deter investments through Participatory Notes or P-notes.

- ▶ Experts feel that while some investors who are bullish on India may advance their plans and invest before April 1, 2017 in order to save tax, many others will raise their due diligence procedure on investments, factoring in the tax cost in the returns they generate.
- ▶ Traders fear that the new tax rules will impact foreign flows into domestic equities and debt market because many foreign funds had set up base in Mauritius to avoid paying any capital gains taxes in India. Mauritius is an important investment base for India, accounting for a third of the \$278 billion in foreign equity investments that India has attracted since 2000.

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○ **Conclusion:**

For a country keen to play a greater role in global decision-making, the move to seal a key route for the round-tripping of capital generated out of tax-dodging enterprises will help boost both revenue and confidence in the rule of law in India. It is beyond doubt that ensuring a level playing field for all international investors, irrespective of domicile, can only serve to enhance India's attractiveness as an investment destination in the long run.

3.4 GOVERNMENT T NOTIFIES 100% FDI IN ARCS VIA AUTOMATIC ROUTE



(Q) What do you understand by ARC'S? How does it tackle the problem of NPA'S.? What will be the significance of Government decision to allow 100% FDI in this sector?

○ **Context**

The Department of Industrial Policy and Promotion (DIPP) has notified a Budget announcement to permit 100% Foreign Direct Investment (FDI) in Asset Reconstruction Companies (ARCs) through automatic route.

○ **What is ARC?**

An Asset Reconstruction Company (ARC) is a company that is set up to do exactly what the name suggests - reconstruct or re-package assets to make them more saleable. The assets in question here are loans from banks, card companies, financial institutions etc.

○ **Why do we need ARCs?**

- ▶ Bad loans are essentially of two types - those that are a consequence of routine banking operations and those that are a reflection of a greater systematic route, as in the Indian context where the bulk of Non-Performing assets (NPAs) are due to government interference/loan waivers/difficulties in recovering dues etc. There are essentially two approaches to tackling NPAs - one, leave the banks to manage their own bad. Two, do the same thing on a concerted, central level, through a centralized agency or agencies. ARCs are centralized agencies for resolving bad loans created out of a systematic crisis.
- ▶ ARCs buy up distressed assets from banks/card companies and other financial institutions, re-package them and then sell them in the market. Non-performing Assets (NPAs) can be assigned to ARCs by banks at a discounted price, enabling a one-time clearing of the balance sheet of banks of sticky loans. At the same time, the ARC can float bonds and recover dues from the borrowers directly. ARCs can have several alternate structures. They can either be publicly or privately owned or a combination of both, and can be either separately capitalized units or wholly-owned subsidiaries.

○ **What are the advantages of setting up an ARC rather than leaving NPA recovery to individual banks?**

- ▶ Centralization of bad loans in one or a few hands obviously gives banks more clout and they are left with cleaner balance sheets and do not have to deal with problem clients.

- ▶ Because ARCs deal with a larger portfolio, they can mix up good assets with bad ones and make a sale which is palatable to buyers. It is easier to do a capital-market based funding for an ARC than for the banks themselves.

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◉ ARC in India

- ▶ In India the problem of recovery from NPAs was recognized in 1997 by Government of India. The 'Narasimhan Committee Report' mentioned that an important aspect of the continuing reform process was to reduce the high level of NPAs as a means of banking sector reform. It was expected that with a combination of policy and institutional development, new NPAs in future could be lower. However, the huge backlog of existing NPAs continued to hound the banking sector. It impinged severely on banks performance and their profitability. The Report envisaged creation of an "Asset Recovery Fund" to take the NPAs off the lender's books at a discount.
- ▶ Accordingly, Asset Reconstruction Company (Securitization Company / Reconstruction Company) is a company registered under Section 3 of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SRFAESI) Act, 2002. It is regulated by Reserve Bank of India as a Non Banking Financial Company (U/S 45I (f) (iii) of RBI Act, 1934). RBI has exempted ARCs from the compliances under section 45-IA, 45-IB and 45-IC of the Reserve Bank Act, 1934. ARC functions like an AMC within the guidelines issued by RBI.
- ▶ **ARC has been set up to provide a focused approach to Non-Performing Loans resolution issue by:-**
 - (a) Isolating Non Performing Loans (NPLs) from the Financial System (FS),
 - (b) Freeing the financial system to focus on their core activities and
 - (c) Facilitating development of market for distressed assets.

◉ Detail of the Recent news

- ▶ In line with the announcement made in the Union budget, the government has notified the relaxed foreign investment norms in Asset Reconstruction Companies (ARCs).
- ▶ The department of industrial policy and promotion permitted 100% foreign direct investment in asset reconstruction companies to come in without any prior government approval-under the automatic route.
- ▶ Earlier, while 49% foreign investment was permitted under the automatic route, investors needed prior government approval to increase their stake beyond 49%.
- ▶ Government also proposed to link the investment limit of a sponsor to the provisions of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (Sarpaesi) Act. At present, a sponsor is not allowed to hold more than 50% in an asset reconstruction company But in this year's budget speech, finance minister had sought to allow a sponsor to hold up to 100% stake in the asset reconstruction company, a move the government hopes will see specialized asset reconstruction companies setting up business in India as they will not need to scout for a local partner.
- ▶ Further, the government has also allowed foreign portfolio investors to invest up to 100% of each tranche in securities receipts issued by ARCs subject to sectoral caps, as against the earlier cap of 74%.

◉ Significance of the decision

Stressed assets (which include gross bad loans, restructured assets and written-off accounts) for the banking system rose to 14.5%, as of 31 December 2015, compared to 9.8% in March 2012. ARCs can play an important role in reconstruction of such stressed assets therefore It's a welcome move and should help address the issue of stressed assets to some extent in the banking sector, as more investments flow into ARCs in near future.

3.5 OIL PALM ISSUE

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- (Q) What is oil Palm? What are its uses? Why growing of oil palm is criticized by environmentalist
- (Q) Many experts believe that without bringing oil palm under Plantation category, FDI liberalization cannot have significant effects on improving the situation of oil palm production in India.

Context

The government's decision to allow 100% Foreign Direct Investment (FDI) in oil palm plantations in November last year has failed to draw even a single investor.

What is Oil Palm?

- ▶ Consumed for more than 5,000 years, its nutritional value, health benefits and value as a natural resource continue to be discovered even today. Palm oil is produced from the fruit of the oil palm tree *Elaeis guineensis*. Oil palm is the only fruit that can give two types of oil. Since it is a vegetable oil; not an animal or dairy product, and therefore does not contain cholesterol.
- ▶ Palm oil itself is reddish because it contains a high amount of betacarotene. It is used as cooking oil, to make margarine and is a component of many processed foods. Boiling it for a few minutes destroys the carotenoids and the oil becomes white. Palm oil is one of the few vegetable oils relatively high in saturated fats (such as coconut oil) and thus semi-solid at room temperature.
- ▶ Previously the second-most widely produced edible oil, after soybean oil, 28 million metric tons were produced worldwide in 2004. It may have now surpassed soybean oil as the most widely produced vegetable oil in the world. Since its introduction, oil palm is now a leading agricultural crop. Increased planting, cultivation and refinement have led to the introduction of a wide range of processed palm oil products. Today, palm fruit oil and palm oil products are used in many food and non-food applications. They can be used for frying media and for making margarines, shortenings, soap, oleo chemicals and other products.
- ▶ Indonesia and Malaysia are the two major palm oil producers globally, producing nearly 85% of the global output. Indonesia churns out nearly 33 million tonnes, followed by Malaysia with nearly 20 million tonnes.
- ▶ The palm oil plant is grown in a nursery for 12-18 months before it is planted in the field where it bears fruit 30 months later and has an economic life of 20-30 years. A mature tree produces 10-15 bunches a year. A normal plantation yields four tonnes of palm oil per hectare per year. The best plantations have yields of 7-8 tonnes/hectare or even higher. Although there are peaks and troughs, harvesting occurs all the year-round, producing a continuous supply of oil.
- ▶ The best growing conditions for palm trees exist in a small band around the equator, limiting the number of places the crop can be successfully farmed. These regions coincide with the rainforest zones.

Why growing of oil palm is criticized?

Between 1990 and 2010, palm oil monocultures replaced 3.5 hectares of forests in Malaysia, Indonesia and Papua New Guinea. This large scale deforestation has resulted in a massive loss of biodiversity and wildlife habitat, best illustrated perhaps by the annihilation of orangutan populations. Moreover, conversion of large peatlands to oil palm plantations releases millions of metric tons of CO₂ into the atmosphere.

Oil Palm & India

Indian palm oil production is estimated at 1.7 lakh tonnes for 2014-15, up from 0.6 lakh tonnes 2010-11. Andhra Pradesh is the leading producer (86% of total), followed by Kerala (10%) and Karnataka (2%). Unlike in Indonesia or Malaysia, in Andhra Pradesh, palm oil cultivation is mostly irrigated.

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◉ Why 100% FDI was allowed in this sector?

- ▶ India spends over \$10 billion on imports of edible oil every year, and this Bill is only next to the one incurred on crude oil and gold imports. Attempts to increase the area under oilseeds in India have not been very successful, but demand has been rising perennially.
- ▶ Indian edible oil imports have grown at an annual growth rate of 13% for the past decade. In 2014-15, edible oil imports reached a record high of 14.3 million tonnes, up by 25% over last year.
- ▶ Palm oil imports constitute nearly 75% of the total edible oil imports. Palm is generally the cheapest commodity vegetable oil and also the cheapest oil to produce and refine globally.
- ▶ The Government of India has been trying, for many years now, to reduce its dependence on imported edible oils, by encouraging farmers to take up palm cultivation. In 1992, the Oil Palm Development Programme (OPDP) was launched in 6 Indian States. In 2004-05, the scheme was introduced in 6 more States, including North-East India - Mizoram, Tripura and Assam. This was followed by an "Oil Palm Area Expansion" (OPAE) programme in 2011-12, with a budget of 300 crore. But palm cultivation in the country has not really gained traction due to various reasons:
 - Most important limitation to oil palm production in India is the weather. Palm requires humid weather throughout the year. The harsh Indian summer impacts both crop development and yield. In hot summer months, the recommended irrigation is 300 litres per plant per day. This limits the regions where this crop can be grown.
 - The second constraint is the lack of infrastructure. Close proximity between farms and processing mills is a must. The fresh fruit bunches should be processed within 24 hours of harvest to obtain good quality oil. A delay leads to build-up of free fatty acids.
 - There's the lack of trained and experienced farmers who can successfully make money out of this crop.

Therefore As a solution, the government has allowed 100% FDI in the sector. This, it is hoped, will usher in processing technology as well as trained personnel to speed up the plantation process which would increase the domestic production of oil palm thereby reducing the dependence on imports.

◉ Why no FDI has come to this sector till now?

Oil Palm is not declared a plantation crop in India and since it is not declared a plantation crop it comes under the Land ceiling law .The current policies of the Centre do not allow companies to either acquire or lease land beyond a specific acreage as defined by land ceiling norms. Thus, there is no scope for the corporate sector for large scale plantation of oil palm. These norms have discouraged Foreign investor to invest in this sector.

◉ Way ahead

- ▶ Government should declare oil palm as cultivation crop which would remove the land ceiling regulation in this sector and would pave the way for foreign investment.
- ▶ The potential of this crop could be realised effectively if there is a separate oil palm development board, a separate import policy for palm oil and a separate budget for oil palm industry development besides relaxation of land ceiling norms.

3.6 GOVERNMENT EASES TAX REGIME ON ROYALTY INCOME

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o Context

The Government has made the tax regime for royalty income of inventors more liberal.

o What is a patent?

- ▶ A patent is a right granted to the owner of an invention that prevents others from making, using, importing or selling the invention without his permission.
- ▶ A patentable invention can be a product or a process that gives a new technical solution to a problem. It can also be a new method of doing things, the composition of a new product, or a technical improvement on how certain objects work.
- ▶ Once it is granted, its term of a patent is 20 years from the Date of Filing, subject to the payment of annual renewal fees.

o What is royalty income?

A royalty payment is made to the legal owner of a property, patent, copyrighted work or franchise by those who wish to make use of it for the purposes of generating revenue or other such desirable activities. In most cases, royalties are designed to compensate the owner for the asset's use, and are legally binding.

o What are the Changes made?

- ▶ The changes sought to tax royalty income of companies from commercialized patents at a lower rate of 10%, rather than the prevailing tax rate of 30%. However The benefits of this liberalized regime can now be availed only if 75% of the total expenses incurred for developing the patent are incurred by the resident in India.
- ▶ As per the changes made in the patent tax regime, the government has now allowed for deduction of expenditure from income before the calculation of tax. However, if the assessee exercises this option, he will have to stay in this regime for 5 years. If he decides to opt out before the completion of 5 years due to lower profits or losses, he will not be entitled to access the concessional tax scheme for 5 succeeding years.

o Why these changes are made?

- ▶ India is ranked very low in the world in almost every innovation survey or reports released. The number of Patent applications Filed by residents in India are far lower than the numbers for comparable nations such as U.S.A., Russia and China, which are part of the BRICS grouping. Worldwide, there were 2.35 million patent applications filed in 2012. India's contribution to the total number of filings stood at a low 1.8%.
- ▶ The objective of the current changes is to encourage indigenous research and development, and to make India an innovation hub. These changes would encourage more innovation in India and would help to improve the ranking of India.
- ▶ The aim of the 'concessional taxation regime' extended across sectors, for income derived from patents, is to provide an additional incentive for companies to retain and commercialize existing patents and to develop new innovative patented products. The government hopes it will also encourage domestic companies across sectors, including automotive, electronics and pharmaceuticals, to locate high-value jobs associated with the development, manufacture and exploitation of patents in the country.

o Criticism of the changes

While these changes would encourage more innovation in India, this would disqualify cases where part of expenditure on development (say imported equipment, specific research, testing, prototyping, etc) is incurred outside India and such expenditure exceeds 25% of total expenditure. This would fence out some genuine Indian inventions, merely because that part of the development expenses was incurred outside India.

3.7 MONETARY POLICY COMMITTEE



(Q) What are the Key features of the Monetary Policy Committee? How will it democratize the Monetary Policy regime in India.

o Context

The Finance Act which has the Provision of setting up of MPC have been passed recently by the Parliament. The process to form the proposed Monetary Policy Committee for the Reserve Bank of India (RBI) will be initiated soon after the notification of the Finance Bill as an Act.

o What is the MPC?

- ▶ The Monetary Policy Committee framework will replace the current system where the RBI governor and his internal team have complete control over monetary policy decisions. While a technical advisory committee advises the RBI on monetary policy decisions, the central bank is under no obligation to accept its recommendations.
- ▶ The committee will have 6 members, with 3 appointed by the Reserve Bank of India (RBI) and the remaining nominated by an external selection committee. The RBI governor will have the casting vote in case of a tie.
- ▶ According to the Finance Bill, the committee will consist of the RBI governor, the deputy governor in charge of monetary policy and one official nominated by the central bank.
- ▶ The other three members will be appointed by the central government through a search committee.
- ▶ This search committee will comprise of the cabinet secretary, the secretary of the Department of Economic Affairs, the RBI governor and 3 experts in the field of economics or banking as nominated by the central government.
- ▶ The members of the MPC appointed by the search committee shall hold office for a period of 4 years and shall not be eligible for re-appointment.
- ▶ The idea to set up a monetary policy committee was mooted by an RBI-appointed committee led by deputy governor Urjit Patel in 2014.

o Analysis

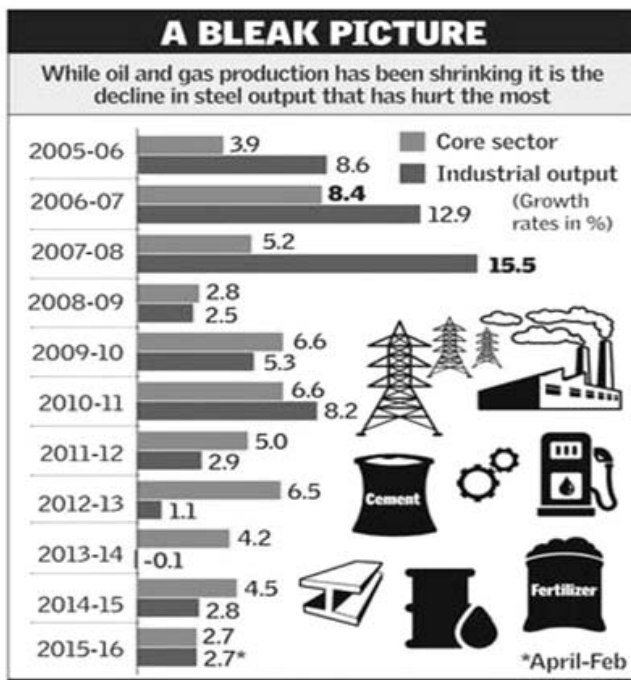
▶ Significance of the MPC

- There is very little to disagree about the desirability of transitioning from the current decision process to that of an MPC, imparting as it does a greater diversity of views, specialised experience and independence of opinion.
- With the introduction of the Monetary Policy Committee, the RBI will follow a system similar to the one followed by most global central banks. The US Federal Reserve sets its benchmark rate-the Fed funds rate-through the Federal Open Market Committee (FOMC). The Bank of England's monetary policy committee is made up of 9 members.
- Setting up of MPC would make monetary policy making more democratic since currently, the RBI governor alone decides key interest rates. The committee will take decision based on the majority vote. Each member will have one vote.
- The final composition of MPC announced by the government seems to tread the middle path as it tries to address concerns over excessive government influence over monetary policy in the country Which the draft MPC invoked since under it proposed to strip the Governor of veto vote on the monetary policy besides powers for the government to appoint 4 of the 6 members. The government, however, has reserved the right to send its views to the monetary policy committee, if needed.
- Communicating the rationale of monetary policy actions is central to both the credibility of the central bank and to enable the incidence targets of the policy to adjusting behaviour appropriately.

3.8 ANNUAL CORE SECTOR GROWTH AT DECADE LOW

? (Q) What do you understand by Core sector Growth? Why has Core sector growth sector witnessed a massive slowdown this year? What should be done to arrest the trend?

India's annual core sector growth slowed to a decade low of 2.7% in 2015-16, slower than the 4.5% pace in the previous financial year, according to government statistics.



Source: Ministry of Commerce & Industry and Ministry of Statistics

Fig: 3.1

o **What are core sector Industries**

The 8 Core Industries are Coal, Cement, Electricity, Crude Oil, Refinery products, Steel, Fertilizers and Natural Gas, which have the following weights in IIP. The 8 Core Industries comprise nearly 38 % of the weight of items included in the Index of Industrial Production (IIP).

o **The rationale of the Index of Core Industries**

- ▶ The Central Statistics Office (CSO) of the Government of India brings out monthly Index of Industrial Production (IIP). Industrial Production in the IIP comprises 3 distinct groups of industry, (a) Mining, (b) Manufacturing and (c) Electricity. The quick estimate of IIP pertaining to a month is released after approximately 6 weeks (on 12th of the Month, or if 12th is a Gazetted Holiday, on the previous working day).
- ▶ Among the industries that go into the IIP basket, in order to provide an indication of how the industries whose production performance was 'core' in nature because of their likely impact on general economic activity as well as other industrial activity, the exercise of bringing out an Index of Core Industries was initiated in the Office of the Economic Adviser, with 6 industries, viz. Coal, Cement, Electricity, Crude Oil, Refinery products, and Steel.

	Coal	Crude Oil	Natural Gas	Refinery Products	Fertilizers	Steel	Cement	Electricity	Total Weight
Weights	4.379	5.216	1.708	5.939	1.254	6.684	2.406	10.316	37.903

Fig: 3.2

Reasons for the Dismal growth

- ▶ The growth was pulled down by steel and crude oil, both of which saw output contracting by 1.4% and natural gas that dropped 4.2 %.
- ▶ While oil and gas output has been shrinking for about 4 years now, it is the decline in steel output in the backdrop of plunging global prices that has hurt the most as it had been growing at an average of 7% in the past 4 years. steel has been hit by the low global prices and competition from China.

Significance of the data

- ▶ The steel industry employs 6 million people directly and generates associated employment for more than 2.5 million its contraction therefore could have negative impact on Job growth.
- ▶ This data should serve as a wake-up call for the government to move away from incremental reforms to relieve the distress in the steel sector and push construction and real estate sectors.
- ▶ Experts believe that Some emergent 'out of the box' actions are called for as the real estate industry is also not showing any recovery and would continue to impact cement and steel.
- ▶ The core sector industries did show an increase of 6.4% in march, but we should remember that we have a very high base in the month of March which normally happens because in March, companies tend to rush ahead to meet their targets and therefore the production numbers tend to go up.

3.9 THE PROPOSAL FOR THE 'MOVEABLE ASSET REGISTRY'



(Q) Indian MSME sector has a major role to play in the Success of make in India, However it is facing number of issues the most important being lack of credit availability. Discuss. Also Highlight how will the establishment of movable asset registry improve the situation.

Context

Government is planning to setting up a 'moveable asset registry to increase credit inflow in MSME sector.

Background

- ▶ Micro, Small and Medium Enterprises (MSME) sector cumulatively contributes 37.5% of India's GDP with its network of 48 million enterprises employing an estimated 111.4 million people. However the sector is plagued with the problem of lack of credit availability. The biggest impediment to credit availability being the lack of assets such as immovable property that can be offered as collateral for a bank loan.
- ▶ Most of the small business entrepreneurs do not possess immovable property to offer as collateral and instead they own machinery, stocks, receivables or livestock .Banks cannot accept inventory, machinery or rolling stock as collateral as the borrower can move it at a later date.

What will Movable Asset Registry do?

The proposal for the 'moveable asset registry' in India would be on the lines of the provision in place for property mortgages, where the government has made it mandatory for all banks and financial institutions to register the mortgage created (security interest over property to secure loans) with Cersai within 30 days of creation of mortgage. The banks and financial institutions can access the central registry website by paying the prescribed fee and verify whether there are any encumbrances over the property to be funded, making it virtually impossible for any borrower to raise loans twice or more against the same property or raise loans using forged documents.

o Analysis

► Significance of the registry

- Most of the small business entrepreneurs do not possess immovable property to offer as collateral and instead they own machinery, stocks, receivables or livestock, which can be leveraged to obtain finance from banking channels if a 'movable asset registry' is available.
- Most companies that are starting don't spend their money on acquiring fixed assets but instead on meeting working capital requirements such as raw materials, equipment, technology and skilled labour." Only once the company crosses a turnover of Rs. 5 crore do they look to buy property. The setting up of the registry will make it easier for larger units within the MSME segment to borrow from banks.
- A moveable asset registry would give smaller entrepreneurs more options to raise capital.
- Globally, collateral registries for movable assets have been a big plus. According to a 2011 study by IFC, the World Bank's private sector lending arm, that used firm-level surveys for up to 73 countries to explore the impact of introducing collateral registries for movable assets on firms' access to bank finance found that this significantly increased firms' access to bank finance. There was also evidence that this effect is larger among smaller and younger firms.

o Additional information

► What all constitutes MSME?

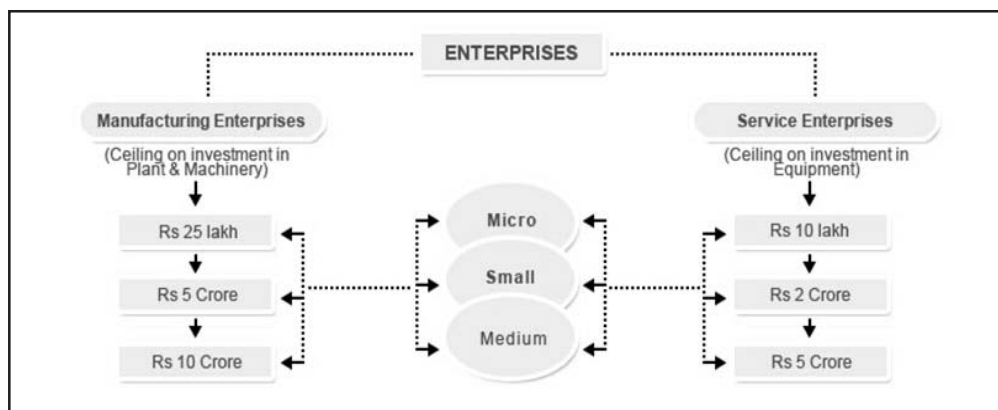


Fig: 3.3

► Role Played of MSMEs

- Worldwide, Micro, Small and Medium Enterprises (MSMEs) have been accepted as the engine of economic growth and for promoting equitable development. MSMEs constitute over 90% of total enterprises in most of the economies and are credited with generating the highest rates of employment growth and account for a major share of industrial production and exports.
- In India too, the MSMEs play a pivotal role in the overall industrial economy of the country. MSMEs in India account for more than 80% of the total number of industrial enterprises and produce over 8000 value-added products. It is estimated that in terms of value, the sector accounts for 45% of the manufacturing output and 40% of the total export of the country and employs over 6 crore people.
- Further, in recent years the MSME sector has consistently registered higher growth rate compared to the overall industrial sector. The major advantage of the sector is its employment potential at low capital cost. As per available statistics, this sector employs an estimated 6 crore persons spread over 2.6

core enterprises and the labour intensity in the MSME sector is estimated to be almost 4 times higher than the large enterprises.

► **Problems faced by MSME sector**

- Lack of adequate capital,
- Poor infrastructure
- Access to modern technology
- Access to markets
- Getting statutory clearances related to power, environment, labour etc.

○ **Steps taken by Government in recent years to address the Problem**

To obviate these problems, the Ministry of Micro, Small and Medium Enterprises (MSME) is implementing a number of Schemes & Programmes like MUDRA Bank Scheme, Credit Guarantee Scheme, Credit Linked Capital Subsidy Scheme, Cluster Development Programme and National Manufacturing Competitiveness Programme etc. Furthermore, the Ministry has been interacting with various concerned Ministries/Departments/State Governments/Banks and other stake-holders to streamline the mechanism for grant of loans, simplify labour laws and other procedures to facilitate the growth of MSME units.

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3.10 TRIAL VERSION: GOVERNMENT TO LAUNCH E-PLATFORM FOR LABOUR MARKET INFORMATION

○ **Context**

The Government is ready to launch a trial version of single-window online platform for labour market information, Labour Market Information System (LMIS).

○ **What will LMIS do?**

- It will be a single-window online platform for labour market information through which employers will be able to access area-wise details of skilled workers across the country
- The final version of the online platform will be launched in about 2 months .
- The online platform will be a one-stop window to know area-wise details for skilled workers under various sub-heads of name, father's name, place, skills and caste. All skilled workers trained by government-run Industrial Training Institutes (ITIs) and vocational institutes will be part of the registered database of the LMIS platform.
- LMIS completely provides information about the supply versus demand needs of labour market. All people, like job seekers or job providers can come together on the platform to access the information, which will be uploaded after the consent of the worker. "For instance, if you are looking for a plumber in Delhi, you need to search the keywords, locality, any specific type of plumbing requirement and you will be able to find the required details on LMIS platform .

○ **Significance of LMIS.**

As opposed to developed countries, where the percentage of skilled workforce is between 60% and 90% of the total workforce, India has 5% of workforce (20-24 years) with formal vocational skills. This e-platform will make it easier for ITI trained worker to get a suitable job which will incentivize general population to go for vocational education and it will ultimately lead to more skilled people in the total workforce which is also the aim of National Skill Development Mission, which aims to train a minimum of 300 million skilled people by the year 2022.

3.11 FINANCE MINISTRY GIVES CLEARANCE TO GOVERNMENT E-MARKETPLACE

The Ministry of Finance sanctioned the creation of "Government e-Marketplace (GeM)" for frequently used products and services.

o Key Features of Government e-Market place

- ▶ The finance ministry has given its nod and the Department of Expenditure has added a new provision in the General Financial Rules (GFR) for creation of a one-stop GeM by Directorate General Supply and Disposal (DGS&D).
- ▶ The DGS&D will host an online Government e-Marketplace (GeM) for common use goods and services.
- ▶ The GeM may be utilised by government buyers (at their option) for direct online purchases. In the first phase, 2 items are being included. These are Computers & Vehicle management (Taxi) service which are used by various Government Ministries/Departments/Organizations.
- ▶ The GeM would be dynamic, self-sustaining and user-friendly. DGS&D will ensure adequate publicity, including periodic advertisements in newspapers of the GeM and the items to be procured through GeM, for prospective suppliers.
- ▶ Purchases up to Rs. 50,000 can be made from any of the available suppliers on the GeM, meeting the requisite quality, specification and delivery period. Above Rs. 50,000, the criterion of the lowest price among available suppliers on the GeM has to be followed.
- ▶ The GeM will also provide tools for online bidding and online reverse auction which can be used by the purchaser.

3.12 CENTRE'S NOD FOR NIMZ IN MEDAK

- ▶ Central Government gives a clear indication to the Telangana Government for setting up the National Investment and Manufacturing Zone (NIMZ) at Zaheerabad in Medak district.
- ▶ As per the Detailed Project Report (DPR) submitted by the Government of Telangana for final approval, the estimated total investment by manufacturing industry by the end of ultimate phase of NIMZ development is Rs. 17,300 crores and the direct and indirect employment generation will be about 2.77 lakhs.

o What is stand for NIMZ?

- ▶ NIMZ is meant to be the hub for any manufacturing units such as, production unit, logistic, environmental protection mechanism, residential areas etc. it includes one or more SEZ in itself.
- ▶ National Investment and Manufacturing Zones (NIMZ) are the part of the National Manufacturing Policy.
- ▶ These NIMZ are Industrial Township with all the necessary infrastructure for manufacturing industries.
- ▶ These townships are created on average 5000 ht. of uncultivated land. The management of the NIMZ is in the hands an SPV company owned by state, Union and Private players
- ▶ At present 8 NIMZ around Delhi-Mumbai Industrial corridor (DMIC) FOR eg.. Ahmadabad-Dholera investment region, Gujarat.
- ▶ In the Interim Budget of the government China has proposed 5 more NIMZ outside DMIC region.
- ▶ As per the innovation and quality of the concerns, for setting up the NIMZ State Government will pay 50% fees for International Parent application. Tax exemption on money spent to get ISO is exclusive in nature.

For the proposed NIMZ, Telangana Infrastructure Corporation Ltd. (TSIIC) has acquired 11,252 acres of land which has already been identified in the past by then combined Andhra Pradesh Government.

4

**INTERNAL
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4.1 DRAFT GEOSPATIAL INFORMATION REGULATION BILL



(Q) What do you understand by the term Geospatial information? Highlight the salient features of the draft Geospatial Regulation Bill, why it is considered draconian by experts?

o Context

The Ministry of Home Affairs recently posted the draft of a Bill aimed at regulating the acquisition and use of geospatial information pertaining to India.

o What does "geospatial information" mean?

► According to the draft it means:

- Geospatial imagery or data acquired through space or aerial platforms such as satellite, aircrafts, airships, balloons, unmanned aerial vehicles
- Graphical or digital data depicting natural or man-made physical features, phenomenon or boundaries of the earth
- Any information related thereto including surveys, charts, maps, terrestrial photos referenced to a co-ordinate system and having attributes;

o What does Security Vetting Authority do?

It grants licenses to organisations/individuals who want to use geospatial data. It will check the content and data provided and make sure it is well within national policies, "with the sole objective of protecting national security, sovereignty, safety and integrity"

o Key features of the Bill

- The preamble of the Bill says "A Bill to regulate the acquisition, dissemination, publication and distribution of geospatial information of India which is likely to affect the security, sovereignty and integrity of India and for matters connected therewith or incidental thereto.
- In simple terms, any addition or creation of anything that has to do with any geospatial information or location within the territory of India will need the permission of the Government or in this case, a Security Vetting Authority.
- The draft law says that whoever disseminates, publishes or distributes any geospatial information of India in contravention of section 4, shall be punished with a fine ranging from Rs. 10 lakhs to Rs. 100 crore and/or imprisonment for a period up to 7 years.
- According to experts the following could be deemed illegal in India after the passage of this Bill
- Possession of geospatial data without the permission of the security vetting authority
- Disseminating, publishing or distributing or visualising any geospatial information of India through internet platforms or online services, or publishing or distributing of any geospatial information of India in any electronic or physical form without the general or special permission of the Security Vetting Authority (SVA).
- Disseminating, publishing or distributing any geospatial information of India, outside India, without the general or special permission of the SVA.
- Depicting, disseminating, publishing or distributing of any wrong or false topographic information of India including international boundaries through internet platforms or online services or in any electronic or physical form.

o Analysis

► Significance

- The draft has come at a time when India has had a number of lapses in terms of cyber security, like the recent hacking of the IRCTC website, which may not have been for commercial gains, but could have been for other reasons like terrorism. In such a scenario Indeed, what the proposed stringent punishments, which include imprisonment of over 3 years to make it non-bailable, and licensing regime seek are a deterrent effect.

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► **Criticism of the Bill**

- The new draft bill has come under severe criticism from cyber law experts, who believe it is a shoddy piece of legislation that has various loose ends.
- The problems the experts point out include the facts that the draft conflicts with the Information Technology Act, 2000, seeks applicability outside India without specifying how foreign entities would be reined in and creates a licensing raj under which even innocuous acts such as taking photographs from an aero plane would be criminalized, as well as the possibility that the use of maps by the media would become punishable.
- What is worrisome is that it provides for stringent punishment ranging from a fine of up to 100 crore Rupees to a 7-year jail term, for as much as publishing a wrong map of India. Since the print, electronic and digital media use a lot of easily available data, the new regulations could spell doom for the industry as it would push up the costs of acquiring such basic information and also make media liable for heavy fines and imprisonment in case of even an oversight.
- The draft also does not mention any relaxations or exemptions for media or other groups from mandatory licensing, or the provision of free-to-use templates by the government, like court judgments, which the media can easily access without fearing grave repercussions.
- The draft legislation has the intrinsic problem that it has been given extra-territorial applicability in terms of jurisdiction. It is applicable to any person anywhere in the world. We have historically seen that such jurisdiction does not work well in practical terms.
- Similarly, lacunae exist in the way geospatial information is defined. Geospatial information is very wide in its scope and applicability: it includes all kinds of imagery and data acquired through space charts, maps and terrestrial photographs and incorporates digital and graphic data depicting natural or manmade physical features and boundaries.
- Another fear is that licenses could come to be arbitrarily granted under the regime. As of now, not much clarity exists on how licenses are going to be issued. Therefore, there need to be checks and balances even within the Security Vetting Authority.
- The provisions could also prejudicially impact the growth of e-Commerce and m-Commerce in India. As Under this law, Google Maps will be illegal without a license, which means that all mobile or e-Commerce applications working on Google Maps will also become illegal. The licence will also only be applicable to the concerned person. So if I am a taxi aggregator like Ola or Uber, I will have to get a separate licence over and above what Google Map has.

○ **Conclusion:**

While the bill has potentially noble objectives in aiming to protect the sovereignty, integrity and security of India, its provisions are extremely wide in their scope and ambit. India needs a legislation which will have to strike a balance between the protection of its national interest and ensuring that the data gets used freely for the propagation of e-Commerce and m-Commerce and other activities. Unfortunately the current draft Bill is lacking in the second aspect.

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4.2 ANTI - HIJACKING BILL



(Q) What do you understand by the term Hijacking? What are the Key features of the Anti-Hijacking bill? Will the recently passed Anti-hijacking bill be able to successfully tackle the threats of hijacking in India? Critically examine.

Context

Recently the Parliament passed the Anti-Hijacking Bill 2016

Why the Bill was brought?

The country had witnessed 19 hijacking incidents till date. The Bill amends the 1982 Act which only provided for death penalty for the hijackers only in the event of death of the hostages. The Anti-Hijacking Act of 1982 had undergone minor changes in 1994. But the need for giving "more teeth" to law-enforcing agencies vis-a-vis aircraft hijacking was felt in India after the hijacking of Indian Airlines Flight IC-814 on December, 1999.

Key features of the Bill

- ▶ **Definition of hijacking:** The Bill defines hijacking as seizing control of an aircraft in service, unlawfully and intentionally, by technological means or by exercising force, coercion, or any other form of intimidation. An aircraft is considered to be in service from the time it is being prepared for a specific flight by the crew or ground personnel until 24 hours after any landing.
- ▶ **Related offences:** The Bill includes several Acts within the definition of hijacking including: (i) Attempt and abetment of hijacking; (ii) Making a credible threat to commit hijacking; (iii) Organising or directing others to commit hijacking; (iv) Agreeing with another to commit the offence, and acting on the agreement; etc.
- ▶ **Punishment for hijacking and related offences:** The Bill provides for: (i) Death penalty, where the offence results in death of hostage or security personnel; (ii) Life imprisonment in all other cases; and (iii) Moveable and immoveable property of the accused may be confiscated. For any acts of violence committed in connection with the hijacking, the accused shall be punished with the same punishment as provided under the laws in force.
- ▶ **Jurisdiction:** Indian courts can exercise jurisdiction on several grounds including where the offence is committed: (i) In India; (ii) Against an aircraft registered in India; (iii) On board an aircraft which lands in India with the accused still on board; (iv) By or against an Indian citizen; (v) By a person who is present in India and is not extradited by the central government, etc.
- ▶ **Previous sanction for prosecution:** The Bill requires that sanction must be taken from the central government before prosecuting an accused for hijacking or related offences.
- ▶ **Investigation, arrest, bail, etc.:** The central government may confer powers of investigation, arrest and prosecution on any officer of the central government or the National Investigation Agency. An investigating officer can order seizure or attachment of property which is related to the offence, and is likely to be concealed or disposed of by the accused.
- ▶ Where an accused is forwarded to a Magistrate to authorise detention because investigation could not be completed within 24 hours, a Judicial Magistrate may authorise detention up to 30 days. An Executive Magistrate may authorise detention up to 7 days.
- ▶ With regard to bail, an accused cannot be released on bail or bond unless: (i) The public prosecutor has had an opportunity to oppose the release; and (ii) If the release has been opposed, the designated court is satisfied that there is reason to believe the accused is innocent and is unlikely to commit any offence while on bail.
- ▶ **Trial by designated courts:** The accused person shall be tried by a Sessions Court which is notified to be a designated court by the concerned state government. In case the investigation is carried out by the National Investigation Agency, the designated court shall be a court set up under the National Investigation Agency Act,

2008. The designated court shall have the power to order for attachment of the accused person's properties.

- ▶ **Presumption of guilt:** The court will presume the accused to be guilty if the prosecution establishes either: (i) Arms, ammunition or explosives were recovered from the accused and there is reason to believe that similar arms, etc. were used in the hijacking or (ii) There is evidence of use of intimidation against the crew or passengers in connection with the hijacking.
- ▶ Extradition: Hijacking and the related offences shall be extraditable. Extraditable offences are those offences for which one country may transfer the accused to another country's legal jurisdiction. No request for extradition shall be refused on the ground that hijacking is a political offence or is connected to a political offence.

○ Analysis

▶ Significance of the Bill

- In the earlier Bill, hijackers could be tried for death penalty only in the event of death of hostages, such as flight crew, passengers and security personnel. In the amended law, the definition has been expanded to include death of ground staff as well thus the perpetrators of hijacking would now be punishable with death penalty where such an act results in the death of "any person".
- Whoever unlawfully and intentionally seizes or exercise control of an aircraft in service by force or threat thereof, or by coercion, or by any other form of intimidation, or by any technological means, commits the offence of hijacking.' For the first time, in this Bill, this technological means of electronic warfare has been mentioned.
- Besides broadening the definition of hijacking, it also provides for an enhanced punishment to the perpetrators as well as the area of jurisdiction.

○ Way forward:

- ▶ While the Bill give more teeth to the earlier Act however many experts say that since hijackers are highly motivated persons, they cannot be deterred by death penalty alone.
- ▶ India had already witnessed hijack scenario in our country many times and the response that our government has displayed during that crucial time is weak therefore along with this legislation adequate attention should be paid to improve the crisis management infrastructure to deal with this kind of exigencies.
- ▶ A proper system should be put in place for security of airports as there are huge numbers of ground handling staff and they keep moving.
- ▶ A special force should be established and trained to handle airport security .

4.3 PARLIAMENT STANDING COMMITTEE ON HOME AFFAIRS REPORT ON BORDER SECURITY



(Q) The Pathankot proved how vulnerable India's Border are. In the context of the report submitted by the parliamentary committee on Home affairs highlight those vulnerability, What should be done to fix those vulnerability?

○ Context

A Parliamentary panel has rapped the Government for its failure to prevent the Pathankot terror attack, saying "something is seriously wrong" in the country's counterterror establishment and the airbase's security was not robust.

○ What happened during the Pathankot Attack?

- " On 2 January 2016, a heavily armed group attacked the Pathankot Air Force Station, part of the Western Air Command of the Indian Air Force. 4 attackers and 2 security forces personnel were killed in the initial battle, with an additional security force member dying from injuries hours later. The gun battle and the subsequent combing operation lasted about 17 hours on 2 January, resulting in 5 attacks and 3 security personnel dead. The attackers, who were wearing Indian Army fatigues, were suspected to belong to

Jaish-e-Mohammed, an Islamist militant group designated a terrorist organisation by India, the US, the UK and the UN.

- ▶ A further 3 soldiers died after being admitted to hospital with injuries, raising the death toll to 6 soldiers. On 3 January, fresh gunshots were heard, and another security officer was killed by an IED explosion. The operation continued on 4 January, and a 5th attacker was confirmed killed. The United Jihad Council claimed responsibility for the attack on 4 January.

◉ Key Facts observed by the Parliamentary committee

- ▶ The Parliamentary Standing Committee on Home Affairs, in its 197th report observed that the role of the Punjab police is also very "questionable and suspicious" during the 2 January terror attack.
- ▶ It has failed to understand that in spite of terror alert sounded well in advance, how terrorists managed to breach the high-security airbase and subsequently carry out the strike.
- ▶ It is constrained to note that despite concrete and credible intelligence inputs received from abducted and released Superintendent of Police (SP) of Pathankot and his friend and through interception of communication between terrorists and their handlers by the terrorists disclosing that they were planning an attack on a defense establishment, the security agencies were so ill-prepared to anticipate threats in time and counter them swiftly and decisively.
- ▶ During its visit to the airbase, the panel found that there were no roads around the perimeter wall of the strategic airbase. There were growth of long shrubs and trees on the premises, which have helped terrorists in hiding and making difficult for security forces in flushing out the terrorists.
- ▶ There cannot be two opinions on the fact that Pakistan-based Jaish-e-Mohammad terror group was behind this ghastly attack which was established through interception of calls between terrorists and their handlers based in Pakistan, thanks to their use of robbed mobile phones from the Pathankot SP and his friend.
- ▶ The Parliamentary Standing Committee said despite the fencing, floodlighting and patrolling by Border Security Force (BSF) personnel, Pakistani terrorists managed to sneak into India from across the border.

◉ Recommendation of the committee

- ▶ The committee recommended that in view of the serious attacks from across the international border in the area, the government should pay attention to effectively sealing the border through enhanced patrolling, fencing, flood lighting etc.
- ▶ The Committee recommends that the Pathankot airbase, which is very close to border, should be declared High Security Zone and should be properly secured through round-the-clock patrolling and making it out-of-bounds for general people residing around the airbase.

◉ Analysis

▶ Significance of committees observation and recommendations

- Faced with the questions many Indians have been asking about January's attack on the Indian Air Force base in Pathankot how the border was so easily penetrated, and why the base's perimeter was so poorly guarded the standing committee has, however, only platitudes to offer. Its calls for more effective police action against cross-border trafficking, to "effectively seal the border" and for "better intelligence and operational coordination however all these recommendations have been made dozens of times before to little avail. The truth is that the resources to do what the committee knows needs doing just do not exist.
- The real problem is shortage of manpower and lack of budget. As Punjab Police patrol vehicles were operating for just a few hours a day because of chronic budget shortfalls that have meant funds are not available even for fuel and maintenance needs. BSF and intelligence agencies like IB and RAW are short of officer rank personnel by one third.

- The committee also did not observe that due to lack of budget training standards are being diluted, and specialist skills are in short supply.
- The real scandal is that it has taken so long for Parliament to wake up to the problem and that it still isn't demanding accountability. For decades now, flag-waving has been allowed to gloss over gross failures in security management.
- The disgraceful early conduct of the Kargil War by top military commanders, documented in scholarly work and legal proceedings in the almost two decades since, was never punished. There was no serious audit of the manifold failings of the Mumbai Police and NSG during 26/11, nor a lessons-learned exercise.
- The problem has been a simple one: Accountability can't be demanded unless security forces are given functional autonomy, and credible resources to go with it.

4.4 OFFSHORE PATROL VESSEL 'IGCS SHAURYA' LAUNCHED

Goa Shipyard Limited (GSL), launched Indian Coast Guard Ship (ICGS) Shaurya at Vasco. This is the 5th ship of a series of 6 Off-Shore Patrol Vessels (OPVs) that the Indian Coast Guard had tasked the Vasco defense public sector undertaking to build.

◉ Key features of the shaurya:

- ▶ It is the second of a series of 6 OPVs that the Coast Guard had ordered for. The first ship was delivered on November 26, 2014.
- ▶ The indigenously designed ship is capable of search and rescue operations, pollution control and external firefighting and will be deployed for ocean surveillance and for monitoring sea lanes of communication.
- ▶ The vessel is capable of cruising at a speed of 23 knots and has a range of 6,000 nautical miles. It will be fitted with state-of-the-art machinery like the integrated machinery control system and integrated bridge system. Once sea trials are done, it will be delivered to the Coast Guard.
- ▶ The second ship builds on the feedback given by the Coast Guard and has a number of improvements, such as design optimization, additional crew space and lower power requirement thus helping improve the ship's lifecycle.

◉ Related information

▶ Goa Shipyard Limited

- Goa Shipyard Limited (GSL) is one of India's best shipyards and designated "Mini-Ratna" by the Government of India. It is located on the West Coast of India at Vasco da Gama, Goa at 15°24, 7.54, N 73°49, 29.40, E. Coordinates: 15°24, 7.54, N 73°49, 29.40, E. It was established in 1957, originally by the colonial government of the Portuguese in India, as the "Estaleiros Navais de Goa", to build barges to be used in Goa's growing Mining Industry, which took off after the establishment of India's blockade of Goa in 1955. In the wake of Portugal's defeat and unconditional surrender to India following the invasion of Goa by the Indian Armed Forces in 1961, it was requisitioned to manufacture warships for the Indian Navy and the Indian Coast Guard.
- At present, Goa Shipyard is the largest exporter of military marine vessels in the country with an order book of over 1,200 crore.
- Besides the two advanced off-shore patrol vessels being supplied to Sri Lanka and the 13 patrol vessels being built for Mauritius, the defence public sector undertaking is also building a damage control simulator for Myanmar.

► Coast Guard

- The Indian Coast Guard (ICG) protects India's maritime interests and enforces maritime law, with jurisdiction over the territorial waters of India, including its contiguous zone and exclusive economic zone. The Indian Coast Guard was formally established on 18 August 1978 by the Coast Guard Act, 1978 of the Parliament of India as an independent Armed force of India. It operates under the Ministry of Defence.
- The Coast Guard works in close cooperation with the Indian Navy, the Department of Fisheries, the Department of Revenue(Customs) and the Central and State police forces.
- The Indian Army has conducted one of the largest Military exercise 'SHATRUJEET' near Pokhran city- Thar Desert in Rajasthan, with a focus on sharpening its deep strike capabilities in enemy territory. This 2 months long exercise saw the participation of about 30000 soldiers from the Mathura based strike 1 corps.
- The mandate is to validating integrated theatre battle fighting concepts, where the Army incorporated new technologies, weapon platforms and systems including its long range Artillery fire such as, high altitude jumps by special forces commandos, night firing of Army tanks hitting their targets, fine test of made in India- 'Pinaka'- multi barrel -Rocket launcher, a smoke screen tank hide etc.
- The exercise was to have Army's proactive war strategy called the 'Cold Start Doctrine', It was held in a nuclear, biological, chemical (NOC) warfare situation, as a response to the rising threats from enemies battlefield or tactical nuclear missiles, moreover Indian Army is looking forward to strengthens its measures through it plan to use to strike deep in to enemy territory at short notice. This exercise of the Army has airborne components too with the term integrated Air- land battle environment.
- Motive to undertake such exercise at regular intervals at different levels to ensure forces are provided war-like situations and kept in high state of battle readiness along with its keep Indian Army ongoing and on one expected to be reviewed.

4.5 EXERCISE 'SHATRUJEET' IN DESERT OF RAJASTHAN

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4.6 INDIA-MANGOLIA JOINT TRAINING EXERCISE, NOMADIC ELEPHANT -2016

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- ▶ For improving the Defence ties and promotes military association between India and Mongolia, the 11th Indo-Mongolia joint training exercise commenced namely 'Nomadic Elephant-2016' at Mongolia.
- ▶ The objective of this exercise is to develop synergy and inter operability between the two Armies to fight in Counter Insurgency and Counter Terrorism under the United Nation Mandate.
- ▶ During this 2 week exchange the Indian contingent has share their practical experiences through a series of classroom lectures and outdoor demonstrations which include aspects like House Clearing and Room Intervention techniques in hostage situation, road opening, establishing mobile check posts, Intelligence gathering and drills for countering Improvised Explosive Devices, moreover both the contingents have share their techniques of unarmed combat, specialized rappelling and participate in various sports events.
- ▶ A platoon of the Kumaon Regiment of the Indian Army along with a team of 2 observers and other side team of total 60 personnel form Mongolian Army has participated in this event which is executed in a 48 hours joint outdoor exercise covering specialized operations.

5

SCIENCE

5.1 NEW IPR POLICY



(Q) Can the New IPR Policy reverse the dismal state of affairs in India with respect to research? Critically comment?

o Context

India announced a new Intellectual Property Policy recently.

o Why New IP policy was brought?

- ▶ India's strained patent and intellectual property administration has failed to keep pace with growing technological advances. Global pharmaceuticals players have often complained about India's price controls and marketing restrictions.
- ▶ At last count, a total of 2.37 lakh patent applications and over 5.44 lakh trademark registrations were deemed as pending, some of these hanging fire for years. The main reason for these pendency figures has been attributed to the shortage of manpower in the country's intellectual property offices. The unclogging of the pendency and quality examination are at the heart of improving the robustness of India's Intellectual Property Rights (IPR) system, something that the government has moved towards by announcing the country's first IPR policy. A strong IPR regime on the subject was among India's commitment to the World Trade Organization under the Trade Related Intellectual Property Rights (TRIPs) agreement.
- ▶ While IPRs are becoming increasingly important in the global arena, there is a need to increase awareness on IPRs in India, be it regarding the IPRs owned by oneself or respect for others' IPRs. The importance of IPRs as a marketable financial asset and economic tool also needs to be recognised. For this, domestic IP filings, as also commercialization of patents granted, need to increase. Innovation and sub-optimal spending on Research & Development too are issues to be addressed.
- ▶ As of 2014, India's spend on research and development (0.8% of GDP) significantly lagged global counterparts such as China (1.9%), Korea (3.8%) and the US (2.7%). In 2015, India ranked a dismal 29th out of 30 countries in the International IP Index released by the Global Intellectual Property Center of the US Chamber of Commerce, a ranking that measures the overall IP environment in a country. China was ranked 19th in the same list.

o Key Features of the New IP policy

- ▶ The Policy recognizes that India has a well-established TRIPS-compliant legislative, administrative and judicial framework to safeguard IPRs, which meets its international obligations while utilizing the flexibilities provided in the international regime to address its developmental concerns. It reiterates India's commitment to the Doha Development Agenda and the TRIPS agreement.

The new policy lays down 7 objectives, which are briefly covered below:

1. **Creating awareness** - The new policy aims to create awareness among all sections of society about the economic, social, and cultural benefits of IPR. It will be made a compulsory part of the curriculum in major institutions. The need to open a national research institute for IPR has also been proposed, to increase outreach.
2. **Innovation** - To offset India's growing foreign dependence, India needs to develop indigenous products. Through its national IPR policy, the government's main thrust is to create an environment where people can think innovatively and generate innovation in every field. The policy will help mainly inventors and entrepreneurs who are dealing with an overload of knowledge and ideas that need to be protected (from infringers) through trademarks, copyrights or patents, as may be required.
3. **Balanced structure of legal framework** - Protection of intellectual property can only be provided through well-defined laws, which balance the interests of the public with those of intellectual property owners. If there are no protection mechanisms in the legal system, then people will not be encouraged to create

more intellectual property. The new policy will lead to stronger institutional monitoring mechanisms to curb IP offenses at the state level.

4. **Administration and Management**- The policy aims to modernise and strengthen service-oriented IPR administration. Digitisation of all government filings has made it quite hassle free to register trademarks online by using IP India's Site. By 2017, the Government aims to lower the average time for pending IPR applications to 18 months (down from 5-7 years) and trademark registration to one month (down from 13 months).
5. **Commercialisation of IPRs** - The policy aims to enable Indian companies to get value for IPRs through commercialisation. Most business owners do not know how their brand impacts the value of their business. A strong brand is nothing but an intangible asset that includes trademarks, copyrights, patents and trade secrets which are the intellectual property of that company. At the time of valuation or in case if the owner is considering selling his business, then intangible assets like your intellectual property can command more value than other tangible assets. Also, a well-protected brand attracts investors as they will feel safe to invest in a company that has everything secured in legal terms to avoid any future conflicts.
6. **Enforcement and Adjudication** - Protecting intellectual property with trademarks, copyrights and patents plays an essential role in monetising innovation. By strengthening the enforcement and adjudicatory mechanisms for combating IPR infringements, a company can stop others from stealing its work. The process of opposing and safeguarding IP will involve coordination between various agencies and guiding IP owners to follow best practices to avoid digital piracy.
7. **Human Capital Development** - To strengthen and expand human resources, the new policy calls for (i) New institutions and capacities for teaching, training, research and skill building in IPRs; (ii) The opening of R&D institutions; and (iii) Making IPR a compulsory subject to be taught in schools and colleges. The aim is to develop a increasing pool of skilled IP experts, to facilitate the growth and judicious management of IP assets.

- ▶ The new National Intellectual Property Rights policy seeks to put in place a legal framework that will encourage the IPR regime and reduce the time taken by the government to approve a trademark to a month by 2017. Currently, the process takes more than 12 months on an average.

◉ Significance of the New Policy

- ▶ The new policy will try to safeguard the interests of rights owners keeping in mind the wider public interest while combating infringements of IPRs.
- ▶ Experts believe that the policy shows that the government has not succumbed to demands from the US, but that it should have made the policy more radical to protect India's generic industry.
- ▶ If we combine the Finance Minister's speech and the text of the policy, then it is clear that the government is not going to do anything more than TRIPs and that is really good as it means India has successfully resisted demands of TRIPs plus-bilateral agreements that provide for stronger protection for patents-with regard to international pharmaceuticals.
- ▶ It is laudable that the policy also does not open debate on Section 3(d) of Indian Patent Act, 1970, which is the primary contentious issue between India and MNCs like Novartis and GlaxoSmithKline. Section 3(d) says that, inventions that are discoveries of a new form of a known substance and do not result in increased efficacy are not patentable. Novartis's cancer drug Glivec and GSK's breast cancer drug Tykerb were denied patents by Indian courts on this grounds.
- ▶ The policy needs to be commended for taking note of our "informal" (rural) economy and the need to encourage the prolific creativity found within.

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o Criticism of the Policy

- ▶ As per many analysts, although the new IPR Policy framework is robust, the Government didn't open up Section 3(D) of the Patents Act. This section sets the standard for inventions happening inside India. In the absence of any new law, inventions happening inside India may still be copied and the creator cannot take any action.
- ▶ A major issue of concern is IP enforcement and linking IP with innovation. The policy sees IP as an end in itself. But most of the research in India is conducted in universities which are publicly funded. We cannot give patent for such knowledge to individuals.
- ▶ There is an overemphasis on IP enforcement. But it does not address the gaps which innovators face in the bio-medical field. The developed countries are not developing medicines for diseases of the third world like Malaria. The policy does not help create an atmosphere where Indian companies can develop such medicines. Putting innovation within the framework of IP will not help.
- ▶ Finance Minister commented that "We believe that our existing laws, they are all WTO compliant, and as and when global trends move forward, a continuous evolution of these laws will always be required. However experts believe that, The word 'evolution' is a matter of concern because it has moved in one direction only, pressured by the developed countries. Hence, unless the government is ready with funding and programmes to ensure access to medicine for all, any change in the legislative framework would hurt not only the generic industry, but the people of India."
- ▶ Much in line with its powerful IP rights-centric approach, the policy recommends that the unauthorised copying of movies be criminalized. No doubt Bollywood requires some protection from pirates, but criminalising what is essentially a civil wrong (much like defamation) is tantamount to killing an ant with an elephant gun, not to mention the potential for abuse at the hands of our police.

o Conclusion:

- The policy could be commended as with this policy India has cleared its stance on the Intellectual Property Rights policy framework. It is laudable that the policy also does not open debate on Section 3(d) of Indian Patent Act, 1970, which is the primary contentious issue between India and MNCs like Novartis and GlaxoSmithKline. However the policy has major limitations also. The policy feels that India is low on innovation because of incompetent Patent regime while definitely there are number of flaws with our Patent System But is the problem lies with the country's IP regime? Or does the malaise lie elsewhere? Could it be cultural, where parents put undue pressure on their children for that fat salaried job, as opposed to a risky entrepreneurial venture? The policy advocates that IP be taught in schools and colleges. But why? What we need in schools and colleges are courses on creativity, not on IP. Unfortunately the policy is silent on that.

5.2 THE TRAP OF TRANSFAT



(Q) What do you understand by Transfat? Discuss how it is hazardous to health. Also Highlight the vulnerabilities of Indians to Transfat?

o Context

The US Food and Drug Administration (FDA) issued a press release in June stating that Partially Hydrogenated Oils (PHOs), the primary dietary source of trans fats, are "not generally recognized as safe" for human consumption. The federal agency gave food manufacturers in the US 3 years to completely remove PHOs from their products.

o What is Transfat?

- ▶ Artificial Trans Fats can be formed when oil goes through a process called hydrogenation, which makes the oil more solid (known as hardening). This type of fat, known as hydrogenated fat, can be used for frying or as an ingredient in processed foods.
- ▶ Artificial Trans fats can be found in some processed foods such as biscuits and cakes, where they are sometimes used to help give products a longer shelf life. However, in recent years many food manufacturers have removed trans fats from their products.

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- ▶ Trans fats can also be found naturally in some foods at low levels, such as those from animals, including meat and dairy products.

◉ Are Trans Fats bad for you?

- ▶ Consuming a diet high in Trans fats can lead to high cholesterol levels in the blood, which can cause health conditions such as Heart disease, heart attack and strokes.
- ▶ Trans fats also increase the amount of C-reactive protein in the blood, increasing the inflammation of the arteries while interfering with the proper functioning of the immune system.

◉ Transfat & India

- ▶ The Indian population is already identified as genetically predisposed to cardiovascular diseases. In addition, epidemiological data points to greater risk of coronary heart disease from an increase in dietary trans fats. Hence, consumption of vanaspati (a source of trans fats) compounds the risk of cardiovascular diseases in the Indian population.
- ▶ The reason trans fats have been used traditionally by the food industry in India is because they increase taste, add texture, increase the shelf life of regular food products and reduce the cost of production.
- ▶ In the US, food manufacturers are required to state the amount of trans fat in their food product if the level exceeds 0.5mg per serving-as prescribed by the FDA. This isn't required of the Indian food manufacturer.
- ▶ The only way in India of knowing that a processed food product doesn't have Trans fats, or has minimal trans fats, is when the manufacturer voluntarily puts such information on the label. The uncertainty is even greater in street food. One can at least find out if Trans fats are being used or not in labelled products, but there is no way to verify its presence in the food that one eats outside.

◉ Steps taken by India to curb the menace of transfat:

- In 2015, the FSSAI had issued a notification to reduce the maximum permitted amount of trans fats to 5% in hydrogenated vegetable oils, margarine and fat spreads and interesterified vegetable fat.

5.3 SCIENTISTS CREATED WORLD'S SMALLEST (NANO) THERMOMETER USING DNA

◉ Introduction

Scientists have developed world's Smallest (Nano) Thermometer using DNA (Deoxyribonucleic Acid) structures that can fold and unfold at specifically defined temperature functions. It was developed by the scientists at the University of Montreal and the study report in this regard was published in the journal Nano Letters.

◉ Key features of the Thermometer

- ▶ The world's smallest thermometer is 20,000 times smaller than a human hair and is fully programmable. It was developed using basic idea of the DNA molecules which unfold when heated to certain temperatures. RNA, proteins and other bio-molecules in the DNA fold and unfold.
- ▶ With this idea researchers engineered DNA structures that are capable of folding and unfolding at specific temperatures making it nano-scale temperature signaling device.

◉ Significance of the discovery

- ▶ It can help in understanding of natural and human designed nanotechnologies by enabling to measure temperature at the nanoscale.
- ▶ It can be incorporated in new electronic devices and has a wide range of applications across fields of chemistry and physics.

- ▶ It can Play a crucial role in answering a number of debatable questions in the field of science and technology.
- ▶ It may be used to create super-strong structures, repair cells and help nano-computing become more efficient.
- ▶ It can Help in understanding biological functions better and opens new avenues in the developing field of nanotechnology.

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◉ **Related information**

- ▶ DNA, short for Deoxyribo Nucleic Acid, is the molecule that contains the genetic code of organisms. This includes animals, plants, protists, archaea and bacteria.
- ▶ DNA is in each cell in the organism and tells cells what proteins to make. Mostly, these proteins are enzymes. DNA is inherited by children from their parents. This is why children share traits with their parents, such as skin, hair and eye color. The DNA in a person is a combination of the DNA from each of their parents.

5.4 GENE THAT GIVES CARROTS THEIR COLOUR IDENTIFIED

- ▶ The humble supermarket carrot owes its deep orange colour to a newly found gene, according to an analysis of the full carrot genome.
- ▶ The first full genome sequence of the carrot, published in Nature Genetics, sheds light on the vegetable's evolutionary origin, its distinctive orange colour, and its nutritious value.
- ▶ The researchers identified more than 32,000 genes in a typical orange carrot, including around a third that were unique to the popular root vegetable.
- ▶ They then sequenced the genomes of 35 different carrot specimens and subspecies, both wild and cultivated, in an attempt to understand how carrots evolved into those we find in our fridge.
- ▶ Finally, they found a gene responsible for the high concentration of Beta-Carotene in the orange carrot taproot.
- ▶ Beta-carotene, which is converted by the human body to vitamin A, belongs to a class of several hundred naturally occurring pigments called carotenoids.
- ▶ It gives the yellow, orange or red colour to fruits and vegetables, as well as some animal products, like egg yolks and butter.

◉ **Significance of the discovery**

- ▶ While a few gaps remain, it represents one of the most comprehensive analyses of vegetable genetics so far.
- ▶ The findings could help boost Beta-carotene in carrots, as well as the nutritional quality of a range of crops, including lettuce and celery.
- ▶ As well as helping scientists develop carrots with improved nutritional value and other traits, the carrot genome sequence could provide insights into the genome sequence of other crops.
- ▶ It could also be useful in genome editing technologies, when DNA is inserted, deleted or replaced in other organisms. This could increase beta-carotene levels in crops like cassava, a staple food in many developing countries.

◉ **Related information**

▶ **Beta-carotene:**

- Beta-carotene is a type of pigment found in plants. It gives yellow and orange fruits and vegetables their rich hue. The name beta-carotene is derived from the Latin name for 'carrot'.

- Among the carotenoids that can be converted to 'Vitamin A' in the human body, so-called 'provitamin A carotenoids', beta-carotene is the most abundant and most efficient one found in foods.
- Currently available evidence suggests that in addition to being a source of vitamin A, beta-carotene plays many important biological roles that may be independent of its provitamin A status.

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5.5 SCIENTISTS DEVELOP WORLD'S SMALLEST LIGHT POWERED ENGINE

A group of researchers from University of Cambridge have built the world's smallest (nanoscale) working engine. The research team was from the Cavendish Laboratory. They have named the microscopic engine as ANTs (Actuating Nano-Transducers).

◦ Key facts

- ▶ The nanoscale engine is just a few billionths of a metre in size and uses light to power itself. The prototype engine was made of tiny charged particles of gold. It was bound together with temperature-responsive gel-like polymer called PNIPAM.
- ▶ On heating the engine above critical temperature with a laser it stores large amounts of elastic energy in a fraction of a second. The elastic energy is mainly produced after the gold particles are bound tightly together with the polymer through intermolecular attraction. When it falls below critical temperature, the polymer suddenly absorbs water and expands and the gold particles are pushed rapidly apart like a spring. This stored energy generates a propulsive force on a microscopic scale that is a hundred times greater per unit weight than any known motor or muscle.
- ▶ The nanoscale engine could form the basis of future nano-machines. This engine can help to navigate in water, even enter living cells to fight disease or sense the environment around them.

5.6 RAINWATER CAN HELP TRIGGER EARTHQUAKES

Rainwater and snowmelt help fuel intense earthquakes along a New Zealand tectonic fault, new research suggests.

◦ Key findings of the Research

- ▶ Researchers identified the sources and fluxes of the geothermal fluids and mineral veins from the Southern Alps of New Zealand where the Pacific and Australian Plates collide along the Alpine Fault.
- ▶ From careful chemical analyses, they discovered that fluids originating from the mantle, the layer below Earth's crust, and fluids derived from rainwater, are channelled up the Alpine Fault.
- ▶ By calculating how much fluid is flowing through the fault zone at depth, the researchers showed for the first time that enough rainwater is present to promote earthquake rupture on this major plate boundary fault.
- ▶ Geologists have long suspected that deep groundwaters may be important for the initiation of earthquakes as these fluids can weaken the fault zones by increasing pressures or through chemical reactions. Chemical reactions may alter the strength and permeability of rocks, and if enough fluid is present at sufficiently high pressures they may aid earthquake rupture by 'pumping up' the fault zone.

◦ Related information

▶ What is earthquake?

- An earthquake (also known as a quake, tremor or temblor) is the perceptible shaking of the surface of the Earth, resulting from the sudden release of energy in the Earth's crust that creates seismic waves. Earthquakes can be violent enough to toss people around and destroy whole cities. The seismicity or seismic activity of an area refers to the frequency, type and size of earthquakes experienced over a period of time.

5.7 CGMP COMPLIANT FACILITY FOR MANUFACTURE OF DPT AND TT VACCINE AT THE CENTRAL RESEARCH INSTITUTE (CRI), KASALI.

- ▶ The Central Government was inaugurated the 1st of this kind Current Good Manufacturing Practice (CGMP) compliant facility within the central government for manufacture of Diphtheria, Tetanus, Pertussis (DPT) and Tetanus Toxoid (TT) vaccine and launched the CRI Website at the Central Research Institute (CRI) Kasauli, Himachal Pradesh
- ▶ Central Research Institute (CRI), Kasauli is one of the most important suppliers of vaccines for the government Universal Immunization Programme (UIP) especially for DPT and TT vaccines. The institute is involved in manufacture and supply of various lifesaving therapeutic antisera for snake bites, Rabies and Diphtheria and supplies Yellow Fever Vaccine to different part of the country. Diagnostic reagents such as diagnostic antigens for typhoid, typhus fever and brucellosis and diagnostic antisera for cholera and salmonella are also manufactures and supplied to various institutions throughout the country.
- ▶ Functioning of the Zonal office of CDSCO, at Baddi has being facilitated Pharma companies and exporters from Himachal Pradesh, Punjab and Haryana to get their clearance and No Objection Certificate (NOC).
- ▶ In order to ensure production of quality medicines along with Good manufacturing and Good Laboratory Practices for the research on vaccine development and various other public health related issues along with contribute to the prevention of spread of novel antigenic variants, for which the workshops will be regularized timely.

○ Features and of the issue:

- ▶ The advancement in regulatory requirements and introduction of C-GMP concept in vaccine manufacturing led to the need for creation of C-GMP compliant infrastructure and process, this mark the CRI is the first central government institute to have C-GMP compliant infrastructure for vaccine production. According to this, CRI has been able to create this C-GMP compliant facility for production of DPT group of vaccines.
- ▶ TT vaccine has been commercialized from this facility for Universal Immunization Programme use and production of DPT bulk has been initiated.
- ▶ It is essential for vaccine manufacturers to have global quality standards moreover CRI is exploring the feasibility of establishing WHO Prequalified c GMP compliant manufacturing facility for yellow fever vaccine, enable the institute to supply this vaccine to African and Latin American countries.

Furthermore, in future (CRI) plans to manufacture all vaccines viz. Japanese encephalitis vaccine, Rabies vaccine and Typhoid vaccine, for enabling c GMP's application of recent technological advancement and compliant facility.

5.8 INDIAN SPACE RESEARCH ORGANISATION (ISRO) DEVELOPS AN APP NAMED 'SMARAC CITIZEN'

- ▶ Based on the proposal from the National Monuments Authority (NMA) the Indian Space Research Organisation (ISRO) has developed the app named 'Smarac Citizen'.
- ▶ The aim of the App granting construction permits within few minutes to architects and real estate developers who plan to constructs buildings close to the National Monuments.
- ▶ The App contains the Map of 3,686 centrally protected monuments across the country.
- ▶ A part from easing the process of obtaining construction permits, the App will help the NMA keep a tab on encroachments around monuments.

- ▶ The App will also give the elevation details like the height of the sites with respect to mean sea level. It will help architects not only for the NMA approval, but also for the approval of the Airport Authority of India.

◉ Related information

▶ ISRO

- Formed in 1969, ISRO superseded the erstwhile Indian National Committee for Space Research (INCOSPAR), which was established in 1962 by the efforts of independent India's first Prime Minister Jawaharlal Nehru, and his close aide and scientist Vikram Sarabhai. The establishment of ISRO thus institutionalised space activities in India. It is managed by the Department of Space, which reports to the Prime Minister of India.
- ISRO built India's first satellite, 'Aryabhata' which was launched by the Soviet Union on 19 April in 1975. In 1980, 'Rohini' became the first satellite to be placed in orbit by an Indian-made launch vehicle, SLV-3. ISRO subsequently developed two other rockets: the Polar Satellite Launch Vehicle (PSLV) for launching satellites into polar orbits and the Geosynchronous Satellite Launch Vehicle (GSLV) for placing satellites into geostationary orbits. These rockets have launched numerous communications satellites and Earth Observation Satellites. Satellite navigation systems like GAGAN and IRNSS have been deployed. In January 2014, ISRO successfully used an indigenous cryogenic engine in a GSLV-D5 launch of the GSAT-14.

5.9 NASA'S CASSINI SPACECRAFT, ORBITING SATURN CONFIRMED A HUG SEA ON SATURN'S MOON TITAN COMPOSED MOSTLY OF PURE LIQUID METHANE.

- ▶ A new research confirms by the NASA's spacecraft 'Cassini' is that one of the largest seas on Saturn's moon 'Titan' is filled with pure liquid methane. The seabed may be covered in sludge of carbon and nitrogen rich material, and its shores may be surrounded by wetlands.
- ▶ Methane, a compound made of 1 carbon atom and 4 hydrogen atoms, exists as a gas on Earth. It becomes liquid only at -161.5 degrees Celsius. Saturn's great distance from the Sun ensures that gases like methane exist as liquids there.
- ▶ NASA's Cassini spacecraft, orbiting Saturn and its moon since 2004, it confirms the sea, called Ligeia Mare, has surface area of about 126,000 sq. kms. Cassini also found that the seabed may be covered in sludge of Carbon and nitrogen rich material as well as layer of organic-rich compounds such as nitriles and benzene; furthermore its shore may be surrounded by wetlands.
- ▶ Since arriving in the Saturn system, the Cassini spacecraft has revealed that more than 1.6 million square kilometers of Titan's surface consist of almost 2% of the total area is covered in liquid. There are 3 large seas, all located close to the moon's North Pole, surrounded by numerous of smaller lakes in the northern hemisphere, just one large lake has been found in the southern hemisphere.
- ▶ The shoreline around Ligeia Mare may be porous and flooded with liquid hydrocarbons. Cassini measurements suggests that the lakes and seas are wet with liquid hydrocarbons, which would make them warm up and cool down much like the sea itself.

Possibilities of the sea methane are either Ligeia Mare is replenished by fresh methane rainfall, or something is removing ethane from it. In the other way it is possible that the ethane ends up in the undersea crust, or that it somehow flows into the adjacent Sea, kraken Mare.

5.10 NORTH-EAST GOT ITS FASTEST SUPERCOMPUTER 'PARAM KANCHENJUNGA'

- ▶ North-east has got its first fastest supercomputer 'PARAM Kanchenjunga' with a peak computing power of 15 Teraflops and latest Intel-based processor with accelerator technologies, will give a major boost to research at all levels.
- ▶ PARAM Kanchenjunga is collaboration between centre for development of Advanced Computing (C-DAC) Pune, and the Ministry of Communication and IT.
- ▶ It features consists not only the distinct privilege of being the fastest supercomputer in the North-east but also be the fastest supercomputer among the all NIT's in India.
- ▶ The entire system built a cost of over 2 crore, while the related infrastructure to house it including electrical and air-conditioning has cost up to Rs. 50 lakh.
- ▶ There are only a few of countries including India who have developed capabilities in utilizing this to solve grand challenges which are more or less out of bounds for serial computing.

Applications of the 'PARAM Kanchenjunga':

- ▶ Two faculty members of National Institute of Technology Sikkim, (NIT) are already studying on how to increase the efficiency of fuel movement through long pipelines such as from Middle East to India.
- ▶ The measurement of ocean surface temperature for weather forecasting through simulations.
- ▶ An application for instance information system regarding road condition for the tourists.

5.11 PANAMA DISEASE STALKS BANANA CULTIVATION IN KERALA

- ▶ The Panama disease caused by a soil-borne fungus is threatening banana crops across Kerala, posing a potential crisis for farmers, even as global efforts to control the disease gain momentum.
- ▶ In spite of his name, the disease probably originated in the South East Asia and was first reported in Queensland, Australia in the year 1876. In the 1950's, Panama wiped out the Gros Michel banana, one of the dominant cultivar. Over the years, it spread from Panama to neighbouring countries. A new virulent strain of the disease known as, Tropical Race4 (TR4) is now threatening banana crops in Asia, Australia, Africa and the Middle East.
- ▶ The main concern of the scientist is to sporadic cases of infestation could turn into an epidemic. Most of the popular cultivars have shown signs of infestation. Scientist at the Kerala Agricultural University recommends soil treatment with fungicides for control of the disease but they are worried that farmers who are yet to determinate the depravity of the threat would corner the need for the intervention.
- ▶ Panama also called 'Fusarium Wilt of banana'; Panama is caused by soil-borne fungus Fusarium Oxysporum f. sp. Cubense (Foc). This pathogen is resistant to fungicide and cannot be controlled chemically. The fungus enters the plant through the roots and goes on to colonise the plant through the vascular system. It causes discoloration and wilting of leaves, and eventually kills the plant. The fungus spread through infected planting material, soil and water.

6

ENVIRONMENT

6.1 IS ODD-EVEN FORMULA AN EFFICIENT WAY TO CURB POLLUTION?



(Q) While schemes like Odd-even can reduce Pollution in short run. It is not a sustainable way to tackle pollution in Long run. Critically Comment. What steps should Government undertake to curb pollution of our cities in Long run?

Context

Recently, Delhi has completed ODD-EVEN 2. The main objective to bring Odd-even was to curb the pollution in Delhi. We will analyze in this article how effective odd-even Programme in Delhi and whether It is a sufficient Formula to curb Delhi's Pollution.

What is the odd-even scheme?

- ▶ In last year December, the Delhi High Court after observing that the air pollution levels in the national capital had reached "alarming" proportions and it was akin to "living in a gas chamber" had directed the Centre and city government to present comprehensive action plans to combat it.
- ▶ A day later, the Delhi government announced that it will restrict the amount of vehicles on the road by allowing cars with odd and even number plates to run on roads only on respective odd and even dates.
- ▶ It was also announced that all private vehicles, even having registration numbers issued by neighboring states, will have to follow the odd-even number formula. Emergency services and public transport will not be under the ambit of the restriction
- ▶ The First phase of odd-even scheme was implemented from 1st January 2016 to 15 January 2016 and the second phase of the scheme was implemented from 15 April to 30 April 2016.

Performance of the First Phase

- ▶ Analyzing real-time vehicle speed data from Uber, Delhi revealed that during the odd-even programme, average speeds went up by a statistically significant 5.4% (2.8% standard deviation from normal). This is an especially significant change given that radio taxi drivers are meant to stay within speed limits.
- ▶ The odd-even pilot did have some impact on pollution too reducing hourly particulate air pollution concentrations by 10-13%.
- ▶ When focusing just on the hours that the odd-even policy was in effect estimates suggest that particulates pollution declined by 18% due to the pilot.

Performance of the second Phase

- ▶ The first, in January, succeeded in reducing pollution by about 10-13% But this time around experts find no evidence that the same policy, running from April 15 to April 30, affected pollution levels.
- ▶ Hourly estimates of pollution reduction in this phase was small. Indeed, none of the hourly estimates for the second round of odd-even can be statistically distinguished from zero. These estimates suggest congestion and vehicle use did not significantly decrease, as they did during the January iteration.

Why didn't the April pilot work when the January programme did?

One reason might be the differences in atmospheric conditions between summer and winter. In the winter, air pollution stays trapped close to the ground in Delhi (a phenomenon known as thermal inversion). As a result, short-term policies to reduce air pollution such

as the odd-even scheme can have a brief, detectable effect. The summer, however, is very different. Pollution rises and quickly disperses. As a result, it is less likely that any short-term policy will have immediate and significant impact on ground-level air pollution.

◉ **What then might we conclude from this?**

One argument has been that the odd-even policy should be extended over a longer period of time. But experience proves otherwise, as humans learn to adapt and game the system. In Mexico City, where an odd-even programme was enforced over a longer period of time, pollution reductions vanished as commuters bought cheaper, second-hand and often higher-polluting cars. The only thing these vehicles had going for them was the right number plate. It is very unlikely that this is a factor in India currently. But, if the scheme was extended, Delhi might experience something similar to Mexico City.

◉ **How can we reduce Pollution and congestion of our cities in Long run?**

- ▶ Given the fact mentioned above that Odd-even policy can only be a short term solution to curb pollution as in Long run People will find a way to bypass the scheme as was done in Mexico, We need to look beyond Odd-even scheme to curb the menace of odd-even in Long run.
- ▶ Adopt congestion pricing in areas where local pollution levels are high and traffic jams are common. In such a system, drivers are charged for using the roads at certain places and times, allowing cities to effectively reduce car use at periods of peak congestion and pollution. This approach has been successful in places such as London and Singapore.
- ▶ Taxing actual fuel consumption might also be a sustainable long-term policy if designed well.
- ▶ Even without the odd-even programme, congestion can be reduced by technological measures and economic incentives. A computerised and automated signalling system can move the traffic faster. Synchronised signals can also help. There is poor lane discipline in traffic and stricter enforcement of rules can reduce many gridlocks.
- ▶ Biomass burning of any kind should have strict penalties which require alert monitoring as well as alternatives and solutions. Those who burn biomass for cooking should be provided LPG as is the policy of the Government.
- ▶ Construction firms should be asked to keep the dust confined within the site, which should be covered up, inner roads where trucks ply should be regularly watered and the PM level should be monitored at the site and a few meters outside it.
- ▶ This is the season for trees to shed leaves and all Residents Welfare Association (RWAs) should be mandated to compost them and find place for the compost on their premises. Dry leaves also create dust pollution.
- ▶ Regular vacuum of Roads are required in the cities as road dust is also a major contributor to pollution in our cities.
- ▶ More incentives and disincentives need to be given to change the vehicle profile gradually by de-registering high-polluting old vehicles and encouraging CNG and electric vehicles.
- ▶ Much of the long-term solutions are with the Central government, which can mandate the oil and auto companies to get Bharat 6 in Delhi earlier.
- ▶ With programmes that use financial incentives to change behaviour, it also becomes possible to raise revenue. Any revenue could then be used to improve the quality and capacity of public transport. In the long run, this is the most effective way to reduce the use of cars and traffic congestion, while also directly impacting air pollution.

6.2 WATER CRISIS IN INDIA: AN ANALYSIS



(Q) Why most of the Indian states are in the Grip of Water shortages? What steps should be taken Government and the people to improve the situation?

o Context

Recently, Most of the Indian states like Maharashtra, Telangana, and the area of Bundelkhand etc. are in the grip of worst Water shortages.

o Extent of the Shortage

- ▶ What we are seeing this year is unprecedented in many respects: Major perennial rivers like the Ganga, Godavari, Krishna and Netravati have dried up at several locations, which was unheard of earlier. Groundwater levels are at a record low. In many places hand pumps have dried up completely. The number of people impacted, the intensity of the impact are huge. This is only the fourth time in a century that there has been a back-to-back drought, but on all previous occasions groundwater, an insurance in times of drought, had provided relief. That is no longer an available option in several places. Our rivers are in a much worse situation today than ever in the past.
- ▶ Water scarcity is so acute in places like Latur (Maharashtra), which is facing a second successive drought, that trains have been deployed to carry water from the Krishna river to that district to provide drinking water. Apprehending that people could riot over water, Maharashtra has even issued prohibitory orders in some villages to avoid violence over water shortage.
- ▶ Vast tracts of Maharashtra, Telangana and Bundelkhand (UP) are facing drought. Many of the minor water tanks have dried up and storage in the 91 nationally monitored reservoirs has gone down from 158 Billion Cubic Metres (BCM) to about 36 BCM.
- ▶ Water stored in reservoirs in Maharashtra and Gujarat was at 21% of their capacity, compared to the usual decadal average of 44%. In southern India, covering drought-hit states like Karnataka, Andhra Pradesh and Telangana, water levels were at 17% of reservoir capacity, compared to decadal average storage levels of 29% of capacity.
- ▶ Currently, in every state except Madhya Pradesh, West Bengal and Tripura, cumulative storage levels are below their normal levels. The situation is better in the reservoirs that produce significant hydropower of 60 MW and above. There are 37 of them, and 26 are at levels that are normal or just below normal.

o What has led to this situation?

- ▶ Successive failure of Monsoon has led to fall in the water table and drying of rivers, lakes and ponds.
- ▶ Climate change, coupled with the El-Nino weather event, has resulted in an unusually harsh summer with many parts of the country reeling under heat wave conditions. This has led to more demands for water.
- ▶ There has been rapid depletion of ground-water levels, particularly in North India and Maharashtra where crop irrigation takes away a huge chunk. This rapid depletion is due to cheap and subsidized availability of ground water to Farmers which has led to its overuse.
- ▶ The kind of industries we set up and the kind of agriculture we do in any region has to keep in mind the various factors prevailing in the region, including water. When we conduct water-intensive activities in water-starved regions, that is an invitation to an inequitable, unsustainable, conflict-generating situation and sooner or later we will face the consequences. We have seen this happening in Maharashtra over the last decade most starkly. In Marathwada and western Maharashtra (similarly, also Northern Karnataka) sugar cane cultivation on about 4-5% of cropped land takes up about 70% of available irrigation water. even when 2014 and 2015 monsoon had major deficits in Maharashtra, the area under sugarcane remained at record levels.

- ▶ The rapid growth of population and its growing needs has meant that per capita availability of fresh water has declined sharply from 3,000 cubic metres to 1,123 cubic metres over the past 50 years. The global average is 6,000 cubic metres. As water demand is expected to rise further, the pace of supply is expected to fall further
- ▶ Mispricing of water has meant that the better-off residents in Indian cities have access to subsidized water, while the poor need to purchase water from private agencies at a steep price. Among those connected by piped water supply, the usually flat pricing structures mean that those using more water avail more subsidies. Political interference in urban water administration has ensured that there has never been a serious effort to rationalize water tariffs. This has led to under-recovery of costs, leaving municipal bodies bereft of funds to modernize or expand water networks. To make things worse, political interference also allows households with dysfunctional meters to continue receiving water at cheap rates. This leaves little incentive for them to install new meters, dealing a big blow to municipal finances. The limited financial resources of municipal bodies force them to rely on a dilapidated network of decades-old pipelines to meet even the current supply, leading to high leakage rates.

○ **Solution to the problem**

- ▶ As climate change will continue to affect weather conditions and create water shortages and excesses, the solution lies in expediting the Indian River Linking (IRL) project that was proposed 3 decades ago. The proposals envisaged linking the rivers to enable inter-basin water transfer from surplus to deficit basins, so as to even out the variations of water availability and for optimum utilisation of the resource.
- ▶ We can solve the problem on permanent basis by creating a Water Grid network throughout India just like we have created electric grid by which the electricity produced in one part of the country can be quickly transmitted to other part of the country. A water-grid authority can connect the water sources across the country and connect the water scarce region with the water surplus region through water pipelines. Thereafter, whenever there is a flood like situation, the water can be pumped to the water-scarce region and the problem of flood as well as drought can be simultaneously taken care of.
- ▶ There is a need of creating huge water reservoir at close proximity of major towns and cities where huge quantify of water can be stored. These reservoirs can ensure that no water during rainy season is wasted as the same is preserved here. They also raise the water level of the cities on permanent basis. At the time of shortage, the same water can be used for irrigation and drinking purposes.
- ▶ Rebuilding water levels is possible through construction of large number of percolation tanks and reviving old tanks. Other ways like rainwater harvesting, water budgeting and proper selection of cropping pattern should also be propagated.
- ▶ Instead of giving free power and water, the government can gradually phase out other subsidies into subsidy on per hectare basis to all the crops, thereby making a crop-neutral incentive structure.
- ▶ Recalibration of the price support regime and rationalization of electricity subsidies are required to nudge the farmer towards less water-hungry crops.

○ **Other steps which could also be taken**

- ▶ Government should Promote technologies that lower water demand such as drip irrigation
- ▶ Adopt desalination methods nears sea areas.
- ▶ Ban industries that consume much water resources and cause pollution and support them with alternatives.
- ▶ Everyone have to be aware of what we are into. Take self initiative and responsibility to spread awareness.
- ▶ Recycling plants to use drainage waters back for purpose where contamination or hygiene is not needed much. So that people.won't exploit good water.

- ▶ Policies and plans should be passed and followed by government regarding this. Correct punishments must be given to those who exploit resources.
- ▶ Develop water collection, conservation and distribution techniques to reduce wastage.

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6.3 WATCHDOG REVISES POLLUTION INDEX FOR INDUSTRIAL CLUSTERS

◉ Context

CPCB has come out with new norms to help authorities decide whether an industrial cluster is "critically polluted."

◉ What is Comprehensive Environment pollution index?

- ▶ The Central Pollution Control Board (CPCB) has developed a Comprehensive Environmental Pollution Index (CEPI). CPCB has done a nationwide environmental assessment of Industrial Clusters based on CEPI and 43 such industrial clusters having CEPI greater than 70, on a scale of 0-100, has been identified as critically polluted.
- ▶ The data refers to the Comprehensive Environmental Pollution Index (CEPI) scores of the critically polluted industrial clusters/areas. The index captures the various dimensions of environment including air, water and land.
- ▶ The CEPI is based on parameters such as the nature of toxins, the scale of industrial activities, the level of ambient pollution, impact on humans and eco-geological features and the number of people potentially affected within a 2 km radius. It has a maximum composite score of 10.
- ▶ In 2009-10, the CPCB had carried out the first comprehensive environmental assessment in 88 prominent industrial clusters. The assessment showed that 43 industrial clusters were Critically Polluted Areas (CPA), based on a high score on the comprehensive environmental pollution index.

◉ Key features of the New norms

- ▶ The Central Pollution Control Board (CPCB) has revised the criterion to assess Comprehensive Environmental Pollution Index (CEPI) across industrial clusters in the country, an exercise that first began in 2009-10
- ▶ The CEPI index will be calculated on the basis of factors such as the scale of industrial activity, status of ambient environment (air, surface water and groundwater) quality, health related statistics (drawn from major hospitals of the area being studied) and compliance status of industries.
- ▶ In the process of updating the Comprehensive Environmental Pollution Index (CEPI), the board has done away with criteria such as the potential impact on the health of people as it felt that these cannot be measured objectively, are time consuming and cost too much.
- ▶ As part of the new norms, the central board has written to all State Pollution Control Boards (SPCBs) asking them to install continuous ambient air quality and real time water monitoring stations.
- ▶ States have also been asked to put the CEPI scores of critically polluted areas in the public domain and implement action plans-short-, medium- and long-term-that would restore the environmental quality of those industrial clusters and bring down their CEPI score. The action plan, should be reviewed periodically to monitor the progress of implementation.
- ▶ The central board has also ordered the state governments to issue public advisories declaring that such critically polluted industrial clusters are only meant for industrial activity. It also said that the new norms can now be applied to locations other than industrial clusters in order to calculate pollution levels.

◉ Criticism

- ▶ Environmentalists warned the new norms are merely a dilution of the present environmental norms and designed to clear more industrial projects. They expressed

concern that the new norms could affect millions of people living in and around industrial clusters.

- ▶ Experts say doing away with the criteria of "potentially affected populations in a cluster" and replacing it with health data drawn from major hospitals will not give a complete picture.
- ▶ Experts believe that if CPCB is unable to assess the parameters it does not mean the impact doesn't exist or affect people. It would be instead better for CPCB to collaborate with organizations who have the methodologies to assess such impacts. Otherwise what is the point of understanding and calculating pollution if you can't relate it to the impact on both living and non-living beings.

6.4 WARMING IS ALTERING HOW EARTH WOBBLER

◦ Context

Global Warming is shifting the way the Earth wobbles on its polar axis, a new NASA study finds.

◦ What is the Earth Wobbles?

- ▶ The Chandler wobble or variation of latitude is a small deviation in the Earth's axis of rotation relative to the solid earth which was discovered by American astronomer Seth Chandler in 1891. It amounts to change of about 9 metres (30 ft) in the point at which the axis intersects the Earth's surface and has a period of 433 days. This wobble, which is a nutation, combines with another wobble with a period of one year, so that the total polar motion varies with a period of about 7 years.
- ▶ These wobbles don't affect our daily life, but they must be taken into account to get accurate results from GPS, Earth-observing satellites and observatories on the ground.
- ▶ By itself, the wobble of Earth's axis does not directly cause temperature changes like orbital shape and tilt. But it changes the portion of the orbit at which a given season occurs that is, it changes when a particular season will occur.

◦ Earth tilt at Present

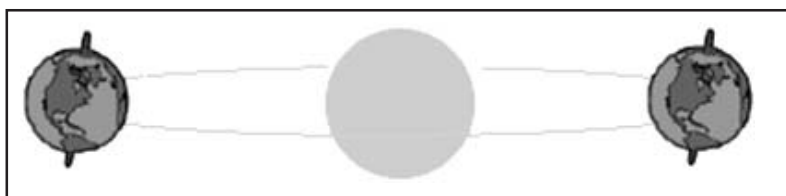


Fig: 6.1

◦ Earth tilt 13000 years from now

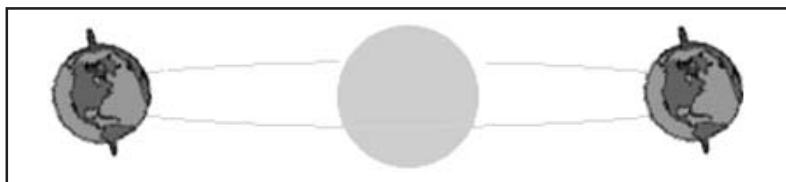


Fig: 6.2

- ▶ In the upper part of the diagram above labeled "Now," Earth's axis is tilted so that summer occurs in the Northern hemisphere on the left side of the Sun and winter on the right. In the lower part labeled "In 13,000 years," the axis has moved to where summer in the northern hemisphere occurs on the right side of the Sun and winter on the left.
- ▶ If Earth's orbit is nearly circular, then it makes no real difference. But if Earth's orbit is slightly elongate, and perihelion occurs on the right side of the Sun (as shown), then Earth is slightly farther from the Sun on the left side. In this case, northern summer are slightly cooler and northern winters slightly warmer on the "Now" part of the diagram. But in 13,000 years, the axis will have shifted so that summer in the northern hemisphere

will occur on the right side of the Sun where Earth is closer, so summers will be hotter, and winters will be colder (and longer).

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◉ Key Findings of the study

- ▶ Scientists and navigators have been accurately measuring the true pole and polar motion since 1899 and for almost the entire 20th century they migrated a bit toward Canada. But that has changed with this century and now it's moving toward England.
- ▶ Earth's spin axis drifts slowly around the poles; the farthest away it has wobbled since observations began is 37 feet (12 meters).
- ▶ Scientists have long known that the axis on which the planet spins is prone to wavering, but some of the reasons have escaped understanding.
- ▶ Researchers at NASA's Jet Propulsion Laboratory say, droughts and heavy periods of rain in different places around the planet are causing Earth to shake in space.
- ▶ The study found out that "We are going through this massive global-scale climate change, to such a degree that the change in climate has been strong enough to affect the rotation of such a giant planet."
- ▶ Earth does not always spin on an axis running through its poles. Instead, it wobbles irregularly over time, drifting toward North America throughout most of the 20th Century. That direction has changed drastically due to changes in water mass on Earth.
- ▶ Since 2000, the Earth's axis has jumped eastward by about 7 inches a year, which is a "massive swing."

◉ What does the study indicate towards?

- ▶ The movements point to huge changes in the storage of water on Earth, including the loss of water in the Indian subcontinent and the Caspian Sea area as a result of depleted aquifers and drought.
- ▶ It shows that changes in water storage on the continents have had an important effect in recent years.
- ▶ The new findings open an intriguing new pathway to connect events relating to past climate change with swings in Earth's spin axis.

6.5 'WHO REPORT' ON POLLUTED CITIES

- ▶ While Delhi managed to chuck-off the tag of being the world's most polluted city in the latest World Health Organisation's (WHO) ranking on pollution levels, thirty plus Indian cities have made their way into the list of hundred most polluted ones. 22 cities in the country parked themselves in the top 50.
- ▶ The national capital surfaced as the most polluted city in 2014 ranking of WHO, with an annual PM 2.5 level of 153 mgm³. However, in the latest list, the number has come down to 122 and Delhi now stands at 11th position.
- ▶ As per the latest list, Zabol in Iran is the most polluted city across the globe and India's Gwalior, Allahabad, and Raipur stands at a close second, third, sixth and seventh positions, respectively. Even Raebareli and Varanasi held the 52nd and 78th spot in the global ranking. All inclusive, 4 of our cities rank in world's 10 most polluted cities and the half in the worst 20.

◉ Significance of the report:

The report comes as a setback for the Indian Government's ambitious plan of building 100 smart cities as 17 of those have been ranked in the hundred most polluted cities by WHO. So, while the authorities are emphasizing on better modes of transportation, more use of technology, uplifting the level of civic amenities and improvement in infrastructure, the concerned bodies will also have to focus on improving the air quality and decreasing pollution level in the upcoming smart cities.

◉ Related Information

▶ WHO (WORLD HEALTH ORGANISATION)

- The World Health Organization (WHO) is a specialized agency of the United Nations that is concerned with international public health. It was established on

7 April 1948, headquartered in Geneva, Switzerland. The WHO is a member of the United Nations Development Group. Its predecessor, the Health Organization, was an agency of the League of Nations.

- Since its creation, it has played a leading role in the eradication of smallpox. Its current priorities include communicable diseases, in particular HIV/AIDS, Ebola, malaria and tuberculosis; the mitigation of the effects of non-communicable diseases; sexual and reproductive health, development, and aging; nutrition, food security and healthy eating; occupational health; substance abuse; and driving the development of reporting, publications, and networking.
- The WHO is responsible for the World Health Report, a leading international publication on health, the worldwide World Health Survey, and World Health Day (7 April of every year). The head of WHO is Margaret Chan.

► PM 2.5

- Fine particulate matter (PM_{2.5}) is an air pollutant that is a concern for people's health when levels in air are high. PM_{2.5} are tiny particles in the air that reduce visibility and cause the air to appear hazy when levels are elevated.
- There are outdoor and indoor sources of PM_{2.5}. Outside, fine particles primarily come from car, truck, bus and off-road vehicle (e.g., construction equipment, snowmobile, locomotive) exhausts, other operations that involve the burning of fuels such as wood, heating oil or coal and natural sources such as forest and grass fires. Fine particles also form from the reaction of gases or droplets in the atmosphere from sources such as power plants. These chemical reactions can occur miles from the original source of the emissions. In New York State, some of the fine particles measured in the air are carried by wind from out-of-state sources. Because fine particles can be carried long distances from their source, events such as wildfires or volcanic eruptions can raise fine particle concentrations hundreds of miles from the event.
- PM_{2.5} is also produced by common indoor activities. Some indoor sources of fine particles are tobacco smoke, cooking (e.g., frying, sautéing, and broiling), burning candles or oil lamps, and operating fireplaces and fuel-burning space heaters (e.g., kerosene heaters).
- Tiny particulate matter can cause lung cancer, strokes and heart disease over the long term, as well as triggering symptoms such as heart attacks that kill more rapidly.

6.6 CABINET APPROVES SIGNING THE PARIS AGREEMENT

- The Union Cabinet chaired by Prime Minister Narendra Modi gave it approval for signing the Paris Agreement adopted at the 21st conference of parties held in December 2015.
- The Paris Agreement on climate change is a milestone in global climate operation to enhance the implementation of the convention and recognizes the principles of equity and common but differentiated responsibilities and respective capabilities in the light of different national circumstances.
- **The Salient features of the Paris Agreement:**
 - This Agreement acknowledges the development imperatives of developing countries and recognizes the developing countries right to development and their efforts to harmonize development with environment, while protecting the interest of the most vulnerable sections of the world society.
 - It recognizes the importance of sustainable lifestyle and sustainable pattern of consumption with developed countries taking the lead, and notes the important of 'Climate Justice' in its preamble.
 - The Agreement seeks to improve the 'implementation of the convention' whilst reflecting the principle of equity and common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

- ▶ The objective of Agreement further ensures that, it is not mitigation centric and includes other important elements such as adaptation, loss and damage, finance, technology, capacity of building and transparency of action and support.
- ▶ Pre-2020 actions are also part of the decisions. The developed county parties are urged to scale up their level of financial support with a complete framework to achieve the goal of jointly providing US \$100 billion by 2020 for mitigation and adaptation by significantly increasing adaptation finance from current level and to further provide appropriate technology and capacity building support.
- ▶ India had advocated a strong and durable climate agreement based on the principle and provision of the convention. The Paris Agreement brings all the important concerns and expectations of India.

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6.7 EARTH DAY- THEME FOR THE YEAR 2016

'Earth Day' is an annual event celebrates each year on April 22nd in more than 193 countries across the globe. In 1969 at the UNESCO Conference in San Francisco, peace activist John McConnell proposed a day to honor the Earth and the concept of peace to first be celebrated on March 21st 1970, the first day of spring in the Northern hemisphere to demonstrate support for environmental protection.

In the year 2020, Earth day will going to celebrate its 50th anniversary, the initiative of Earth Day will make a significant and measurable impact on the Earth will serve as the foundation of a cleaner, healthier and more sustainable planet for all. The theme of Earth Day 2016 is '**Trees for the Earth**'.

Our planet is currently losing over 15 billion trees each year due to deforestation, land development, and bad forest management. Tree for the earth is plan to plant 7.8 billion trees by earth Day's 50th in 2020, which is one tree for every person on the planet.

'Trees for the earth' will focus on those regions of the world most affected by deforestation. In order to achieve this goal society has collaborated with the national and sub-national governments, mayors of the cities, faith leaders, industrial and corporate houses and civil society from across the globe.

◉ Objectives of the Theme:

- ▶ Fight climate change and pollution, (absorb excess and harmful CO₂, nitrogen oxides, ammonia, sulfur dioxide and ozone).
- ▶ Support communities, their local economies, and their way of life, (provide food, energy and income).
- ▶ Protect biodiversity,
- ▶ Inspire millions of people to join in this worldwide environmental citizenship.

7

**DISASTER
MANAGEMENT**

7.1 FOREST FIRES IN UTTRAKHAND AND HIMANCHAL PRADESH



- (Q) What do you understand by Forest fire? Highlight its Positive and negative effects?
- (Q) What has caused the recent Forest fire in Uttarakhand and Himanchal Pradesh? What steps should the Government take to minimize these incidents in Future?

Context

Recently Forest fires in the hills of Uttarakhand have damaged valuable natural resources.

What is Wild Fire?

A wildfire also known as a wild land fire, forest fire, vegetation fire, grass fire, peat fire, bushfire (in Australia), or hill fire is an uncontrolled fire often occurring in wild land areas, but which can also consume houses or agricultural resources. Wildfires often begin unnoticed, but they spread quickly igniting brush, trees and homes.

What causes a wildfire?

Common causes of wildfires include lightning, human carelessness, arson, volcano eruption, and pyroclastic cloud from active volcano, Heat waves, droughts, and cyclical climate changes such as El Niño can also have a dramatic effect on the risk of wildfires. Although, more than four out of every 5 wildfires are caused by people.

Harmful effects of Forest Fires?

- ▶ Forest fires are one of the largest of PM 2.5. They can have significant impacts on local air quality, visibility and human health. Emissions from forest fires can travel large distances, affecting air quality and human health far from the originating fires. **These emissions include:**
 - ▶ Particulate matter;
 - ▶ Carbon monoxide;
 - ▶ Atmospheric mercury;
 - ▶ Ozone-forming chemicals;
 - ▶ Volatile organic compounds.
- ▶ Severe wildfires destroy valuable timber resources and weaken trees leaving them susceptible to disease and insects.
- ▶ Wild animals and their habitats are destroyed. Human life can be lost and private property destroyed.
- ▶ Scenic beauty is marred often leaving a blackened landscape. Soil erosion occurs in a stream or river corridor if surrounding vegetation is killed and the root network of plants, trees, and shrubs no longer acts as a stabilizing force.
- ▶ The recreational value of the forest is decreased.
- ▶ Equipment and manpower costs of fighting a major forest fire are great.

Positive effects of Forest fire

- ▶ Wildfires can serve to clean up any dead or decaying matter strewn across forest, which, in turn, enables an increase in new plant growth. Wildfires are also useful in maintaining the balance within an ecosystem by removing any harmful insects and diseased plants. An added benefit of plant removal is an increase in sunlight, which can assist in the regeneration of plant seeds.
- ▶ Scientists have also realized that wildfires can increase the amount of plant and animal diversity within a particular ecosystem. In the midst of a wildfire, exceptional amount of nutrients are released into the soil, which can result in a flood of new plant growth. Some plants even require wildfires to germinate their seeds and stimulate growth, such as the peculiar species of Panderosa pine trees.

o Forest Fire and India

- ▶ A report titled Forest Fire Disaster Management, prepared by the National Institute of Disaster Management, a body under the Ministry of Home Affairs, in 2012, said about half of India's forests were prone to fires. 43% were prone to occasional fires and 5% to frequent fires, and 1% were at high or very high risk,.
- ▶ According to the FSI report more than 95% of the Wildfire in India are Manmade as Villagers reportedly burn leaves and grass in order to get better growth of grass the following year. They also burn the needles of the chir pine, which form a slippery carpet on the ground.
- ▶ According to the FSI 2012 Report 1.45 million hectares of forest were affected annually by fire.
- ▶ During the period 1990-2011, the worst incidents of wildfires occurred in Uttarakhand in 1995, in which 3,75,000 ha was affected, followed by the Ganga-Yamuna watershed area (1999, 80,000 ha), Himachal Pradesh (2010, 19,109 ha), and 2 fires in Maharashtra in 2008 and 2010, in each of which some 10,000 ha was affected

o What caused the Uttarakhand Forest Fire?

- ▶ Wildfires are an annual occurrence in Uttarakhand, though they have been bigger and more widespread this year. The fire season usually begins from mid-February and lasts until mid-June, when the rains arrive. This year, the fires started early - the first incident was reported on February 2.
- ▶ The major reasons for forest fires in Uttarakhand are the highly inflammable material of dry chir pine needles and the dry-leaf litter of broad-leaved trees on the forest floor associated with chir pine.
- ▶ Chir pine covers a significant forest area (about 16%) in the state and, every year, encroaches on the mixed species area due to its hardy nature as well as the ban on green felling above 1,000 metres.
- ▶ The chir pine itself is highly resistant to fire due to thick bark but the fallen dry needles are highly inflammable and its open resin ducts are considered a main catalyst for fires in pine forests.
- ▶ Chir pine needles, though used for bedding material for livestock, compost, biomass energy, etc, cannot be utilised on a mass scale. Unfortunately, in recent years, mass migration of villagers from the state has also checked the local utilisation of the needles, leaving more fuel for forest fires .
- ▶ Scant rains, with a dry spell in winter, have also led to early forest fires.

o Extent of Damage caused by the Forest Fire?

- ▶ Over 4,500 hectares have been affected in Himachal Pradesh, some 40% more than the 3,185 hectares in Uttarakhand. The latter state has seen 1,470 incidents of fire so far - 803 (affecting 1,413.58 ha) of which were in the Garhwal region, 463 (1,076.21 ha) in Kumaon, and 204 (695.65 ha) in wildlife zones.
- ▶ The forest department estimated the losses in monetary units to approximately Rs. 29 Lakhs in Uttarakhand.
- ▶ The preliminary losses in Himachal have been estimated at Rs. 57 lakh. This damage is assessed in terms of loss to new plantations. No loss of human life or heads of cattle, or destruction of human habitation has been reported so far.

o What was the response of the Government?

- ▶ The Uttarakhand Forest Department has employed 9,000 men - 3,500 regular staff, the rest daily wagers, to work with 3 teams of the NDRF and one of the SDRF, with 45 people in each team. Forest officials say the traditional method of "beating the fire down" with green branches work best. 2 IAF Mi-17s have been flying sorties to dump water picked from the Bhimtal lake and the Srinagar, Garhwal, reservoir over the affected areas of Kumaon and Garhwal.
- ▶ The government has banned people from carrying matchboxes to forests, and is running awareness campaigns .

o Way Ahead

While the Government current response is curative which can tackle the problem of forest fire in the region in short run but in Long run Preventive measures need to be employed by the Government and these measures include following:

- ▶ There's a scope for involving local communities, NGOs and community-based organisations to minimise fire hazards. Van Panchayat is a unique model in Uttarakhand, effectively managing forests for a long time. But forest communities need capacity-building and acquaintance with modern methods of combating forest fires.
- ▶ The pine needles, the main fire hazard, need to be converted into a resource for the community by extending capital, technological and industrial support for their effective utilisation and as a livelihood opportunity.
- ▶ Some of the measures can be tried through the creation of Forest Self-help Groups (FSHGs) or local Forest Special Purpose Vehicle (FSPV) - with an industrial linkage to the removal of dry needles with the help of villagers for making bio-briquettes, compost or vermicompost, composite boards, panels, etc. Further, this activity can be linked with employment generation schemes like MGNREGA, Skill India and Make in India, as well as women's empowerment schemes. This will provide a double benefit - removing the pine needles from the forest and generating employment and incomes.
- ▶ The conventional centuries-old method of making fire lines or firebreaks (also used as inspection paths) and burning and clearing them before the summer is also not practised properly due to a lack of manpower. Usually, a forest guard or beat guard would look after a large forest area, which is difficult to cover even over several days on the tough terrain. Therefore, the forest department needs to exclusively recruit forest-fire-fighting staff acquainted with modern technologies.
- ▶ There can be other approaches to reducing the fire hazard in the monoculture/ pure chir pine forest, like the inclusion or plantation of indigenous broad-leaved, moisture-conserving species, particularly banj oak, Myrica, Alder, Rhododendron, etc at higher elevations and sal, khair, Harad, Baheda, Arjun, sissoo, etc at lower elevations. The selection of species must be done after understanding the local ecology and public needs.
- ▶ In fire control strategy, emphasis should be put on prevention rather than curing. Curing is of no use after the loss of biodiversity, forest wealth and lives.
- ▶ Last but not least, communication via print or electronic media, social media, community radio, Doordarshan can also boost public awareness and action. Communication measures should be activated at the start of summer and some reward and recognition should be announced to motivate locals.

8

SOCIAL ISSUES

8.1 COOLING-OFF TIME' FOR CHRISTIAN DIVORCES MAY BE CUT

- ▶ The Law and Justice Ministry is proposing to amend the Divorce Act, 1869 by reducing the waiting period for Christians who have already decided to divorce by half from 2-1 year.
- ▶ The Ministry intends to amend Section 10A (1) of the Divorce Act which states that a petition for dissolution of marriage by mutual consent can be presented before a court only after a judicial separation of 2 years.
- **Present status:**
 - ▶ The 147-year-old divorce law mandates Christian couples to live separately for two years before they can apply for dissolution of marriage.
 - ▶ The other personal laws, including the Hindu Marriage Act, the Parsi Marriage and Divorce Act and the Special Marriage Act, mandate only a year's judicial separation.
- **Problem:**
 - ▶ The present status has been held to be arbitrary and discriminatory by various high courts.
 - ▶ This is also against the principle of Uniform Civil Code which India seeks to apply.
 - ▶ It is also considered to be violative of Articles 14 (Right to Equality) and 21 (Right to Life and Liberty).
 - ▶ Provisions for divorce by mutual consent in other statutes such as Section 28 of The Special Marriage Act, 1954, Section 13-B of The Hindu Marriage Act, 1955, and Section 32 B of The Parsi Marriage and Divorce Act, 1936 require and prescribe statutory period of separation as one year. Consequently, it acts as oppression to the members of Christian community intending to seek divorce by mutual consent.
 - ▶ Even the Law Commission on the past several occasions has also recommended amendments to the Divorce Act to make it more women-friendly.
- **Significance:**
 - ▶ This will enable the government to bring uniformity in the divorce laws across religions.
 - ▶ It will help to bring down the period of duration in cases that seek to get divorce through mutual consent.
 - ▶ This is a positive step in the direction of achieving a Uniform Civil Code.

8.2 MOST OF THE RURAL INDIA STILL OPTS FOR OPEN DEFECATION: NSS REPORT

- ▶ 'Swachthta status Report' was released by the National Sample Survey (NSS) office through the nation-wide rapid survey drive. The survey has been conducted during May- June 2015, concurrently with the 72ND round of the NSS.
- ▶ The motive of the survey is to track the government's flagship programme, "Swacch Bharat Abhiyan" initiative.
- **Key points of the survey:**
 - ▶ 45.3% household reportedly having a sanitary toilets, while in urban areas, the number of percentage stands up to the 88.8%.
 - ▶ Jharkhand is having the lowest percentage of sanitary toilets (18.8%), followed by Chhattisgarh (21.2%) and Odisha (26.3%), while the states were the highest numbers were Sikkim (98.2%), Kerala (97.6%) and Mizoram (96.2%) respectively.
 - ▶ Since the Swacch Bharat Mission (Gramin) on October 2, 2014 there was an improvement of 8.12 % points in number of rural households having toilets, with 50.17% rural household covered as till February 2016.

- ▶ 13.1% of the villages having the community toilets among they were not being used in 1.7% villages while in the Urban ward 42% have community toilets and 8.6% Urban wards , community toilets are not being cleaned.
- ▶ The main reason of open defecation is' behavior and mindset of the people who have continued the practice for centuries moreover the inadequate availability of water for the toilets' is the big concerns.
- ▶ 87.9% of the urban households were found to have access to water for use in the toilets; only 42.5% of rural household had this facility. For improving this situation Under the Swacch Bharat Mission (Gramin) the incentives for the individual toilets has been increased from Rs. 10,000 to 12,000 to provide efficient amount of water for the purpose of storing water for hand-washing and cleaning.
- ▶ Mode of the sanitation schemes in India are demand driven so, it does plan to construct 1.2 crore toilets in the current Year. From the previous records of the schemes, it is found that, at least 16 states exaggerated the data on individual household toilets by over 190% of the actual construction and from that too 30% were found to be disfunctional.

8.3 DOMESTIC VIOLENCE ACT

o Context

- ▶ The Government has commented that "some times" provisions of the Domestic Violence and Anti-Dowry Acts were misused and several NGOs had also given reports supporting it.
- ▶ According to the report, 426 cases were registered under the Act in 2014, of which charge sheet was filed in 312 cases. Conviction happened in just 9 cases. Trial was completed in 19.1 % cases. Of the 693 persons arrested in these cases, 639 were charge-sheeted. Only 13 were convicted. The low rate of conviction, according to the government denotes that most of the cases were resolved at a later stage as the offences were civil in nature.
- ▶ The same concern had also been raised by the delhi high court some time back.

o What is Domestic violence Act, 2005?

- ▶ The main intent of the Act is to protect the value system and institution of family and save it from destruction and to provide protection to the wife or female live-in partner from domestic violence at the hands of the husband or male live-in partner or his relatives.
- ▶ Domestic Violence Act-2005 was introduced in India for the speedy disposal of the cases with victims who faced cruelty by husbands or relatives.
- ▶ It has a wide scope as it includes actual abuse or the threat of abuse that is physical, sexual, verbal, emotional and economic.
- ▶ Children are also covered under the ambit of this Act; they too can file a case against a parent or parents who are tormenting or torturing them, physically, mentally, or economically. Any person can file a complaint on behalf of a child.

o Has the Law been effective?

As per the National Crime Record Bureau (NCRB) data 7803, 11736 and 9452 cases have been registered under Protection of Women Against Domestic Violence Act, 2005 during 2009, 2010 and 2011 respectively which show that women are making use of the Act in registering cases of domestic violence against them.

o Misuses of the Act:

- ▶ The Madras High Court Bench has observed that Protection of Women from Domestic Violence Act, 2005 suffers from inherent flaws which tempt women to misuse their provisions and men to dread being prosecuted under the law without any rhyme or reason.

- ▶ Sometimes, women find it hard to resist the temptation to teach a lesson to their male relatives and will file frivolous and false cases.
- ▶ When a case is filed under the act, the woman is often looked as being the victim and there have been reports that even the NGOs support such cases.
- ▶ The provision of punishment intimidates and instils fear in innocent people.
- ▶ Filing cases under the Domestic Violence Act by women has become a common one.
- ▶ Some times it is used to harass the husband or any other member claiming under him and to see that he yields to the illegitimate demands of the so called victim instead of vice versa. Many a time, aged parents and other relatives are falsely accused of physically and mentally torturing the so-called victim, thereby causing unwanted tension, which may result in ill health of the aged parents and physical and mental distress to the family members of the 'accused'.

○ **Conclusion:**

- ▶ Though the Act stipulates disposal of cases within 60 days, in reality, it takes nearly six months and sometimes more than two years which makes many of the women give up in between. So the time period of disposing the cases needs to be brought down.
- ▶ While protection orders are important, effective prevention and reduction of domestic violence will come about through more effective integration of services.
- ▶ The true intention of this Act was to protect domestic violence victims from further pain and to thus relieve them from their misery and not to cater to misuses of the provisions. Thus, only genuine victims of domestic violence must be identified and given assistance; this can be done by putting in place a proper mechanism to filter the cases.
- ▶ Besides enforcing the Act, there is also a need to make the society more understanding so that the relationships tend to be stronger and healthier.

8.4 IS DECISION OF FEW GOVERNMENT TO GIVE QUOTAS TO SOME SECTIONS JUSTIFIED

○ **Context**

Recently Gujarat Government announced 10 % quota for Economically Backward Class (EBC) among the upper castes, who are ineligible for quota under the existing system. Earlier Jats were given quota by Haryana Government.

○ **Why is it not justified?**

- ▶ Jats and Patel are not only prosperous and socially powerful in western Uttar Pradesh and Rajasthan, but also call the shots in politics and governance in these states.
- ▶ Also, if one can go by the famous anthropologist M.N. Srinivas's definition of a dominant caste, then Jats and Patels, it turns out, would be one as they are demographically important and also own a lot of land.
- ▶ Therefore if we take political, social and land criteria Jats are not backward and therefore reservation should not be provided to them.
- ▶ The reason why Jat and Patel are asking for reservation is unemployment. Jats and Patels are unfortunately not able to get what they aspire for. They need reservations not because they feel their caste is a backward caste but because our economy has not been able to provide sufficient employment opportunities to the youth. Hence, their caste has become an appropriate reason for them to wreak havoc for reservations. A similar situation can be witnessed in the case of Patels (Gujarat), Kapus (Andhra Pradesh), and Marathas (Maharashtra).
- ▶ Though Jats and Patel Have land but their landholding is fragmenting fast. Having prospered after the green revolution, Jats are now facing agrarian distress and deep stagnation in the rural economy. Two successive droughts and untimely rains have worsened the crisis.
- ▶ Granting reservation to Jats and Patels might lead to a chain reaction with gujjar, Kapus and Marathas resorting to the same tactics, then it would not lead to long-term benefits

and again everybody would find themselves back to square one with burning SUVs, cut water supply, deaths, curfew and so on.

- ▶ Giving reservation to Patel on the basis of economic condition would also be violation of constitution since it is clearly written in Article 16 that reservation cannot be given on the basis of economic condition. Thus most likely SC would scrap the reservation.

○ **Conclusion:**

To sum up a rational answer therefore lies more in addressing rural India's economic stagnation and removing weaknesses in reservations through consensus rather than recklessly expanding the list of beneficiaries. It also puts the whole idea of reservations on its head. The founding fathers of the Constitution had dreamt that the ultimate aim of the job reservations was to annihilate the caste system. But the post-Mandal politics ended up nurturing the curse of caste by rousing a hysterical politicisation of all caste groups.

8.5 SC 'NO' TO SMALLER PICTORIAL WARNINGS ON TOBACCO PACKETS

○ **Context**

The Supreme Court has refused to shrink the size of pictorial health warnings on cigarette and tobacco packets and asked manufacturers to abide by a Health Ministry notification on increasing the size of the warning messages to 85 per cent from the present 20 % of the principal display area on packets from April 1.

○ **What was earlier order?**

Last month A new government notification was released according to which tobacco products are required to carry larger pictorial warnings covering 85 per cent of the display area on packets.

○ **Why Government has taken this stand?**

- ▶ About 1 million deaths or more in India each year are linked to tobacco, according to scientists and health researchers, while a study on the economic effects of tobacco-related diseases in India conducted by the government and the World Health Organization revealed an annual cost of more than US\$22 billion.
- ▶ The government has argued that such moves are designed to reduce consumption of cigarettes and alleviate the negative effect that the habit has on the health of the country's population.

○ **What is the argument of Tobacco Manufacturers?**

- ▶ They believe that 85% warning is too harsh as most of the developed countries either no warning or they have only 22% warning.
- > Companies say that the implementation of any change in the health warnings on the cigarette packages is an elaborate process for the manufacturers, entailing months of preparation involving substantial cost and effort. "Since the matter of new health warning was under the Parliamentary Committee's consideration, and the government had itself held out that it would await the committee's report, the industry was led to believe that the government would re-notify new health warnings after considering the committee's recommendations.
- ▶ Extreme regulations such as pictorial warnings provide further encouragement to the illegal cigarette trade in India, as illegal cigarettes do not comply with tobacco control regulation of the government and illegal cigarettes are even more harmful for the health of the people.
- ▶ Manufacturers, part of the \$11bn tobacco industry in India, are concerned that their incomes could be hit hard by the move, which they argue will also affect tobacco farmers. About 46 million Indians depend on tobacco for their livelihood.

- ▶ The industry says that "as a consequence of high and discriminatory tobacco taxation and extreme tobacco control regulations in India, legal cigarettes have been on a continuous decline in the country while illegal cigarette trade has grown significantly".

○ **Should Pictorial warnings be allowed in Cigarette packs?**

- ▶ According to "the cigarette package health warnings: International Status Report, 2014" released in Moscow recently, India has slipped to 136th position in the list of 198 countries that warn smokers about the hazards of smoking through graphic pictures on cigarette packages. Thus this move is in line to improve India's position. Don't we all know smoking is injurious to health? Larger pictorial warnings are a highly cost-effective means to increase awareness of the ill effects of tobacco and to reduce its consumption, as recognized by guidelines to implement article 11 (packaging and labeling) adopted under the WHO framework convention on tobacco control.
- ▶ Considering how dismal our literacy rate is in India, pictures can convey a message with far more impact than a message containing only words. A larger size allows for bigger and better pictures, a larger font size, and/or additional information, including information about cessation and passive smoking. Indeed as the old adage goes, "a single picture can convey 1000 words."
- ▶ The use of pictorial warnings can take on the power of product packaging on its head - from building and establishing a brand name, cigarette packs can become a vehicle for increasing awareness about tobacco's health risks. It has been proven universally that the use of graphic images along with written messages has the potential to significantly make young people think twice from taking up the habit, to motivate existing users to cut the amount of tobacco consumed and even quit smoking and to prevent a relapse in former smokers.
- ▶ Tobacco companies are certainly aware of the damage these larger pictorial warnings can do to their revenues. In a country where nearly a million people die each year because of tobacco consumption, the onus is on our Government to show how determined it is to win the war against tobacco. If a large picture changes the mindset of even a single individual, we would say, there is certainly no harm in increasing the size of the pictorial warnings on cigarette packs. Along with this Government should strictly regulate illegal cigarettes otherwise this decision would shift people towards illegal cigarettes and we would have no significant reduction in the number of smokers.

8.6 API INDICATORS TWEAKED: UGC GIVES STUDENTS A SAY IN TEACHER'S APPRAISAL



(Q) Discuss the proposed new changes in the API for performance appraisal of the teachers in colleges. Also discuss their significance.

○ **Context:**

The University Grants Commission (UGC) has tweaked the contentious Academic Performance Indicators (API) in order to give students the right to participate in the performance appraisal of their teachers.

○ **What is API?**

- ▶ It is a measure that gives away the growth of a student, teacher or an institution. This was introduced by the UGC in 2010.
- ▶ It is a mandatory requirement for universities and colleges to select and promote faculty members.

○ **Suggested changes:**

▶ **Changes to be implemented (Teachers' context):**

- Introduction of students' evaluation of teachers
- Only students with more than 75 % can evaluate their teachers

- Under teaching/learning/evaluation, a teacher is expected to have 100 points as an assistant professor.
- Associate professors are expected to have 90 points in the same category and the Professors are expected to have 80 points.
- ▶ **Changes to be implemented (Students' context):**
 - Evaluation of co-curricular and research work will be carried out individually. No annual evaluation will be done.
 - Simplification of the evaluation process.
 - Overall scores in co-curricular activities and research have been reduced.
 - New fields for evaluation have been introduced such as NSS, NCC and field trips.
 - Apart from these changes, significant changes have been introduced in terms of research and submission. Research papers will not be published in shady journals, and the papers will be introduced in various Indian languages as well.
 - The API regulator for higher education has also been modified to make teaching/learning the main criterion of performance appraisal instead of research and co-curricular activities.
- **Significance:**
 - ▶ The changes have been incorporated with regard to the responsibility on teachers along with changing norms under research sub categories.
 - ▶ The present method forces teachers to collect points from activities that may not be of interest to them, and hence, disallows them the opportunity to pursue a long-term engagement in any area. This issue is going to be solved now.
 - ▶ The present API grading system under the research category is based on the number of research papers/publications, notably, 20 % on research projects, 10 % on research guidance/undergraduate dissertations and 15 % on training course and conference/seminars. Now the research criterion has been made more flexible by scrapping the provision that made it mandatory for a teacher to contribute to all parts of research, including publishing papers in journals, attending conferences and seminars and guiding PhD. and undergraduate dissertations.
 - ▶ The current API system expects an unrealistic research output even from teachers of those colleges and institutes which do not have the proper research facilities and enabling environment. Thus a uniform appraisal criteria for all teachers was detrimental to those from socially and economically backward areas. The new norms will shift the acute focus from research to how well a faculty member is teaching his or her class.
 - ▶ The present API is inflexible and the strict regimentation of a teacher's work kills free and critical thinking. The notification of new indicator is expected to help in this regard.

8.7 IS TAXI PRICE SURGING JUSTIFIED?



(Q) What do you mean by price surging? Recently the Delhi government banned price surging by taxi operators such as Uber and Ola, Is it justified? What other measures can the state take to provide efficient transport system to the citizens?

○ Context

- ▶ Recently, the Delhi government banned surge pricing during the second phase of the odd-even rule from 15-30. This has affected the cab aggregators such as Uber and Ola.
- ▶ The tussle between the Delhi government and cab hailing services such as Uber and Ola over charging higher rates during the odd even scheme has raised questions over the the gap in the regulatory architecture.

○ What is surge pricing?

- ▶ "Surge Pricing" is a dynamic pricing by which taxi fares could jump several fold depending on localised demand and supply.

- ▶ the pricing, in general, is essentially an algorithm-based mechanism that determines fares based on supply and demand. All fares have 3 components: base fare, per km charge (from Rs 6-8 per km), and per minute charge (Re 1/min). But When demand exceeds supply, prices start increasing.

◦ What is the issue all about?

- ▶ The cab aggregators work on a dynamic pricing model, wherein prices are determined on the basis of real-time demand and supply in a locality, and can jump several times the regular rate either when demand is too high or supply is too low. This is what has happened at present.
- ▶ Due to more demand for the cabs the companies started to hike the prices.
- ▶ Issue of state banning the price surging raises the question of state trying to intervene and fix prices as was done in the licence-permit raj.
- ▶ It also denotes the gap in the regulatory framework that provides the scope for disagreement between the govt and the cab aggregator companies.

◦ What are the benefits of app based services?

- ▶ By replacing random physical matching and haggling with a virtual platform for precise real-time matching of traders and auction-based pricing, App-based cabs implement the mutually beneficial trades implied by demand-supply mismatches.
- ▶ The taxi market becomes more competitive as there is a larger number of suppliers across the quality spectrum.
- ▶ The ability of the supply-side of the market to respond flexibly to price signals makes the taxi supply far more elastic than under a rigid permit regime.
- ▶ They provide better quality of service relative to the neighbourhood taxi-stand benchmark.

◦ Arguments given by Government

- ▶ The Government insists that irrespective of how fares are calculated (including surge prices), they must adhere to government ceilings.
- ▶ The Government has a basic duty to provide services to the people at affordable prices. So, charging of high prices specially when it seeks to see the participation of people in programmes such as odd even schemes is not justified.
- ▶ The drivers got their commercial licences with the clear understanding that no taxis driven by them would charge more than the prices set by the government. They are not complying to the regulations by charging rates which are too higher.

◦ Arguments given by Uber and Ola:

- ▶ The cab companies argue that they are just an app-based marketplace where drivers and customers come together to trade, and the company gets a fixed commission on each ride
- ▶ They don't employ drivers, don't own any cars and are not a taxi company. So , they have basically no role in the price surging.
- ▶ The hike in fares is justified on the basis of demand and supply mismatch.

◦ Way ahead?

- ▶ A permanent ban on surge pricing is a good move as it is becoming heavy on the pockets of cab users. At the same time, equal efforts should also be made in standardizing the rates across cab agencies and cab aggregators .
- ▶ Along with this, Governments can do more in the medium term to enhance options in terms of better modes of public transport, greater frequency of bus and metro services during rush hour and perhaps even adoption by mass transport of applications using similar algorithms to allow passengers to plan their commute better.
- ▶ A more useful intervention can be to enhance public awareness about how these algorithms work in commuters' favour, and at the most cap surge pricing to a predetermined multiple of the regular rate.

9

EDUCATION

9.1 GOVERNMENT TO INCREASE CHECKS ON PRIVATE UNIVERSITIES



- (Q) The absence of monitoring mechanisms in education sector has downgraded the quality of education in India with many unethical practices adopted especially by Private Educational Institution in respect of money making. Critically evaluate.
- (Q) The irregularities practiced in Private Institutions in India have prompt the government to think on strengthening monitoring mechanisms. Do you think it is the failure of regulatory bodies? Highlight the steps taken by the UGC (Higher Education Regulator).

Amid the rising issues of fake degrees, irregularities in finances and other operations and a multifold rise in complaints against the privately owned universities in India has prompt the government and higher education regulator (UGC) to strengthen its monitoring mechanisms in order to have close look and deal with the issues involving malpractices by these private universities.

o Increasing Number of Private Universities:

- ▶ Private participation in Education is a good step in India and has played a significant role in higher education given the less accommodation in Government schools and universities.
- ▶ The recent decade has seen a multifold increase in the number of state private universities from 16 out of 368 in 2007 to 235 out of 744 till February, 2016. While the total universities have doubled in the last nine years, private universities have grown 14-fold in the same period.
- ▶ Education impacts the human societies in all positive aspects hence the increasing number of private universities and multiple increase in complaints against them has made the government to bring effective monitoring mechanisms, in order to bring transparency and accountability in Universities functioning and providing quality education to citizens.

o Measures taken by UGC:

- ▶ In order to curb the illegal practices by the private universities, Universities Grant Commission (UGC) has made a committee of experts for inspecting the various universities to check their irregular and illegal practices. In the past several months the committee has inspected at least 137 Private Universities asking to rectify their shortcomings and submit the action taken reports by July 2016.
- ▶ The expert group has also found at least t3 Universities, including 1 in Rajasthan and 2 from North-Eastern States, fit to be shut down and the UGC has instructed the concern states for the same but a formal announcement is still waiting.

o Privatization of Education in India:

- ▶ India has private education institutions in the form of so called public schools (like Mayo College, Doon School) and Christian Missionary Schools and Colleges prior to the independence. These institutions used to be run by their own Board of Management without much Government interventions.
- ▶ Post independence huge surge in population with less accommodative Government schools have escalated the demand of private schools/universities which has actively been supported by the central and state government. The allowances of the teachers' at all levels are determined in accordance with the national and state wage scales.
- ▶ With the active support of the central and state governments to establish state-owned or government-aided schools the number has gone up. After 1990s interlinked process of globalization and liberalization have also tremendously affected the educational process in India.

- ▶ These positive initiatives have opened up many forms of privatization and has witnessed rise in private tuition, subcontracting the publication of textbooks to private agencies, selection and appointment of teachers by their own management boards on their own terms and conditions.
- ▶ The active support from both the Governments (Centre and State) has encourages many reputed foreign education institutions (e.g., Oxford, Harvard) to foothold their foundational branches in India which in turn has brought both opportunities and challenges.
- ▶ Witnessing the benefits and opportunities with the quality education over the years among all strata of society including the most vulnerable one and marginalized, the demand of schooling has grown many folds.
- ▶ In the wake of widespread demand of degrees and prompt action for acquiring degrees by any means has given opportunities to many private universities to sell out their degrees and thus practicing illegality and irregularity in their process. Despite an increase in enrollment, the content and quality and process of schooling and teaching practices are not only degrading but also discriminatory.
- ▶ However, faulty and improper monitoring mechanism encouraged these private institutions to adopt unethical practices in terms of distributing fake degrees, irregularities in financial transactions & operations and degrading educational qualities.
- ▶ There is much that must leave us unhappy about the functioning of India's public higher education sector. It has held the country back in many ways, principally by not responding with solutions for our pressing needs. It cannot be left the way it is. So it is time that its record be subjected to open social audit, prior to it being thoroughly reformed.
- ▶ All expansion should be put on hold till the latter task is completed. But there is no case for it to be privatized wholesale, not even its professional colleges. Equivalently, once an effective regulatory framework is in place, it makes little sense to stymie the growth of the private sector in higher education.

9.2 FIXING EDUCATIONAL POLICY'S FAILURE



(Q) Analyse the state of education in India. Do you think pedagogical interventions aimed at targeting instruction to the learning level of the child will help in solving these problems?

- ▶ Speaking at the National Stocktaking Convention on the Right to Education Act (RTE) recently, vice-president Hamid Ansari voiced concern that while enrolment in elementary education has increased, education outcomes have declined, with abilities in reading, writing and other comprehensive skills deteriorating among children aged 6 to 14 years.
- ▶ As per the latest Annual Status of Education Report (ASER) 2014, about half of all Class V children in rural India were unable to read a simple paragraph or do basic maths.
- ▶ This challenge of chronically low learning levels has been articulated in the human resource development (HRD) ministry's approach document to the New Education Policy (NEP), and multiple questions have been posed.
- ▶ How do we ensure that children learn basic language and numerical skills? How can technology be leveraged to provide quality school education? Are teacher performance assessments needed to build a culture of accountability? What are the ways to improve community participation in school management?
- ▶ These are not new questions, and while the HRD ministry has turned to extensive grassroots consultations for solutions, rigorous field research conducted over the past decade can also help to precisely answer some of these questions.
- ▶ A number of randomized impact evaluations conducted by researchers affiliated with Massachusetts Institute of Technology's Abdul Latif Jameel Poverty Action Lab (J-PAL) provide important insights on what works and what doesn't work to improve learning outcomes of children, which can help build a robust evidence-backed NEP.

o Pedagogical Solutions (worldwide):

- ▶ Pedagogical interventions aimed at targeting instruction to the learning level of the child will be a suitable solution. The basic problem faced is a wide variation in learning level by Indian child in the same class room. Research conducted over the past 15 years in India, Ghana and Kenya demonstrate that restructuring class by learning level, rather than by age or grade, can help children gain basic maths and reading skills quickly.
- ▶ Different versions of Pratham's Read India programme based on the above teaching-at-the-right-level approach have shown positive impacts on learning.
- ▶ In-school pullout programmes and after-school reading classes led by community volunteers have proven to be successful, as have summer camps led jointly by government teachers and volunteers.
- ▶ A recent evaluation of this programme implemented in a classroom setting by government school teachers in rural Haryana, with monitoring and mentoring support from block officials and Pratham staff, showed significant improvements in basic Hindi skills.
- ▶ This has helped identify an evidence-backed scalable model for raising basic literacy and numeracy skills that can be implemented by government school teachers in a government school context.
- ▶ Technological solutions that adapt to the level of understanding of the child may also be used to ensure that students gain basic competencies in reading and arithmetic.
- ▶ An evaluation of a computer-assisted learning programme in Gujarat wherein children played self-paced math games showed large improvements in student math scores.
- ▶ However, an important caveat, as shown by evaluations of the One Laptop per Child scheme in Peru and the Colombian government's Computers for Education programme, is that access to technology in and of itself does not ensure learning.

o School Governance:

- ▶ In addition to pedagogy, school governance factors have also demonstrated some success in moving the needle on learning levels. Studies conducted by J-PAL affiliated researchers show that incentivizing teacher presence and effort, and putting in place properly designed monitoring and accountability structures, can lead to significant gains in learning in certain contexts.
- ▶ In primary schools run by the non-governmental organization Seva Mandir in rural Udaipur, monitoring attendance through daily photos of the teachers and linking teachers' salaries to their attendance was found to be effective in improving student test scores.
- ▶ Another programme in government schools in rural Andhra Pradesh that linked teachers' pay with their students test score performance also led to test score gains.
- ▶ However, the design of the incentive structure is critical; when incentives are tied to student learning outcomes; there may be a danger of "teaching to the test", as seen in an incentive programme for teachers in Kenya that raised test scores in the short-term, mainly due to an increase in test preparation rather than broader improvements in learning.
- ▶ Recognizing the importance of community participation, India's RTE Act mandates the formation of school management committees, but existing evidence on the effectiveness of community monitoring is mixed.
- ▶ A study in rural Uttar Pradesh saw that simply informing Village Education Committees about the quality of government schools in their village and about their role and rights did not improve education outcomes.
- ▶ In contrast, a programme in Kenya where school management committees were trained and empowered to oversee recruitment of teachers as well as monitor them showed positive impact on learning outcomes.
- ▶ Overall, the evidence suggests that, well-designed reforms in pedagogy and school governance structures are critical to address India's learning crisis.

- ▶ Going ahead, as new solutions to this problem emerge, it is important to not only carefully ascertain their impact through rigorous research, but also ensure that as different models and innovations are evaluated and validated, lessons learnt from them find their way into our national policies in a timely manner.

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9.3 THRIFT IN EDUCATION



(Q) Poor condition of education in India coupled with number of flaws restricted the exposure/participation of Indian youth in the global competition. Critically analyse the statement and suggest some measures to overcome with this problem.

- ▶ Education industry is well flourished in India at par with the global level. With more than 1.4 million schools which have over 227 million students enrolled and more than 36,000 higher education institutes, India has one of the largest higher education systems in the world. However, there is still a lot of potential for further development in the education system.
- ▶ There have been various efforts to transform the education sector in India since independence. To strengthened the education sector in India, an education policy was adopted in 1968 based on the recommendation of the Kothari Commission (1964-66), which made education an integral part of the national development efforts.
- ▶ However, with the prevailing education system, there arises a question that, "How much should India spend on Education, given the rising strata of education in the world in terms of quality education?" As per the recommendation of Kothari Commission, Indian public expenditure on education must be 6% of gross domestic product (GDP).
- ▶ Spending 6% of GDP for public expenditure on education has become a commonly accepted norm across the world, with credibility drawn from actual experience across many countries. This goal is only directional and normative, not a precise measure for what may really be required for educational well being of any nation.
- ▶ This goal was reaffirmed in the New Education Policy of 1986 and its revision in 1992, with a suggestion that every attempt must be made to go beyond 6%. Since then, each successive government on multiple occasions has reaffirmed this goal of spending 6% of GDP on education. For clarity, "spending" and "expenditure" includes both operating and investment spends.
- ▶ India has never reached even near the goal of spending 4.5-5% of GDP expenditure on education. The closest it has come was in 2001, when this number hit 4.4%. The number has been over 4% only in three years since the goal was set; it has hovered between 3.3% and 3.8% since the 1980s and currently it is 3.8%.
- ▶ As against 3.8% of India, the public expenditure on education in the OECD is 5.4% and in Brazil 5.8%. In reality this headline number vastly understates India's shortfall.
- ▶ India's education system is on development path and a way short of our actual need, for example: secondary school, colleges and teachers. We have neglected many critical parts like teacher education, physical and social sciences, humanities and vocational education.
- ▶ To cope up with this situation we need more money than countries that are done with the build-up, but we are significantly short of them. This large cumulative investment gap stunts the system and its capacity structurally, i.e. this is a structural investment gap.
- ▶ We have the habit of cutting the corner of the cost and underfund almost everything by design like hiring teacher at much lower salaries with short term contracts compromising the quality of education. Almost every expenditure head is ludicrously underfunded, e.g. school budget for teaching-learning material, training for teachers and principals, expenditure for basic things such as electricity bill and maintenance, research in colleges and universities etc.
- ▶ One shocking number that is emblematic of this underfunding: each child is supposed to get a nutritious mid-day meal at school for Rs.3.4. And this number is hardly been revised in the face of soaring food inflation. This operational funding gap makes ineffective, whatever we have built structurally, and eventually erodes it.

- ▶ Our education system must be designed to serve the age group of 6-21. This number is 29% for India, 18% for OECD, and 23% for Brazil. To maintain this proportion we need more money, even if other things were to be equal.
- ▶ With the accumulated funding deficit over decades, the magical thinking (of many) that private funding can substitute being disabused by reality, the economy demanding dynamic and higher capacities of the workforce, soaring societal expectation from education, and the massive population of the young, it's clear that we need sustained public spending much in excess of what we have done, probably way over 6% of GDP.
- ▶ Until India's poor tax-to-GDP ratio (18% at present) improves substantially this is not going to happen and will further deteriorate the education (and Health). This is not a matter of finance but of substantial political will and action over time, not merely the professional and elected political class, but by public, by all of us.

9.4 SHOULD FOREIGN UNIVERSITIES IN INDIA BE ALLOWED?



- (Q) Critically analyze the report submitted by the NITI Aayog to PMO and HRD in favour of inviting foreign universities to setup their branches in India.
- (Q) The education sector in India is facing huge investment deficit in terms of funds allotted and its proper implementation. Discuss.

- ▶ Globalization has turned world economies into a global village where being solitude is no longer survival in terms of economic growth and prosperity. The education sector is also not untouched with this.
- ▶ The NITI Aayog has submitted a report to the Prime Minister's office (PMO) and Ministry of Human Resource Development (HRD) in favour of inviting foreign universities to set up campuses in India. It has suggested three routes to permit entry of foreign education providers.
- ▶ A new law to regulate the operation of such universities in the country;
- ▶ An amendment to the UGC Act of 1956 and deemed university regulations to let them in as deemed universities.
- ▶ Facilitate their entry by tweaking UGC and AICTE regulations on twinning arrangements between Indian and foreign institutions to permit joint ventures.

◉ State of Education in India:

- ▶ Indian education sector has always been facing drawbacks inviting the criticism across the world for its lack of global exposure. Though India produces a huge pool of college graduates, its lack of global exposure makes it rigid and monotonous.
- ▶ India has become the second largest market for e-learning after the US. The sector is currently pegged at US\$ 2-3 billion, and is expected to touch US\$ 40 billion by 2017. The distance education market in India is expected to grow at a Compound Annual Growth Rate (CAGR) of around 34% during 2013-14 to 2017-18. Moreover, the aim of the government to raise its current gross enrolment ratio to 30% by 2020 will also boost the growth of the distance education in India.
- ▶ Higher education system in India has undergone rapid expansion. Currently, India's higher education system is the largest in the world enrolling over 70 million students while in less than two decades, India has managed to create additional capacity for over 40 million students.
- ▶ The report has justified NITI Aayog's support for the proposal on the ground that foreign universities will help meet the demand for higher education in the country, increase competition and subsequently improve standards of higher education. At present, higher education sector witnesses spending of over Rs. 46,200 Crore (US\$ 6.78 billion), and it is expected to grow at an average annual rate of over 18% to reach Rs. 232,500 Crore (US\$ 34.12 billion) in next 10 years.
- ▶ One of the main reasons for the government's step to open up its education sector for foreign universities by the Foreign Educational Institute (Entry and operations) Bill, 2010, is to stop the flow of Indian money out of the country. Every year more than 1 lakh students go abroad for higher education and spend millions on foreign land.

Now, when these 'big players' educational institutes open their campuses in India, the number of people going abroad will decrease, and on the other hand, would bring in foreign direct investment.

- ▶ The country's already existing universities will try to compete with foreign universities and thus new standards, which are considered much advanced, will automatically incorporate into these Indian universities.

○ **FDI till so far:**

The total amount of Foreign Direct Investments (FDI) inflow into the education sector in India stood at US\$ 1,209.40 million from April 2000 to December 2016, according to data released by Department of Industrial Policy and Promotion (DIPP).

- ▶ The education and training sector in India has witnessed some major investments and developments in the recent past.

Some of them are:

- ▶ The Government of India aims to increase digital literacy to at least 50% of Indians from currently 15% over a period of next 3 years.
- ▶ The World Bank has extended US\$ 50 million loan to support Indian government's Nai-Manzil scheme which aims to address educational and livelihood needs of minority communities through its educational and skill development programs.
- ▶ Tata Institute of Social Sciences (TISS) launched the 'School of Vocational Education' program to offer vocational training courses in 20 sectors or verticals in association with relevant training partners in 25 different cities across India.
- ▶ The Confederation of Indian Industry (CII) has launched Strategic Manufacturing Skill Council (SMSC) to train workforce for defence equipment manufacturing, ship building and repair, homeland security equipment and other firefighting equipment.
- ▶ In an attempt to improve health care infrastructure in West Bengal, 9 new medical colleges will be opened, out of which 5 will be government-run while the other 4 will be set up under the Public Private Partnership (PPP) model.

○ **Criticism:**

- ▶ Like every new step brings with it criticism, this one too is no exception. Many believe that foreign universities will come only with one purpose, and that is to tap the potential of the rich students who could afford huge fees charged by such universities. The majority of Indians will not benefit.
- ▶ Though the government claims of scholarships for the meritorious and needy students, the critics say it's the government exchequer that ultimately pays.
- ▶ Another criticism is that the faculty for which the universities are known will not be there in its offshore campuses. And it's also speculated that they will hire local professors and will lure them with higher salaries which many government funded universities can't afford, thus another point of concern.
- ▶ Another claim of the government that this will improve the efficiency of existing universities is just a mirage, since Telecom and Aviation in the 90s had similar promises by the government but they were taken over by foreign players in their field and are just biting the dust; for example, BSNL and Indian Airlines.
- ▶ Apart from all these critiques, the system of checks and balance should be adopted by the government and foreign universities should be regulated in the interest of Indians for best results in the future.

10
HEALTH

10.1 CURE FOR HIGH MEDICINE BILLS: A GENERICS PRESCRIPTION LAW

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(Q) Despite having sufficient supply of generic medicines, an artificial crisis is created by doctors which shows there are a close nexus between Doctors and Pharmacists. Examine in the context of recent proposed ordinance by the Government of India.

Abstract:

The regularization of the prescription of generic medicine by the doctors so that the same could be easily purchased from the Jan Aushadhi stores. The central government proposes to do it with the help of ordinance and drafting an Act.

Details:

- ▶ In order to provide the quality generic medicine at affordable price the Central Government has launched the Jan Aushadhi program through Bureau of Pharma PSUs of India (BPPI) which functions under the department of pharmaceuticals in 2008.
- ▶ However, due to the recalcitrant attitude of the doctors the patients find it difficult to obtain medicine through the Jan Aushadhi stores. Since doctors don't prescribe the generic medicines supplied through the Jan Aushadhi stores patients finds it difficult to obtain the same. The scheme has become redundant in the absence of doctors supports to it.
- ▶ The government is therefore willing to take the legal route to counter the obstinate tendency of doctors. The central government is under consideration to make a statutory provision which would make it mandatory for the doctors to prescribe generic drugs to patients so that the patients could easily purchase them from the Jan Aushadhi stores.
- ▶ Presently the central government through an ordinance is planning to mandate the use of generic name of medicine while suggesting a branded medicine. The government is also planning to expand the access of Jan Aushadhi stores by opening around 3000 outlets across the country. However by 2014-15, just 99 Jan Aushadhi stores had opened in 16 States, and there are 283 stores in 22 States and Union Territories.
- ▶ Despite having sufficient supply of generic medicines an artificial crises is created by doctors by prescribing the branded medicines. A pharmacist usually refuses to sale medicine without doctor's prescription and hence taking advantage of that the doctors who hand in glove with the branded companies prescribe them. The government therefore through the Act would provide an option to the pharmacist to give generic substitute of the medicine.
- ▶ The main aim of the Act is to focus on the accessibility, affordability and availability of medicine within the country. "Ex-factory cost of medicines gets marked up multiple times owing to supply chain costs and incentives for medical representatives. The Jan Aushadhi stores are able to provide drugs at Rs. 19, if the ex-factory cost is Rs. 10. "A similar branded drug would cost Rs. 100".
- ▶ Similar norms are existing in United Kingdom's National Health Service taking inspiration from it the centre is also planning to make a convergence list which would match branded drugs with its generic substitutes.
- ▶ The government is also proposing to create an IT-enable prescription system that automatically includes the formulation of such drugs when a doctor prescribes a branded drug out of habit or because they don't know the exact formulation. Achieving accessibility and affordability of medicine is also a target under National Rural Health Mission.

Conclusion:

The use of Jan Aushadhi store to increase affordability and accessibility of generic medicines is a pragmatic approach taken by government. But, the doctors are reluctant to the

government schemes and try to elude the provision by not giving generic names of medicines in their prescription which eventually forbids the pharmacist to sale them to the people. The government therefore through an Act is looking forward to curb the recalcitrant attitude of doctors. Thus the generics prescription law which has been taken from the UK National Health service could be an important means to bring control of law to curb the malicious attitude of the doctors.

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10.2 NITI AAYOG MEET SEEKS REFORMS IN PUBLIC HEALTHCARE SYSTEM



(Q) Examine the present health care system in India. Discuss in the context of NITI Aayog's proposal for renewal of health care system in India.

Abstract:

The new public health care system scheme proposed to be introduced by the NITI Aayog wherein the private doctors and nursing home would be paid or be incentivized by the government in order to improve the quality of government hospitals through competition with the private sector. This would increase the Government spending in public health system but likely to bring improvement in the quality of medical services in India.

Introduction:

NITI Aayog has proposed for renewal of health care system in India. The present health care system is based on a hierarchy at 3 levels. The primary level is the Primary Health care centre. At secondary level they are established as community centre. At tertiary level hospitals like AIIMS are situated. The present system although is decentralised and able to reach people at all levels but, it is not able to generate quality services at primary level where there are most beneficiaries of services are situated.

Factual Matrix:

- ▶ The new health care system therefore plans to step up the health services by instituting competition amongst the doctors at primary and secondary level. Private Doctors in rural areas would be appointed by the government to offer their services in competition with the doctors of primary health care centre and similar competition would be instituted between the specialist doctors at secondary levels in Government hospitals qua private hospitals at secondary level.
- ▶ The scheme proposes to train the MBBS doctors working at rural level to be a family physician who would be paid by the government for their work. Every area would be allotted with certain number of doctors who would have to cater patients through their excellent services and depending on the number of patients they treat their promotion would be decided within the public health system.
- ▶ The Primary Health Centres (PHCs) would continue carrying out its initiative such as immunization and provide laboratory services and free medicines.
- ▶ Presently the government pays salaries only to physicians and specialist at PHC. At secondary level the physicians at community centres would have to compete with their counterparts at private nursing home wherein incentives and packages would be given by the government for providing efficient treatment and better services.
- ▶ Presently government is loosely connected with the private doctors whose services are used only when a public-private partnership (PPP) is announced for specific services as institutional services. At the tertiary level there would be a mix of AIIMS (All India Institute of Medical Sciences) like institutions and low-cost private models such as Sankara Nethralaya, Chennai, and Narayana Hrudayalaya would be promoted. Corporate hospitals with high-cost treatment will not be promoted (as per Srivastava, National President of Loksatta).
- ▶ This would definitely increase the government spending in public health care system. The proposal estimates that if the said model is put in place, primary and preventive healthcare would cost 80,000 crore-1.2 trillion per year by the year 2022. Secondary

care will cost 40,000 crore, while tertiary care will cost 93,000 crore, making it a total of 2.18-2.53 trillion.

- ▶ Assuming a cost escalation of 50%, the amount needed will be 3.27 -3.80 trillion (as per reported in daily hunt dt.26 April, 2016). According to Jayaprakash Narayan, General Secretary FDR, "If India's real growth rate continues to be 7% and nominal growth 11%; the country's Gross Domestic Product (GDP) will be 240 trillion. Through our model, universal health care will be achieved by spending 1.67% of GDP". Currently, India spends approximately 1.3% of GDP on the health sector.
- ▶ Revamp of Health care system it has also been proposed by the previous government planning commission under the 12th Five Year Plan (2012-2017), the NITI aayog plans to build upon it giving it a definite idea.
- ▶ The proposals have been suggested to the NITI Aayog by the Hyderabad-based Foundation for Democratic Reforms (FDR) and the Mumbai-based non-governmental organization Loksatta Movement which themselves have borrowed it from the experiences of the UK's National Health Service, the government-run health programme.

o **Conclusion:**

The new Public Health Service scheme proposed to be launched by the government is an excellent initiative which uses competition of public sector qua the private sector. This will also help in utilising more efficiently the services of private doctors. It is likely to improve the quality of public health services at all the levels. It would also help in bringing uniformity of medical services in India. It will help increase the growing demand of doctors in country. Promotions on the basis of treating the number of patients would incentivise the doctors to work hard. However, presently the role played by the government hospitals and the PHC is important and care should be taken that the present functioning of the PHC and community centres is not disturbed.



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