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SIMPLIFYING IAS EXAM PREPARATION

INSIGHTS into EDITORIAL TV/Radio **Synopsis**

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IAS SELF STUDY GUIDE

Table of Contents

| | |
|---|-----------|
| INSIGHTS into EDITORIAL | 3 |
| [1] For a wider pool | 3 |
| [2] Unseemly haste | 4 |
| [3] Towards a genomics revolution | 5 |
| [4] Questionable remedy | 7 |
| [5] A sum of contributions | 10 |
| [6] The problem of land hoarding | 12 |
| [7] Dark clouds across Asia | 13 |
| [8] Avoiding roadkill | 16 |
| [9] The ABC of the RTE | 18 |
| [10] Is radio relevant in the 21st century? | 20 |
| [11] The much-neglected pollutant | 22 |
| [12] A new weapon in the carbon fight | 24 |
| [13] Restoring order in the court | 26 |
| [14] Are farmers distressed across India? | 28 |
| [15] Towards solar-powered agriculture | 29 |
| [16] Protecting marriages across castes | 31 |
| [17] Capacity building for primary health care | 34 |
| [18] A misleading story of job creation | 36 |
| [19] Signs of a geopolitical whirlwind | 38 |
| [20] Making our roads safe | 40 |
| [21] A turtle recovery plan | 42 |
| [22] The arc to Southeast Asia | 44 |
| [23] Should euthanasia be allowed? | 47 |
| [24] A vote for state funding | 48 |
| [25] Red alert on the green index | 51 |
| [26] A road map for renewal | 53 |
| TV, AIR Synopsis | 57 |
| [1] Security Scan: Security issues in Indian Ocean | 57 |
| [2] US Slams Pakistan Over Terrorism | 58 |
| [3] Electoral Bond | 59 |
| [4] Industrial Reforms | 60 |
| [5] Various Aspects of Energy Conservation | 62 |
| [6] E-Sansad & E-Vidhaan | 63 |
| [7] Persons of Indian Origin Parliamentary Conference | 64 |
| [8] FDI Reforms | 65 |
| [9] Growth in Industrial Output | 66 |
| [10] India-Israel Bilateral Talks | 67 |
| [11] Annual Meeting of World Economic Forum | 68 |
| [12] Bilateral Relations Between India and Cambodia | 70 |
| [13] Upgradation of Airports in North East Region | 71 |
| [14] Development of Sports in the Country | 72 |

INSIGHTS into EDITORIAL**[1] For a wider pool****Context:**

A growing number of people are over-volunteering for clinical trials in order to supplement their income. There is a disturbing trend that is putting at risk the health of serial volunteers as well as the reliability of trial data.

In May 2017, 53-year-old from Telangana state, who volunteered for the trial on a bio-equivalence study, to compare the biological behaviour of an unapproved formulation of melatonin with an older one, was died.

Troubling trend

Financially needy people serially volunteer for trials to supplement their income. This is a worldwide phenomenon, including in high-income regions like the U.S. and the European Union.

The problem arises when volunteers who are desperate for money deceive investigators, lying about their age, health or other medications, just so they can participate.

Such serial volunteers are an especially vulnerable class of people, because of their poverty and low levels of education.

Under the Indian Drugs and Cosmetics Act, an independent body of doctors and laypersons, known as an ethics committee, must oversee a trial to make sure the rights of such groups are safeguarded. But bioethicists say this isn't happening.

What are Clinical Trials?

- Clinical trials are research studies that explore whether a medical strategy, treatment, or device is safe and effective for humans. Before a drug is launched in market, it has to be tested for its safety and efficacy. This is done in stages, with a large pool of patients after which the data from the trials is assessed.
- In India, Central drug Standard Control Organisation (CDSCO) regulates under Drugs and cosmetics Act.
- India has been a preferred destination due to the availability of large genetic pool with a wide spectrum of diseases, educated work force and lower operational costs.

Ethical considerations to be followed while conducting clinical trials

- Informed consent and Voluntary Agreement of the participant
- Maintain privacy of the participant
- Accountability and transparency while conducting trials
- Research and trial details should be in public domain.

Prevailing Issue in India

- The major issues w.r.t Clinical trials in India are Regulatory failures, Unethical clinical trials, spurious drugs, Collusion between drug companies and doctors.
- Landmark amendments to the Drugs and Cosmetics Act in 2013 led to better protection of vulnerable groups such as illiterate people, but more regulation is needed to ensure truly ethical research.
- Clinical research organisations (CROs) have argued that more rules will stifle the industry; the truth is that ethical science is often better science. The big problem plaguing clinical research is an over-representation of low-income groups among trial subjects.
- Sometimes CROs recruit them selectively, exploiting financial need and medical ignorance; at other times people over-volunteer for the money.
- Because these subjects are well-paid, and get no therapeutic benefit, their only reward from the trial is financial. This results in an incentive to lie about one's medical history or enrol in multiple trials to maximise one's income.

Protecting the vulnerable

In any trial that relies heavily on vulnerable groups like daily wage earners, the ethics committee can choose to monitor subjects intensively, and counsel them on health risks. There are several tools to do this, like meeting participants and administering questionnaires to gauge their awareness.

The pervasiveness of serial volunteering and deception is not just a risk to participants but also taints the quality of data collected by CROs in bioequivalence studies. Unsafe drugs can make their way into the market as a result, or safe drugs can get rejected.

- One potential solution is a national registry of trial volunteers, which will alert a CRO when someone signs up for two studies simultaneously without compromising volunteer's privacy.

So regulators need to create a system that anonymises each participant's data.

- Another option is to pay volunteers less, taking away the financial incentive to fudge their participation history. But this measure, in isolation, would reduce trial participation dramatically: an unacceptable side-effect because clinical trials are essential to drug research. A third, more sustainable solution is to encourage a wider cross-section of society to participate in research on human subjects.

Way Forward

Compulsory registration of all clinical trials before any dosing starts. This will help in stopping illegal trials. Audio visual recording of informed consent in trials is important. Ethics committee of the Institute must also be accredited (recommendation of Ranjit Roy Choudhury Expert Committee)

Society at large must realise the valuable service that clinical research subjects perform by making drugs safe for the rest of us. Civil society's vigilance is vital.

[2] Unseemly haste**Context:**

On December 28, the Lok Sabha passed the 'triple talaq' Bill — the Muslim Women (Protection of Rights on Marriage) Bill — following a day of engaging discussion. It will soon be tabled in the Rajya Sabha. The legislation was mooted in the aftermath of the Supreme Court's judgment in August declaring that the practice of instant triple talaq was not constitutionally protected and would have no legal effect.

However, in Rajya Sabha Opposition demanded to send the controversial triple talaq legislation criminalising instant triple talaq, or *talaq-e-biddat*, to a select committee.

Background:

- The egregious practice that many Muslim men employ to divorce their wives instantaneously and without their consent, merely by uttering the word talaq thrice, was rendered legally invalid by the Shamim Ara vs State of UP judgment of 2002 and subsequent orders from various High Courts. But this has not stopped the practice; many Muslim women are unaware of the judgments or have had to accept such pronouncements owing to pressure from conservative sections.
- Many women have undergone severe trauma after being thrown out of their homes. Shayara Bano, one such victim of this arbitrary custom — not to speak of years of domestic violence — has filed public interest litigation in the Supreme Court seeking a ban on the practice. The conservative All India Muslim Personal Law Board that seeks to wield influence on questions of Muslim personal law has found it an occasion to air its regressive views on the issue.

Earlier Supreme Court set aside instant 'talaq'

- In a majority 3:2 judgment, a five-judge Bench of the Supreme Court set aside 'talaq-e-biddat' — instant and irrevocable 'talaq' — as a "manifestly arbitrary" practice.
- By declaring the discriminatory practice of instant triple talaq as unconstitutional, the Supreme Court has sent out a clear message that personal law can no longer be privileged over fundamental rights. Three of the five judges on the Constitution Bench have not accepted the argument that instant talaq, or talaq-e-biddat, is essential to Islam and, therefore, deserves constitutional protection under Article 25. Two judges in the minority favoured imposing a six-month injunction to enable Parliament to enact legislation on the subject; the judges in the majority specifically chose not to do so.

- The purpose of the court's judgment was disarmingly simple: to deprive talaq-e-biddat of recognition in the eyes of the law. That remains the case irrespective of the frequency with which it is exercised.

What does the new Bill say?

- The Muslim Women (Protection of Rights on Marriage) Bill, 2017 was passed by the Lok Sabha.
- It makes the pronouncement of talaq-e-biddat "void and illegal." According to clause 3 of the Bill, "Any pronouncement of talaq by a person upon his wife, by words, either spoken or written or in electronic form or in any other manner whatsoever, shall be void and illegal."

What is the punitive measure mentioned in the bill?

- A man who pronounces talaq on his wife will be punished with a jail term and a fine. This Bill also makes the mentioned of talaq-e-biddat a non-bailable offence and shall be punished with imprisonment for a term which may extend to three years and fine.
- This Bill puts men at the centre of legislative policy, by triggering a number of legal consequences upon the utterance of those words.

How does this protect Muslim women's rights?

- The woman upon whom talaq is pronounced will have to receive an allowance from her husband, and she retains custody of her children and shall be entitled to custody of her minor children in the event of pronouncement of talaq by her husband.
- Law Minister says that this legislation will, help in ensuring the larger Constitutional goals of gender justice and gender equality of married Muslim women and help sub serve their fundamental rights of non-discrimination and empowerment.

[3] Towards a genomics revolution

Context:

All of us begin our life as a single cell, roughly the width of a human hair. Within this cell is the human genome, made of 3 billion bases of DNA that carries the instructions for life. In 2001, after a decade of work involving scientists from over 16 countries, the sequence of the first human genome was completed at a cost of \$3.8 billion. Over the past decade, advances in DNA sequencing technologies have made it possible to sequence a human genome for \$1,000 in a week's time. A number of groups, using DNA sequencing, have begun to catalogue variations in human populations. This has enabled us to understand human migration and population history.

Introduction

In 1865, Gregor Mendel discovered the two laws of inheritance that are now named after him. Almost 90 years later in 1953, the work of James Watson, Francis Crick, Maurice Wilkins and Rosalind Franklin, deciphered the structure of the molecule — DNA — that stores our hereditary information and gets transmitted from parents to children over generations.

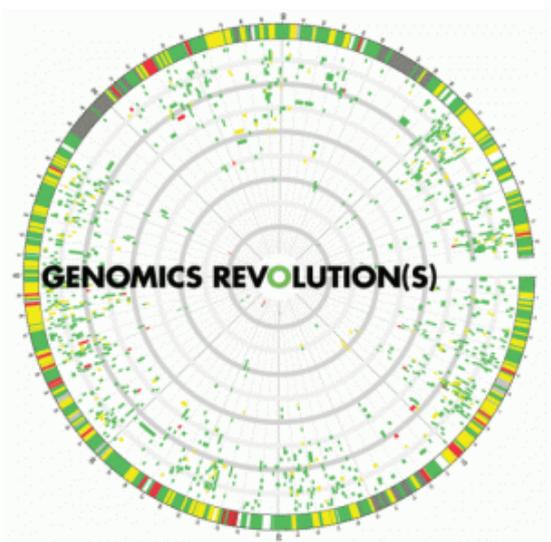
What are the uses of genome sequencing?

Genomics is an interdisciplinary field of science focusing on the structure, function, evolution, mapping, and editing of genomes.

A genome is an organism's complete set of DNA, including all of its genes. Genomics also involves the sequencing and analysis of genomes through uses of high throughput DNA sequencing.

Advances in genomics have triggered a revolution in discovery-based research and systems biology to facilitate understanding of even the most complex biological systems such as the brain.

- Cancer is caused by deleterious mutations that accumulate in the genome. Inherited genetic disorders arise due to mutations in DNA that are passed on at birth. Increased risk for developing breast cancer is linked to variations in genes such as BRCA1 in the genome. Sequencing an individual's genome or the tumour



genome and comparing it to a reference human genome has helped identify the differences that contribute to the disease. In many cases, it has the potential to help with treatment decisions.

- In pregnant mothers, the blood also contains DNA from the fetus. Scientists have developed methods that can sequence the cell-free DNA in mother's blood to monitor the genetic health of a developing baby.
- The genomics revolution has enabled sequencing a large number of organisms including bacteria, plants and animals.
- While it has confirmed the common evolutionary origin of life on earth, it has provided the code for a number of life forms.
- Sequencing of plants including cereals like rice and wheat has set the stage for rapid crop improvement.
- Understanding genomes of livestock such as cattle and goats has created a rich resource of genetic variations that can be used to produce animals with superior traits.

Perhaps this will also make interventional treatments feasible, in the not too distant future, thanks to the revolutionary advances brought about by the discovery of new gene-editing techniques, such as CRISPR/CAS9 (application of a precise genome editing/engineering technology). The editing combined with sequencing will enable rapid crop and livestock improvements that have the potential to end hunger and improve the standard of living across the world.

Examples of genome projects

1. Human Genome Project (HGP)

The Human Genome Project (HGP) was an international scientific research project with the goal of determining the sequence of nucleotide base pairs that make up human DNA, and of identifying and mapping all of the genes of the human genome from both a physical and a functional standpoint. It remains the world's largest collaborative biological project.

2. Genome Project – Write

It is an extension of Genome Projects (aimed at reading genomes since 1984), now to include development of technologies for synthesis and testing of many genomes of microbes, plants and animals

3. 100K Genome Project

It aims to sequence the genomes of 100,000 infectious microorganisms to create a database of bacterial genome sequences for use in public health, outbreak detection, and bacterial pathogen detection. This will speed up the diagnosis of foodborne illnesses and shorten infectious disease outbreaks. The 100K Genome Project will provide a roadmap for developing tests to identify pathogens and trace their origins more quickly.

4. 1000 Genomes Project

1000 Genomes project set out to map the genetic variations in human across the world sequenced 1,092 individuals from 14 populations. The resulting 20,000 GB bases of raw data will be basis for understanding of human genetic variations.

What implications do these developments have for India?

- To gain fully from the genomics revolution, India needs to collect information about the genetics of its population and train manpower capable of interpreting it.
- The information that is needed has to come from a large and sustained collection of data — fully sequenced individual genomes along with medical histories for the individuals who volunteer for this effort.
- This kind of longitudinal study is what would allow actual physical manifestations relevant to health, e.g. specific illnesses, to be related to features in the genome.
- China has been studying half a million people since their recruitment in 2004-2008. As India is much more genetically diverse — with something like 5,000 ethno-linguistic and religious groups (castes and others), all of which probably have some degree of genetic distinctiveness — it needs a larger survey.
- The genetic distinctiveness of different Indian groups is in part the result of endogamy. While we cannot know the full impact of endogamy in advance of a proper survey, some recent research has shown that endogamy is very likely to be medically significant.

- The genetic implication of this is that there are likely to be many recessive diseases stemming from single genes specific to individual groups that can be identified.

Decreasing disease burden

This knowledge could then also be quickly applied to the task of managing diseases in these groups as well as be used for genetic counselling that could reduce their incidence in future generations. As an example elsewhere, the founder group of Ashkenazi Jews have almost eliminated Tay-Sachs disease from their population by such means.

With large samples the technique of “genome-wide association studies” that compare genomes of cases and controls could be used to identify genetic risk factors related to common diseases like Heart diseases.

- This is a good point at which to note that such a survey of Indian genetic diversity will be an important asset, beyond disease genetics.
- The data collected as part of these efforts will also help to uncover the basic biological function of genes and their interactions, which are not yet fully understood.
- This knowledge will be useful to humanity worldwide and also offer India a chance to claim a piece of the global medical and scientific frontier.

As a large part of the enterprise would be the application of information technology or “bio-informatics”, the prospects of establishing viable commercial enterprises with synergies to existing IT champions are also promising.

What then is to be done?

There has been path-breaking work in using genomics to shed light on Indian history, a small number of hospitals are using genetic information to help patients.

- But all of this activity is on a much smaller scale than needed and is currently not generating the manpower required to equip the next generation of medical and research activities in the area.
- What is needed is a coherent push at the national level that involves government, academic institutions, the existing health-care industry, the IT industry and the nascent biotechnology industry.
- This coherent push should aim to set an ambitious but realistic objective of creating an Indian genetic data bank, to promote academic programmes that train scientists, technicians and doctors in this area and to create a regulatory framework that promotes broad objectives for both public and private sectors without being self-defeating.

Since both genetic data and biological samples are easily transported across borders, the Indian regulation cannot be shortsighted. It will simply cause Indian genomics to move abroad to places such as Singapore.

While this is eminently worthwhile as it will provide a broader pan-Asian set of data, it would be important to make similar investments at a national scale.

All in all, the time is ripe for India to begin its own genomics revolution. What is needed is a vision and leadership at the national level to leverage this and seize the day.

[4] Questionable remedy

Context:

The National Medical Commission Bill, 2017 was introduced in Lok Sabha recently.

When the Bill came to light, it generated an unprecedented response – a one-day strike by nearly three lakh doctors and protests from all sections – doctors, health activists, former policy makers, academicians and so on, making the government to refer it to the Standing Committee for further deliberation.

Background:

- The idea of reforming and revamping the MCI took root in the Independence Day speech of former prime minister in 2009. The vision was to replace the MCI with an overarching National Commission for Human Resources for Health with four verticals looking after the four different aspects of regulation – undergraduate, postgraduate education, accreditation and licensing and ethical practice.
- It was to provide platforms for cross consultation and coordination between the disciplines and medical and non-medical personnel.

In 2013, the Parliamentary Standing Committee (PSC) returned the ambitious Bill with three terse observations:

- The states' autonomy and potential violation of federal principles;
- excessive bureaucratisation and centralisation; and
- Faulty selection procedure of regulators, providing scope for abuse.

Reason for introducing National Medical Commission Bill, 2017

- First proposed in 2016, the Bill aims to overhaul the corrupt and inefficient Medical Council of India, which regulates medical education and practice.
- The Bill seeks to repeal the Indian Medical Council Act, 1956 and dissolves the current Medical Council of India (MCI). The MCI was established under the 1956 Act, to establish uniform standards of higher education qualifications in medicine and regulating its practice.

The Bill provides for a medical education system which ensures:

1. availability of adequate and high quality medical professionals,
2. adoption of the latest medical research by medical professionals,
 - periodic assessment of medical institutions, and
1. An effective grievance redressal mechanism.

What are the key issues regarding the regulation of medical education and practice?

1. Separation of regulatory powers

- Over the years, the MCI has been criticised for its slow and unwieldy functioning owing to the concentration and centralisation of all regulatory functions in one single body.
- This is because the Council regulates medical education as well as medical practice. In this context, there have been recommendations that all professional councils like the MCI, should be divested of their academic functions, which should be subsumed under an apex body for higher education to be called the National Commission for Higher Education and Research.

2. Conflict of interest

- With most members of the MCI being elected, there has been a conflict of interest where the regulated elect the regulators, preventing the entry of skilled professionals for the job.
- The Niti Aayog Committee recommended that a framework must be set up under which regulators are appointed through an independent selection process instead.

3. Fee Regulation

- The NITI Aayog Committee (2016) recommended that a medical regulatory authority, such as the MCI, should not engage in fee regulation of private colleges. Such regulation of fee by regulatory authorities may encourage an underground economy for medical education seats with capitation fees (any payment in excess of the regular fee), in regulated private colleges.

4. Professional conduct

- The Standing Committee on Health (2016) observed that the present focus of the MCI is only on licensing of medical colleges. The Committee recommended that the areas of medical education and medical practice should be separated in terms of enforcement of the appropriate ethics for each of these stages.

What does the National Medical Commission, 2017 Bill seek do to?

The 2017 Bill sets up the National Medical Commission (NMC) as an umbrella regulatory body with certain other bodies under it.

- The NMC will subsume the MCI and will regulate the medical education and practice in India.
- Under the Bill, states will establish their respective State Medical Councils within three years. These Councils will have a role similar to the NMC, at the state level.

Functions of the NMC include:

- laying down policies for regulating medical institutions and medical professionals,
- assessing the requirements of human resources and infrastructure in healthcare,
- ensuring compliance by the State Medical Councils with the regulations made under the Bill, and
- Framing guidelines for determination of fee for up to 40% of the seats in the private medical institutions and deemed universities which are governed by the Bill.

What does the Bill say regarding the conduct of medical entrance examinations?

- There will be a uniform National Eligibility-cum-Entrance Test (NEET) for admission to under-graduate medical education in all medical institutions governed by the Bill. The NMC will specify the manner of conducting common counselling for admission in all such medical institutions.
- Further, there will be a National Licentiate Examination for the students graduating from medical institutions to obtain the license for practice. This Examination will also serve as the basis for admission into post-graduate courses at medical institutions.

What are the complex issues that have caused this widespread concern?

But despite its plus points, the NMC isn't the game-changing legislation it could have been.

1. Over centralisation

The over centralisation of the NMC and the near control over it by the central government, ranging from appointing all the 77 members for the various bodies is a concern. Such wide-ranging powers that will be exercised by the central ministry rob not just the federal nature of the law and reduce the NMC to an advisory role.

2. Conducting uniform NEET is a laudable idea as it will enable standardising the competence levels of the "Indian Doctor". Currently, the variance between the training and competencies in different colleges and regions is astoundingly wide. So such a reform was sorely required. Yet, there is apprehension that in the absence of standardisation of the quality of instruction in the country, it may widen disparities and become inequitable.

3. The issue of fees

Assuming that an investment of Rs 400 crores is required to set up a medical college and with a view to attract investment, the Bill permits 60% of seats to be open for managements with unfettered freedom to charge any quantum of fees in order to recoup the investment. This logic is highly debatable. It is apprehended that this will increase rent seeking, corruption and reserve medical education only for the rich and well off.

4. Issue of corruption

One of its goals is to rein in corruption in the MCI through greater distribution of powers. This is sought to be accomplished through an independent Medical Advisory Council to oversee the National Medical Commission, the proposed successor of the MCI. But all members of the NMC are a member of the Council, undermining the latter's independence.

5. Perhaps the most controversial provision of all is for a bridge course allowing alternative-medicine practitioners to prescribe modern drugs. One motivation could be to plug the shortfall of rural doctors by creating a new cadre of practitioners.

Keeping in view the current realities prevailing in the country, the Act has introduced a system under which the Commission and the heads of the councils of Ayush can design bridge courses legalising Ayush practitioners to prescribe allopathy medicines. Such cross pathy then endangers the credibility of all the systems of medicine.

Way forward

- The shortfall of MBBS doctors is partly due to the fact that many of them seek a post-graduate degree to improve career prospects.
- Another way to bolster healthcare delivery is a three-year diploma for rural medical-care providers, along the lines of the Licentiate Medical Practitioners who practised in India before 1946. Chhattisgarh tried this experiment in 2001 to tackle the paucity of doctors it faced as it was formed.

- Graduates from such a three-year programme would only be allowed to provide basic care in under-served pockets. Massive protests by the Indian Medical Association and poor execution derailed the Chhattisgarh experiment, but the idea wasn't without merit.
- India has no choice but to innovate with health-care delivery models to tackle the challenges it faces. The trick is to base these innovations on evidence.
- In this context, the decision of the Lok Sabha to send the National Medical Commission Bill to a standing committee for a relook is the right one.

[5] A sum of contributions

Context:

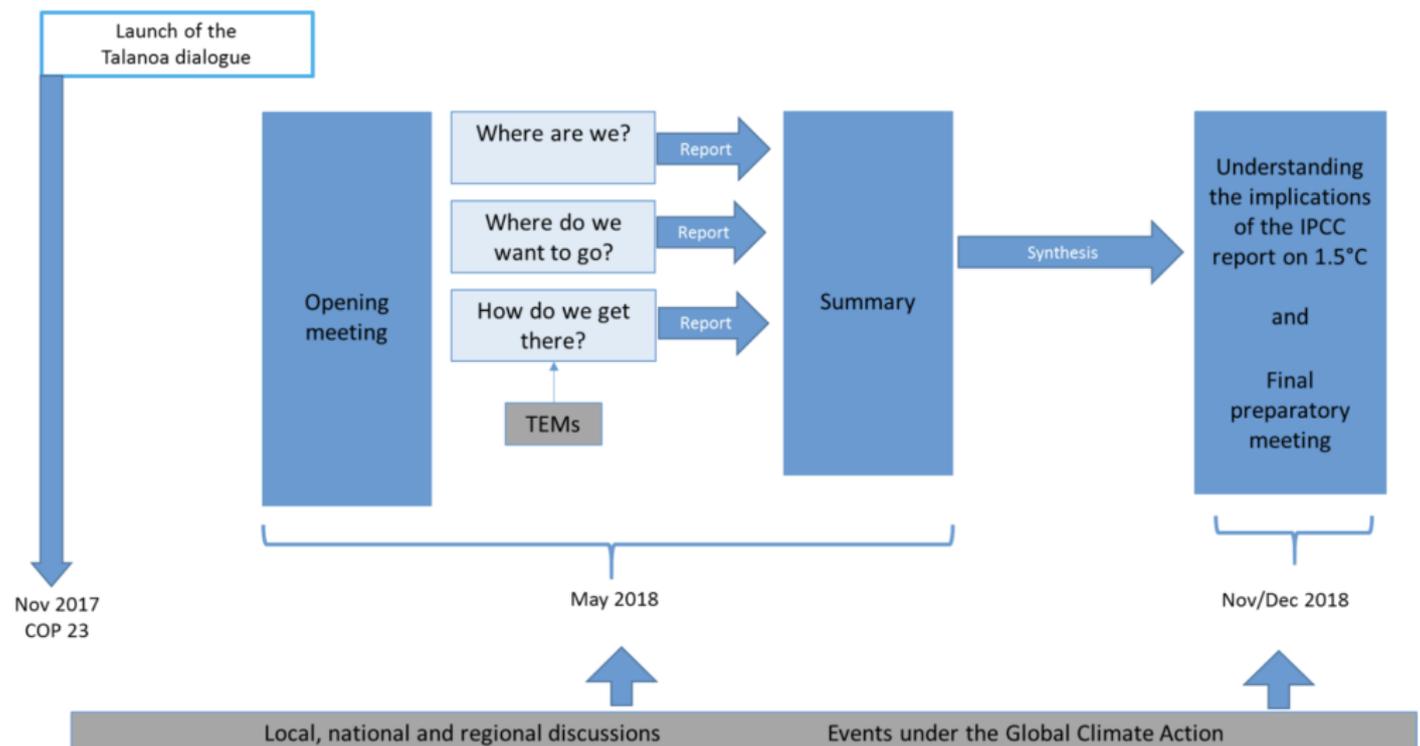
The Talanoa Dialogue of the UN Framework Convention on Climate Change, beginning this month, will facilitate the parties to take stock of progress post-Paris.

As a key player in international climate governance, India could set the precedent in deepening the dialogue process through an action-oriented, inclusive, bottom-up approach, involving extensive participation and collaboration of its States.

Talanoa dialogue

The UNFCCC Climate Change Conference (COP23) was held in **Bonn, Germany** and was presided over by **Government of Fiji**. It concluded with countries putting in place a roadmap for 'Talanoa Dialogue', a year-long process to assess countries' progress on climate actions.

- Talanoa is a traditional approach used in Fiji and the Pacific to engage in an inclusive, participatory and transparent dialogue;
- The purpose of Talanoa is to share stories, build empathy and trust;
- During the process, participants advance their knowledge through common understanding;
- It creates a platform of dialogue, which results in better decision-making for the collective good;
- By focusing on the benefits of collective action, this process will inform decision-making and move the global climate agenda forward.



The significance of Talanoa dialogue

- The goal of the Paris Agreement on climate change, as agreed at the Conference of the Parties in 2015, is to keep global temperature rise this century to well below 2 degrees Celsius above pre-industrial levels. It also calls for efforts to limit the temperature increase even further to 1.5 degrees Celsius.
- The UN Environment Emissions Gap Report 2017 (Eighth) presents an assessment of current national mitigation efforts and the ambitions countries have presented in their Nationally Determined Contributions, which form the foundation of the Paris Agreement.
- The report underlined that the foundation of the Paris Agreement cover only approximately one third of the emissions reductions needed to be on a least cost pathway for the goal of staying well below 2°C. The gap between the reductions needed and the national pledges made in Paris is alarmingly high.
- Hence more ambitious NDCs will be necessary by 2020 and should build on the existing, extensive knowledge about the cost-effective policies and measures that can be taken.
- As per COP23 decision, Talanoa Dialogue has been structured around three questions to arrive at answers with consensus: Where are we? Where do we want to go? How do we get there?

Role of states to achieve India's pledge at Climate summit

Routine engagement of the States is crucial to India's climate action commitments.

- In a federal democracy like India, sub nationals or States are a vital part of the grand coalition between the Centre, civil society, businesses, and key climate stakeholders.
- India's State Action Plan on Climate Change supports the integration of national climate change goals into subnational policies.
- India has committed to meet its current target of 33% reduction in emission intensity of the 2005 level by 2030, by generating 40% of its energy from renewables.

States are important for the realisation of this goal.

Why do sub-nationals matter?

According to the United Nations Development Programme, 50 to 80 percent of the mitigation and adaptation actions necessary to tackle climate change will be implemented at the subnational or local levels of governance. Subnational governments are particularly well placed to address climate change for a number of reasons, including:

- They are often responsible for the development and implementation of policies that have the most impact on climate change, including in the areas of air quality; transportation; energy and energy efficiency; the built environment; natural lands; technology innovation, development, and transfer; and others that have direct implications for greenhouse gas emissions levels;
- Subnational governments often serve as the laboratories for policy innovations which are then adopted at the national and even international level; and
- Subnational governments provide the critical link in the vertical integration of climate policies between national and local governments.

The Under2 Coalition, a Memorandum of Understanding by subnational governments to reduce their greenhouse gas (GHG) emissions towards net-zero by 2050, is generating a unique precedent for bold climate leadership, with its member states and regions surpassing 200 in number.

Currently, Telangana and Chhattisgarh are signatories to this pact from India, as compared to representations from the other top emitters: 26 subnational governments in China and 24 in the U.S. Greater representation of Indian States is crucial.

The Need of the Hour

- It is imperative to examine the progress of subnational actions in meeting national climate targets. Towards this end, both national and State plans would need to be periodically reassessed and reviewed.
- A transparent framework for review, audit and monitoring of GHG emissions is needed.
- As State capacities vary significantly, the principle of common but differentiated responsibilities should be applied to allocate mitigation targets in different States, based on the principle of equity.

- States have enormous mitigation potential, but the evidence pertaining to its effectiveness is still scarce. Therefore, India must look towards creating knowledge action networks and partnerships under both national and State action plan frameworks.
- Kerala has taken the lead to build such a knowledge network funded by the National Mission on Strategic Knowledge for Climate Change.

Conclusion

Governments at all levels must act now to reduce greenhouse gas emissions and bring the climate back into balance in the long run. It has never been more important for states and regions to work together to help promote clean energy economies and limit global temperature rises.

[6] The problem of land hoarding

Context:

As per the details from the Government Land Information System (GLIS), the government owns at least 13,505 square km.

The government owns more land than it admits, large swathes of which are unused or underutilised.

Government Land Information System (GLIS)

In 2012, a committee headed by former finance secretary Vijay Kelkar had recommended monetising the government's unutilised and under-utilised land to finance infrastructure projects in urban areas.

- It is a first-of-its-kind centralised database created by the ministry of electronics and information and monitored by the Prime Minister's Office (PMO).
- The GLIS portal records total area, geo-positioning maps, and details such as ownership rights.
- According to the portal, the railways is the biggest landowner among Union ministries. The defence ministry, which owns a large share of the government's land holding, has given only partial details citing security concerns.

Though the track record of the railways, as well as other government agencies, on land asset management is incomplete, the move to make an inventory is a step towards better utilisation of government land.

The problem of unused land

What is worse is that a large proportion of government land lies unused. According to reports of the Comptroller and Auditor General of India (CAG), the 13 major port trusts have 14,728 hectares of land lying idle.

These numbers are staggering and incomplete. They exclude several departments of the Centre and, more importantly, don't take into account excess land holding by the States.

1. Generates artificial scarcity of Land

- Due to excessive holdings, a precious but scarce economic resource remains unutilised. This generates an artificial scarcity of land for developmental purposes, and increases project costs and is one of the main drivers of skyrocketing urban real estate prices.
- Moreover, the allocation of unused land is rife with corruption. At the State level too, instances abound of public land being resold to private entities in dubious deals.

2. Inadequate ownership records

- The CAG reports that none of the government agencies maintains adequate ownership records. For instance, the 13 major ports have failed to produce title deeds for as much as 45% of their land holdings. This makes squatters difficult to evict, and so they gravitate to these areas.

The need of the hour

1. Increase Floor Space Index

- Land is a crucial and often constraining input for production, not only in agriculture but also in secondary and tertiary sectors. The problem of land scarcity has been aggravated by grossly wasteful land use by government agencies.

- While stock of land is fixed, its supply as an input in production is not — it crucially depends on land use patterns. A useful measure of this is the floor space index (FSI), which is the total floor area built per square metre of land.
 - The demand for land increases with both population density and economic growth. Therefore, to maintain efficiency, the FSI should also increase. By this token, the FSI should be the highest in major city centres, where the demand for space is highest, and it should taper off gradually towards the periphery. Apart from supplying space for economic activities, such an arrangement would also help maximise the gains from transport infrastructure.
2. Increase investment per square metre
 - The investment per square metre gradient of Indian cities is very low and haphazard. Increasing investment per square metre could solve the problem of wastage, generate employment and pull masses out of poverty, thereby aiding the economy to grow fast.
 3. Furnish details about usage of acquired land
 - People have the right to know the size and use of land holding by government agencies which have been acquired by way of compensation.
 - One of the solutions is that all the departments should identify their surplus land. Unfortunately, agencies seem to be loath to cooperate.
 4. Comprehensive inventory of land resources
 - A comprehensive inventory of land resources and usage patterns for all government branches is the need of the hour. It should include information on the location of each property, its dimensions, the legal title, current and planned use, and any applicable land use restrictions.
 - This will enable effective identification of suboptimal land use, as well as of the land that is surplus.
 5. Use of surplus land
 - Surplus land should be utilised to meet the ever-growing demands for services, such as water and waste disposal, as well for government-sponsored housing and transportation projects.
 - Monetising land for infrastructure is not only a noble goal but also necessary to optimise the use of resources for development.
 - Land intended for future use can be rented out till such time it is needed, through a transparent auctioning process. This will not only buoy the public exchequer but prevent plots of land lying waste for years.

Way Forward

- ✓ Given the importance of land for the country, we need to be creative in finding solutions. A public-government partnership seems to be the way out.
- ✓ We could take a cue from Britain. There, the government has pledged to provide details of ownership, location, and intended use for all properties. Citizens are invited to contest official land use and suggest alternatives under a 'right to contest'.
- ✓ The Indian government should also agree to disclose its land use and release of excess land, the use of which it cannot justify.

[7] Dark clouds across Asia

Context:

In 2017, Washington put "America First" and Pyongyang rattled the nerves of the entire globe with its relentless missile and nuclear tests. Beijing steadily pursued its new-age resurrection of the Silk Road across Asia, by land and by sea, and anointed its mastermind, Xi Jinping, as "core leader." India faced off with China on a remote triangle of land, Doklam, in the Himalayas and relations between Pakistan and Afghanistan continued to fester. ASEAN celebrated 50 years in 2017, marking an important milestone, but challenges remain to the bloc's consensus-driven cooperative mandate.

What awaits the Asia-Pacific in 2018?

Asia-Pacific an area of intense geostrategic and geo-economic competition

1. Rising Chinese influence:

- China is the rising economic and military power in Asia today — the second most important economic power after the U.S. and having the second or third most powerful military. In seeking dominance over Asia, however, it not only has to contend with a strong military and economic U.S. presence in the region, but it also cannot afford to ignore the competition from Japan and India. In mid-2017 in Doklam, India had demonstrated that it was more than capable of standing up to China's bullying tactics.
 - The 19th Congress of the Chinese Communist Party (October 2017) essentially highlighted China's quest for global leadership and the means to achieve it, including making China's military 'world class', one capable of 'winning wars'.
 - The Maldives has recently concluded a free trade agreement with China, and is growing much closer to Beijing in all respects.

2. New National Security Strategy of US:

- In its National Security Strategy (NSS), the U.S. has called China a "challenger" and "rival" while welcoming India's emergence as a "leading global power and stronger strategic and defence partner"
 - The NSS also states that the U.S. would support India's growing relationships throughout the region
 - NSS uses this term Indo-Pacific instead of Asia-Pacific, indicating that the United States has as deep an interest in South Asia as it does in East Asia.

This is followed by US president's announcement to recognise Jerusalem as Israel's capital which created anger among Arab countries.

3. Troubled East Asia:

- East Asia will remain a troubled region for much of 2018, with the leadership of North Korea intent on playing increasingly dangerous games and engaging in nuclear threats. It is unpredictable at this point whether this would lead to a major destabilisation of the region, with far-reaching consequences for Asia and the world.

4. China-Pakistan Axis:

- The future of the rest of the Asia in 2018 is again dependent on how the strategic triangle of state relations between China, Pakistan and India plays out, as also the extent to which events in West Asia deteriorate. The situation has become more complicated as China and Pakistan have further strengthened their axis, which is inimically disposed towards India.

5. Quadrilateral Security Dialogue(Quad):

- US, Japan, Australia and India had agreed to create a coalition(Quadrilateral Security Dialogue or Quad) that would patrol and exert influence on waterways from the Indian Ocean to the Pacific to the (much disputed) East and South China Seas.
- The Quad's rebirth highlights the growing suspicion and unease about China's military and economic rise.
- In addition to it, the breakdown of the institution of the state, as is evident in Afghanistan and Syria, that poses far more pressing problems for Asia.

India – China relations

In 2017, India-China relations had steadily deteriorated. China is clearly peeved that India refuses to participate in its Belt and Road Initiative that straddles Asia and Europe. The stand-off at Doklam in mid-2017 was possibly intended by China to be a 'shot across India's bow', to send a message to India.

China can also be expected in 2018 to resort to other pressure tactics against India.

- Backing Pakistan in 'needling' India is certain to be one.
- Additionally, China can be expected to intensify its moves to displace India as the major partner in relations with many of India's neighbours — 2017 had already seen China moving in this direction vis-à-vis Nepal, the Maldives, Sri Lanka, Bangladesh and Myanmar.

- As it is, China has succeeded to some extent in denting India's long-standing relationship with Russia, having established a strategic congruence with that country.

Way ahead for India in dealing China

- ✓ India would need to be on its guard in 2018 as China consolidates its takeover of Gwadar (Pakistan) and Hambantota (Sri Lanka) ports. Together with China's establishment of a base in Djibouti (on the Horn of Africa), India could find itself at the receiving end of China's encirclement game.
- ✓ As India grows closer to the U.S. in 2018, the India-China equation could further worsen. The most recent National Security Strategy of the U.S. refers to China as a 'rival', while welcoming India's emergence as a 'strategic and defence partner'. This is certain to ratchet up the rivalry between India and China in the Asia-Pacific region, likely to be further compounded by India's association with the Quad.

Looking at Pakistan

Again, 2018 holds out little prospect of an improvement in India-Pakistan relations.

- The last year ended with a serious ceasefire violation along the Line of Control in the Rajouri Sector, in which army men, including a Major, were killed.
- In 2017 there was an over 200% increase in ceasefire violations, with infiltration touching a four-year high.
- This year began with a major terrorist attack by Jaish-e-Mohammad (JeM) elements on a Central Reserve Police Force (CRPF) camp in Avantipur (Pulwama district) in which five CRPF men were killed.
- The treatment meted out to the family of Kulbhushan Jadhav (currently incarcerated in a Pakistani prison) and the fake news that followed their visit provides an index of Pakistan's cold, calculated and consistent hostility towards India.
- The South Asian Association for Regional Cooperation (SAARC) continues to remain in cold storage.
- Pakistan has also not refrained from persisting with its proxies like the Lashkar-e-Taiba and the JeM in its war with India.

India must be prepared

- In its neighbourhood, India must be prepared during 2018 for a further deterioration of the situation in already disturbed Afghanistan. The Afghan state is in real danger of imploding, and this situation could worsen.
- The latest attack by Mr. Trump on Pakistan's duplicity in dealing with terrorism could well result in Pakistan adopting a still more perverse and disruptive role here, and providing further encouragement to the Afghan Taliban and the Haqqani network.
- The current peace talks may well collapse as a result. Any possibility of exerting greater military pressure by the North Atlantic Treaty Organization and allied forces may prove futile.

West Asia in turmoil

The situation in West Asia in 2018 could well turn out to be far grimmer than in 2017. The entire region is in turmoil.

- Syria has almost ceased to be a state. The war here entails major powers like the U.S. and Russia, proxies for certain West Asian countries, a mix of non-state actors, apart from terrorist outfits such as the Islamic State (IS) and al-Qaeda.
- Intrinsic to the Syrian and West Asian imbroglio is the on-going war within Islam featuring intense rivalry between Sunni Saudi Arabia and Shiite Iran.
- In addition, there are other forces aggravating an already complicated situation, viz. the war in Yemen, the disruption within the Gulf Cooperation Council.
- Both the IS and al-Qaeda seem to have acquired a new salience lately. The collapse of the so-called Islamic Caliphate and its territorial demise has hardly weakened the terror potential of the IS.

None of these issues is likely to find resolution in 2018, and could suck in more states of the region.

If the U.S. were to follow through with its announcement to recognise Jerusalem as Israel's capital, it might well ignite new tensions across the entire Arab world. This will further inflame radical Islamist ideas and tendencies across the region, paving the way for a new round of conflict.

[8] Avoiding roadkill

Context:

An adult male tiger T2 from Bor Tiger Reserve falls prey to the killer highway NH-6 (Nagpur-Amravati Highway stretch) that cuts the vital corridor between Bor and Melghat Tiger Reserves in Maharashtra. It is a reminder that building unsuitable roads through wildlife habitats has a terrible cost.

It has highlighted the inevitable trade-offs in conservation and development. Conservation groups and National Highways Authority of India (NHAI) have been at loggerheads. Conservationists insist upon mitigation measures such as underpasses on those sections of NH-6 that cut an important wildlife corridor.



The Environmental Impact of Roads

Roads are increasingly common in today's world as human development expands and people increasingly rely on vehicles for transportation on a daily basis. The large network of roads has dramatically altered the landscape and can impact wildlife in a number of deleterious ways. In addition to causing mortality, roads can also shift population demographics and be a source of pollution into the environment.

1. Mortality & Population Declines

- When animals cross roads, mortality is often the result. In fact, road mortality is the leading source of mortality to many wildlife populations. This rate of mortality can severely threaten animals and has been identified as a leading cause of decline in some populations. When a road crosses through an animal's preferred habitat, the chances increase for road mortality.

2. Habitat Fragmentation & Alteration

- In addition to causing direct mortality, roads can have a number of indirect impacts such as habitat fragmentation. When roads create barriers to movement they can impact animal populations in many ways.
- Animals may also suffer by not being able to access particular habitats. When a road runs through a forest, it creates an edge habitat along the portion of the forest that fringes the road.
- Forests fragmented by edges additionally suffer changes in ecological and ecosystem process such as pollination, seed dispersal, and carbon storage.
- Such forests are susceptible to soil erosion and landslides, degrading soil quality, and depleting aquatic reservoirs and water catchments of rivers.

3. Pollution

- Roads can also be a conduit for pollutants into the environment.
- Pollution from roads extends beyond just chemicals, as light and noise pollution from roads can be detrimental as well. Noise from cars can impact birds by disrupting acoustic communication and interfering with warning signals, leading to bird population declines in the proximity of roads.
- When land is cleared for roads, it often facilitates the spread of invasive species.

4. Increase in illegal activities

- Roads make otherwise inaccessible habitats easily reachable. Consequently, increased human settlement and fractal increases in networks of secondary roads can in turn increase illegal activities like poaching or logging, especially in regions where monitoring or enforcement is inadequate or absent.

Human wildlife Conflict in India

- Human wildlife Conflict is one of the major threat to Indian wildlife, human activities such as deforestation, Habitat loss, Lack of prey and illegal roads cut through forest are threaten the safety and survival of wildlife in India.

- Many wild animals have been killed due to road accidents and speeding vehicles passes through the wildlife protected area. Big animals like sloth bears, striped hyena, blue bull and small creatures such as snakes, monitor lizards and Jackal are getting endangered due to roadkill.
- Other than roadkill, wild animals have to also deal with speeding trains, human wild animal interaction and brutal and insensitive animal torture by the villagers. Few of the worst incidents in India are six elephants run over by speeding train in Odisha, speeding train kills six elephants in West Bengal.
- Recently losing a charismatic tiger in its prime to a hit-and-run accident is an irony, given that it is one of the most protected species.
- Successive Prime Ministers have personally monitored its status. Yet, the fate of the big cat, and that of so many other animals that end up as roadkill, highlights the contradictions in development policy.
- The Centre and the National Highways Authority of India have been repeatedly advised by the National Board for Wildlife, as well as independent researchers, to realign or modify sensitive roads.

Mitigation

A number of mitigation strategies have been developed to decrease the harmful impacts of roads on wildlife.

- In cases where patterns of mortality are predictable during certain times of the year, road closures or speed limit reductions during these times may decrease mortality rates.
- Decreasing traffic volume is not likely to be effective when animals avoid the physical surface of the road. In such cases, constructing alternative ways like combination of realignment and creation of long underpasses of crossing the road can be more successful.
- An assessment by the Wildlife Institute of India states that tigers in at least 26 reserves face the destructive impact of roads and traffic. The National Tiger Conservation Authority should insist on modification of existing roads to provide crossings for animals at locations identified in various studies.
- A more robust approach would be to realign the roads away from all such landscapes.
- Users can be asked to pay a small price for the protection of vital environmental features, and more areas for nature tourism can also raise revenues.
- This would ensure that tigers and other animals are not isolated, and can disperse strong genetic traits to other populations.

The road to sustainable development

- ✓ For all this to be efficiently implemented, it is important that government officials, ecologists, conservationists, and engineers have productive discussions to arrive at win-win solutions.
- ✓ In one well-studied case of two populations of breeding tigers in the Kanha-Pench corridor, which also forms part of the sensitive central Indian belt, scientists commissioned by the Environment Ministry found that a national highway could block flow of genes between regions. The remedy suggested was a combination of realignment and creation of long underpasses for animal movement.
- ✓ That is the sustainable way forward, and the Centre should order the modifications without delay wherever they are needed.
- ✓ It would be consistent with the Wildlife Action Plan 2002-2016. Also, curbs should be imposed on traffic on existing roads passing through sanctuaries.
- ✓ This can be done using speed restraints and by allowing only escorted convoys, with restrictions on private vehicular movement at night.

Conclusion

We can pioneer new development models where environmental sustainability and wildlife conservation are given as much credence as economic growth. Building a culture of ecological sensitivity will allow for sustainable use of natural resources and help keep spaces for biodiversity.

[9] The ABC of the RTE

Context:

Since its enactment, the RTE Act has been lauded and criticized. But there has been concern not only over its provisions but also about the lacunae in the school education system. However, there are clauses in the Act which have enormous catalytic potential but that have gone largely untouched and unnoticed.

School education in India

According to the 2011 census, literacy rate in India was found to be 74.04 per cent. Among the states, Kerala leads the literacy rate followed by Goa, Tripura, Mizoram, Himachal Pradesh, Maharashtra, and Sikkim. The lowest literacy rate in India is seen in the state of Bihar.

India has made phenomenal progress since independence in the field of education. Following the Millennium Development framework, by the measure of the Net Enrolment Ratio (NER), India had crossed the cut-off target of 95 per cent, regarded as the marker value for achieving 2015 target of universal primary education for all children aged 6-10 years in 2007-08.

The present education system in India is guided by different objectives and goals but is based around the policies of yesteryears.

- Immediately after independence, a Department of Education under the Ministry of Human Resource Development was set up on August 29, 1947 with a mandate to expand the educational facilities.
- After 1960, the focus on access gradually started moving towards quality. With that vision, the National Policy on Education was formulated in 1968.
- Over subsequent years, several policies have been formulated by the Indian government to ensure that the literacy level is gradually increased with a close monitoring of the quality of education as well.
- Retention of children in schools was of paramount importance in the years that followed.
- With several educational reforms, school drop-out rates have registered a decline with the gender gap of education also showing a dipping.
- More recently, two prominent policies of the Indian government—the Sarva Shiksha Abhiyan (SSA) in 2001 and the Right of Children to Free and Compulsory Education (RTE) Act, 2009 have seen education priorities rise amongst households and catalysed improvements in educational performance.
- Education continues to remain a top priority for the Government of India with rising budgetary allocations.

Major Challenges:

- Steep dropout rates after the elementary level and also at the middle school level and the increasing enrolment gap from elementary to higher secondary are matters of great concern.
- Disadvantaged groups are worse off with the dropout rates for Scheduled Castes and Scheduled Tribes higher than the national average.
- High pupil–teacher ratio, lack of professionally trained teachers, and poor level of student learning resulting in weak learning outcomes at each stage of education are major challenges faced by the Indian school education system today.

Some of the Initiatives of Government of India on School Education

The emphasis on education in the Central Budget has been on the rise in the recent years. Several schemes and budgetary allowances have been announced for the education domain.

- The budget has special focus on education of the girl child with the Beti Bachao Beti Padhao scheme and the resolution of providing girls toilets and drinking water facilities in schools targeted to benefit millions of girls hoping to reduce dropouts in the process.
- Modernisation of the madrasas
- School Assessment Programmes
- Pandit Madan Mohan Malviya’s Teacher Training Programme which will benefit nearly 20,000 teacher trainees studying in Teacher Education Institutions.

- Setting up of virtual classrooms as Communication Linked Interface for Cultivating Knowledge (CLICK) and Massive Open Online Courses (MOOC) and a national e-library.
- The Twelfth Five-Year Plan (2012–2017) targeted to increase the mean years of schooling to seven years and to eliminate gender and social gaps in school enrolment.
- Mid-Day Meal programme to provide free lunch on working days for children in Primary and Upper Primary Classes. The primary objective of the scheme is to improve the nutritional status of children, encouraging poor children, belonging to disadvantaged sections, to attend school more regularly and help them concentrate on classroom activities, thereby increasing the enrolment, retention and attendance rates.
- Under 86th Constitutional Amendment Right to Education was added to the Indian Constitution (Article 21A).
- National Scheme for Incentive to Girls for Secondary Education (NSIGSE) to reduce the drop-outs and to promote the enrolment of girl child belonging mainly to SC/ST communities in secondary schools.
- Scheme for setting up of 6000 Model Schools at Block Level as benchmark of excellence.
- National Means Cum-Merit Scholarship Scheme(NMMSS)
- Rashtriya Madhyamik Shiksha Abhiyan (RMSA) to achieve a Gross Enrolment Ratio (GER) of 75 per cent at secondary stage and universal retention by 2020.

Right to Education Act:

The RTE Act is a game-changer in that it establishes that the onus to ensure free and compulsory education lies on the state. However, there are several challenges existing in our education system.

A focus on below three of these provisions can result in an immediate and noticeable impact.

1. Focus on retention

- ✓ Tracking dropouts and preparing and mainstreaming them into age-appropriate classes has been subsumed into existing scheme activities. Even seven years after its enactment, there are still children on the streets, in fields and in homes.
- ✓ Strategies to ensure retention need to change from the earlier approach of enrolling the un-enrolled. As children out of the fold of schooling are the most hard to reach, such as girls, the disabled, orphans and those from single parent families, the solutions have to be localised and contextualised.

2. Pupil-teacher ratio

The most critical requirement, which has also got the least public attention, is the pupil-teacher ratio (PTR). It is impractical to expect quality education without this.

- According to the Education Department's data, under the Unified District Information System for Education (U-DISE) database 2015-16, 33% of the schools in the country did not have the requisite number of teachers, as prescribed in the RTE norms, for PTR at the school level.
- The percentage of schools that were PTR-compliant varied from 100% in Lakshadweep to 16.67% in Bihar.
- All other forward-looking provisions of the Act such as continuous assessment, a child learning at her own pace, and 'no detention' policies are contingent on a school with an adequate number of teachers.
- No meaningful teaching-learning is possible unless trained teachers are physically present at school.
- States shy away from recruiting or posting more teachers keeping in mind higher salaries and finances, but PTR at the school level is the most critical of all inputs.

Teacher provisioning should be the first option to fund as no educationally developed country has built up a sound schooling foundation without a professionally-motivated teaching cadre in place.

3. Think decentralisation

The third provision is that the academic calendar will be decided by the local authority, which, for most States and Union Territories, is the panchayat.

- This provision recognises the vast cultural and regional diversities within the country such as local festivals, sowing and harvesting seasons, and even natural calamities as a result of which schools do not function academically.

- It is socially acceptable that priority will be given to such a local event.
- Not all festivals and State holidays declared by the State headquarters may be locally relevant.
- So if panchayats, perhaps at the district level, decide the working days and holidays, this would not only exponentially increase attendance and teaching-learning but also strengthen local panchayats, being closest to the field, to take ownership of their schools.
- They would be responsible in ensuring the functioning of the prescribed instruction days.

For inexplicable reasons, the educational bureaucracy has not allowed the decentralisation of academic schedules even in districts.

Open-minded adoption of these provisions, keeping the child in mind, can go a long way in radically transforming our school education sector.

[10] Is radio relevant in the 21st century?

Introduction:

Radio has absorbed new technologies and emerged stronger over the decades.

In the decades since, radio has emerged as the ultimate survivor, adapting itself to the tastes of the newer generations of listeners and absorbing newer technologies.

In the 1980s and '90s, it saw off threats posed by personal video recorders and digital compact discs through a greater emphasis on listener-driven programmes. By the late '90s and early 2000s, radio stations were reinventing themselves to cater to niche audiences:

There were stations dedicated to specific genres of content — talk radio, punk rock stations.



Relevance of Radio in Today's World

Radio continues to be useful in their daily life – informing, educating, entertaining and helping to build their capacities. Radio programmes reach people on site.

- UN Radio has been broadcasting on international peace and security issues, and social, economic and health problems at large; these broadcasts are translated into different languages and aired by UN member nations.
- The UN Radio played a useful role in educating people during the Ebola outbreak in Africa; it is now sensitising people about the Zika virus that is spreading Southern America.
- All India Radio (AIR) is one of the largest broadcast networks in the world. Started as Indian State Broadcasting Service in 1930 by the British Government, today it has 415 stations educating and entertaining people in about 23 languages and 146 dialects. AIR's transmission covers more than 92 percent of India's landmass.
- Besides disseminating information and educating people about government schemes and programmes, AIR plays a vital role in the fields of agriculture and health. Its contribution to the success of Green Revolution was phenomenal.
- Radio has proved to be of tremendous help during natural calamities when the broadcasts go round the clock without a break.
- During Tsunami in December 2004 that created havoc in Tamilnadu coast and Andaman and Nicobar Islands, it helped coordinate relief effort and guide police, and medical teams and those looking for their near and dear ones.
- Radio dispels rumours and myths spread by anti-social elements during such calamities.
- Audio programmes easily surmount barriers linked to literacy.
- The cost of content production is lower than that incurred on producing visuals this allows cheaper broadcasting in a variety of languages, dialects and creative forms.

Radio is an audio medium and doesn't have the advantage of visuals. Yet, it survived the onslaught and is flourishing with the advent of FM across the world, developing and developed countries alike such as the United States, Russia, Japan and India.

Community Radio as an Effective Tool in India

Community radio is a type of radio service that caters to the interests of a certain area, broadcasting content that is popular to a local audience.

- Community radio is confined to a small geographical area. It depends on low power transmission covering not more than 20-30 km. radius.
- It serves a community which uses common resources for livelihood, has common development issues and concerns, which are relatively localized, nevertheless connected to national and regional development goals.
- Today, there are more than 180 community radio stations across India, broadcasting in languages like Bundelkhandi, Garhwali, Awadhi and Santhali — tongues that typically find little or no space on television.

1. Community radio for Agricultural development

Agriculture has always been a highly knowledge-intensive sector requiring continuous information flow. Farmers' quest for authentic, credible and usable information from established systems and traditional practices is ever increasing in this fluctuating global environment, to operate efficiently and compete economically.

- Effective extension, education and communication services are probably some of the key strategies for sustaining agricultural growth, strengthening food security and combating hunger and malnutrition.
- Agricultural extension is the vehicle or system for delivering useful information to farmers and assisting those farmers to develop requisite knowledge.
- Experience with rural radio has shown the potential for agricultural extension to benefit from both the reach and the relevance that local broadcasting can achieve through participatory communication approaches.

2. To Propel Rural Development

It provides a platform for the local people or groups to tell their own stories; share their experiences and thus become active contributors and participants of the media.

- Social awareness programmes and health care measures can also be articulated to the people by means of community media.
- Sangham Radio, which broadcasts on 90.4 MHz, is licensed to *Deccan Development Society (DDS)*, an NGO that works with women's groups in about 75 villages of Telangana.

3. In empowering women

- Community Radio is useful in empowering women through education, entrepreneurial training programs, mass communication and propaganda.
- The Namma Dhwani (Our Voices) of Karnataka is India's first cable CR station. The listeners of this CR are primarily illiterate women, who otherwise have little access to information.
- Its programs not only created awareness among its listeners, but it enhanced the leadership qualities/behaviour in women.
- It has much more impact on women when it comes to creating awareness about health and sanitation, education, savings, food habit and family system.
- It played a catalytic role in changing the life of the rural people.
- Thus, community radio acts a source of effective communication vis-a-vis various developmental works that are on and their implications for the local residents.

Challenges to the Community Radio

Community Radio plays a central role in community development. To play this role they need to provide quality programmes to ensure continued audience, and support from the community. It has been a great success in developed nations but has lacked in developing countries because of illiteracy and lack of awareness among people. Community

radio faces the challenges in effective and quality programme production in terms of content, production quality and community involvement:

- Lack of journalistic and technical skills and thus a consistent demand for training.
- Community Radio derives its strength and popularity from community participation. In practise participation is harder than it seems, because it is labour intensive, requires the right attitude, skills and mobile equipment.
- Without proper management skills, as well as some knowledge of financial management and income generation, it is very hard for Community Radio to survive without donor funding.
- Community Radio is by definition relatively small and often situated in locations where basic services, like a constant supply of electricity, are lacking. Due to these conditions equipment suffers and needs to be vigorously maintained and/or regularly replaced.
- A clear regulatory framework in which Community Radio operates is needed.

Drawbacks for the radio industry

- Monopoly of government and the fee charged by the Prasar Bharati Corporation is exorbitant.
- The huge licensing fee acts as a deterrent. A single frequency for a single city, dished out for a 15-year period, can cost more than ₹100 crore in large metros.
- Radio has stiff competition from the new media. One of the challenges it faces is that it lacks proper measurement tool.

Way Forward

- ✓ Despite its popularity, Television connectivity is not available across the entire country but radio reaches over 99 percent of population. This is why Prime Minister has opted for radio to reach out to the masses. Prime Minister has spoken on subjects like drug abuse, unity in diversity, skill development and problems facing the disadvantaged sections and minorities in his Mann ki Baat programme.
- ✓ Diversifying and creating different revenue streams is extremely critical. They include channels specialising in diverse genres — like news devotional music and rural development programmes.
- ✓ The time has come for the government to reconsider its licensing model. The fee can be determined by the content being offered. There could be content aimed at children or women or sports and the fees can be worked out accordingly. This could also act as a check on the current auctioning process which has led to a lot of speculation.

[11] The much-neglected pollutant

Context:

As a blanket of pollutants descends on large parts of north India, it is important to remember that killer pollutants go beyond particulate matter. A much-neglected pollutant in discussions about pollution is surface ozone (O₃). A recent study shows that O₃ levels will continue to rise drastically, particularly in north India.

An analysis report, "Impact of regional climate change and future emission scenarios on surface O₃ and PM_{2.5} over India", on prevalence of O₃ was recently published.

Good Ozone

- Called stratospheric ozone, good ozone occurs naturally in the upper atmosphere, where it forms a protective layer that shields us from the sun's harmful ultraviolet rays. This beneficial ozone has been partially destroyed by manmade chemicals, causing what is sometimes called a "hole in the ozone."

Bad Ozone

- Tropospheric, or ground level ozone, is not emitted directly into the air, but is created by chemical reactions between oxides of nitrogen (NO_x) and volatile organic compounds (VOC). This happens when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources chemically react in the presence of sunlight. Ozone at ground level is a harmful air pollutant, because of its effects on people and the environment, and it is the main ingredient in "smog."
- Ozone can also be transported long distances by wind, so even rural areas can experience high ozone levels.

Ground-Level Ozone

Ozone (O₃) is a colourless, reactive oxidant gas that is a major constituent of atmospheric smog. Many factors impact ground-level ozone development, including temperature, wind speed and direction, time of day, and driving patterns.

- Ground level ozone is formed by the reaction of NO_x and VOCs under the influence of sunlight hundreds of kilometers from the source of emissions.
- Ozone concentrations are influenced by the intensity of solar radiation, the absolute concentrations of NO_x and VOCs, and the ratio of NO_x and VOCs.
- Peak ground-level ozone concentrations are measured in the afternoon.
- Both natural and anthropogenic sources contribute to the emission of ground-level ozone precursors, and the composition of emissions sources may show large variations across locations.
- Anaerobic biological processes, lightning, and volcanic activity are the main natural contributors to atmospheric NO_x, occasionally accounting for as much as 90% of all NO_x emissions.
- Motor vehicles are the main anthropogenic sources of ground-level ozone precursors. Other anthropogenic sources of VOCs include emissions from the chemical and petroleum industries and from organic solvents in small stationary sources such as dry cleaners.

Impacts of Ozone

- The main health concern of exposure to ambient ground-level ozone is its effect on the respiratory system, especially on lung function.
- Elevated ground-level ozone exposures affect agricultural crops and trees, especially slow growing crops and long-lived trees.
- Ozone damages the leaves and needles of sensitive plants, causing visible alterations such as defoliation and change of leaf colour.



Ground level ozone's Toll in India

Ozone pollution in India is damaging millions of tons of the country's major crops.

- Despite air quality standards passed in the 1980s that were designed to curb industrial and vehicle emissions, pollution remains a major challenge for India.
- Long-term measurements of surface ozone across India—measured on the ground or by aircraft—are not available, making it difficult to get a clear picture of how levels of the pollutant have changed.
- But satellite-based studies show ozone has increased in the last two decades.
- The Centre for Science and Environment (CSE) noted that due to high pollution levels and growing heat stress owing to climate change, the ozone level is frequently exceeding the standards and rising to poor and very poor levels — as classified by the National Air Quality Index (NAQI).
- Delhi-NCR is in the grip of multi-pollutant crisis. Even before the health risk from particulate matter could be addressed, deadly ozone has raised its ugly head in Delhi and NCR.

Way Forward

- ✓ Climate change will adversely impact soil moisture, rains, or vegetation density, which will further impact the absorption of ozone. The scenario is scarier when tabulating man-made sources such as vehicles, power plants, or any machinery that uses fossil fuels, where the O₃ component will increase by up to 45% in parts of north India.
- ✓ The increase, albeit in varying degrees, will be seen in much of the subcontinent save for a few spots close to the Western Ghats — perhaps a lesson on how to contain pollutants — where O₃ will actually decrease by 4%.
- ✓ Surface ozone not only damages health but also destroys crops. In a country where food insecurity is high, this should be reason enough to act.

[12] A new weapon in the carbon fight

Context:

Policy is usually focussed on reducing greenhouse gas (GHG) emissions from the electricity sector, transport and industry. There has, however, been a renewed interest in understanding how soils can serve as a sink for carbon dioxide since atmospheric concentrations of carbon dioxide have crossed 410 parts per million and oceans are already turning acidic.

Besides, increasing soil carbon offers a range of co-benefits and this would buy us time before other technologies can help us transition to a zero-carbon lifestyle.

What is soil organic matter?

- Significant carbon pools on earth are found in the earth's crust, oceans, atmosphere and land-based ecosystems. Soils contain roughly 2,344 Gt (1 gigatonne = 1 billion tonnes) of organic carbon, making this the largest terrestrial pool.
- Organic matter makes up just 2–10% of the soils mass but has a critical role in the physical, chemical and biological function of agricultural soils. Carbon is a measureable component of soil organic matter.
- Soil organic matter (SOM) is mainly composed of carbon, hydrogen and oxygen but also has small amounts of nutrients such as nitrogen, phosphorous, sulphur, potassium, calcium and magnesium contained within organic residues.
- Organic matter contributes to nutrient turnover, soil structure, moisture retention and availability, degradation of pollutants, greenhouse gas emissions and soil buffering.
- It is divided into 'living' and 'dead' components and can range from very recent inputs such as stubble to largely decayed materials that are thousands of years old.
- Storing the carbon contained in organic matter within the soil is seen as one way to mitigate climate change by reducing greenhouse gas emissions (in this case carbon dioxide) but to do this an increase in the more stable or resistant fractions of organic matter is required.

What is soil organic carbon?

- Soil organic carbon (SOC) comes from plants, animals, microbes, leaves and wood, mostly found in the first metre or so. There are many conditions and processes that determine changes to SOC content including temperature, rainfall, vegetation, soil management and land-use change.
- In the presence of climate change, land degradation and biodiversity loss, soils have become one of the most vulnerable resources in the world. Soils are a major carbon reservoir containing more carbon than the atmosphere and terrestrial vegetation combined.
- Soil organic carbon (SOC) is dynamic, however, and anthropogenic impacts on soil can turn it into either a net sink or a net source of GHGs.
- After carbon enters the soil in the form of organic material from soil fauna and flora, it can persist in the soil for decades, centuries or even millennia. Eventually, SOC can be lost as CO₂ or CH₄ emitted back into the atmosphere, eroded soil material, or dissolved organic carbon washed into rivers and oceans.
- The dynamics of these processes highlight the importance of quantifying global carbon fluxes to ensure maximum benefits of SOC to human well-being, food production, and water and climate regulation.
- The Intergovernmental Panel on Climate Change (IPCC) provides guidelines for measuring, reporting and verifying national SOC stock inventories.

Role of SOC in Human Well-being:

1. Achieving the SDGs:
 - As an indicator for soil health, SOC is important for its contributions to food production, mitigation and adaptation to climate change. Maintaining SOC storage at equilibrium or increasing SOC content towards the optimal level for the local environment can contribute to achieving the SDGs.
2. SOC and biodiversity:
 - SOC improves soil structural stability by promoting aggregate formation which, together with porosity, ensures sufficient aeration and water infiltration to support plant growth.

- The amount and quality of SOM (and consequently SOC) determines the number and activity of soil biota that interact with plant roots.
- SOC influences water holding capacity and porosity of the soil.
- With an optimal amount of SOC, the water filtration capacity of soils further supports the supply of clean water.
- Through accelerated SOC mineralization, soils can be a substantial source of greenhouse gas (GHG) emissions into the atmosphere.

Climate change effects on SOC

Temperature and precipitation are the most significant factors controlling SOC dynamics.

- Although the overall impact of climate change on SOC stocks is very variable according to the region and soil type, rising temperatures and increased frequency of extreme events are likely to lead to increased SOC losses.
- SOC hot-spots, which are respectively areas of high SOC, content (e.g. peatlands, black soils, permafrost lands, grasslands and forest soils) and large surface areas of low SOC content (e.g. drylands) constitute major zones of concern. With climate change and unsustainable management, these areas are likely to become net sources of GHG emissions.

However, if managed wisely, they have the potential to sequester large amounts of carbon in their soils, thus contributing to climate change mitigation and adaptation.

SOC management for Climate Change mitigation and adaptation

- Climate change mitigation refers to efforts aimed at restraining, halting and/or reversing climate change through management strategies, behavioural changes and technological innovations that reduce the emission of GHGs.
- Climate change adaptation, on the other hand, refers to efforts aimed at achieving higher resilience towards unprecedented climatic events and conditions. It implies the anticipation of climate change and its adverse effects, and strives to manage them through appropriate actions that minimize the associated risks and negative impacts.

Some management strategies:

It is estimated that an increase of just 1 tonne of soil carbon pool of degraded cropland soils can increase crop yield by several kilograms per hectare.

- Reforestation/afforestation of arable land
- Conservation/reduced tillage
- Crop rotations
- Cover cropping
- Organic farming
- Balanced combined applications of chemical fertilizer and manure
- Avoiding conversion and degradation of native ecosystem
- Restoring drained fields to wetlands
- Planting perennials in degraded/marginal land
- Adopting improved varieties of species with greater yield and/or biomass
- Irrigating water limited systems like Dry lands
- Adoption of genetically modified or naturally bred rice varieties with low root exudation

Soil and agriculture

- After the changes undertaken as part of the Green Revolution, crop yields increased for several decades, but there has also been a dramatic increase in the use of chemicals — pesticides, herbicides and fertilizers. Still, agricultural yields have begun to drop in many places for a variety of reasons primarily related to degraded soils.
- Industrial changes to agriculture have led to a range of adverse effects: loss of biodiversity, elimination of beneficial microbes and insects, reduction in yield, contamination of water bodies and soils, and increasing toxicity and deaths from chemical use in farm households.

- India has a large number of successful sustainable agricultural practices that are consistent with ecological principles. These include natural farming permaculture and organic farming. The knowledge and innovations of farmers who have successfully experimented with these methods must be considered in research and policy.
- The number of farmers in organic farming has been increasing steadily, but many are simply deploying regular agriculture with natural substitutes for chemicals.
- Up to a third of rain fed farmers simply do not have the means to add chemicals, and are organic by default. Many States have some sustainable farming, with Madhya Pradesh reportedly having the highest acreage.

Lessons for India

- ✓ Given that the Local techniques can contribute to relieving a range of challenges, State-level policy makers need to understand better the successes on the ground in India's different agro-climatic zones.
- ✓ They also need to identify what kinds of support are needed by farmers with small holdings to transition from existing practices.
- ✓ Not paying attention to the successes of our own farmers has partly contributed to the agrarian crisis the country now faces.
- ✓ India's population will continue to increase through at least the middle of the century and we need to be able to grow more food, grown in less land and in more severe weather conditions. We should not ignore our own farmers' successes at our own peril.
- ✓ The Parliamentary Standing Committee on Agriculture in its 2016 report in fact recommended "revision of the existing fertiliser subsidy policy and promotion of organic fertilizers".
- ✓ The government has been promoting a Soil Health Card scheme to measure the health of the soils in different parts of the country and in each farm. There is little policy support for natural farming and the alternatives.
- ✓ The ability of soils to sequester carbon is a win-win strategy for farmers, people and for climate change and it is time we stopped ignoring these at the policy levels.

[13] Restoring order in the court

Context:

In an unprecedented move, the four senior-most judges of the Supreme Court held a press conference and raised a banner of revolt against the Chief Justice of India. They alleged that the CJI has been assigning cases, which have far-reaching consequences to the nation, selectively to Benches of his preference, thus ignoring well established convention.

In justification of their otherwise objectionable conduct on these issues, they said they had been left with no other option. They said there was an immediate need to preserve the judiciary system in the country if democracy has to be protected.

Divided opinion

Naturally, this incident has sent shock waves across the country in general and in the legal circles in particular.

- Many former judges, eminent jurists, and senior counsel have found the conduct of the four judges to be highly disagreeable.
- They feel that the image and reputation of the judiciary has been tarnished, and the confidence of the people in the judiciary shaken.

However, a few former judges and lawyers have sought to justify the action by asserting that the judges had no other choice as their repeated pleas to the CJI did not bring about the desired result.

- They also feel that it is more important to address the issues raised by the judges rather than find fault with them for going public.
- According to them, disapproval of the form of protest must not cloud the substance of the grievances.

It is a development that is both momentous and unfortunate

- The press conference held by four senior judges of the Supreme Court has exposed an unprecedented level of disagreement in the top echelons of the judiciary.
- It is regrettable that the banner of revolt has been raised in such a public way against the Chief Justice of India.
- Regardless of who is right in the current dispute over the administrative functioning of the CJI, the reverberations of what took place will not easily subside and will be felt for a long time to come.
- The question is whether it could have been handled internally rather than be dragged into the open like this.
- It is clear that 4 judges' grievances are rooted in their perception that CJI is misusing his administrative powers to assign cases with far-reaching consequences "selectively", disregarding conventions on allocation of judicial work.
- Logically, this is an internal matter of the judiciary, one that is best settled through deliberations in a full court meeting of all the Supreme Court judges themselves.

Cause of differences among judges

- Judicial work is primarily allocated based on a roster, and individual cases are allotted to Benches based on the category under which they fall. Once the roster is fixed, the CJI should ordinarily see that it is duly followed. Exceptions must be rare, and that too only for compelling reasons.
- In an unusual order, regarding controversial Prasad Education Trust case, a Division Bench went ahead to delineate the composition of the Bench to hear the case, in which charges of judicial corruption were made, coupled with hints that there would be a conflict of interest if CJI were to hear it.
- Eventually, a five-judge Bench headed by CJI overturned the order and asserted that the CJI was indeed the master of the roster and that he alone could assign cases and decide on the composition of benches.

Government must stay away from the internal conflict in the Judiciary

- The conduct of the government in maintaining silence on the developments is commendable. The Central government has also rightly made its position clear that this being an internal matter of the judiciary, it will not intervene.
- Rather than be inexplicably silent, it must disclose its position on the Memorandum of Procedure for judicial appointments and communicate this clearly to the Supreme Court. One of the specific issues raised in the letter written by the four judges relates to this issue. They have suggested that since the Centre had not responded to the MoP, effectively it was deemed to have been accepted.

Way ahead

The CJI is the first among equals and he is the captain who has to carry the whole team with him, while enjoying their goodwill and support.

- Rather than brush away the concerns of the four judges, the Chief Justice must convene a meeting of the full court and give them a patient and careful hearing.
- Disapproval of the form of their protest must not cloud the substance of their grievances.
- The stand taken by the Bar Council of India and the Supreme Court Bar Association is also praiseworthy. Both have urged the Supreme Court judges to discuss the issues and settle them amicably by themselves.
- It is best that there is no more airing of differences in public and that this incident is regarded by posterity as an aberration rather than a precedent.

Conclusion

- ✓ About a year ago, the executive and the judiciary were publicly, and often very strongly, disagreeing over judicial appointments. An internal rift in the judiciary is far more serious. It poses the risk of diminishing the image of the judiciary and the esteem it enjoys in society. This institution has illumined national life for more than six decades, but a dark shadow hangs over it now. It is a moment for collective introspection.
- ✓ Let us hope that all the judges of the Supreme Court, including the CJI, will sort out their differences amicably and find a satisfactory solution to the problem.

[14] Are farmers distressed across India?

Context:

Last year, around 184 farmer groups came together from Tamil Nadu, Maharashtra, Madhya Pradesh, Uttar Pradesh, Punjab and Telangana to take part in a 'protest walk', demanding higher prices for agricultural produce. The protest once again highlighted the plight of farmers and the extent of agrarian distress.

Over the last few weeks, across India the price of potatoes has fallen sharply after a year of bumper production caused many distressed farmers left their produce to rot on the roads, and in cold storage facilities.

What's the problem?

The agriculture sector is characterised by instability in incomes because of various types of risks involved in production, market and prices.

The National Commission of Farmers (2006), chaired by M.S. Swaminathan, had pointed out that something "very serious and terribly wrong is happening in the countryside."

- The agriculture growth rates have been unsteady in the recent past. While it was 1.5% in 2012-13, it rose to 5.6% in 2013-14. In 2014-15, the rate dipped to (-) 0.2%, while in 2015-16 it was 0.7%. The provisional estimate puts it at 4.9% in 2016-17. The trend reflects the distress in the agriculture sector.
- The monsoon behaviour has been very erratic and farmers have been facing the problems of severe drought for the past few years.
- Fortunately, there is a bumper crop [unusually large crop growth and harvest] this year, but farmers are not satisfied with the procurement price.
- They are, therefore, unable to repay loans they have taken, both from institutional sources and private moneylenders.
- And without doing so, they will not be eligible for fresh credit for the Rabi [winter] crop. This is one of the reasons why they have been demanding a loan waiver.

Why the crisis?

- The main reason for farm crises is the rising pressure of population on farming and land assets.
- Government data show the average farm size in India is small, at 15 hectare, and since 1970-71, there has been a steady declining trend in land holdings.
- The small and marginal land holdings (less than 2 hectares) account for 72% of land holdings, and this predominance of small operational holdings is a major limitation to reaping the benefits of economies of scale.
- Since small and marginal farmers have little marketable surplus, they are left with low bargaining power and no say over prices.
- Risk because of pests, diseases, shortage of inputs like seeds and irrigation, which could result in low productivity and declining yield; the lower remunerative price; the absence of marketing infrastructure and profiteering by middlemen adds to the financial distress of farmers.
- Also, the predominance of informal sources of credit, mainly through moneylenders, and lack of capital for short term and long term loans have resulted in the absence of stable incomes and profits.
- Farmers face price uncertainties due to fluctuations in demand and supply owing to bumper or poor crop production and speculation and hoarding by traders.
- The costs of farm inputs have increased faster than farm produce prices
- The absence of a robust market for buying and selling forward-looking contracts
- Uncertain policies and regulations such as those of the Agricultural Produce Market Committee, besides low irrigation coverage, drought, flooding and unseasonal rains, are some other factors that hit farmers hard.

Are loan waivers a solution to the agrarian crisis?

- Loan waivers, though temporarily necessary for the revival of farming, do not provide conditions for a secure credit system in the long term. Such relief measures that temporarily ease the pain on farmers, however, will fail to make a significant difference to their lives in the long run.

- The waiver of loans implies that banks will have to be compensated by the government for the amount involved. This means that large sums of money, which could have otherwise gone to strengthen the agricultural infrastructure and research – such as seed production, soil health enhancement and plant protection, will not be available.

Why is productivity low in a sector that employs nearly half the population?

- The share of agriculture in India's GDP has steadily declined since 1950, when it was nearly 45 percent, to 16 or 17 percent now.
- In developing countries like India, agriculture occupies a dominant position in GDP since the secondary and tertiary sectors are not fully developed. As the economy gets diversified with considerable contributions from the secondary and tertiary sectors, particularly IT and service sectors, the share of agriculture has gone down.
- Productivity is quite high in irrigated states like Punjab and Haryana, and in other states like coastal Andhra Pradesh or Thanjavur district of Tamil Nadu. In fact, Indian farmers practise multiple cropping (rice-wheat rotation) wherever there is water.
- Low productivity is related to higher risk contexts such as droughts and pest epidemics, where farmers don't invest in inputs like fertilisers.

Will organic farming help in mitigating the crisis?

- Organic farming helps to improve soil fertility and avoids the use of pesticides, which get into the food chain. So, biologically and nutritionally organic farming confers many benefits.
- The major problem is price support to organic products in order to compensate for the loss in the yield.
- As far as the farmer crisis is concerned, it is largely related to economic factors and organic farming can help those farmers who are able to produce high-value organic products for the national and international market.

How can landless farmers receive better protection?

- The National Commission on Farmers recommended a major non-farm initiative, on the model of the rural township programme of China. This would involve agriculture-based enterprises such as mushroom cultivation, use of bio-pesticides and fertilisers, apiculture, inland and coastal aquaculture.
- This along with the National Rural Employment Guarantee Programme (MGNREGA) can provide social protection to landless farmers.
- Special efforts are also being made to promote market-driven skills for rural women who contribute to about 50 percent of the agricultural work, through the involvement of the agricultural universities and the private sector.

Way forward

- While the farming sector has its own set of risks, like any other economic activity, to increase and ensure stable flow of income to farmers it is vital to manage and reduce the risks by analysing, categorising and addressing them.
- In rainfed areas, water security primarily depends upon rainwater harvesting and the efficient use of the available water through techniques like drip irrigation, and the appropriate choice of farming systems.
- Groundwater augmentation and management is an important method of ensuring adequate and timely availability of water for crops. Fortunately, the concept of 'more crop per drop' is being promoted by the government.
- The government must resolve to address the structural issues and there is a need to give farmers not just a better, but also more stable, return on their crops.

[15] Towards solar-powered agriculture

Introduction:

In the past few years, solar pumps have consistently piqued the interest of various bureaucrats and politicians. The Prime Minister spoke about solar pumps from the ramparts of the Red Fort in 2016. There is no shortage of ideas which the Centre, States, civil society organisations, and enterprises are adopting to enhance penetration of solar for irrigation.

India must exploit the potential of this technology to help farmers meet irrigation needs.

Why do we need to opt for solar powered generators when simple, diesel generators are in existence?**1. Cost:**

- Diesel generators generally preferred over solar powered ones due to the initial cost of installation. But if one can think about the future expenses that would be in store, the individual would prefer solar generators. Diesel generators would need a constant supply of fuel – this would cause the investment to pay back itself, owing to the ever-increasing price of fuel.

2. Pollution:

- In a coal-fired thermal generating station, 1 kWh of electrical energy generated translates to 11.2 tonnes of carbon dioxide emission a year.
- The solar generator not only conserves power, but also reduces pollution. The diesel generator would produce continuous noise, whereas the solar generator doesn't.

3. Reliability

- In warm/hot countries, solar generators are more reliable. But in countries where there is less sunshine and more rains and winds, solar energy doesn't come in handy. However, in Germany, solar energy is used at a much higher level than in North America. Hence, reliability is not an issue when it comes to solar powered gensets.

4. Rising costs

- It is proving increasingly difficult for the government to continue subsidizing the rising costs of generation, transmission and distribution losses, pilferage, etc. The costs and tariffs of electricity continue to rise – the marginal farmer is unable to pay for the electricity

Farmers can sell electricity and save groundwater

- In Kheda district Gujarat, the Solar Pump Irrigators' Cooperative Enterprise (SPICE), which began operating in May 2016, not only made a switch from diesel to solar pumps but also adopted net metering—selling excess power to the local electricity utility.
- Members now have an incentive to save power and curtail their groundwater use, as any leftover power is sold to the local power utility, thereby creating a parallel revenue stream.
- A solar pump is viewed not only as an irrigation asset but also an income-generating asset that has potential to deliver 'climate-proof', risk-free income stream.

**Solar energy will improve resilience of farmers against a changing climate**

- Solar energy is an alternative renewable energy that is increasingly becoming mainstream due to cost feasibility and higher efficiency. Solar energy is inherently decentralized way of energy production. Sunshine is equally distributed everywhere. So, solar power can be generated at the point of consumption.
- Maharashtra is solarising its agricultural feeders by installing solar power plants at the substation level, through competitive bidding. Karnataka is promoting solar pumps for existing grid-connected farmers under a net-metering regime, allowing them to generate additional income by feeding back surplus energy into the grid. In eastern States, GIZ, a German development agency, has piloted community ownership models providing water-as-a-service using solar pumps.
- Despite the diversity of approaches and significant government subsidies, only about 1,42,000 pumps have been deployed till date against a target of one million pumps by 2021. Such limited demand, in a country with 132 million farmers and 28 million existing irrigation pumps, calls for a reflection on existing deployment approaches.
- In India, despite the existing 19 million electrical pumps and about 9 million diesel pumps, 53 per cent of India's net sown area remains unirrigated.
- Solar pumps hold potential to enhance irrigation access, advance low-carbon agriculture, reduce the burden of rising electricity subsidies, and improve the resilience of farmers against a changing climate.
- But farmers' perspectives have to be considered and the local context appreciated when deploying the technology to maximise economic returns.

What can be done to promote solar for irrigation?

1. Target marginal farmers with smaller solar pumps, particularly in areas with good groundwater development potential as many of these marginal farmers relied on buying water, the costliest option for irrigation, or on renting pumps to meet their needs.
2. Couple solar pump deployment with micro-irrigation and water harvesting interventions at the farm and community levels. While lack of irrigation is a major bottleneck, 30% of farmers reported limited water availability for irrigation as a challenge.
3. Focus on technology demonstration and deploy at least five solar pumps in each block of the country. Such efforts could have a profound effect on farmers' willingness to adopt solar pumps and spur bottom-up demand.
 - (a) In regions with already good penetration of electric pumps, prefer feeder solarisation through competitive bidding over solarisation of individual pumps.
 - (b) In regions with prevailing local water markets, promote community-owned solar pumps.
 - (c) Encourage sharing of solar pumps among farmers through farmer extension programmes. Given zero marginal cost of pumping with solar, water sharing, already a prevalent practice in many parts of the country, helps put a marginal price to the water.
4. Provide interest-subsidy to farmers combined with reduced capital subsidy to enable large-scale deployment of solar pumps in a shorter span of time. Such an approach would cover a greater number of farmers, helping them reap the benefits of solar pumps sooner, and increase overall returns to the economy.

Way forward

- ✓ Solar farming is not only environmentally friendly, but also reliable and cost effective. Maintenance cost is low, since there will be fewer moving parts and lesser impact of oil corrosion.
- ✓ Guided by on-ground experiences and an expanding body of research, the government should continuously improve and innovate its support mechanisms on solar for irrigation.
- ✓ The Indian government should help farmers by providing subsidies and loans to acquire solar powered agricultural tools. Agricultural experts should encouraged to guide farmers in operating them.
- ✓ India must exploit the potential of this decentralised technology to achieve the dual national targets of 100 GW of solar and doubling farmer's income by 2022 — setting a world-class example of greening the economy and overcoming its developmental challenges, simultaneously.

[16] Protecting marriages across castes**Context:**

Eight years after the National Commission for Women (NCW) proposed a special law to punish honour killings incited by khap panchayats, the Supreme Court has said that adults are free to marry persons of their own choice and hurting couples, or summoning them before clan members, groups, or a khap, is "absolutely illegal".

India registered 251 honour killings in 2015, recording a big spike in murders carried out by people professing to be acting in defence of their family's reputation.

What is Honour Killing?

An honour killing or a shame killing is the homicide of a member of a family, due to the perpetrators' belief that the victim has brought shame or dishonour upon the family, or has violated the principles of a community or a religion, usually for reasons such as refusing to enter an arranged marriage, being in a relationship that is disapproved by their family, having sex outside marriage, becoming the victim of rape, dressing in ways which are deemed inappropriate.

- Honour killing involves, most often, the murder of a woman or girl by male family members.
- In patriarchal societies, the activities of girls and women are closely monitored.
- The significant feature is the connection of honour killings to the control of individual's behaviour, in particular in regard to sexuality/marriage, by the family as a collective.



- Another characteristic of honour killings is that the perpetrators often do not face negative stigma within their communities, because their behaviour is seen as justified.
- Honour killings have been reported in northern regions of India, mainly in the Indian states of Punjab, Rajasthan, Haryana and Uttar Pradesh, as a result of people marrying without their family's acceptance, and sometimes for marrying outside their caste or religion.
- Honour killings are also widespread in South India and the western Indian states of Maharashtra and Gujarat. (Recently, young Dalit engineering student was brutally murdered in full public view in Tirupur district, Tamil Nadu)

In 1990 the National Commission for Women set up a statutory body in order to address the issues of honour killings among some ethnic groups in North India.

This body reviewed constitutional, legal and other provisions as well as challenges women face. The NCW's activism has contributed significantly towards the reduction of honour killings in rural areas of North India.

Reasons to Honour Killing

A crime in the name of 'honour' is one of a range of violent or abusive acts. This includes emotional, physical and sexual abuse and other coercive acts.

1. Stratification: Sociologist believes that the honour killing continues to take place is because of the continued rigidity of the caste system. Hence in the fear of losing the caste status, which they gain many benefits, makes them commit this heinous crime.
2. Mentality: The mentality of the people till now such that they will not be ready to accept the marriages which have taken place in the same gotra or outside. The society still negatives the right of choice in marriage. And especially for the women it is illegal to right to choice of marriage even imagine it.
3. Lack in Governance: The root of the cause for the increase of it is because the formal governance has not been able to reach the rural areas.
4. Khap Panchayat: The absence of the formal institutions as panchayat Samiti or a constitution gathering leads to the brutal governance of the illegal and extra-constitutionalized panchayat.

Khap Panchayats were primarily called upon by the affluent and upper caste people who desired to consolidate their power and position. They have become highly male-dominated.

Khaps exercise their authority in various ways: they demand payment from couples, impose social or economic sanctions on them, order that they or their families be boycotted, divest the couple of any land or property that belongs to them, and harass, intimidate, or murder them.

1. Sex ratio: The increase in the difference in sex ratio is reason to it. Honour killing are happening in the area where the sex ratio is low and girls are being bought for marriages. One important explanation may lie in the gender imbalance in the society signified by the very low sex ratios which are being further exacerbated by the fewer number of girls being born in the region.
2. Illiteracy : Unknown about the rights which are made to protect them in our constitution incapacity due to lack in education. The honour crime violates Article 14, 15 (1) & (3) 19, 21 and 39 (f) of the Constitution of India.
3. Politician future: Reason to protect Khap Panchayat by politician is mostly for their own future votes because majority in those areas are ironically basis for their livelihoods.
4. Inter, intra-caste marriage: Love in itself is considered as a social crime. Here reputation and ideals of once as draconian who will not allow that marriages.
5. Status : A person's ascribed status is more important than the achieved status.
6. Prestige of every caste: it is not limited to the higher caste but in a section even among oppressed communities like Dalit's and tribal too are indulging in "honour" crimes in a bid to prove that they are no less "honour bound" than the upper caste.

Long road to legal protection

In August 2010, the legal cell of the All India Democratic Women's Association (AIDWA), in consultation with many women's organisations and individuals, drafted a comprehensive law entitled "The Prevention of Crimes in the Name of Honour and Tradition Bill" and gave it to the government.

- The Bill defines honour crimes in relation to a violation of the rights of the couple.
- It reads, “All persons including young persons and women have the right to control their own lives, a right to liberty and freedom of expression, and a right of association, movement and bodily integrity.
- Every man and woman has a right to choose her/his own partner in marriage or otherwise and any action listed below to prevent the exercise of this right shall amount to an offence under the provisions of this Bill.
- The Bill lists the various types of crime, in addition to murder; it suggests preventive measures, it provides for punishment of varying degrees, it includes khap panchayats or other bodies acting in the name of caste or community, it ensures accountability of the police and administration.
- The Bill was supported by the National Commission of Women, which gave a similarly named Bill to the government.

Law commission report on Honour Killing

Two years later, in August 2012, the Law Commission of India, to which a reference had also been made by the government, brought out its own version of the Bill in its Report no 242.

- Although it stated that its draft was closer to the one submitted by the National Commission of Women, in fact it was extremely narrow and conservative in its approach.
- Entitled “*Prohibition of Unlawful Assembly (Interference with the Freedom of Matrimonial Alliances) Bill, 2011*”, the Bill dealt primarily with the “unlawful assemblies” called by caste panchayats to prevent a self-choice

Supreme Court on Honour Killing

Eight years after the National Commission for Women (NCW) proposed a special law to punish honour killings incited by khap panchayats, the Supreme Court has said that adults are free to marry persons of their own choice and hurting couples, or summoning them before clan members, groups, or a khap, is “absolutely illegal”.

Holding honour killings as a slur on the nation, and terming it a barbaric, feudal practice that ought to be stamped out, the Supreme Court directed courts to view such cases as in “rarest of rare” category for awarding death penalty to the convicts.

Way Forward

There has to be an end to a blatant violation of the basic rights of the people sanctified by the law of the land.

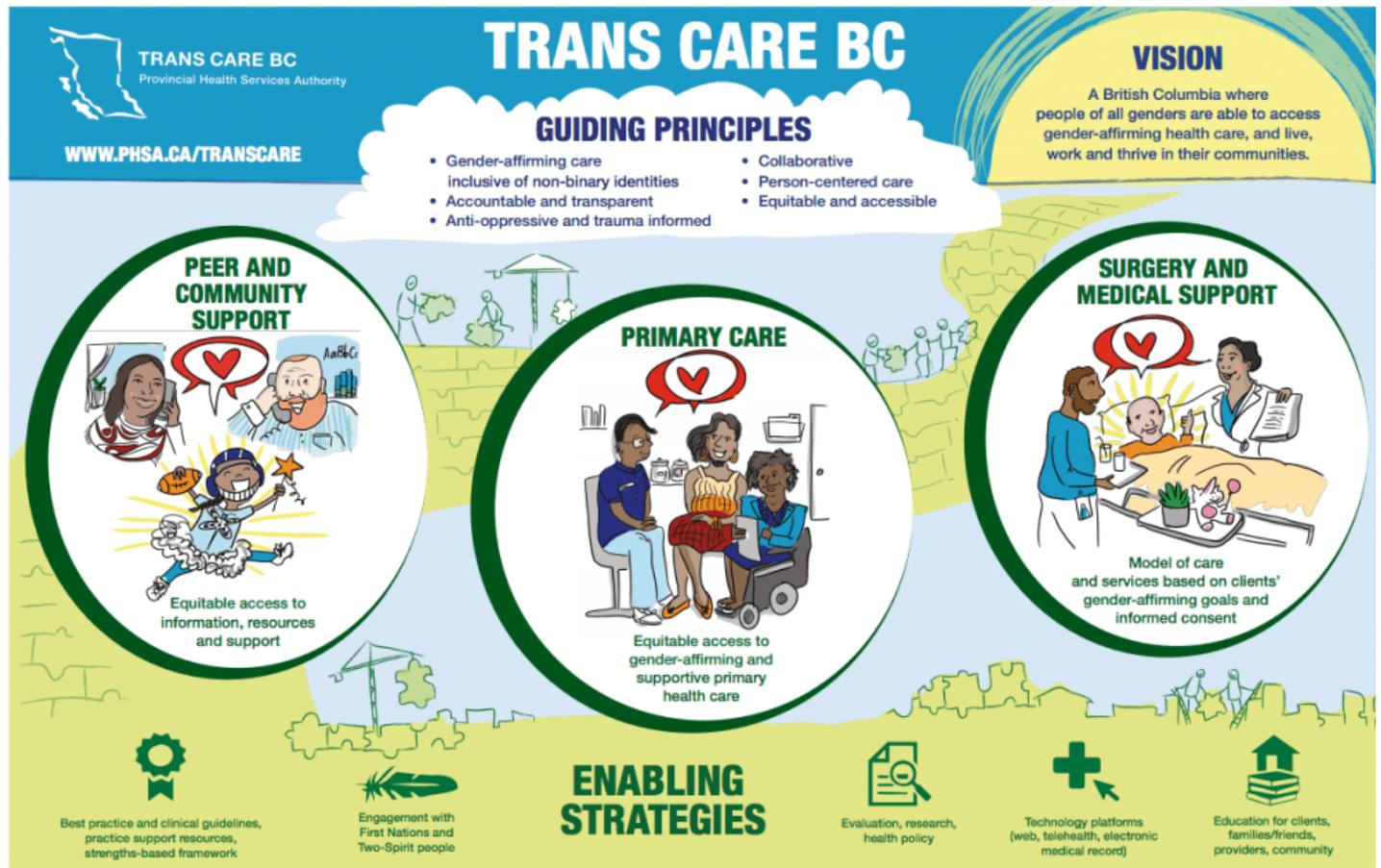
- Role of media in raising burning issues is very brilliant and effective too. One can easily express their views in the front of whole of society, without any fear, even there is a right of freedom to express is also given in our Constitution.
- The mostly areas, as Haryana, Punjab, so on, are the place where female low in number and still practicing the female foeticide. It is very necessary to improve the sex-ratio; gender issue across Haryana, Uttar Pradesh and Punjab, it has been increasingly felt that focus on gender issues are needed there.
- Education is used as arm that has a potential to curb all this social issues.
- The concept of women movement and women’s rights has to reach over these regions. It is imperative for the state to focus on such programmes and projects which help in gender equity. There are the voices of the dissent in the communities where honour killing has been reported. These voices have to be get strength. The agencies like the women and child department, social welfare department and the State Women’s Commission should work on these issues proactively.
- The laws should be clear as detailed in the recent report: 242 law commission of India, issues related to the validity of The Khap Panchayat should be clear to people.
- Women problems can only be sort out when it will be discuss with another women. If Khap Panchayat people would like to continue to the their panchayat communities then according to the equality rights, there should be a provision of one or two women sitting in the Khap Panchayats so that equality right also follow.

[17] Capacity building for primary health care

Context:

A contentious element of the National Medical Commission (NMC) Bill 2017 — an attempt to revamp the medical education system in India to ensure an adequate supply of quality medical professionals —proposes a joint sitting of the Commission, the Central Council of Homoeopathy and the Central Council of Indian Medicine.

This sitting may decide on approving specific bridge course that may be introduced for the practitioners of Homoeopathy and of Indian Systems of Medicine to enable them to prescribe such modern medicines at such level as may be prescribed.

**What does the National Medical Commission, 2017 Bill seek do to?**

The 2017 Bill sets up the National Medical Commission (NMC) as an umbrella regulatory body with certain other bodies under it.

- The NMC will subsume the MCI and will regulate the medical education and practice in India.
- Under the Bill, states will establish their respective State Medical Councils within three years. These Councils will have a role similar to the NMC, at the state level.
- There will be a uniform National Eligibility-cum-Entrance Test for admission to undergraduate medical education in all-medical institutions regulated by the Bill.
- The Under-Graduate Medical Education Board (UGMEB) and the Post-Graduate Medical Education Board (PGMEB): These two bodies will be responsible for formulating standards, curriculum, guidelines, and granting recognition to medical qualifications at the under-graduate and post-graduate levels respectively;
- The Medical Assessment and Rating Board: The Board will have the power to levy monetary penalties on institutions which fail to maintain the minimum standards as laid down by the UGMEB and the PGMEB. It will also grant permissions for establishing new medical colleges.
- According to the Bill, the Ethics and Medical Registration (EMR) Board shall maintain a separate National Register –including the names of licensed AYUSH practitioners.

Functions of the NMC include:

- Laying down policies for regulating medical institutions and medical professionals,
- assessing the requirements of human resources and infrastructure in healthcare,
- ensuring compliance by the State Medical Councils with the regulations made under the Bill, and
- Framing guidelines for determination of fee for up to 40% of the seats in the private medical institutions and deemed universities which are governed by the Bill.
- Perhaps the most controversial provision of all is for a bridge course allowing alternative-medicine practitioners to prescribe modern drugs. One motivation could be to plug the shortfall of rural doctors by creating a new cadre of practitioners.

Why do we need more trained practitioners?

The debates around this issue have been ranging from writing-off the ability of Ayurveda, yoga and naturopathy, Unani, Siddha and homoeopathy (AYUSH) practitioners to cross-practise to highlighting current restrictions on allopathic practitioners from practising higher levels of caregiving.

However, these debates miss the reality: which is a primary health system that is struggling with a below-par national physician-patient ratio (0.76 per 1,000 population, amongst the lowest in the world) due to a paucity of MBBS-trained primary-care physicians and the unwillingness of existing MBBS-trained physicians to serve remote/rural populations.

Urban-rural disparities in physician availability in the face of an increasing burden of chronic diseases make health care in India both inequitable and expensive.

Therefore, there is an urgent need for a trained cadre to provide accessible primary-care services that cover minor ailments such as fever, upper respiratory tract infections, gastrointestinal conditions (diarrhoea, acidity), urological conditions; health promotion services; risk screening for early disease detection and appropriate referral linkages, and ensure that people receive care at a community level when they need it.

Arguments in favour of Bridge Courses and cross-prescription

The issue of AYUSH cross-prescription has been a part of public health and policy discourse for over a decade, with the National Health Policy (NHP) 2017 calling for multi-dimensional mainstreaming of AYUSH physicians.

- There were 7.7 lakh registered AYUSH practitioners in 2016, according to National Health Profile 2017 data. Efforts to gather evidence on the capacity of licensed and bridge-trained AYUSH physicians to function as primary-care physicians have been under way in diverse field settings.
- The 4th Common Review Mission Report 2010 of the National Health Mission reports the utilisation of AYUSH physicians as medical officers in primary health centres (PHCs) in Assam, Chhattisgarh, Maharashtra, Madhya Pradesh and Uttarakhand as a human resource rationalisation strategy.
- In some cases, it was noted that while the supply of AYUSH physicians was high, a lack of appropriate training in allopathic drug dispensation was a deterrent to their utilisation in primary-care settings.
- Similarly, the 2013 Shailaja Chandra report on the status of Indian medicine and folk healing, commissioned by the Ministry of Health and Family Welfare, noted several instances in States where National Rural Health Mission-recruited AYUSH physicians were the sole care providers in PHCs and called for the appropriate skilling of this cadre to meet the demand for acute and emergency care at the primary level.

Way Forward

- ✓ Keeping in view the current realities prevailing in the country, the Act has introduced a system under which the Commission and the heads of the councils of Ayush can design bridge courses legalising Ayush practitioners to prescribe allopathy medicines.
- ✓ Capacity-building of licensed AYUSH practitioners through bridge training to meet India's primary care needs is one of the multi-pronged efforts required to meet the objective of achieving universal health coverage set out in NHP 2017.
- ✓ Current capacity-building efforts include other non-MBBS personnel such as nurses, auxiliary nurse midwives (ANM) and rural medical assistants, thereby creating a cadre of mid-level service providers as anchors for the provision of comprehensive primary-care services at the proposed health and wellness centres.

- ✓ Further, the existing practice of using AYUSH physicians as medical officers in guideline-based national health programmes to ensure uninterrupted care provision in certain resource-limited settings hold promise.
- ✓ Hence ensuing discussions will be well served to focus on substantive aspects of this solution: design and scope of the programme, implementation, monitoring and audit mechanisms, technology support, and the legal and regulatory framework.
- ✓ In the long run, a pluralistic and integrated medical system for India remains a solution worth exploring for both effective primary-care delivery and prevention of chronic and infectious diseases.

[18] A misleading story of job creation

Context:

A recent research report titled "Towards a Payroll Reporting in India" authored by the Group Chief Economic Adviser of the State Bank of India and a professor from the Indian Institute of Management, Bangalore has caught the media's and the Prime Minister's attention.

The main objective of the report was to make a case for a better payroll reporting system in India, which is perfectly justified and needed.

The report also made an extravagant claim that 55 lakh new jobs are created every year in India.

What is the basis of report, 'Towards a Payroll Reporting in India'?

- The estimates in the report is based on organised sector employment data — which include the Employees' Provident Fund Organisation (EPFO), the Employees' State Insurance Corporation (ESIC), and National Pension System (NPS) enrolment numbers — up to the end of November 2017, which the researchers have extrapolated for the full year 2017-18.
- In order to be conservative on estimates, and to avoid any data anomaly, they have excluded the zero-contribution accounts and considered new workers in the age group 18-25.
- The authors said the attempt to capture payroll data in India is similar to the nonfarm payroll numbers published monthly by the United States, which also publishes monthly wage growth data.
- 'Nonfarm payroll' is the term used in the US for any additional jobs during a month, excluding proprietors, farm work, unincorporated self-employment, and employment by private households. The military and intelligence agencies are also excluded. Nonfarm payroll accounts for approximately 80% of workers who produce the GDP of the US.
- Experts say these assumptions and exclusions are justified. Also, this is primarily an establishment survey for collecting information on employment in the unit; therefore, it does not provide information on unemployment.

Organised sector:

- Organised sector covers the businesses where the terms of employment are regular and people have assured jobs.
- Government laid rules and regulations to follow.
- The salaries are paid as per Basic Wage Act.
- The people enjoy the security of employment in organised sector.
- Employees in organised sector enjoy insurance and medical claims and benefits.
- The employees of the organised sector cannot be forced to leave the job without any strong reason.
- The employees of the organised sector are only 8% of the total people but constitute 50% of the GDP of India.
- The employees of the organised sector have extra benefits like overtime pays, paid leaves, medical leaves, etc.



EPFO:

- Manages the funds contributed by the workforce engaged in the organized sector in India.
- EPFO manages a corpus of over Rs 11 lakh crore for its estimated 5.5 crore subscribers across jurisdictions in over 190 industries employing more 20+ people

ESIC:

- It is an autonomous corporation by a statutory creation under Ministry of Labour and Employment.
- Employees' State Insurance is a self-financing social security and health insurance scheme for Indian workers.
- ESIC manages corpus for 1.2 crore subscribers for 65 industries with 10+ employees

NPS (National Pension Scheme):

- It was launched on the *1st of Jan'04* and was aimed at individuals newly employed with the central government and state government, but not including ones in the armed forces.
- NPS currently manages corpus of 50 lakh people in state and central government organisations.

GPF (Government Provident Fund):

- The total number of Government employees is 2 crores (1.67 crores in State Government & Parastatal State Government Units and 33 lakh in Central Government & Parastatal Central Government Units)

What are the suggestions of the Report?

This is the first attempt to report the payroll situation in organised sector in India.

- Monthly Reporting: EPFO, ESIC & NPS in collaboration should publish monthly report of new payrolls in India who have made a first contribution to their schemes monthly with age buckets, geography, and top 20 industry classification. The data could be used by policy-makers to reorient our skill development programmes towards such industries.
- Quality of payroll reporting: The study suggested measures to improve the quality of payroll reporting, such as making it mandatory for professional bodies, hospitals, nursing homes etc. to submit details of new joinees every three months to local government offices.
- From April 1, 2018 Government should ask every GST filer for giving total number of permanent employees on payroll and total no of contract employees on payroll.
- Tax deductions for Domestic help: Report suggested that some tax deduction (per person) may be given for domestic help, if their name and details are registered with tax authorities by the household employing them.
- The report also suggested that the government should continue with the Rs 50,000 extra tax deduction for contributions to NPS and provide new incentives also to encourage people to join NPS.
- In contrast to the new estimates, the Labour Bureau's fifth Quarterly Employment Survey (QES) showed that in the period between January and March 2017, job creation stood at 185,000 as against 122,000 in October-December 2016 and 32,000 in July-September 2016.
- The QES published by the Labour Bureau has several limitations, and does not capture job creation appropriately, the report said.

What are the flaws in analysis?

- There is a seeming disconnect with the key macro-economic numbers and what the Payroll employment study shows. This disconnect is also evident in the consumption, investment trends over the period under consideration.
- Report found that as of November 2017, there were 36.8 lakh new members in the age group of 18-25 years who registered with the EPFO vis-à-vis the previous year. It assumed that any 18- to 25-year-old registering with the EPFO implies that he or she found a new job in the organised sector.
- New 18- to 25-year-old EPFO members do not automatically mean net new jobs in the economy; an informal job that turns formal with an EPFO registration does not mean it is a new job.
- It then extrapolated this November 2017 data to the full year of FY-2018 and boldly claimed that 55.2 lakh new jobs were created in FY-2018.

- This number may not totally be correct because demonetisation recently acted as an external force in formalising employment resulted in thousands of employers retrenching a large part of their informal workforce paid in cash and registering the remaining employees as formal workers with benefits such as provident fund. This upheaval will show up as new formal jobs in the EPFO data set but it does not mean net new jobs were created. The study does not adjust for these effects.
- The GST by design was a policy of formalisation of the Indian economy through a networked system of tax credits which could be claimed only if the business was formally registered under the GST. It is likely then that the GST coerced thousands of small and medium businesses in the country to transition at least a part of their workforce from informal to formal employment.
- The above argument would be further reinforced by the data from an informal study. According to that study, after demonetisation, in FY-2017, the total number of contributing EPFO members grew 20% and by December 2017, it had grown a further 23% where as it was only 7% in FY-2015.
- The EPFO methodology does not capture any of these costs of forced.
- When we talk of new jobs in the economy, we usually mean net new jobs, not gross jobs. So, it is somewhat misleading to claim that the economy has “created 55 lakh new jobs” when we do not know how many lost their existing jobs.

Conclusion

- ✓ If enough jobs are being created over the last year, why doesn't it correlate with the private consumption trends, demand–revival and investments? This is a question that begs an answer.
- ✓ Even if the EPFO-job data is correct and the job scenario is not depressing, hence the government shouldn't alter its focus from job creation. This is because there are far too many youngsters out there entering the job market every month — a number much beyond what the job market can accommodate as of now.
- ✓ Quality data is needed to understand the ground reality. The EPFO-based job data study can be a good start to work out a new payroll model.

[19] Signs of a geopolitical whirlwind

Context:

US President Donald Trump turns tough against Pakistan, accuses Islamabad of lies and deceit; says no more US aid.

US President said his country will not give any more aid to Pakistan as it gave safe havens to the terrorists that attack US troops in Afghanistan. Trump came down heavily on Pakistan on the first day of the New Year, saying Pakistan gave America nothing but lies and deceit. He said the US ‘foolishly’ gave more than 33 billion dollars to Pakistan in aid over the last 15 years.

With these accusations, U.S. President ‘appears’ to be radically resetting his administration’s Pakistan policy, with implications or the rest of South Asia.

Tough action against Pakistan

- The United States has suspended over 1 billion US dollar security assistance to Pakistan until Islamabad takes decisive action against terror groups, including the Afghan Taliban and the Haqqani Network.
- The administration will freeze the aid payments but not allocate the money elsewhere and it would reassess it in the coming year.
- Prominent among the suspended amount is the 255 million dollars in Foreign Military Funding for the fiscal year 2016 as mandated by the Congress.
- In addition, the Department of Defence has suspended the entire 900 million dollar of the Coalition Support Fund money to Pakistan for the fiscal year 2017.
- The US has also placed Pakistan on a **Special Watch List** for severe violations of religious freedom.
- **Pakistan is the only country to be put under the newly-formed list.**
- This is for the first time that the State Department announced its Special Watch List, a new category created by the Frank R Wolf International Religious Freedom Act of 2016.

The official said, the Trump's new policy is not about looking at Pakistan through the lens of Afghanistan, but it is about looking at the region and the future of the US.

US President Donald Trump accused Islamabad of giving nothing to the US but lies and deceit and providing a safe haven to terrorists.

A clever ploy?

- A less worrisome interpretation of President's outrage would be that it is a clever ploy to gain more leverage in a region where the U.S. is seemingly losing ground.
- It is steadily losing its Afghan war, losing ground to China in the region, and China is increasingly interested in politically managing the potential outcomes of the Afghan war.
- And Islamabad so far is seen to have had the best of both worlds — being China's closest ally, while remaining a non-NATO ally of the U.S.
- In that interpretation, US president decided to end the party for Pakistan on January 1, till of course Pakistan agrees to deliver on American concerns regarding China and Afghanistan.

Response from Islamabad

- As an immediate measure, Pakistan has banned the Mumbai terror attacks mastermind Hafiz Saeed-led Jamaat-ud Dawa (JuD) and Falah-i-Insaniyat Foundation from collecting donations.
- Any tightening of the noose around the Taliban is likely to be viewed by the Pakistan army as a strategic blunder, the implications of which would outlast the irresolute U.S. commitment in Afghanistan.
- Caving into U.S. demands would have grave implications for the much-weakened civilian government in Islamabad, especially when all eyes are on the general elections later this year.
- Smooth-talk may be government's way out. The response from Islamabad has so far been verbal, with threats of suspending military and intelligence cooperation with Washington. However, it should be noted that American aid and reimbursements (for expenses incurred by Pakistan in the war on terror) have been declining over the past several years.
- If so, the impact of the U.S. withholding aid may not be exceptionally damaging for Pakistan.
- It would be instructive to watch what role Beijing would play in this war of nerves between its strategic adversary and closest ally.

What are the compelling scenarios that would play out in various ways in the days ahead?

Notwithstanding how Pakistan responds to the U.S., the latter's strong-arm policies have implications for South Asia.

1. This would considerably diminish Pakistan's ability of being China's closest ally, while remaining a non-NATO allies of the U.S even as China and the U.S. inch towards a Cold War of sorts. Pakistan has been steadily moving towards China from the American camp: this will now be a far quicker shift.
2. As a direct consequence of these moves and counter-moves, there would emerge a far severe geopolitical competition in the region, the sharpest since the end of the Cold War.
 - Southern Asia's regional geopolitics would be reshaped along several disconcerting fault-lines.
1. The emerging China-Pakistan-Russia axis is set to play a dominant role in the regional geopolitical order.
2. The role of Iran — which also has hostile relations with the U.S. even as it maintains a crucial strategic partnership with New Delhi — in this grouping would be interesting to watch.
3. The closer India gets to the U.S., the more each of these countries would display their discomfort towards India.
 - The emerging counter-pole is to be led by the U.S., with India and Japan on board, and the increasingly cautious Western powers taking a rather subdued interest.

However, given the rise of China and the retreat of the U.S., current American allies are likely to hedge their bets. The one U.S. ally that has immense influence in Pakistan is Saudi Arabia with which India also maintains a close relationship.

Implications for India

Implications of the U.S.-Pakistan rift may not be as straightforward as they might seem. Even though the American rhetoric against Pakistan is viewed highly favourably in India, the freezing of U.S.-Pakistan relations could potentially have negative implications for the country, certainly in the medium to long term.

- This will mean the end of the indirect influence (through the U.S.) that India has traditionally managed to exert on Pakistan, especially on terror-related issues.
- The ever-strong China-Pakistan ties, without the balancing effect of the U.S. in the region, could push India further to the wall.
- American 'absence' would embolden Chinese manoeuvres against India, and more so, China will be a far less pro-India broker than Washington ever was.

Reluctant India may be pushed to make a choice: either to remain unallied and safeguard its strategic autonomy or walk with the U.S.

Way Forward

- While New Delhi's best bet would be to deal with Washington without closing its doors to Moscow or Beijing, *such fine balancing would require a great deal of diplomatic acumen, strategic foresight and long-term thinking.*
- Moreover, choosing sides while physically located in the middle of a geopolitical whirlwind is no easy task. Such a crucial choice needs to factor in economic relations, defence partnerships, and most of all geographic realities.
- In any case, New Delhi should also closely consider the real intent behind Washington's ire at Islamabad: it's the Pakistani Taliban and the Haqqani network the Americans are after, not so much India-centric terror groups.
- It is also important to note that even though the relations between the two countries were deteriorating in the recent past, the possibility that the U.S. establishment, with long-term interests in Pakistan, might soft-peddle its President's angry outbursts.
- New Delhi should view it as a clash between Pakistani and American geopolitical interests, and not get involved itself. To its credit, then, the response from New Delhi has been guided by 'cautious optimism'.
- A sharper geopolitical competition in the region could also adversely impact the overall sub-systemic stability in the region.
- India needs to carefully consider focussing on infrastructure development, market access, development of regional organisations, and regional conflict resolution mechanisms because unlike both China and the U.S., India is deeply invested in stability in South Asia.

[20] Making our roads safe

Context:

The process of introducing legislation for road safety has been in the making for the past four years. The Motor Vehicles (Amendment) Bill was passed by the Lok Sabha in 2017. If passed by the Rajya Sabha, it will be the first of its kind to extensively reform existing legislation on road safety, the Motor Vehicles Act, 1988.

The Amendment Bill is robust and rectifies several systemic issues by providing for a uniform driver licensing system, protection of children and vulnerable road users, rationalising penalties, and much more.

Main proposals in the Bill:

- The World Health Organisation (WHO) points out that for effective road safety management, it is imperative to have an institutionalised and sustainable data system. This includes information pertaining to drivers, such as types of licences held and a record of violation of traffic laws.



- The driver licensing system in India controls and filters the number and quality of drivers on the road. The inefficiencies of a predominantly manual system, given the scale of licences issued every year, results in lakhs of licences being issued without the prescribed checks and balances.

It is believed that passage of the Bill would help meet the UN mandate to reduce road accidents up to 50 per cent by 2020.

- It makes Aadhaar mandatory for getting a driving licence and vehicle registration.
- For deaths in hit-and-run cases, the government will provide a compensation of Rs 2 lakh or more to the victim's family. Currently, the amount is just Rs 25,000.
- In traffic violations by juveniles, the guardians or owner of the vehicle would be held responsible unless they prove the offence was committed without their knowledge or they tried to prevent it.
- The registration of the motor vehicle in question will be cancelled. The juvenile will be tried under the Juvenile Justice Act.
- The bill has provision for protection of Good Samaritans. Those who come forward to help accident victims will be protected from civil or criminal liability. It will be optional for them to disclose their identity to the police or medical personnel.
- The minimum fine for drunk driving has been increased from Rs 2,000 to Rs 10,000.
- The fine for rash driving has been increased from Rs 1,000 to Rs 5,000.
- Driving without a licence will attract a minimum fine of Rs 5,000 as against Rs 500 at present.
- The fine for over-speeding will go up from Rs 400 to Rs 1,000-2,000.
- Not wearing seatbelt would attract a fine of Rs 1,000 as against Rs 100 at present.
- Talking on a mobile phone while driving will attract a fine of Rs 5,000, up from Rs 1,000.
- A Motor Vehicle Accident Fund will provide compulsory insurance cover to all road users in India for certain types of accidents.
- It will be mandatory to alter vehicles to make them suitable for specially abled people.
- Contractors, consultants and civic agencies will be accountable for faulty design, construction or poor maintenance of roads leading to accidents.
- A time limit of six months has been specified for an application of compensation to the Claims Tribunal with regard to road accidents.
- The Bill removes the cap on liability for third-party insurance. The 2016 Bill had capped the maximum liability at Rs 10 lakh in case of death and Rs 5 lakh in case of grievous injury.
- The time limit for renewal of driving licence is increased from one month to one year before and after the expiry date.
- The government can recall vehicles whose components or engine do not meet the required standards. Manufacturers can be fined up to Rs 500 crore in case of sub-standard components or engine.

Motor Vehicle Act (Amendment) Bill 2017 to change how India drives

Improvement is proposed in the areas of road safety, rural transport, last mile connectivity, public transport, automation, computerization, online services, passenger convenience, online learning licenses, and increasing validity period for driving licenses.

1. Going digital

- The Bill addresses several challenges by introducing technology in the licensing procedure.
- A digitised, uniform and centralised driver licensing system will go a long way in ensuring ease of access, efficiency and transparency in the filtering process.
- The Bill also proposes to introduce digitisation in the monitoring and enforcement of traffic laws.

- Electronic monitoring and enforcement can already be seen in practice in Kerala. The State has a 'city surveillance and traffic monitoring system', and automated traffic enforcement systems to detect traffic light violations as well as speeding.
- The enactment of the Bill will facilitate the replication and creation of such digitised systems for all other States.

2. Good Samaritan guidelines:

- It will help passer-by take appropriate action in helping the wounded in an accident.

3. Children in focus

- Since 2008, in India, over 55,000 children have lost their lives in road accidents. In 2016 alone, 7% of road crash deaths were attributed to children below 18 years.
- The WHO asserts that using child-restraint systems in vehicles decreases the risk of death in a crash by about 70% for infants and 54-80% for small children.
- The Bill proposes to mandate the use of protective headgear by every person above the age of four driving, riding or being carried on a two-wheeler. It provides for measures to be laid down for the safety of children below the age of four.

4. Penalties

- For decades, penalties for behaviour that results in fatalities and grievous injuries have remained minimal, largely unrevised, and, consequently, have failed to deter violators.
- This Bill promises to rationalise these fines. For instance, the penalty for drunk driving has been increased to ₹10,000 for the first offence and ₹15,000 for the subsequent one.

Conclusion:

As a signatory to the Brasilia Declaration on Road Safety, India has committed to reducing, by 2020, the number of road crash fatalities and serious injuries by 50%. This will be impossible to achieve if the sole statute governing road safety in India, the Motor Vehicles Act, 1988, is not overhauled.

The Motor Vehicles (Amendment) Bill, 2017, will serve as the first and most essential step towards fulfilling this vision.

[21] A turtle recovery plan

Context:

Every year, thousands of sea turtles are accidentally captured, injured or killed by mechanised boats, trawl nets and gill nets operated and used by commercial fishermen. They can also sustain internal injuries from fishing hooks or suffer serious external injuries after becoming entangled in nets. Each year, environmentalists record a high number of dead turtles washing up ashore. This heavy toll, of injuries and deaths, occurs when turtles begin migrating to their nesting grounds on beaches and in fishing areas that are their feeding grounds.

Marine turtles along the Indian coast

India has a coastline of more than 8000 km which is rich in biodiversity. Apart from sustaining fishing grounds, India's coastal waters and beaches provide foraging and nesting sites for a variety of marine species, including sea turtles. Five species of sea turtles are known to inhabit Indian coastal waters and islands.

These are the Olive Ridley, Green, Hawksbill, Loggerhead and the Leatherback turtles. Except the Loggerhead, the remaining four species nest along the Indian coast.



In India, though sea turtles are protected under the Indian Wildlife Protection Act of 1972, under the Schedule I Part II, they face grave threats. Some of the major threats include

- unplanned beach development
- By-catch mortality (in trawl nets and gill nets): By-catch is the name given to ocean animals that are unintentionally caught by fishing gear.
- weak enforcement of fisheries and Protected Area regulations
- To a limited extent, killing of turtles for meat and the poaching of eggs.

Breeding Seasons

- The turtle breeding season is usually between November and December. In Tamil Nadu, the Olive Ridley nests between December and April along the Chennai-Kancheepuram coastline. The eastern coastline is the feeding area for Olive Ridley, juvenile Hawksbills and Green turtles. Off-shore waters are also migratory routes for the Olive Ridley while moving towards beaches in Andhra Pradesh and Odisha.
- The coastal state of Odisha on the eastern coast of India experiences one of the world's largest mass nestings or arribada of the Olive Ridley turtle during the months of October to April.
- Three of the world's major mass nesting beaches for this species are located in Odisha, supporting a nesting population of probably more than half a million Olive Ridelys, making this one of the most critical conservation areas for this species globally.

Role of Turtles in marine ecosystem

Sea turtles occupy a unique position within the food web. They consume an assortment of prey, including puffer fish, crustaceans, sponges, tunicates, sea grasses, and algae. The unusual life cycle of the animal plays a vital role in transportation of nutrients from the highly productive marine habitats such as sea-grass beds to energy-poor habitats like sandy beaches. This helps reverse the usual flow of nutrients from land to sea.

- Sea turtles, especially the leatherback, keep jellyfish under control, thereby helping to maintain healthy fish stocks in the oceans.
- The Green turtle feeds on sea grass beds and by cropping the grass provide a nursery for numerous species of fish, shellfish and crustaceans.
- The Hawksbill feeds on sponges in the reef ecosystem and opens up crevices for other marine life to live in.
- Turtles are also transporters of nutrients and energy to coastal areas.
- Unhatched eggs, eggshells and fluids help foster decomposers and create much needed fertilizer in sandy beaches.

As turtle populations in general decline, so does their ability to play a vital role in maintaining the health of the world's oceans.

Integrated conservation measures are needed to rebuild their populations to healthy levels so that they can carry out the full extent of their key roles in ocean ecosystems.

Workable solutions

1. Enforcement of Bans:

- Under current regulations, mechanised trawl boats are not allowed to operate within 8 km of the shore in Andhra Pradesh, 5.5 km in Tamil Nadu and 5 km in Odisha. However, these limits are not being enforced.
- Similarly, nets set for ray fish are banned under the law during the season. However, their use by some categories of fishermen is widespread.
- The ban needs to be enforced at all levels of fishing and monitored by the respective Fisheries departments, marine police and the Indian Coast Guard. All areas where fishing boats land need to be monitored.

2. Turtle excluder devices

- Turtle excluder devices or TEDs, are two-dimensional net inserts with large escape openings for turtles. In India, trawlers meant for shrimp fishing are required by law to be fitted with TEDs. If used correctly, TEDs have been found to reduce turtle captures by 90%.

3. Seasonal Closures

- There are closed seasons for certain types of fishing vessels. Trawlers and motorised craft with an engine output greater than 25 hp are banned. Areas where sea turtles forage and congregate need to be identified and additional seasonal closures need to be implemented within these areas.

4. Vessel monitoring system

- If sea turtle conservation is to have meaning, all trawl boats should be fitted with a vessel monitoring system that must be kept on at all times. This will provide a simple system of monitoring by the Coast Guard.

5. By-catch reduction programmes

- Scientists are now working on programmes such as new fishing nets and gear that reduce the amount of By-catch while fishing. Growing public interest in By-catch reduction programmes is motivated by factors such as an appreciation for endangered species and concern for maintaining marine biodiversity.
- These small but meaningful measures will help the sea turtles that are our marine heritage have another chance at survival.

[22] The arc to Southeast Asia

Context:

This week India will host heads of state or government of all 10 nations (Brunei, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, Laos, Myanmar and Vietnam) of the Association of Southeast Asian Nations (ASEAN) for the Republic Day celebrations in a dramatic declaration of intent by New Delhi to boost India's ties with Southeast Asia.

ASEAN and India: 25 years and beyond

While we commemorate 25 years of ASEAN -India relations, India's ties with Southeast Asia date back more than 2,000 years.

Ancient trade between India and countries such as Cambodia, Malaysia and Thailand is well-documented. Southeast Asian cultures, traditions and languages have been profoundly influenced by these early linkages.

Indic Hindu-Buddhist influences seen in historical sites such as the Ankor Temple Complex near Siem Reap in Cambodia, Borobudur and Prambanan temples near Yogyakarta in Indonesia.

- India became an ASEAN Sectoral Dialogue Partner in 1992, a full ASEAN Dialogue Partner in 1995, and participated in the East Asia Summits (EAS) from 2005.
- The EAS is a key component of an open, inclusive and robust regional architecture, and the region's main strategic Leaders-led forum.
- ASEAN -India relations were further elevated to a strategic partner-ship in 2012, the 20th anniversary of ASEAN -India relations.
- Today, ASEAN and India enjoy multi-faceted cooperation across ASEAN's political-security, economic and socio-cultural pillars.
- Government's 'Act East' policy and 3-C (Commerce, Connectivity, Culture) formula for strengthening engagement with ASEAN speaks to our broad-based cooperation.

India has participated actively in ASEAN -led platforms including the ASEAN Regional Forum, the ASEAN Defence Ministers' Meeting Plus, and the East Asia Summit.

- With the ASEAN -India Free Trade Area (AIFTA), ASEAN -India trade has risen steadily from US\$2.9 billion in 1993 to US\$70 billion in 2016-17 after a period of stagnant growth due to global slowdown of trade.
- On the socio-cultural front, programmes like the ASEAN -India Students Exchange Programmes and the annual Delhi Dialogue foster closer people-to-people relations.
- Delhi Dialogue is a premier annual track 1.5 event since 2009 to discuss politico-security and economic issues between ASEAN and India. (**Track 1.5** to denote a situation in which official and non-official actors work together to resolve conflicts.)

To mark this Silver Jubilee of ASEAN -India relations, both sides have held many commemorative activities. The recent *Pravasi Bharatiya Divas in Singapore* recognised the contributions of the Indian diaspora.

Why 2017 is a landmark year for India, ASEAN ties?

- The year 2017 was an important landmark as India and the ASEAN commemorated 25 years of their partnership, 15 years of summit-level interaction, and five years of strategic partnership.
- To observe India's connections nurtured with ASEAN in the past 25 years, New Delhi is planning a series of events which include signing of an air services agreement, a car rally and a maritime expedition by Indian naval ships to the region.
- The *ASEAN flag will fly in the sky over Rajpath for the first time* this Republic Day as 10 leaders of the grouping will attend the glittering function, which will showcase India's military might.
- Cultural groups from the 10 member-nations of the Association of Southeast Asian Nations staged musicals and plays based on the epic at the festival celebrating the India-ASEAN dialogue. *The festival seeks to highlight the common cultural heritage and India's friendship with ASEAN nations.*
- India's bid to accentuate its links with ASEAN comes at a time of flux in the region with China seen as growing more assertive vis-a-vis its territorial claims in the oil and gas-rich South China Sea.

East Asia (cont.)

- Arc of Islands
 - Mountainous
 - Formed by underwater volcanoes
 - Tectonic Plates
 - “Ring of Fire”
 - Also cause earthquakes
 - Japan
 - Archipelago
 - Chain of islands
 - Taiwan
 - Off coast of China



ASEAN-India Commemorative Summit

ASEAN-India Commemorative Summit in India held at New Delhi on the **theme “Shared Values, Common Destiny”**

- The focus of the Summit will be on counter-terrorism, security and connectivity.
- The highest-level of participation at the meeting will mark 25 years of Indo-ASEAN ties.
- *The meet can be an opportunity for India to present itself as a powerful ally to these countries in the strategic areas of trade and connectivity.*

The Need for ASEAN-India Cooperation

Major global trends are reshaping the strategic outlook, presenting both challenges and opportunities. The strategic balance is shifting. Demographic, cultural and political changes are underway in many parts of the world.

The consensus on globalisation and free trade is fraying, but the Asian story continues to be a positive one. The geopolitical uncertainty gives new impetus to ASEAN's cooperation with key partners like India.

- ASEAN and India share common interests in peace and security in the region, and an open, balanced and inclusive regional architecture.
- India is located strategically along major sea-lanes from the Indian Ocean to the Pacific. These sea lanes are also vital trade routes for many ASEAN Member States. Both sides share an interest in preserving these vital maritime conduits of trade.
- ASEAN and India's combined population of 1.8 billion represents one quarter of the world's population. Our combined GDP exceeds US\$4.5 trillion.
- By 2025, India's consumer market is expected to become the fifth largest in the world, while in Southeast Asia middle-class households will double to 163 million.
- Both regions are also experiencing a demographic dividend – 60 per cent of ASEAN's population is below 35 years old, while India is projected to be the world's youngest country with an average age of 29 by 2020.
- ASEAN and India also have fast-growing internet user bases, which will help us to grow the digital economy.

Against this backdrop, we still have much scope to grow our ties – India accounted for only 2.6 per cent of ASEAN's external trade in 2016.

Challenges:

- There has been a sense of disillusionment on both sides about the present state of play in the relationship.
- India's capacity to provide development assistance, market access and security guarantees remains limited and ASEAN's inclination to harness New Delhi for regional stability remains circumscribed by its sensitivities to other powers.
- The interests and expectations of the two sides remain far from aligned, preventing them from having candid conversations and realistic assessments.
- Though the government's 'Act East' policy is aimed at enhancing India's strategic profile in East and Southeast Asia, New Delhi's main focus remains on South Asia and the Indian Ocean region.
- India's economic focus too is not in tune with other regional powers which view ASEAN as an important market for exports and investments. India's export sector remains weak and the government's focus has shifted to boosting manufacturing domestically.

The Need of the Hour:

It is important for India and ASEAN to chart out a more operational, though modest, agenda for future cooperation.

Economically, India needs to develop connectivity with the region so that economic complementarities can be fully realised. Military, India needs to evolve into a robust security provider in the region. Diplomatically, it needs a sustained outreach. Culturally, it needs to build on the shared cultural linkages.

1. Redouble efforts to promote trade and investment

- We need to keep existing pathways up to date and relevant, including the AIFTA.
- We should work together to conclude a high quality Regional Comprehensive Economic Partnership (RCEP), surpassing the existing AIFTA.
- This would create an integrated Asian market comprising nearly half the world's population and a third of the world's GDP.
- Streamlining rules and regulations will stimulate investments in both directions, complement India's 'Act East' policy and facilitate 'Made in India' exports to the region.

2. Focus on connectivity:

- People will benefit greatly from greater land, air and maritime connectivity. New Delhi now needs to focus on more effective delivery of projects it is already committed to.
- Prompt completion of the India-Myanmar-Thailand Trilateral Highway, which will run from Moreh in Manipur to Mae Sot in Thailand via Myanmar, is the key.
- The plan is to extend this highway to Cambodia, Laos and Vietnam in an attempt to project India's role in the emerging transportation architecture.

- Improving air connectivity between India and ASEAN countries should also be high on the agenda. Focus should be on expeditiously concluding the ASEAN -India Air Transport Agreement.
 - Digital connectivity is another important area of cooperation, and can shape people-to-people connections for the future. India as a facilitator of the ASEAN-wide digital economy would not only challenge China but also emerge as an economic guarantor of its own.
 - The three Cs of commerce, connectivity and culture have been highlighted but a more granular perspective is needed in terms of a forging a forward-looking approach.
3. The cultural connect between the two needs strengthening. While India offers scholarships to students from ASEAN states to study at Nalanda University, this initiative should be extended to the IITs and the IIMs.
- Tourism too can be further encouraged between India and the ASEAN with some creative branding by the two sides.

[23] Should euthanasia be allowed?

Context:

- Elderly Mumbai couple seeks Presidential nod for 'active euthanasia'.
- The couple, Iravati Lavate, 79, a retired school principal, and her husband Narayan, 86, a former government employee, have no major health problems. However, the fear of falling terminally ill and of not being able to "contribute to society" has pushed them to write to the President to seek permission for "doctor-assisted death".
- Lavate said he wrote to the president because the latter has the constitutional power to pardon life sentences, and should also have the power to allow 'right to death'.
- Both the petitioners are in reasonably good health, not afflicted by any serious ailment as on the date of this petition.

National discourse on euthanasia

- It started in India in 2011, when the Supreme Court, while hearing the case of a nurse from KEM Hospital, Aruna Shanbaug, who was in a vegetative state for nearly 30 years, legalised passive euthanasia. Shanbaug was in a vegetative state since 1973 after she was sexually assaulted in the hospital premises. However, she herself couldn't benefit from the case as the petitioner in the case was not her kin. The nurses of KEM, who were caring for her after her family stayed away refused to allow euthanasia. Shanbaug died in 2015, while on a ventilator for several days after suffering from pneumonia.
- There have been applications, including one in 1997 from CA Thomas Master, a Kerala teacher, before Indian courts seeking permission for active euthanasia. The Kerala high court rejected the teacher's plea. He subsequently killed himself in April 2004.

Why does old couple's request unlikely to be heeded?

- The 2011 judgment helped to push the debate to the extent of permitting passive euthanasia for terminally ill patients under the strict supervision of the High Court, in consultation with a team of doctors treating the terminally ill patient.
- Passive euthanasia means withdrawing life support to induce death in a natural way. In contrast, active euthanasia means injecting legal drugs to induce death. This is not permitted in India and so the Lavates' request is unlikely to be heeded as India is not comfortable with the idea.

The chances of its (active euthanasia) misuse is a major cause of concern

- In the Aruna Shanbaug case, which generated a lot of debate, we have to bear in mind that Shanbaug was not in a position to take any decisions herself.
- In the case of terminally ill patients who are provided with expensive health care, whose families know that the patients are unlikely to return to normalcy and given the economic burden on the family and on society to treat these patients, euthanasia could be debated. But euthanasia for those who are mentally alert, though physically disabled, is a big no.

- Euthanasia in that form cannot be allowed or legalised because the probability of its misuse is very high. The decision in favour of euthanasia is far more complex when a person is mentally alert.

The right to life

- The right to life was made more sacrosanct and, over the years, has been seen as a basic feature of the Constitution, thereby making it both fundamental and permanent.
- The significance of this is that if one relinquishes the right, one can do so only in accordance with procedure established by law. Imposing death by way of capital punishment is an example of the right to life being terminated in accordance with the procedure established by law.
- To terminate life, even one's own life, were it to be done without the authority of law, would amount to an unlawful act. In certain cases, it may even be a criminal act. In fact, an attempt to commit suicide is a crime under the IPC.
- There exists no legislation laying down the procedure to permit a person to take her own life. Now the courts are called upon to decide, without having the benefit of legislation to guide their decision-making.

Way forward

- ✓ The right to life under Article 21 has been interpreted by the Supreme Court as the right to live with dignity. The debate now is whether the fundamental right to life extends to the right to choice.
- ✓ The Lavates (Old couple) are physically fit. Nobody should or can allow them to die. Even the courts have ruled that life support can be withdrawn only when the chances of return to life are negligible.
- ✓ But their letter to the President has opened up a new debate in this area. So far, the debate has been confined only to people who are terminally ill. Countries like Canada have given legal recognition to the concept of a "living will", where people lay down directives in advance on how they should be treated if they end up in a vegetative state.
- ✓ Now an important question before the courts is whether the law should allow living wills.

[24] A vote for state funding

Context:

- Indian elections are the world's biggest exercise in democracy but also among the most expensive. India's campaign spend is only matched by the American presidential race, the world's most expensive election.
- Unreported cash continues to make its way into the reserves of political parties and individual candidates. There is very little transparency in who gives and receives corporate contributions.
- Political parties often sidestep any independent audit of their accounts, leaving the public uninformed.
- The system of electoral bonds for making political contributions to political parties is nowhere near the system of transparent political funding that is needed.
- Chief election commissioner recently said, Electoral bonds will not solve all problems pertaining to transparency in political funding, but hoped that it will be a step in the "right direction".

Why were Electoral bonds issued by government?

- India is the largest democracy in the world. However, despite strengthening various institutions for the last seven decades, India has not been able to evolve a transparent political funding system. Elections and political parties are a fundamental feature of Parliamentary democracy. Elections cost money. Yet there has not been a transparent funding mechanism of the political system.
- The conventional system of political funding is to rely on donations. These donations come from a range of sources from political workers, sympathisers, small business people and even large industrialists. The conventional practice of funding the political system was to take donations in cash and undertake these expenditures in cash. The sources are anonymous or pseudonymous.
- Earlier the Income Tax Act was amended to include a provision that donations made to political parties would be treated as expenditure and would thus give a tax advantage to the donor.

- It was hoped that donors would increasingly start donating money by cheque. Some donors did start following this practise but most of them were reluctant to disclose the details of the quantum of donation given to a political party. This was because they feared consequences visiting them from political opponents.
- The law was further amended to provide for “**pass through**” **electoral trust** so that the donors would park their money with the electoral trusts which in turn would distribute the same to various political parties.
- Both these reforms taken together resulted in only a small fraction of the donations coming in form of cheques.
- Last year, **Electoral bonds**, which were introduced by the government to *make funding to political parties transparent*, will allow a political donor to purchase bonds from authorised banks and can be redeemed by parties only through registered accounts in a prescribed time frame.

What is Electoral Bond?

- An electoral bond is designed to be a bearer instrument like a Promissory Note — in effect, it will be similar to a bank note that is payable to the bearer on demand and free of interest. It can be purchased by any citizen of India or a body incorporated in India.

How do we use it?

- The bonds will be issued in multiples of ₹1,000, ₹10,000, ₹1 lakh, ₹10 lakh and ₹1 crore and will be available at specified branches of State Bank of India.
- They can be bought by the donor with a KYC-compliant account.
- Donors can donate the bonds to their party of choice which can then be cashed in via the party’s verified account within 15 days.
- Every political party in its returns will have to disclose the amount of donations it has received through electoral bonds to the Election Commission. The entire transactions would be through banking instruments.

What are the other conditions?

- Every party that is registered under section 29A of the Representation of the Peoples Act, 1951 and has secured at least one per cent of the votes polled in the most recent Lok Sabha or State election will be allotted a verified account by the Election Commission of India.
- Electoral bond transactions can be made only via this account.
- The bonds will be available for purchase for a period of 10 days each in the beginning of every quarter, i.e. in January, April, July and October as specified by the Central Government.
- An additional period of 30 days shall be specified by the Central Government in the year of Lok Sabha elections.
- The electoral bonds will not bear the name of the donor. In essence, the donor and the party details will be available with the bank, but the political party might not be aware of who the donor is.
- The intention is to ensure that all the donations made to a party will be accounted for in the balance sheets without exposing the donor details to the public.

Will it be tax deductible?

- The maximum amount of cash donation that a political party can receive **is capped at ₹2,000**(from ₹20,000) and that parties be entitled to receive donations by cheque or digital mode, in addition to electoral bonds.
- A donor will get a deduction and the recipient, or the political party, will get tax exemption, provided returns are filed by the political party.

What are the shortfalls of Electoral bonds raised by the critics?

1. Lack of Transparency:

- The scheme defeats the purpose for which it was envisaged. The name of the donor will not be revealed either to the party or to the public. So, the problem to replace anonymous donations and bring about transparency and accountability towards voters will remain the same. This would lead to further opacity in the funding process and further limit oversight and accountability.

2. Generation of Black money

- Opacity will lead to generation of more and more black money into the political system.
3. Politico corporate nexus
- Government removal of cap on donations of money to political parties by corporations and the current rule of maintaining anonymity of the donor will further increase the corporate and politicians nexus to work towards the fulfilment of their own selfish aims. It will hamper democracy and making it less answerable to the individual voter and more responsive to deep-pocket special interest groups.
4. Given that the State Bank of India is owned by the Union government, this raises the spectre that data on donors could be made available to the ruling party to be used to its benefit.
- Due to these shortfalls, electoral bonds cannot address the problems that arise from the corporate control over politics and corporate capture of government policies and decisions. Electoral bonds may result in unlimited and undeclared funds going to certain political parties which will be shielded from public scrutiny as the balance sheets will not show which party has been the beneficiary of this money.

What are the other things that will end up strengthening the business-politics nexus?

- Lifting of the maximum limit of 7.5% on the proportion of the profits a company can donate to a political party, thus opening up the possibility of shell companies being set up specifically to fund parties;
- Amendment of the Foreign Contribution (Regulation) Act (FCRA) opening the floodgates of foreign funding to political parties, especially those which have a foreign support base;
- The refusal of political parties to come under the RTI Act in order to conceal their sources of funding.

These three things will end up strengthening the business-politics nexus. It goes against the position taken by various electoral reform committees that the existing pattern of political funding encourages lobbying and capture of the government by big donors.

- Far from making the funding process transparent, the bond scheme could provide a backdoor to corporates and other lobbies for shaping public policy to benefit their interests.
- All registered parties were required to disclose to the EC the identity of individuals and private entities donating more than ₹20,000 every year.
- Proposed amendments to the Income Tax Act and the Reserve Bank of India (RBI) Act will exempt parties from keeping records of donations made through bonds.
- However, the decision to reduce cash contributions from ₹20,000 to ₹2,000 is a step in the right direction, but the net effect is debatable, since it could prompt parties to take smaller cash donations, and therefore not declare their source.

Way forward

- ✓ Elections that work well are essential for democracy; conversely, money power can corrode the entire process. A major concern associated with the high cost of elections is that it prevents political parties and candidates with modest financial resources from being competitive in elections.
- ✓ A number of government committees have outlined reform proposals to contain the negative effects of the high cost of elections. These include strong disclosure norms, strict statutory limits on election expenses and ceiling on corporate donations to political parties.
- ✓ The rules to limit and restrict the campaign expenditure of parties are largely inoperative because it is easy to circumvent them.
- ✓ India's privately funded election campaign stands in contrast to the trend in most countries, which have partial or full public funding or transparent regulation and financial accountability of political finance as in the U.S.
- ✓ State funding of elections is a potential solution to this problem. The **Indrajit Gupta Committee** on State Funding of Elections had endorsed partial state funding of recognised political parties and their candidates in elections way back in 1998, but the lack of political will has prevented any serious discussion on this.
- ✓ The mechanics of this process need to be carefully worked out to establish the allocation of money to national parties, State parties and independent candidates, and to check candidate's own expenditure over and above that which is provided by the state.

[25] Red alert on the green index

Context:

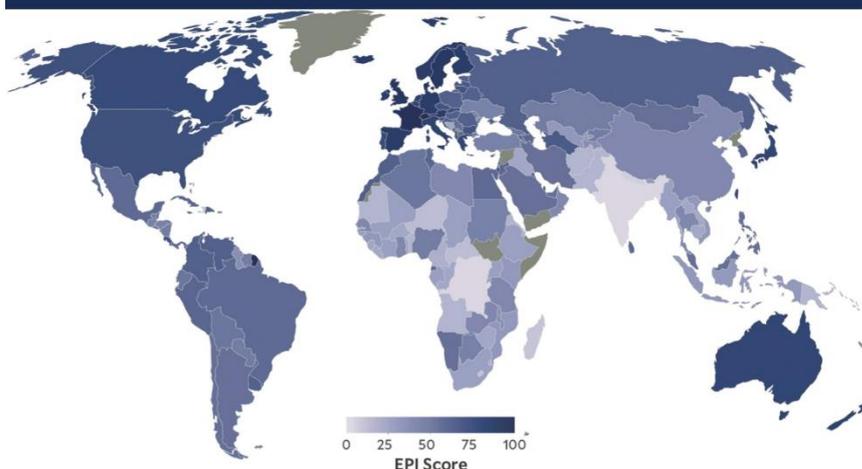
- Reports on India are improved ranking in the World Bank's 'Ease of Doing Business' Index (from 130 to 100) has been cause for much celebration. As a follow-up to this, the government announced additional reform measures to further improve the ranking.
- However, coinciding with this is the news that out of the 180 countries assessed, India ranks low in the Environmental Performance Index (EPI) 2018, slipping from rank 141 in 2016, to 177 in 2018.

Environmental Performance Index (EPI)

The Environmental Performance Index (EPI) is a method of quantifying and numerically marking the environmental performance of a state's policies. This biennial report prepared by Yale and Columbia Universities along with the World Economic Forum.

- The EPI ranks countries on 24 performance indicators across 10 issue categories.
- The 10th EPI report ranks 180 countries on 24 performance indicators across 10 categories covering environmental health and ecosystem vitality.
- Of the emerging economies, China and India rank 120 and 177 respectively, reflecting the strain population pressures and rapid economic growth impose on the environment.
- Its overall low ranking — 177 among 180 countries — was linked to poor performance in the environment health policy and deaths due to air pollution
- The report said deaths attributed to ultra-fine PM2.5 pollutants have risen over the past decade and are estimated at 1,640,113 annually in India.
- Switzerland leads the world in sustainability, followed by France, Denmark, Malta and Sweden in the EPI.
- A drop in an index ranking environmental performance should be cause for concern and used as a context to examine our policy measures.

2018 ENVIRONMENTAL PERFORMANCE INDEX



Global metrics for the environment: Ranking country performance on high-priority environmental issues

Government's recent initiatives for environmental protection

- In December 2015, it notified new, strict environmental standards for coal-fired power plants, to be effective from January 2018.
- An aggressive target was set to implement Bharat Stage VI emission norms from April 1, 2020, skipping Stage V norms.
- In 2017, the Minister of State for Power and Renewable Energy said that a road map was being prepared so that only electric vehicles would be produced and sold in the country by 2030.
- In order to accelerate the transition to renewable sources of power, the government, under the National Solar Mission, revised the target for setting up solar capacity from 20 GW to 100 GW by 2021-22.
- The Centre has also assured the Supreme Court of India that the highly polluted Ganga will be cleaned up by 2018.

A big gap between policy goals and action

While we seem to be moving in the right direction on solar targets, we are seriously lagging behind in a number of other goals. There are many examples to support this argument.

- The government has gone back on its promise of implementing strict power plant emission norms by December 2017.
- The automobile industry has categorically stated that based on current estimates, full conversion to electric vehicles is realistically possible only by 2047.
- After setting electronics manufacturers a reasonable annual electronic waste collection target of 30% of the products sold in the market, the figure has now been relaxed to 10%.
- And late last year, the Comptroller and Auditor General, in a report, pulled up the government for not developing an action plan and for its poor utilisation of allocated funds in the clean-up of the Ganga.

Environmental degradation costs India \$80 billion a year: World Bank

India's steady economic growth over the last decade has improved the country's average income and has brought out millions above the poverty threshold. This remarkable economic growth has, however, been clouded by a sharp degradation of environment causing scarcity of natural resources.

Considering the size and diversity of India's economy, environmental risks are wide ranging and are both driven by prosperity and future poverty.

- Poverty remains both a cause and consequence of resource degradation: agricultural yields are lower on degraded lands, forests and grasslands are depleted as livelihood resources declined.
- Environmental degradation of air, soil and water, especially fresh water reserves' depletion in India coupled with the impending resource scarcity are exacerbated by the climate change issues.
- In a recent survey of 178 countries whose environments were studied by the International Labour Organization, India ranked 155th overall and almost the last in air pollution.
- Also according to another WHO survey across G-20 economies, 13 of the 20 most polluted cities were in India.
- The report by World Bank "Diagnostic Assessment of Select Environmental Challenges in India" – observed that India has performed remarkably economically, but that's not reflected in its environmental outcomes.
- The report finds the air pollution, the biggest culprit. According to this report the higher costs of air pollution are primarily driven by an elevated exposure of the young and productive urban population to particulate matter pollution that results in a substantial cardiopulmonary and chronic obstructive pulmonary disease.
- A recent study by the World Bank and the Institute for Health Metrics and Evaluation, University of Washington, Seattle, U.S., showed air pollution to be the cause of an estimated 1.4 million premature deaths in India, which translated into a welfare loss equivalent around 8% of India's GDP in 2013. In addition, the cost of lost labour productivity was 0.84% of its GDP.

These figures reflect the enormity of the problem. A significant concern is also the fact that the poor are affected disproportionately because of environmental degradation.

Way Forward

- ✓ Viewing environmental problems even from a purely market logic suggests that the solutions lie in recognising the environmental costs of development and "getting the prices right".
- ✓ Rapid transition to solar energy can be accomplished not only by enabling subsidies but also by pricing the more polluting fuels correctly.
- ✓ The strict environmental standards should be defined for coal plants.
- ✓ Similarly, the transition to electric vehicle use would be aided by pricing petrol and diesel, and perhaps the vehicles that use these fuels, to reflect their external costs to society.
- ✓ The current environmental problems are linked also to the lack of political will to implement even existing environmental laws and regulations.
- ✓ It is not possible to restore environmental quality overnight. However, we must ensure that we are moving forwards, not backwards, in meeting our environmental targets.
- ✓ Being among the four worst countries in the world in terms of environmental performance should hopefully serve as a wake-up call.

[26] A road map for renewal**Introduction:**

The Economic Survey, a statutory document tabled in Parliament, is meant to be a scorecard of the economy for the current fiscal year. But over the years, it has transformed into a sourcebook for data and policy analysis. Big Data has been mined to shed light on the economy.

New facts on the Indian Economy mentioned in Economic Survey, 2018**1. Increase in Tax payers:**

- There has been a large increase in registered indirect and direct tax payers
- A 50 % increase in unique indirect tax payers under the GST compared with the pre- GST system.
- Similarly there has been an increase in income tax filers since November 2016.

2. Formal non-agricultural payroll:

- Percentage of non-farm employment is much greater than believed.

3. State's property in correlation with Trade:

- State that export more internationally, and trade more with other states, tend to be richer.
- But the correlation is stronger between prosperity and international trade.

4. Export Structure:

- India's firm export structure is substantially more egalitarian and is more diversified than in other large countries.
- Top 1 percent of Indian firms account for 38 percent of exports. In other countries, they account for a substantially greater share.
- It is promising to note the important role of small and medium enterprises in industrial employment and exports.

5. Preference for son leads to skewed sex ratios

- Indian society exhibits strong preference for son.
- Survey mentions that Parents continue to have children until they get the desired no of sons. This kind of fertility-stopping rule leads to skewed sex ratios.

6. Litigation in Tax disputes

- There is substantial avoidable litigation in the tax arena which government action could reduce.
- The tax department's petition rate is high even though its success rate in litigation is low and declining.
- According to Survey, Only 0.2 percent of cases accounted for 56 percent of the value at stake
- About 66 percent of pending cases (Each less than Rs. 10 Lakh) accounted for only 1.8 percent of the value at stake.

7. Growth slowdowns are preceded by investment slowdowns

- Cross-country experience shows that growth slowdowns are preceded by investment slowdowns but not necessarily by savings slowdowns.
- To re-ignite growth, raising investment is more important than raising saving.
- There is economic evidence suggesting competitive exchange rates are more important for export-led growth.

8. Lack of direct taxation powers to states and local governments

- Own direct tax collections by Indian states and local governments are significantly lower than those of their counterparts in the other federal countries.
- The share is low relative to the direct taxation powers they actually have.

9. Evidence of Climate change in the country

- The footprint of climate change is evident and extreme weather adversely impacts agricultural yields.
- Unirrigated ones would have twice the impact than irrigated ones.

What are major reforms undertaken over the past year?

- The Goods and Services Tax (GST) was launched in July, 2017. The policy of such scale, scope and complexity affected the informal sector. The transition encountered challenges of policy, law and IT systems.
- Decisive action through 4 R's (Recognition, Resolution, Recapitalization and Reforms) was taken to tackle Twin balance sheet challenge.
- The new Indian Bankruptcy Code (IBC) has provided a resolution framework for corporates to clean-up their balance sheets and reduce debts.
- Government announced a large recapitalization package to strengthen the balance sheets of PSBs which are reeling under the pressure of NPAs.

These reforms would resume spending and enable banks to lend to critical but currently-stresses sectors of Infrastructure and Manufacturing.

How have been macroeconomic developments this year marked by 'swings'?**In the first half,**

- India's economy temporarily "**decoupled**," that means, India's growth had been accelerating until early 2016, when Growth in other countries was decelerating. But then the converse happened. The world economy witnessed a gradual recovery, but India's GDP growth decelerated even as India remained the second-best performer amongst major countries.
- Reasons for the swings are demonetization, Transformation into new GST regime, rising real interest rates, the Twin Balance Sheet challenge, and sharp falls in certain food prices that impacted agricultural incomes.

In the second half,

- Indian economy witnessed signs of revival as economic growth improved and global economic recovery boosted exports.
- Reflecting the cumulative actions taken by the government to improve the business climate, India jumped 30 spots on the World Bank's Ease of Doing Business rankings, while similar actions to liberalize the foreign direct investment (FDI) regime helped increase flows by 20 percent.
- However, these solid improvements coupled with negative fall outs such as higher Fiscal deficits, the current account, and inflation, reflecting in part higher international oil prices.
- Rising capital flows, especially into debt instruments, in liberalized FDI regime caused the rupee to strengthen, dampening both net services exports and the manufacturing trade balance
- Survey hints that some slippage from pre-announced fiscal deficit targets is to be expected in this pre-election Budget. The bond markets react to fiscal slippage negatively and already there is sell-off of bonds. This will lead to a rise in interest rates. The biggest loser from a higher interest rate is the biggest borrower in the system, the Government of India.

What are the broader lessons for the Indian economy going forward in the medium term?**1. Stabilize GST implementation:**

- The government will need to stabilize GST implementation to remove uncertainty for exporters, facilitate easier compliance, and expand the tax base.
- Tax-GDP ratio has to be improved to tackle macro-economic vulnerabilities w.r.t fiscal and capital accounts when the oil prices rise. The GST could help to overcome this problem with positive spill overs for macro-economic stability.
- GST council, which strengthens cooperative federalism, could be used as a platform to create a common agricultural market, integrate fragmented and inefficient electricity markets, solve interstate water disputes, implement direct benefit transfers (DBT), make access to social benefits portable across states, and combat air pollution.

2. Focus on the 4 R's

- The government will need to focus on the 4 R's, ensuring that the process of resolving the major indebted cases and recapitalizing the PSBs.

3. Resolving Tax litigation

- The total amount estimated to be locked up in tax disputes is more than ₹8.2 lakh crore.
- The Economic Survey points out that such a high rate of pendency and the huge amounts stuck in litigation are hurting India's ease of doing business.
- IBC should aim to solve Twin balance sheet problems through the expedient of transparently auctioning off stressed firms to the highest bidders.
- The decision to ban promoters of firms with non-performing loans from the IBC auctions may have been necessary to minimize moral hazard going forward.

4. Rationalise Government resources:

- A major goal of government policy has been to rationalize government resources, redirecting them away from subsidies towards public provision of essential private goods and services at low prices, especially to the poor.
 - The pace and magnitude of this improvement will depend upon the extent to which increased physical availability/provision is converted into greater actual use. For instance: toilet building into toilet use, bank accounts into financial inclusion.
5. Addressing the current account vulnerability requires raising the trajectory of export growth with internationally competitiveness of manufacturing.
 6. Both competitive exchange rates and open capital accounts are helpful for growth.
 7. Policy design must minimise the costs wherever possible with recourse to calibrated decisions. The government will have to think very carefully on how to avoid slippage and keep bond markets optimistic.
 8. State's capacity of delivery of essential services such as health and education should be enhanced by the use of the JAM (Jan Dhan—Aadhaar—Mobile) architecture, now enhanced by the Unified Payments Interface (UPI).
 9. The government's target of doubling farmers' incomes consequently requires radical follow-up action, including decisive efforts to bring science and technology to farmers, replacing untargeted subsidies (power and fertiliser) by direct income support, and extending irrigation via efficient drip and sprinkler technologies.

What could be the key macroeconomic headwinds from abroad?

- First, oil prices are going up. This will result into increasing import bill, growing oil subsidy burden and higher inflation. Every \$10 increase in oil prices can reduce GDP growth by 0.2-0.3%. And oil prices have gone up by almost 60% in the last six months. Aggressive output cuts by Saudi Arabia (and Russia) could force oil prices even higher.
- The second headwind comes from the tightening stance of the world's most influential central bank, the U.S. Fed. As rates are being tightened in the U.S., it is likely to lead to a reversal of dollar flows, which can impact India's domestic liquidity situation, the stock market, and perhaps the exchange rate.
- In addition to it, there are the usual geo-political and geo-economic risks: war in the Korean peninsula; political upheaval in the Middle East; a final reckoning from China's unprecedented credit surge in the form of capital controls, slowdown in growth, and a sharply depreciating currency with consequences for the global economy.

The Global Outlook by IMF

- According to the International Monetary Fund (IMF), the global economy is experiencing a near-synchronous recovery, the most broad-based since 2010.
- In 2017, roughly three-quarters of countries experienced improvements in their growth rates, the highest share since 2010.
- The latest World Economic Outlook (WEO) of the IMF shows global GDP growth accelerated to around 3.6 percent in 2017 from 3.2 percent in 2016, and the forecast for 2018 has been upgraded by 0.2 percentage points to 3.9 percent.
- One reason why the recovery has spread around the globe is that world trade in goods and services has finally emerged from its inactivity, registering 4.7 percent real volume growth in 2017 compared with 2.5 percent in 2016.

- Another reason is that commodity producers such as Russia, Brazil, and Saudi Arabia, which for the past few years have been suffering from depressed prices, have benefitted from the upswing in demand.
- Private investment seems poised to rebound, as many of the factors exerting a drag on growth over the past year finally ease off. Translating this potential into an actual investment rebound will depend on the resolution and recapitalization process.
- Putting all these factors together, a pick-up in growth to between 7 and 7.5 percent in 2018-19 can be forecasted, re-instating India as the world's fastest growing major economy.

TV, AIR Synopsis

I. RSTV

[1] Security Scan: Security issues in Indian Ocean

Indian Ocean Region has been gaining **potential for geopolitical rivalry** due to its **trade & economy**. **Chinese initiatives like String of Pearls and the One Belt One Road** initiative signify its strong presence in Indian Ocean and these are in **direct conflict with Indian interests in the region**. India too has taken its counter measures to protect its interests in Indian Ocean.

Analysis:

- The **sea lanes in the Indian Ocean** are considered strategically most important in the world with more than 80% of the world's seaborne **trade in oil transits** passing through it through **Strait of Hormuz, Strait of Malacca and Bab-el-Mandab Strait**. Major ports like Port of Singapore, Mumbai, Paradip, Durban, etc are present on its coasts.
- Indian Ocean has allowed interaction among people, culture and civilizations since long time. It provides major sea routes **connecting the Middle East, Africa and East Asia with Europe and Americas**. It carries a particularly heavy traffic of petroleum products from **oil fields of Persian Gulf & Indonesia**.
- The emergence of initiatives like String of Pearls is indicative of China's growing geopolitical influence to increase access to ports and airfields, expand and modernise military forces, and make stronger diplomatic relations with trading partners. **Chinese companies have made investments in several ports** like Gwadar, Hambantota, Colombo, etc.
- **China** has been **increasing presence of its navy looking at US** which has deployed its navy all around the world. So, India needs to take strong counter measures as well. Chinese underwater presence, viz. **submarines, are also a point of concern for India**.
- **In 1970s**, India used to take Indian Ocean as a zone of peace. It was the leader of Non-Aligned Movement and did not want any superpower to be present in the region. **From that stage, India** is now moving towards forming **Quadrilateral group with US, Japan and Australia**. This shall improve security provisions in the Indian Ocean.
- **Apart from security issues**, Indian Ocean is also important for **development of the areas that fall in the region** so that trade and economy may prosper. Many of the island states in Indian Ocean are dependent on resources for which development is needed.
- **Indian navy** is moving towards being the **net security provider** in the Indian Ocean Region. India is also doing joint **patrolling exercises with its maritime neighbours** apart from the cooperation with major players like US and Japan. **US navy has unparalleled power projection capabilities and operational strength**, and is the major naval force in the waters of South and South-East Asia.
- **India** has historically focussed heavily on **anti-piracy and counter-terrorism efforts across Indian Ocean**. A number of efforts for this have been done **in coordination with American forces now**.

Conclusion:

China has been increasing its presence in Indian Ocean Region. It is also making its navy more advanced and building its own aircraft carriers. So, India needs to keep itself at pace for which alliances like Quadrilateral are welcome step. Peace is very important in the region as economies are now shifting from West to East.

II. AIR SOPTLIGHT SUMMARY

[2] US Slams Pakistan Over Terrorism

Introduction

- S. President Donald Trump's New Year tweet has **accused Pakistan on engaging in lies and deceit** and said that **US has foolishly given Pakistan more than 33 billion dollars in aid over the last 15 years**. The US wants Pakistan to do more and Pakistan has said they cannot do more.
- The tweet by Donald Trump is another indication of the thinking which underlines his policy. There is a sense of **great impatience in the US** and particularly **about Pakistan policy towards Afghanistan** and providing safe haven to terrorists. The tweet comes after number of steps the US has taken against Pakistan in 2017 and it's the culmination of all the process.

Why this hard stance by US?

- There has been a sense of **great frustration in US** with regard to Pakistan since atleast 2005. The same sense of frustration had emerged from President Bush, much more evident during tenure of Obama and in the present regime the older thinking has crystallised. There is a sense of great impatience and anger about the Pakistan's policies in the past 7 to 8 years. From 2011-12, the US aid to Pakistan started declining and now it declined sharply.
- US have developed other means and supply routes for reaching out to Afghanistan and so the dependence on Pakistan has reduced. In 2011-12 there were number of US-Pakistan crisis like **detection of Osama Bin Laden, Salala incident, closure of the ground communication linkages to Afghanistan due to blockages by Pakistan Army**. These multiple crisis might have led to rethinking in US administration about the aid to Pakistan. Now we see the crystallisation of the trend with very strong position taken by the President itself. This no longer an institutional thinking, but thinking led by the President and so it is very much significant.
- There is **continued deterioration of security situation in Afghanistan** and no improvements on the ground. There have been very bad terrorist attacks recently in Afghanistan and some months ago US base was also attacked. Over the years there have been numerous terrorist incidents and according to Afghan sources many of these are linked to terrorist sanctuaries in Pakistan.
- The US stopping aid to Pakistan may well be the start of a process where harsh measures may be announced in terms of aid, stronger economic sanctions or military strikes.

US assistance to Pakistan

- Despite the periodic frustration, the money has been poured into Pakistan. When Trump says, US has foolishly given money to Pakistan, it is condemning the Bush administration. There is an impression that arms lobby in US is very strong and wants to supply arms to Pakistan and Pakistan has a strong lobby in US's state department. The location of Pakistan has geo-political significance and it has nuclear weapons. So these are reasons for US to remain engaged with Pakistan.
- The US has given more than 33 billion dollars as Donald Trump says, but there is very little to show for it in Pakistan in terms of infrastructure projects or anything on ground which adds to the country's economy.

Reaction from Pakistan

- The US pressure plays a key role in moulding public opinion in Pakistan because **Pakistan has very strong linkages with the US at societal, cultural and economic level**. This kind of US outspokenness will lead to **rethinking among people in Pakistan about Pakistan's policies**.

- The reaction from Pakistan will be it would strengthen anti-US sentiments and in the process the extremist elements who want to come to the mainstream of politics would be strengthened. On the other hand it would lead to deeper rethinking among many sections in Pakistan whether they are following the right set of policies. Pakistan has very poor international image and it is getting worse over the past 2.5 decade.

China Factor

- There is a strong perception that Pakistan has come to a no more situation and ready to frustrate US because of Chinese support like China-Pakistan Economic Corridor (CPEC) and Beijing will come to the aid of Pakistan. **Friendship with China acts as a psychological boost** to people and policy makers in Pakistan. How China will react needs to be seen.

How India must view this?

- This matter has certain implications for India and we should see it as one more step towards counselling Pakistan to come back to the right track by abandoning policies which are counterproductive, against the regional interest and even against Pakistani interest.

[3] Electoral Bond

Introduction

- Funding of political parties has always been on suspicion or controversy. The government has come out with **Electoral Bonds for funding of political parties**. The government unveiled the fine print of the electoral bonds scheme.
- As per the notification, the electoral bonds will be a bearer instrument in the manner of a promissory note whereby a citizen, or a registered body, in India is eligible to purchase the bond from notified branches of the State Bank of India (SBI) for 10 days each in months of January, April, July and October. It will be available in multiples of Rs1,000, Rs10,000, Rs1 lakh, Rs10 lakh and Rs1 crore.

Significance

- The significant aspect of this scheme is that the **bonds will remain valid for 15 days and shall not carry the donor's name**, although the payee will have to fulfil KYC (know your customer) protocols at the bank.
- To benefit from the electoral bonds scheme, the political parties must have been registered with the Election Commission and should have secured not less than 1 per cent of the votes polled in the most recent General Election to the Lok Sabha or a State legislative assembly. This can be seen as a measure for pushing out the non serious candidates.
- Also, the bonds can be encashed by an eligible political party only through a designated bank account with an authorised bank. Every political party has to submit details of one designated account to the Election Commission and the bonds can be encashed only in that account.
- It is good step in so far as moving away from dubious cash given to political parties to moving to electoral bonds. The returns will have to be filed by the political parties through these bonds and therefore it is meant to be **transparent, accountable and a small step towards electoral reforms**.
- The first three parliamentary elections were held free and fair without any questions being raised, whereas from 4th elections doubts were raised about booth capturing, use of muscle and money power increasing in the election system. Now the magnitude and scale is humongous. These problems have to be addressed. There are number of reports on it, but very little action has been taken. The electoral bonds are a move taken by the government which is a small step in the right direction.
- Many electoral reforms have taken place over the decades like today the candidates have to declare their assets, reducing the age of voting to 18 which is a revolutionary step as the youngsters are

increasingly determining the outcome of elections. So even if there are pros and cons in the electoral bonds, it is a step in the right direction. **Anything that makes the system more transparent, accountable, open, democratic in spirit must be welcomed and later any issues and problems arising out of it must be addressed.**

Issues / Concerns

- The **opposition have pointed that the bonds will help any party that is in power** because the government can know who donated what money and to whom.
- Any potential donor, corporate houses or industrialists do not have to worry about donating to the party in power, but will have to worry about donating to party in opposition. Any party in power wants to know the donors for opposition and they may face some trouble.
- **Our democratic values is not as strong as it should have been 7 decades after Independence** and this is where **we need to strengthen the democratic institutions**. In US we see people openly accepting their support for Democratic and Republican parties whereas in India we even go wrong in Exit polls because people feel that if they openly accept to which party they voted, then action may be taken against them by the political parties.

Scrutinising the expenditure of political parties

- There is nothing much said about how the political parties spend. **There is a huge gap between the ceiling and the money actually spent.** The ceiling for a larger lok sabha constituency is 40 lakhs where as there are constituencies which spend around 40 crores and there are hardly any constituency which spends 40 lakhs. So there has to be realistic picture. There are many reports like Dinesh Goswami committee and Law Commission reports on political funding, but there isn't any political will.

Need of the Hour

- There should be **awareness, consciousness and educating the electorate by the political parties**. The glass is half filled and half empty. We have very precious things in the parliamentary democracy but we also have a very long way to go.
- The question of farmer distress, joblessness was raised in recent state elections and these will be the issues in the next parliamentary elections. So we need to have a solid debate on these issues on television by the political parties.

[4] Industrial Reforms

Introduction

- There is **spike in the GDP indicators for the last quarter** which is a good sign for the revival of the economy. Revival of the economy includes **Industrial growth, industrial development and manufacturing**. The industry has gone through several phases, starting from **industrialisation, license raj, liberalisation and now its global competitiveness**. In the global competitiveness the GDP plays a vital role and even the FDI and FII which helps to increase our GDP. Boosting our industry and job creation can make India a manufacturing hub in the world.
- In the first quarter of 2017-18, the GDP growth was 5.7%, in the second quarter it went up to 6.3% and there are expectations that the third and the fourth quarter will do better. India's share of market capitalisation has gone up by 2.93%.

Growth in Manufacturing Sector

- The slew of measures taken by the government makes India an attractive hub for foreign investments particularly in the manufacturing sector. Of late many **mobile phone companies, many automobile brands are in the process of opening their manufacturing bases in India.**

- The **manufacturing sector has the potential to reach close to \$1 trillion by 2025** and India aspires to be in the top three economies of the world and the manufacturing destination in the world by 2020. There is lot of impetus in **developing industrial corridors and smart cities** for proving smart infrastructure resulting in more urbanisation and increase in the quality of life. The government is aiming at the holistic development of the nation.
- The **factory output** for April to September 2017 has gone up to 3.8%. **Capital goods** grew by 7.4% which plays an important role in the generation of income.
- We need to establish a strong base of service and technology industry, in the new era of **Industry 4.0**. There are lot of technologies coming up like **Artificial Intelligence, Internet of Things, 3D printing and robots** which can be a game changer for the capital goods industry. The 11 of the 23 industry groups like pharmaceutical, medicinal, chemical and botanical has growth of 26.4%.
- The **Purchasing Managers' Index (PMI)** rose to 54.7 in December from November's 52.6. The industry thriving on **3Ds (Democracy, Demography and Demand)** are improving and this is the reason for improvement in PMI.

Government Measures

- There has been **reduction in income tax rate to 25% for MSMEs having turnover of 50 crore and carry-forward of Minimum Alternate Tax credit for 15 years from 10 years**. There is going to the **abolition of Foreign Investment Promotion Board (FIPB)** by 2017-18. The government has launched **Phased Manufacturing Programme (PMP)** providing tax relief and other incentives on components and accessories used in mobile phones, pharmaceutical, biotechnology and chemical industries thereby giving a push to the domestic manufacturing.
- The **labour and land reforms** is very much important. Land is a state subject and whenever a new company want to setup a plant they require hectares of land. In the past we have seen lot of tussle by the states to provide land for establishing manufacturing bases for foreign companies.
- **Ministry of Labour and Employment has envisaged to concise 44 labour laws into 4 broad codes like wages, industrial relations, social security, and occupational safety, health and working conditions**. Once this codification of labour laws happen, it will **remove the multiplicity of definition and authorities, ease of compliance** without compromising on wage security and social security of the workers. This will attract the foreign companies to set up manufacturing bases in India.
- 2017 was a watershed year for the real estate sector because of the rollout of policies like **Real Estate (Regulation and Development) Act (RERA)**. Even the demonetisation had impacted the real estate sector, but now in the new scheme **Affordable housing scheme** we can see healthy growth in residential sales. The Budget 2017 proposed **infrastructure status for affordable housing** which helps to **boost real estate markets**.

Infrastructure Sector

- **The roads are considered to be arteries of any nation**. If the arteries are blocked, it results in heart attack. But if the arteries are open, that is if the roads are open, if there are multiple roads, highways, the logistics and supply side management will be on the top.
- There has been **higher allocation towards highway construction** by the centre and per day lengthening of the roads is increased. This has an impact on the automobile sector. There has been emphasis to shift to electric vehicles which will be a game changer in the Indian automobile sector. The charging infrastructure can create employment opportunities.

Conclusion

India has a demographic advantage where the **average age of our population is 29**. Once we convert them into employable workforce and provide them with the necessary skills there will be an improvement in the growth rate.

[5] Various Aspects of Energy Conservation

Introduction

- Energy is life, without energy the modern lifestyle or even to survive an ordinary lifestyle cannot be imagined. So **energy is very vital for the existence of human being**. Oil is one of the conventional age old energy sources which are finite. **The total oil stock of the planet is been estimated to linger 65 years more**. There will be some time less than a century where there will be no oil at all. There are certain scientific operations and activities for which oil is essential. Renewable energy cannot replace oil in these scientific operations.
- For the first 7 months in the current financial year, the petrol and diesel consumption in India posed a growth of 9.2% and 5% respectively. This shows that **our demand for oil is growing on a daily basis**. The population is increasing, our living standards is improving, average human expectations are rising, so in such a situation we are aspiring for more comfortable lifestyle for which energy is very vital.

Renewable Energy

- **Renewable energy is more preferred these days because of no carbon emission and no Green house gases**. Government has taken a pledge to **reduce 10% of oil imports by 2022** and India being oil deficient country, the conservation becomes very vital. This is not very ambitious target and 10% reduction is feasible. Whatever we require for our sustenance and for meaningful objective is welcome, but wasting oil cannot be tolerated. It pinches in financial terms and also affects our future generation.
- India also committed at international level its **renewable energy target of having 175 GW capacity by 2022, which includes 100 GW Solar, 60 GW Wind, 10 GW Biomass and 5 GW Small Hydro**. Renewable energy in such a big way along with massive nuclear plants can help reduce 10% of oil imports by 2022.

Electric Vehicles

- The government is aspiring to **move towards electric vehicles** where it wants only **electric vehicles** to run on its roads by **2030**. Many say it is futuristic, but it is not. The charging points, battery components need to be in place. When the source of the electricity is from fossil fuels, then electric vehicles will also generate green house gases.

Oil Conservation

- **Oil conservation week** is celebrated every year, from 4th of January to the 10th of January, by the people worldwide in order to increase the awareness all across the world regarding the importance of conservation of the petroleum products. Since oil is a finite resource, it needs to be conserved on a finite basis. In traffic signals when the signal is red, the vehicles need to be switched off, so that unnecessary wastage of fuel can be avoided. In cooking, **heat is to be conserved and recycled**. In industrial processes, the heat can be recycled and so energy can be recycled. **A lot of capacity building, training, and tree plantation at local level** are required because if people are not able to conserve energy, no one can conserve it as government alone cannot do everything. People in their own interest for their own existence need to protect the planet.
- Clean energy measures like ethanol blending or bio fuel mixing are very vital. Oil from bio fuel sources are environmental friendly and don't create more emissions.

- **Energy conserved means energy generated.** By conserving energy we will be **saving the precious resources for the future generation** and it will be beneficial on the financial front also. **India must aim for less oil dependence and depend more on clean and renewable energy.**

[6] E-Sansad & E-Vidhaan

Introduction

- The **18thAll India Whips' Conference** rolled out **e-Sansad and e-Vidhan** in Parliament and State Legislatures to **digitize and make their functioning paperless**. The crucial issue of **Efficient Functioning of Legislatures** was deliberated by the Whips of Parliament and Legislatures and the Ministers of Parliamentary Affairs of various States during the Conference.
- E-Sansad and e-Vidhan are mission mode projects of Government of India under **Digital India**, to make the functioning of Parliament and State Legislatures paperless. **Union Ministry of Parliamentary Affairs (MoPA) is the Nodal Ministry** for implementation of both the projects.

Role of technology in effective Governance

- Since the inception of democracy, it's the scientific revolution which led to its institutionalisation. **As technology changes society, so is the process of legislation.** In the present context of the conference, 4 points are important: E-registration of voters, formation of new political parties, provision of information about candidates and the programmes and services that improves the effectiveness of representativeness in the state legislatures and parliament.
- The developmental role the members input in the legislation process in a developing economy like India becomes very crucial. The magnitude of the problem is enormous. **When the E-system of governance becomes part of the parliamentary process, the credibility and the effectiveness of governance will improve many folds.**
- **The government want to make parliament and state legislatures more participative, responsive, transparent, productive and accountable** to the public and make the entire Legislative process more efficient. Further, this environment friendly initiative is in line with the **'Go Green'** initiative of the Government. Now by moving the public database which is largely paper base into electronic database, the objective of more participative, responsive, transparent, productive and accountable parliament and state legislatures can be achieved.
- In India the parliamentary and legislative constituencies are very large and so are the voters. If there is to be a communication between the representatives and other players and with the electorate, the technology will bring about a sea change in the context of **citizen participation**. With India's size and diversity, there are situations where the local problems remain locally in many constituencies. There are many hilly, dry areas, areas with water and flooding problems. **The E-governance will try to eliminate citizen alienation, and the legislative members will be able to perform their duties effectively.**

Benefits

- Parliamentary Affairs Minister said that this is going to help parliamentarians, ministers, and departments of the government, media, legal professionals, researchers, academicians, historians and activists. It will **improve participation, better legislation, demand more information from the government and the depth of understanding will improve.**
- In India there is huge colonial backlog and many of the legislations are interpreted differently and that leads to piling of cases in the court. With increased use of technology, the process will become smoother and disposal of cases will be quicker. The process of legislation will be such that the lacunas will be much less. The healthy debate will be based on the data and that will improve the climate of democracy in our country. **With the availability of huge digital database, the legislation making process will improve; will be enlightened and comprehensive** as the purpose of parliament is to build unity of the

past, present and future. The participation will improve and the quality of governance will improve. So it is a qualitative change.

- By looking at the complexities and limited resources in India, we may not be in a position like the US where the state supports to each member of senate or House of Representatives enormously. By using the technology properly, we can become the best functioning democracy.
- Since India is multilingual, the technological advancement must not be only in English, it must incorporate all the important Indian languages, and then the effect will be much quicker. The deliberations of the parliament have to be available in all the languages.
- There is lot of fake news or false news percolating, but once the digital database is institutionalised and has credibility, it will deepen the democracy. The **grievance redressal of the citizens** will also be taken note of. **Technological development not only uplifts the life of every citizen, but also leads to the upliftment of the nation.** The nation gains by building up the social capital which is the primary ingredient for nations' development.

[7] Persons of Indian Origin Parliamentary Conference

Introduction

- **The Persons of Indian Origin – Parliamentarian Conference** is the first such conference to be hosted by India and it highlights the importance India places on the people of Indian origin. This highlights India's policy which is seen as encouraging Indians who are living in other parts of the world to feel more Indian and participate more in India's growth.

Role of People of Indian Origin

- We have **more than 30 million people of Indian origin scattered all over the globe** who are a very **big asset for India, for India's development, growth and prosperity.** We have **124 members of parliament and 17 mayors from 23 countries** who are of Indian origin which is matter of great pride for India. There are **3 prime ministers of Indian origin in Ireland, Mauritius and Guyana and 5 members of US congress are of Indian origin.** This is seen as a huge representation of India across the globe. All these elected representatives can be like **India's ambassadors in their own parliament.**
- We see that people of Indian origin are very committed for helping India in our policy achievements and requirements. During Nuclear deal with US, the US congress was approached through people of Indian origin, which had good response. This is the same in other parts of the world. **In Canada the defence minister is of Indian origin; Nikki Haley the United States Ambassador to the United Nations is of Indian origin.** So people of Indian origin have spread out in different countries and they are in influential position.
- People of Indian origin have been integrated with the local society. In most of the societies we see Indian values which are democratic, inclusive, religious freedom. The same values are accepted and there is no conflict with the national objectives of the country where People of Indian origin live and India's national objective. So **there is a great harmony and people of Indian origin fully integrate with the local community and work without any conflict,** but still manage to retain their Indian culture, ethos and commitment towards India.

India's Changing Image

- **The international organisations like World Bank, IMF and Moody's rating agency are looking at India today with positive perception.** When we look at the global media still the coverage about India is about negative kind of issues like poverty, rail accidents etc. **So it important that these parliamentarians of Indian origin fully appreciate and understand India's progress and the initiatives taken by the government** like 3 crore women who got LPG connection under Ujjwala scheme, the MUDRA scheme, Skills India etc, so that **positive message is taken back by the parliamentarians of Indian origin to their**

country that India is developing, progressing and is on the right path. The conference is important to show that India has changed over the past few years and the old attitude of 'Chalta hai' is changing today.

- India gave a strong message that **from reforms India is moving towards transform** of Indian society. Reaching out to people of Indian origin about the policy changes the government has taken will help attract investments and FDI's.

Indian Diaspora

- In the recent time, the **diaspora has become an important part of India's foreign policy**. The ministry of external affairs has been proactively engaged in dealing with Indians living in different countries who are facing problems with Visas, passports and **social media is extensively used to reach out to people**. This connection to the diaspora will eventually **help India furthering its global image and its global ambitions** like permanent seat in UNSC for which we need global support.
- If people of Indian origin have goodwill, it creates a very big reservoir of goodwill for India. In the ICJ elections we were able to defeat the British Candidate, which is first time a permanent member of UNSC could not get its candidate elected, because of vast majority of support in UNGA for India. So Indian diaspora is very important part of India's foreign policy and **they are playing a very positive role in putting forward India's positive image**.

[8] FDI Reforms

Introduction

- Liberalisation of FDI policy on single brand retail and aviation was pending for many years and now has taken place.

FDI in Single Brand Retail

- **FDI policy in retail sector has been controversial** because it opens the door for foreign investors in an area where there are **large number of small kirana shop** owners with small resources and limited ability to take on foreign competition. So any government looks at liberalising the retail sector with lot of caution and circumspection. Initially the government allowed foreign investment upto 100% in single brand retail through government approval route. Now it will be an **automatic route** which means the government is giving up its control. **This decision is significant in the context of very slow pace of foreign investment flows in the retail sector**.
- **India has seen a remarkable rise in FDI in the last few years**. In spite of that the **retail sector acquired a very small share** in total FDI investments. In 2017 the FDI in retail sector was as low as 5% of the total FDI flows to the country. In 2016 it was 9%. The cumulative figure from 2000 until now is around 4%. **In other countries the retail sector accounts for large chunk of FDI inflows**. But now one can hope that with the liberalisation, single brand retail will see some pickup in FDI flows. In multi brand retail the government policy is still to be fine-tuned.
- Once the FDI proposal is cleared in the automatic route, the foreign investor negotiates with the local government for various clearances. In **ease of doing business**, India's ranking has improved from 130 to 100 and **one of those categories where India has made remarkable improvement is getting clearances for setting up businesses**. It is believed that once the Centre gives automatic clearances, the state will also fall in line.
- Foreign investor will always look at opportunities and so the **competitive federalism** will come into the picture. **A state that can provide easier clearances, better infrastructure and attractive domestic market will have an advantage in attracting the foreign investor**.

Impact

- These investments create **huge job opportunities** for retail outlets, the **value chain for the upstream and downstream sectors**. The **manufacturing sector also benefits** as large number of items which are sold are sourced from the domestic manufacturers as there is **domestic sourcing requirement of 30%**. It also creates **opportunities for exports**.
- Single brand retail will give lot of confidence among traders and also kirana houses who are right now apprehensive. **Studies have shown that the advent of single brand retail and even the multi brand retail helps create an ecosystem in which both the kirana stores and the multi brand retail and single brand retail stores can prosper** because India is a young market, a growing market and there is large number of young population which is willing to spend money in items of consumption.
- This is a brave policy by the government, as there was lot of push and pull by the kirana stores union who see this as loss of opportunity. But is actually an enabling situation because with every single brand retail investor from a developed country will improve the basic infrastructure, the cold chains get improved and the supply chains become more efficient.
- The single brand retail will put a **healthy competition in e-commerce** because what is available through e-commerce will also be available in single brand retail. The same retail stores can sell these goods and provide services through e-commerce portal. The cost efficiencies will improve and this is a win-win situation for the retail sector and the economy.

FDI in Aviation Sector

- The policy in the aviation sector is that **any foreign airline can invest upto 49%**. Earlier the response was very lukewarm and the percentage of total FDI flows is less than 0.5%. While the Indian airlines have performed very well in creating a competitive market place in the aviation sector. The government has put in place the privatisation plan for Air India where a foreign airline can invest upto 49% which is a significant step.

[9] Growth in Industrial Output

Introduction

- The **industrial output has shown a remarkable recovery as per the data of Central Statistics Office (CSO), it has gone up to 8.4%**. This is very positive development in the economy because there were lot of worries that the economy was slowing down especially after the introduction of GST.

Industrial Growth

- The industrial growth was not showing any positive signs earlier and now it showing an 8.4% growth and the **manufacturing sector showing growth rate of 10.2%**. There were concerns about high corporate leverages in the economy and the gross fixed capital formation was also not increasing. Now it is believed that **gross fixed capital formation is likely to increase by 4% and there is 9.4% growth in the capital goods**. It is likely to believe that GST has been taken in a positive direction by the economy. The reduction of corporate taxes to 25% in the previous budget has yielded better effect on the economy.
- **16 of the 23 sectors have shown a positive growth** which is the reason behind the growth in industrial output. The construction and the real estate sector was suffering from last 2 to 3 years, post demonetisation it was worst affected with drop in sales. The segments related to the construction sector like steel, cement and others did receive a boost as the **government has been making continuous investments in the infrastructure sector** which is believed to have a crowding in effect in the economy and there by result in higher economic growth. So the construction and infrastructure sector is yielding positive results today.

Employment Generation

- The **employment generation has been a continuous worry and biggest challenge for the government**. The government has been taking several initiatives to generate more employment like **Stand-up India, MUDRA Scheme, Skill Development and Make in India**. What was still needed was the domestic growth in the industry. Since IIP index was not picking up and there was not sufficient industrial growth, it did not create sufficient amount of employment. **The recent growth in industrial output is likely to generate more employment**. The recent clearance for **FDI in single brand retail** will help companies invest in India and **likely to generate employment** as well. There are **vacancies in many private and public sector especially in the government institutions and there is a need to first fill these vacancies** to provide employment.
- There is an **information asymmetry** in the economy. A **Nation Labour Employment Exchange model** along the line of National Stock Exchange or Bombay Stock Exchange was proposed to the government which the government is yet to consider. Here the people and firms register themselves on a national level where firms declare the skills they require and people sell their skills or labour hours required by the firms. For example if a doctor wants to serve for 1 or 2 hrs and if a hospital has a requirement, then the doctor can serve there. These kinds of arrangements are set up in different countries.

Structural Reforms in the Economy

- There have been structural reforms in the economy like the **demonetisation, GST and JAM Trinity** which brought changes in the economy with integration of people in the banking system and digitisation of the economy.
- **The growth in any sector be it agriculture or industry contributes to the GDP**. As the GDP grows, the economy grows and the tax revenues will also increase. With increase in tax revenues the government has more funds to allocate for social welfare. Post demonetisation and GST, there is larger tax compliance which means increase in tax collection for the government.
- There is a **concern about rising inflation** which has gone above 5.21% because of the rise in vegetable prices and fuel prices.
- **The government needs to ensure that the industry receives sufficient amount of credit** and if the government in the coming budget can give incentives to the industry, it can bring domestic growth and development.

[10] India-Israel Bilateral Talks

Introduction

- **The visit of Israeli Prime Minister Benjamin Netanyahu to India is a significant visit**, which is the first major foreign visit of the year. There were **Nine MoUs** signed in areas of significance like **cyber security, agriculture, water management, oil and natural gas etc.**

Growing Relationship

- Since 1992 when the full diplomatic relations between India and Israel was established, there was some hesitation from the Indian establishments that India should not be seen to be very close to Israel. But that hesitation is no longer there in the present government. **The quantum leap in the relationship took place in July 2017 when Prime Minister Narendra Modi visited Israel** and the kind of agreements signed and the publicity it got. The present visit is the continuation of that bonhomie.
- Earlier it used to be that primary cooperation between India and Israel was in defence and security. **Now agriculture has become the main stay of the relationship, with the centres for excellence being setup, along with water management and drip irrigation issues**. The widening of the relationship is different to

the strategic partnership India has with other countries where it is more of defence and security. **Cooperation in agriculture can be a value addition to our farmers.** Olive cultivation was started in Rajasthan with the help of Israeli irrigation technology. **With less water Israel has been able to cultivate more**, if these technologies are widely implemented in India it can make a big difference in the agriculture sector.

- **Israel has always celebrated and honoured the Indian contribution to liberate Haifa.** They have a great sense of history. The Teen Murti Chowk and the Teen Murti Marg in central New Delhi was renamed as the '**Teen Murti Haifa Chowk**' after the Israeli city of Haifa.
- India is perhaps the only country in the world where the Jews have never been persecuted. So they have the strong sense of affection and belongingness towards India.

Technology Transfer

- **Israelis are very innovative**; there are about **12 Nobel Laureates in Israel** which has a total population of about 8 million which is half the population of National Capital Region (NCR). They have about 500 start-ups in the automotive sector and the partnership can be effective to India. **Israel does not hesitate in technology transfer** whereas US and European companies are very reluctant for technology transfer and want to sell or have 100% ownership.

Palestine Issue

- **India voted against the US decision to recognize Jerusalem as the capital of Israel** in the UN. India has a close relation with Iran with whom Israel has a problem. The two leaders have shown statesmanship and **the foreign policy establishments have shown lot of maturity** because India has major differences in policy with respect to Iran and Palestine issue. India's support for the two state solutions has been consistent and we have stood by our decision. This is a **success of India's foreign policy establishments** that **we are able to convey our position and convince Israel that Palestine issue is only one aspect of the relationship and the relationship is much wider.**

Counter Terrorism and Cyber Security

- **In counter terrorism, intelligence gathering and retaliation, Israel has an exceptional good record** and India need to learn from Israel how they have been able to mount surgical strikes all over. At Entebbe Airport in Uganda they had rescued the high jacked Indian plane. There are aspects of **operational details about dealing with terrorist situations where we need to learn from Israel.** In 2008 Mumbai terror attack, we took 3 days to neutralise the terrorist attack, whereas Israelis would have neutralised them within hours. So there is lot of scope to understand their technology and how to deal when there is a terrorist attack.
- Both India and Israel are vulnerable to cyber attack. **Cyber security** would be very important concern of all governments. We need more cooperation from those countries that are also vulnerable so that they have high levels of defence like Israel and South Korea.

[11] Annual Meeting of World Economic Forum

Introduction

- The Indian Prime Minister Narendra Modi is meeting at the World Economic Forum (WEF) in Davos, Switzerland which is a **historic meeting because after over 20 years an Indian Prime Minister is visiting Davos.** The WEF meeting at Davos is assumed as an iconic place in the annual conferences of the world. It is a place where the **world leaders of the economy and politics come together and discuss many issues and seek investment from the corporate CEOs of the world.** It is expected that Modi will project India in the best possible way.

India's Presence in Davos

- India's presence in Davos has been there for a very long time, but **it is believed this particular event would foster more investment to the economy**. There is likely to be a **positive effect on the outlook that many international agencies have about India**. The **Global Economic Prospects report by the World Bank** shows that among all the economies projected in terms of the growth rate, **India's growth rate is likely to be 7.3% in 2018 and 7.5 in 2019-20**. US growth rate would be about 2.5%, the Euro area its 2.1%, Japan its 1.3% and China its 6.4%. **Among all the economies India is in the bright spot** and it is the right moment where we can invite more investments to propel this growth.
- Prime Minister Modi has been vowing the industry for a very long time. From the Make in India programme, the FDI inflows is about 9933 crore. **As the industry invests in the economy, it creates more employment, high income, better choices for the consumer and a higher economic growth**.
- The government is not focusing only on technology driven investments, they are also **focusing on culturally driven economic systems where by our strong strengths like Ayurveda and Yoga have been put forward**. There is going to be soft power talks, yoga demonstrations and India cuisine at Davos. The government has been trying to project to the world market a **newer India having less tolerance to corruption and red tapism and having a tax compliant economy**.

Women Empowerment

- **Shah Rukh Khan received a Crystal award at the WEF** for the work raising **awareness about human rights issues** and he **spoke about women and child rights**. In India the appeal of cricketers and Bollywood personalities are much higher to the people in India and outside. This is significant when we are attracting investments from NRIs who may be fond of Bollywood stars. **Women have been recognised as an important pillar of growth and development** because if we educate women or empower women it is like empowering an entire family or a society. Women development has been one of the focus areas of the government which is also to be highlighted at the Davos.
- **The theme for the 2018 WEF is "Creating a Shared Future in a Fractured World"**. Based on this theme women is given lot of importance and women is Charing all the sessions at Davos. For India, women's development has become very critical and the Beti Bachao Beti Padhao campaign has made some difference in places where there was skewed foeticide ratios like Haryana. These are the issues PM Modi is likely to highlight about the changed focus on women in India and trying to rectify problems that women had in the country.

PM projecting India's Growth at Davos

- PM is likely to bring about the growth story of India where the economy is growing at 7% and the reforms which have created a one market for all with the help of the GST and the rationalisation of the indirect taxes. How digitisation has reached the people and how people have accepted the investments made. Highlight the different MoUs by Japan, Canada and US firms. During April-September 2017, India received the maximum FDI equity inflows from Mauritius (US\$ 11.47 billion), followed by Singapore (US\$ 5.29 billion), Netherlands (US\$ 1.95 billion), USA (US\$ 1.33 billion), and Germany (US\$ 934 million). Similarly there are other investments coming into the economy like pension funds, from other investment companies and organisations in different sectors.
- **Telecommunication sector was the highest FDI receiving sector. International Finance Corporation (IFC)—a sister organization of the World Bank is going to invest about \$6 billion till 2022 in renewable energy sector**. India wants investment in healthcare, manufacturing, renewable energy etc. The government is allowing automatic routes to attract investments and rolling out the red carpet against the red tapism.
- **PM Modi's opening address and the concluding address by UD president Donald Trump** is seen as giving as much importance to the Indian PM as the leader of the most powerful economy in the

world. **India is in the continuous process of globalisation whereas Donald Trump is supporting Protectionism.** So an opening address by an economy which wants to embrace the world is a positive sign of the world economies accepting India's new emergence. Once upon a time India was considered a close economy and US as an open economy and now it seems to be the reverse.

[12] Bilateral Relations Between India and Cambodia

Introduction

- The meeting between Prime Minister Narendra Modi and his Cambodian counterpart Hun Sen saw **Cambodia invite Indian investment in information technology, pharmaceuticals, agriculture and horticulture, infrastructure and small and medium enterprises.** The leaders of India and Cambodia agreed to work toward a **bilateral investment treaty** that could see tens of millions of dollars pour into the Southeast Asian nation. Indians always had close feelings for the people of Cambodia. The visit by a Cambodian Prime Minister to India is taking place after 10 years.

Cultural Relations

- India- Cambodia relations go back to the **1st century AD** when Hindu and Buddhist religious and cultural influences emanated out of India to various parts of Southeast Asia.
- **Cambodia is a representative of Indian cultural outreach to the Asian region** because the biggest Hindu temples like **Angkor Wat** is in Cambodia which has recognition of UNESCO world heritage site. **India is involved in the restoration and preservation of Angkor Wat** which is an honour for India. It is part of the **joint cultural heritage of Cambodia and India.**
- **The cultural ties with Cambodia and other ASEAN nations is a factor of India's soft power.** This can be strengthened to further India's foreign policy goal. From cultural diplomacy we need to move towards people to people contact, commercial ties, scientific, digital, and defence cooperation.

Bilateral Cooperation

- India agreed to **provide lines of credit**, including nearly \$37 million to finance a Cambodian water project. India also offered lines of credit for setting up specialty hospitals, expanding road, rail and digital connectivity and construction of a high-powered electric line.
- India and Cambodia also signed a **MoU on the prevention of human trafficking** under which the two countries will seek to increase bilateral cooperation on the issues of **prevention, rescue and repatriation related to human trafficking.**

China's Influence in the Region

- India is seeking to deepen bonds with Southeast Asia amid wariness over China's growing influence in the region. The Chinese have tried their best to continue their interest in the Indo-China region especially with Cambodia and Vietnam. But these countries do not want their hard won freedom to be bargained for the money from china. Not all ASENSA nations are on the same line when dealing with China.
- Indian Ocean has so far been an ocean of peace, whereas in Pacific Ocean and South China Sea (SCS) we see lot of conflicts. We see China's building activities for bases and unilateral control over SCS islands despite decisions taken by UNCLOS.

India's Outreach to the ASEAN Nations

- Today **India's outreach to the ASEAN nations and India's foreign policy towards ASEAN has a strong focus.** The Prime Minister Narendra Modi met the leaders of 10 ASEAN nations and discussed several issues and the one issue that stood out was **maritime cooperation.** This is important at time when China has taken an aggressive stand in the South China Sea.

- **India announced 1,000 scholarships at IITs for PhD students from ASEAN countries;** India has offered cooperation in Space, Cyber Security, anti-terrorist etc. **Delhi Declaration of the ASEAN-India Commemorative Summit** has come out strongly against terrorism with **united voice between India and ASEAN nations in tackling terrorism.**
- The ASEAN countries have seen the Indian capability in the Republic day parade and perhaps import the defence equipments manufactured in India.
- Normally we had only one leader present as the chief guest for the Republic Day, but now with 10 leaders of ASEAN nations as guests for Republic Day shows that **India has developed the capability and vision that we need to work with countries which have common interest.**

[13] Upgradation of Airports in North East Region

Introduction

- In a major announcement in the civil aviation sector, the **Airports Authority of India** announced a **push for the infrastructure in the North-east particularly in the civil aviation** infrastructure where they would be spending nearly **3400 crore in the development of new airfields, new terminals, new flight gateways** in the north-eastern region.

Significance

- The airports in the region registered a growth of 27.02 per cent in the total passenger movement over the previous year. Guwahati airport has seen a major **growth in passenger travel** which is an indication that the region needs connectivity and more airports to feed the desires of the people.
- North-east and other parts of India are totally different where the **connectivity has always been an issue with the north-east.** The governments have been working for improving the air connectivity to address the problem of connectivity in the north-east.
- Of the 3400 crore announcement made, the work on 2400 crore is already going on where infrastructure is being created in various parts of north-east. Creating infrastructure in places that are not easily accessible is difficult. The government expects that the infrastructure will be in place by 2020 and no major region in the north-east would remain unconnected. **Pakyong Airport in Sikkim, a new Greenfield airport** will be inaugurated shortly.
- **Arunachal Pradesh** is one of the key focus areas of the government. Of the 3400 crores, Rs 211 crore is for Arunachal Pradesh where the Itanagar airport will be upgraded. Since Arunachal Pradesh share border with China, there are many **Indian Air force's Advanced Landing Grounds (ALG) which will be upgraded to ensure that civil operations can be carried out** from those ALGs.
- **The Assam government's initiative of connecting the entire north-east with the south-east Asian countries** would give a major boost in the international scale in terms of **religious tourism** since north-east is part of Buddhist circuit.

Major Connectivity Programmes

- The north-east will be getting a boost in the air connectivity through schemes like **UDAN (Ude Desh ka Aam naagrik) Scheme;** the state governments have approached the central government to **provide international connectivity** scheme in line with regional connectivity scheme, where state governments will provide the subsidy and the logistics will be provided by the central government. These subsidised flights will operate from Guwahati airport to Southeast Asian countries.
- The **Ministry of Development of North Eastern Region (DoNER)** is also working on a plan to provide **helicopter based OPD services** in the region so that people in the interior part can be brought to a district headquarter or state capital where there are better medical services.

- The government had also announced **Rs 90,000 crore road development programmes** in the north-east which is to provide connectivity to the ASEAN nations. So it is a collective effort of the government to provide connectivity. There are also plans for **seaplane in the north-east** by private players. The advantage is that they don't need runways and the plane can land on a river and there are plenty of waterways available in north-east. Since lot of developments are happening together the north-east will get a major boost in the connectivity.

[14] Development of Sports in the Country

Introduction

- **Khelo India School Games was held** recently which is going to have a pan India impact. The school children will get the exposure required. It is going to have a lasting impact especially with the scholarship being introduced which is a remarkable initiative by **Ministry of Youth Affairs and Sports. The children will receive an annual scholarship worth Rs. 5.00 lakh for 8 consecutive years.** Since parents complain about lack of financial support, the initiative is a step in the right direction. This will make education and sports find a right balance.
- Ministry of Youth Affairs and Sports launched the **PLEDGE for Khelo India** at the Khelo India School Games Carnival. The pledge is a promise to participate and **encourage sportsmanship spirit** and it is aimed at inspiring youngsters to **build mass participation and excellence in sports.**

Salient Features

- Focussed on building an **inclusive and comprehensive sports ecosystem** in the country, Khelo India will lay emphasis on **inculcating sports into the day to day lives** of youngsters early in their lives.
- Khelo India School Games concentrates on creating a platform to **showcase hidden talent, creating awareness and cognizance about physical fitness** as well as good health amongst youngsters.
- 2000 children will be receiving Rs 2000 as prize money if they win in the competitions at the block, district and national levels. This can give a **big boost to the children at pan India level.**
- The Khelo India is not limited to only children; it goes beyond 35 to 50 years age group. It looks **changing the lifestyle of people** both in rural and urban India.
- The coaches have stagnated in terms of upgrading their knowledge and attention is given for **upgrading coach's knowledge and development.** The focus is moved away from constructing large stadiums into developing neighbourhood playing areas. **If people of India start playing an hour a day we not only become a better sporting nation, we will also be a healthier nation.**
- There is an attempt to make India's coaches better. **Coaches at the grass root level who discovers young talent will also be rewarded.** The cash incentives the government gives to successful coaches will be now split into 3 parts. 25% of the money will go to coaches at the grass root level, 25% to developmental level coaches and 50% to those coaches who have taken the athlete to international level. This motivates coaches to move from one step to another.

Impact

- The power of sport in **promoting gender equity and social inclusiveness** is also fully recognized and special measures are provided for to achieve these objectives.
- The programme also aims at **engaging youth living in disturbed and deprived areas**, in sporting activities, to wean them away from unproductive and disruptive activities and mainstream them in the nation-building process.

- We are also going to see some unsung heroes who were waiting for a platform to showcase their talent and get known across the country. The kind of training and exposure they get can have a massive impact on the school children.
- All these years post independence there was an argument that we don't have enough drinking water facility in the country and how can we create sports infrastructure. Now we are getting out of this phase and being positive. **Sports builds character, teaches positivity, team spirit and changes mindset of the people.**
- The school games federation of India, the national sports federation and the Ministry of Youth Affairs and Sports have come together on one platform to make the Khelo India a success. This is step in the right direction for seeing positive results over a period of time.
- This programme strives to promote **"Sports for All"** as well as **"Sports for Excellence."**