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## OTHER IMPORTANT ISSUES GS PAPER

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## PERSONALITY TEST PROGRAMME 2019

### MOB LYNCHING

- Mob lynching is a form of violence in which a mob, under the pretext of administering justice without trial, executes a presumed offender, often after inflicting torture.
- It is an illegally authorized way of punishing somebody by an informal group. It is most often also referred as informal public executions by a mob who wish to punish an alleged transgressor, or to intimidate a group.
- Such incidents are egregious manifestations of prejudice, intolerance, and contempt towards the rule of law. [SEP]

#### Reasons for cases of mob lynching in India

- **Mob Psychology:** People have less fear of being punished when they act in groups as it's harder to identify real culprits. Further, there is dispersion of responsibility and guilt unlike in individual action.
- **Political Patronage:** In the competitive electoral politics, the culture of political mobilization based on social faultlines for polarization of electorate into votebanks and use of violence for garnering support and intimidating opponents, has gained strength.
  - Few elected representatives also sometimes come out in open defence of the attackers.
- **Administrative Failure:** Given the state of the police and judiciary in the country, there is a wide-ranging perception that 'culprits' go unpunished, and that there is a chance that the accused in heinous crimes like rape, child lifting and cow-slaughter will go scot-free. Vigilantism is a consequence of this basic failure of the government in providing justice.
  - A recent report by Delhi-based NGO Common Cause and CSDS mentioned that, "35% of police personnel interviewed for the survey think it is natural for a mob to punish the "culprit" in cases of cow slaughter, and 43% think it is natural for a mob to punish someone accused of rape."
- **Rumours on social media: Misinformation and propagandas** spread through platforms like Facebook, WhatsApp. E.g. recent rumours regarding child lifters have incited many impulsive and unplanned acts of violence across the country.
- **Societal factors:** The idea of the so-called form of 'instant' justice is immensely popular. Further, the socio-political framework of the country involves people with deep fissures and mistrust, prejudices and biases based on caste, religion etc.
- **No database to analyse trends:** As per Ministry of Home Affairs there is no record keeping on public lynching. Thus, making it difficult to draw conclusions and possible solutions to the problem. Further, in the recently released NCRB report for the year 2017, the data collected under the sub-heads of mob lynching, killed ordered by Khap Panchayat and murder committed for religious reasons has been omitted.
- **Cattle Protection Laws:** In certain state laws, there is a shifting of burden of proof on victims and consequently a presumption of guilt, which leads to filing of cases against the victims only. It leads to **criminalization of certain professions** such as that of transporters, butchers, leather workers, and the **process itself ends up being the punishment** in most cases.

#### Impact of mob lynching

- **Fuel communalism and casteism:** As in most cases, victims are the most vulnerable people of society - nomadic tribes, religious minorities, lower castes etc. This is threat to secular fabric of the country as diverse as India.
- **Against human rights:** The lynching by mob create an atmosphere where human beings are dehumanised, freedom of speech, expression and personal choices are endangered and plurality and diversity is not accepted.
- **Subverts rule of law:** The process of adjudication takes place within the courts of justice, and not on the streets. A crime cannot be an answer to another crime. Mob lynching reflects the loss of trust in state capabilities in justice delivery.

- **Fear Psychosis:** Terrorism kills far fewer people than traffic accidents, but we have the most stringent laws against terrorism because it causes more than just deaths. It strikes fear in the daily lives of people, bringing cities to a standstill. Events of lynching mean to punish someone in a manner that others will see as a warning and a lesson. Many lynchings are actually hate crimes where identity of the victims seems to be the real cause behind the killing
  - A study, by IndiaSpend, says that of the lynching deaths reported between 2010 and 2017, 84% were Muslims. Every such case strikes fear in the hearts of minorities in India.
- **Economic Impact:** Tougher laws on cow slaughter, transportation of cattle, and mob attacks by cow protection groups have disrupted not just the cattle trade and the rural agricultural economy, but also leather and meat export industries linked to farming and dairy sectors.
  - Management of unproductive cattle puts huge financial strain on farmers. Thus, animal markets aggregators become an indispensable institution for disposal of unproductive animals. But, in wake of mob attacks by cow vigilantes, such businesses have been adversely impacted.
  - Mob vigilantism has seriously hurt the livelihood of nomadic herders (e.g. Banjara nomadic community in Rajasthan).

### Legal provisions on mob lynching in India

- **Section 223(a) of the Criminal Procedure Code, 1973** contains the provision for persons being charged for an offense jointly when they are accused of the same offence committed in the course of the same transaction which is applicable on two or more people.
- The **Indian Penal Code (IPC), 1860** also has some proximate sections related to hate speech and hate crimes under **Sections 153A** (promoting enmity between different groups and doing acts prejudicial to maintenance of harmony), **153B** (imputation, assertions prejudicial to national integration). <sup>[1]</sup> <sup>SEP</sup>
- **Section 34 of the Indian Penal Code** provides punishment for acts done by several persons in furtherance of common intention, where each person is equally liable for the act.
- **Section 120B (criminal conspiracy), 147 (rioting), 148 (rioting armed with deadly weapons) and 143/149 (unlawful assembly) of Indian Penal Code** are some other provisions related to offences against public tranquility.
- **Punishment for lynching** may come under Section 302 (murder), 304(culpable homicide not amounting to murder), 307 (attempt to murder) etc.

### Government steps so far

- States such as **Manipur, West Bengal and Rajasthan** have passed laws against mob lynching.
- The **State Law Commission of UP** recommended jail terms ranging from seven years to life imprisonment for those convicted for mob lynching. In its draft legislation, the commission also recommended, “up to three-year term for dereliction of duty by a police officer or a district magistrate.”
- **Two high-level committees** have been constituted by the **Central government** to suggest ways and legal framework to effectively deal with incidents of mob violence and lynching. One of the committees is being headed by Union Home Minister and the other by Union Home Secretary.
- Central government on its part has asked states to appoint a **nodal officer in each district** to prevent the incidents of mob violence and lynching.

### Do we need for a separate law?

The need of a separate law stems due to the following reasons:

- **Enforce Constitutional provisions:** Lynching based on identity discriminates against a whole community and violates Article 14 and Article 15 of the Constitution of India.
- **Deterrence:** A dedicated law would help create enough deterrence against such heinous crime.

However, some experts feel that the lynch mob is a law and order challenge and there are enough provisions in IPC related to murder, attempt to murder, acts done by several persons in furtherance of common intention etc. to tackle such menace if implemented strongly and effectively.

National Campaign Against Mob Lynching (NCAML) released a draft of a proposed law, **MASUKA**, or the **Manav Suraksha Kanoon** (a law to protect human beings).

#### Manav Suraksha Kanoon

- Definitions of 'lynching', 'mob' and 'offensive material'.
- Lynching should be made non-bailable offence – with graded levels of punishment depending upon the injury caused to the victim.
- Dissemination of offensive material to be made a separate offence.
- Investigation of lynching incidents to be conducted by senior police officers.
- Special courts to fast track trials.
- Designated judges for trial and appeal at High Court.
- Special rights for witnesses and victims.
- Mandatory state government compensation within 30 days.

#### Supreme Court observations on mob lynching

In *Tehseen Poonawalla vs Union of India, 2018*, Supreme Court condemned recent incidents of lynching and mob violence against Dalits and minority community members as "horrendous acts of mobocracy", and asked Parliament to pass law establishing lynching as a separate offence with punishment. Such a law should be effective enough to instill a sense of fear in the perpetrators

- SC said that such incidents "threaten rule of law and the country's social fabric."
- The court said the growing numbness of the ordinary Indian to the frequent incidents of lynchings happening right before his eyes in a society based on rule of law is shocking.
- It is also the obligation of the Centre and the States to ensure that "nobody takes the law into his hands nor become a law into himself".

#### Way forward

Supreme Court issued **directions on the preventive, remedial and punitive measures** to be adopted by the central and the state governments. <sup>[1]</sup><sub>[SEP]</sub>

- The state governments shall **designate a senior police officer in each district** for taking measures to prevent incidents of mob violence and lynching.
- The state governments shall immediately **identify districts, sub-divisions and villages** where instances of lynching and mob violence have been reported in the recent past.
- The nodal officers shall **bring to the notice of the DGP any inter-district co-ordination issues** for devising a strategy to tackle lynching and mob violence related issues.
- It shall be the **duty of every police officer to cause a mob to disperse**, which, in his opinion, has a tendency to cause violence in the disguise of vigilantism or otherwise
- Central and the state governments should **broadcast on radio and television and other media platforms** including the official websites that lynching and mob violence shall invite serious consequences.
- Curb and **stop dissemination of irresponsible and explosive messages**, videos and other material on various social media platforms. Register FIR under relevant provisions of law against persons who disseminate such messages.
- Ensure that there is **no further harassment of the family members of the victims**.
- State governments shall **prepare a lynching/mob violence victim compensation scheme**.
- Cases of lynching and mob violence shall be specifically **tried by designated court/fast track** courts earmarked for that purpose in each district. The trial shall preferably be concluded **within six months**.
- To set a stern example in cases of mob violence and lynching, the trial court must ordinarily **award maximum sentence upon conviction** of the accused person.
- If it is found that a police officer or an officer of the district administration has **failed to fulfill his duty**, it will be considered as an act of **deliberate negligence**.



## Summary

**Mob lynching** is an illegally authorized way of punishing somebody by an informal group under the pretext of administering justice without trial.

### Reasons:

- **Mob Psychology and political patronage.**
- **Administrative Failure** and Perception that 'culprits' go unpunished.
- **Rumours on social media:** E.g. recent rumours of child lifters on WhatsApp inciting violence.
- **Societal factors** such as Popularity of 'instant justice', prejudice, intolerance etc.
- **No database to analyse trends:** NCRB report- 2017, the data collected under the sub-heads of mob lynching has been omitted.
- In **Cattle Protection Laws** of some states, there is shifting of burden of proof on victims and consequent presumption of guilt.

### Impact of mob lynching

- **Fuel communalism and casteism**
- **Freedom of speech and personal choices** are endangered and plurality is not accepted.
- **Subverts rule of law**
- **Fear Psychosis** as it creates fear in the daily lives of people, bringing cities to a standstill.
- **Economic Impact** on leather and meat export industries, livelihood of nomadic herders (Banjara of Rajasthan).

### Legal provisions on mob lynching in India

- **CrPC Section 223(a):** Provision for persons being charged for an offense jointly accused of the same offence committed in the course of the same transaction which is applicable on two or more people.
- **IPC Section 153A:** Promoting enmity between different groups and doing acts prejudicial to maintenance of harmony.

### Government steps so far

- **Manipur, West Bengal and Rajasthan** have passed laws against mob lynching.
- The **State Law Commission of UP** recommended jail terms ranging from seven years to life imprisonment for those convicted for mob lynching.
- **Two high-level committees** constituted by the **Central government** to effectively deal with mob violence and lynching.
- Central government asked states to appoint a **nodal officer in each district** to prevent the incidents of mob violence and lynching.

### Need for a separate law

- **To enforce Constitutional provisions-** Article 14 and Article 15
- A dedicated law would help create **deterrence** against such heinous crime.
- National Campaign Against Mob Lynching (NCAML) released a draft of a proposed law, **MASUKA**, or the **Manav Suraksha Kanoon** (a law to protect human beings), which has following suggestions:
  - Making lynching non-bailable offence, investigation by senior police officers, Special courts, designated judges, Special rights for witnesses and victims, mandatory compensation within 30 days.
- **Supreme Court observations:** In **Tehseen Poonawalla vs Union of India**, 2018 SC called mob violence "horrendous acts of mobocracy" and asked Parliament to pass law establishing lynching as a separate offence.

### Way forward

- **Supreme Court** issued following directions
  - Designate a senior police officer in each district, identify districts, sub-divisions and villages mob violence have been reported, broadcast on radio and television against lynching and mob violence shall invite serious consequences, curb and stop dissemination of irresponsible and explosive messages etc.

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## PERSONALITY TEST PROGRAMME 2019 (Current Affairs Interview Issues)

### NATIONAL MEDICAL COMMISSION ACT, 2019

#### Introduction

National Medical Commission (NMC) Act, 2019 has recently replaced the Indian Medical Council Act, 1956. It intends to reform the **development & regulation** of all aspects relating to **medical education, medical profession and medical institutions**. It provides much needed **multi-sectoral perspective** to healthcare management and incentivizes **innovation and research**.

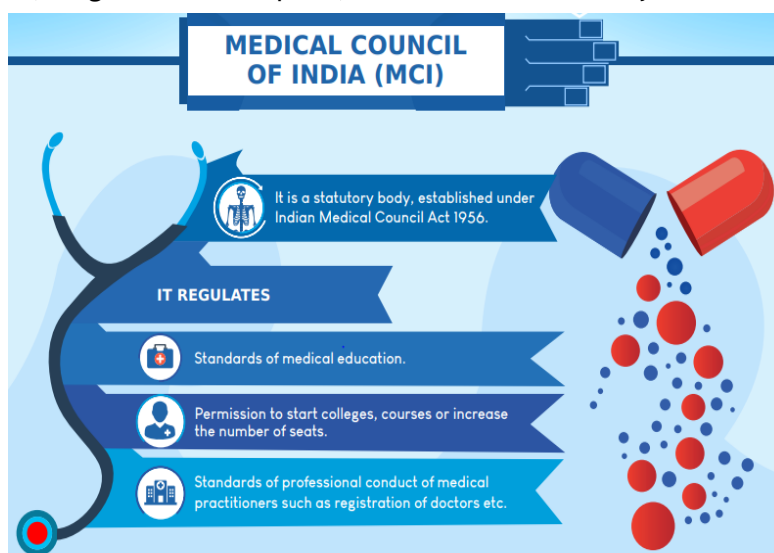
#### Background of Reforms in Medical Education:

- In 2014, an expert group headed by Prof. Ranjit Roy Choudhury was set up to study the problems being faced in the medical education sector.
- In 2016, Lodha Panel was constituted by the Hon'ble Supreme Court to oversee the functioning of MCI and its policy decision making.
- In 2016, NITI Aayog Committee headed by Dr. Arvind Panagariya was formed to address concerns over quality of medical education. It proposed to repeal Indian Medical Council Act, 1956.
- National Medical Commission (NMC) Bill, 2017 lapsed with the dissolution of 16<sup>th</sup> Lok Sabha.

#### Issues with Medical Council of India (MCI) era regulation:

Medical Council of India (MCI) was responsible for regulating medical education and practice. MCI faced several issues with respect to its regulatory role, composition, allegations of corruption, and lack of accountability.

- **Oversight:** Before NMC, there were **separate regulatory bodies** to oversee different healthcare disciplines.
  - These include the Medical Council of India, the Indian Nursing Council, the Dental Council of India etc.
  - Existence of multiple bodies limits cross connectivity across these different health-care disciplines.
- **Role of the Councils:** Current councils perform the dual responsibilities of regulating **educational institutions** and **regulation of professionals** – prescribing a code of ethics, ensuring compliance, and facilitating continued medical education. This clearly gives rise to the conflict of interest.
- **Constitution of the Councils:** MCI has been a **non-diverse body**, consisting mostly of doctors who look out for their own self-interest over public interest. Present structure is not representative of the diverse professionals such as public health experts, social scientists, and health economists.
  - Additionally, large size of the Council (over 100 members) makes it dysfunctional in character.
- **Elected versus Nominated:** The current electoral process is based on a **flawed principle** whereby **the regulated elect the regulators**. It creates an ab-initio **conflict of interest**.



- **Fee Regulation:** There was no provision to regulate fees in medical colleges under the Indian Medical Council Act 1956.
  - Absence of enforceability encouraged continuation of the underground economy consisting of capitation fees and payments demanded on various pretexts throughout education.
  - Supreme Court had set up of 'fees committees' in each state chaired by retired High Court judges but it failed to control excess fee charges by private colleges.
- **Corruption:** Recognition process under MCI consisted of multiple inspections making it a rent seeking exercise.
- **Autonomy & accountability:** Despite being funded by the Government, there was no way to enforce accountability on the MCI.
- **Professional Conduct:** MCI was only limited to the licensing of medical colleges and no emphasis given to the regulation of medical ethics in medical education and practice.

#### Features of National Medical Commission (NMC) Act, 2019

- Setting up of National Medical Commission (NMC) that will replace MCI. State Medical Councils (SMC) would be set up at state or UT level having role similar to NMC.
- **Composition:** Members of NMC will be appointed by the central government.
  - NMC will consist of a Chairperson, 10 ex-officio members, and 22 part-time members. A Search Committee will recommend names to the central government for the post of Chairperson, and the part time members.
  - Ministry of Health & Family Welfare recently finalized 25 members of National Medical Commission (NMC).
- **Medical Advisory Council:** Central government will constitute a Medical Advisory Council, through which states/union territories can put forth their views and concerns before NMC. Further, the Council will advise NMC on measures to determine and maintain minimum standards of medical education.
- **Autonomous Boards:** NMC will co-ordinate activities of four Autonomous Boards. The Presidents of these Boards will also be ex-officio members of NMC.
  - **Under-Graduate Medical Education Board (UGMEB) and Post-Graduate Medical Education Board (PGMEB):** These Boards will be responsible for formulating standards, curriculum, guidelines, and granting recognition to medical qualifications at the UG and PG levels respectively.
  - **Medical Assessment and Rating Board (MARB):** MARB will have the power to levy monetary penalties on medical institutions which fail to maintain the minimum standards as laid down by UGMEB and PGMEB. It will also grant permission for establishing a new medical college, starting any PG course, or increasing the number of seats.
  - **Ethics and Medical Registration Board:** It will maintain a National Register of all licensed medical practitioners, and regulate professional conduct.
- **National Examination:**
  - There will be a uniform National Eligibility-cum-Entrance Test (NEET) for admission to UG and PG super-speciality medical education in all medical institutions.
  - **Section 15 (1)** of the Act proposes a common final-year MBBS exam, National Exit Test (NEXT) to get license to practice medicine, seek admission to post-graduate medical courses and for enrolment in State Register or National Register. It will also be a screening test for foreign medical graduates.
- **Community Health Providers (CHPs):** Section 32 of the NMC Act provides for 'limited licensing' of 3.5 lakhs non-medical persons or Community Health Providers (CHPs) to practise modern medicine, with the aim to tackle disease burden in rural areas better. Any person connected with modern scientific medical profession may be given such license.
  - They can work as health professionals only in primary/preventive healthcare, providing counselling & early warnings, treating elementary ailments and providing early referral to a higher facility.
- **Medical Ethics:**
  - Ethics and Medical Registration Board will ensure compliance of the code of professional and ethical conduct through SMCs.
  - SMCs can also conferred power to take disciplinary actions in respect of professional or ethical misconduct by medical practitioners under respective State Acts.
  - Aggrieved medical practitioner can appeal to Ethics and Medical Registration Board against decision of SMC, or approach NMC against decision of the Board.

#### How NMC will improve the scenario of medical education regulation?

NMC Act aims to fulfil the following 6 tenets of medical education regulation:

- Ensure **appropriately trained** and **skilled workforce** to address the prevailing disease burden
- Uniform **standardization** of competence and skills
- Create Human Resources in Health (HRHs) with **basic knowledge of science** and aptitude for the profession

- Ensure **ethical practice** in the interest of the patients
- Create an **environment** that enables **innovation and research**
- Check corrosive impact of the process of **commercialisation** on **values and corrupt practices**

<b>Reduce burden on students</b>	<ul style="list-style-type: none"> <li>• Common medical entrance exam and counselling will prevent seat blocking in parallel counselling processes. It will also eliminate the need for students to approach multiple colleges &amp; take part in multiple counselling processes for admission.</li> <li>• The provision of NEXT is to ensure common standards of knowledge and skills for graduating doctors on a nation-wide basis.</li> <li>• Students will be able to concentrate on internship instead of spending all their time preparing for entry into PG courses. There will be no restrictions on the number of attempts at NEXT.</li> <li>• There is a provision for common counselling for entrance to PG courses as well.</li> </ul>
<b>Bring down cost of medical education</b>	<ul style="list-style-type: none"> <li>• NMC Act <b>provides for regulation of fees and all other charges in 50% seats in private colleges as well as Deemed Universities.</b></li> <li>• Nearly 50% of the total MBBS seats are in government colleges, which have nominal fees. Of the remaining seats, 50% would be regulated by NMC. This means that almost 75% of total seats in India would be available at reasonable fees.</li> <li>• Rating would be provided by MARB for medical institutions based on the standard of education/training. This will serve to regulate fee through market forces.</li> </ul>
<b>Ensure probity in medical education</b>	<ul style="list-style-type: none"> <li>• Members of NMC will be appointed for only one term of four years, and will not be eligible for any further extension.</li> <li>• They will have to declare their assets at the time of being appointed and again while demitting office. Members will also have to declare their professional and commercial engagement.</li> <li>• Chairperson /member on ceasing to hold office will not accept employment in a private medical institution, whose matter has been dealt by them either directly or indirectly, for a period of two years.</li> <li>• NMC Act would check charging of unregulated capitation fees by private colleges and reduce role of black money in medical education</li> </ul>
<b>Enhance number of medical seats</b>	<ul style="list-style-type: none"> <li>• The Act balances interests of poor but meritorious students and promoters of private medical colleges in order to expand the number of seats on offer.</li> <li>• Provision of differential pricing with 50% unregulated seats would incentivize private participation in medical education.</li> <li>• Meanwhile, involvement of market forces would ensure that quality of education is commensurate to the fees charged; otherwise there would be no takers for such seats.</li> </ul>
<b>Ensure quality education</b>	<ul style="list-style-type: none"> <li>• Composition of NMC includes 75% doctors representing Central and States Institutions/Councils and health universities. Such a composition of NMC will ensure that due weightage to theoretical as well as clinical skill sets in medical education is adhered to.</li> <li>• Only NEET qualified students can get admission, which ensures that merit prevails in admissions.</li> <li>• NEXT ensures that colleges with largest number of failed students will automatically close down.</li> </ul>
<b>Provide wider access to quality healthcare</b>	<ul style="list-style-type: none"> <li>• Given that doctor-population ratio in India is low (1:1456 as compared with the WHO standards of 1:1000), the Act provides for optimal utilisation of scarce resources (Community Health Workers &amp; Mid-Level Practitioners)</li> <li>• Providing limited license to CHPs in preventive and primary healthcare will create a cadre of trained mid-level health providers who can lead the Health and Wellness Centres (HWCs) under Ayushman Bharat initiative.</li> <li>• Chhattisgarh and Assam have successfully experimented with Community Health Workers with adequate regulation. Even developed countries like USA, Canada and UK have mid-level providers like nurse practitioners.</li> </ul>
<b>Encourage federal polity</b>	<ul style="list-style-type: none"> <li>• There will be 10 Vice Chancellors of State Health Universities and 9 elected members of State Medical Councils in the 33-member NMC. More than half of the total strength would be from the States thereby ensuring that the NMC is representative, inclusive and respecting the federal structure of Indian polity.</li> <li>• States still will have the power to decide the extent of fee regulation in the remaining 50% of the seats, signing of MOUs with medical colleges.</li> </ul>

### Concerns with the existing structure of NMC

- **Over-centralization:** Nomination of important functionaries of NMC will rest exclusively with the Centre. Additionally, it gives power to the central government to issue binding policy directives to NMC, its autonomous boards & to state governments for implementing provisions of the Bill. Such centralisation has been opposed by Indian Medical Association (IMA), as it threatens to give rise to nepotism and corruption similar to MCI.

- **Community Health Provider:** Indian Medical Association (IMA) has raised concerns that allowing CHPs to practice modern medicine and prescribe independently might encourage quackery, as the term 'Community Health Provider' has been described vaguely in the Act and there is ambiguity in terms of degree of involvement and regulation of CHPs.
  - Earlier version of the Bill proposed a bridge course clearing which alternative medicine doctors could practise modern medicine. The proposal was shelved after strong opposition from medical fraternity.
  - Given the history of poor enforcement of the Drugs and Cosmetics Act, as seen in the rising rate of the antimicrobial resistance problem, the issue of regulation of CHPs needs to be carefully examined.
- **National Exit Test (NEXT):** The criteria for practising medicine and admission to post graduation can't be brought to the same level since the level of knowledge and training required for both are very different.
- **Human Resources in Health in Rural Areas:** In addition to low doctor-population ratio, there is a huge skew in the distribution of doctors working in the urban and rural areas with urban to rural doctor density ratio being 3.8:1. The Act fails to address people-centric issues like recommendations for retaining doctors in rural health services.

#### Further Suggestions:

- There is a requirement of **creating more seats in government medical colleges**. Government has invested more than ₹10,000 cr in creating government seats in the past five years, and is also setting up 21 new AIIMS at a cost of over ₹30,000 cr to boost medical education sector.
- While encouraging private investment in medical education sector, the **financial viability of private medical colleges** also needs to be ensured while framing regulations on fees and other charges.
- Mid-level health workers like **Community Health Providers** are very much needed but their **training programmes, competencies** and **roles** have to be **clearly defined** to differentiate them from medical graduates.
  - Enhanced punishment for quackery up to one year imprisonment and up to ₹5 lakhs fine is a good deterrent for the start.
- There is a need to **look beyond allopathic practitioners** and **build the capacity of the existing human resources in allied healthcare sector** including AYUSH practitioners, BSc (Nursing), BDS, B Pharma etc., to address the shortage of healthcare professionals so as to achieve the objectives of the **National Health Policy, 2017**. The **Allied Healthcare Professionals Bill 2018**, which is being examined by the Standing Committee, is the right place to position them.

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## Summary

- Recently, National Medical Commission (NMC) Act, 2019 **replaced the Indian Medical Council Act, 1956.**
  - It intends to **reform the development & regulation of all aspects relating to medical education, medical profession and medical institutions.**
- Before passing of this act, **various panels** like Ranjit Roy Choudhury committee, Lodha Panel, NITI Aayog etc. **raised concerns over quality of medical education and proposed to repeal Indian Medical Council Act, 1956.**
- **Various issues plaguing Medical Council of India era:**
  - There were **separate regulatory bodies** like Medical Council of India, the Indian Nursing Council, the Dental Council of India to oversee different healthcare disciplines.
  - **Dual responsibilities of the councils** like educational institutions and regulation of professionals
  - **No provision to regulate fees** in medical colleges under Indian Medical Council Act 1956.
  - **No way to enforce accountability on the MCI** and corrupt practices during inspection.
  - **No emphasis on medical ethics.**
- **Therefore, National Medical Commission (NMC) Act, 2019** was passed with following salient features
  - Setting up of **National Medical Commission (NMC) that will replace MCI** (MCI was responsible for regulating medical education and practice).
  - **Members of the NMC will be appointed by central government** unlike earlier electoral process.
  - **Structural changes**
    - ✓ Constitution of a **Medical Advisory Council**, through which states/union territories can put forth their views and concerns before NMC and advise on measures to determine and maintain minimum standards of medical education.
    - ✓ NMC will also co-ordinate activities of **four Autonomous Boards i.e.** Under-Graduate Medical Education Board (UGMEB) and Post-Graduate Medical Education Board (PGMEB), Medical Assessment and Rating Board (MARB) & Ethics and Medical Registration Board.
  - **Uniform National Eligibility-cum-Entrance Test (NEET)** for admission to UG and PG courses. Also, there will be **National Exit Test** to get licence to practice medicine.
  - **'Limited licensing' of 3.5 lakhs non-medical persons or Community Health Providers (CHPs)** to practise modern medicine, with the aim to tackle disease burden in rural areas better.
- Hence, **NMC will improve the scenario of medical education regulation by** ensuring appropriately trained and skilled workforce, Uniform standardization of competence and skills, regulating fees, enhancing number of medical seats, ensuring ethical practice in the interest of the patients etc.
- But, there are many concerns with the existing structure of NMC:
  - **Over-centralization** as NMC members are exclusively nominated by centre and power to Centre to issue binding policy directives to NMC.
  - **Encouraging quackery** by giving license to Community Health Providers
  - **Opposition to NEXT exam** as it condenses MBBS exam, licentiate exam and PG NEET.
  - **No recommendations for retaining doctors** in rural health services.
- **Various Suggestions have also been given for NMC Act:**
  - Create more seats in government medical colleges.
  - Balancing fee regulation with financial viability of private medical colleges.
  - Defining competencies and roles of CHP for differentiating from medical graduates.
  - Build capacity of human resources in allied health care sectors like AYUSH, BDS, B-Pharma etc.



## PERSONALITY TEST PROGRAMME 2019

### (Current Affairs Interview Issues)

## QUESTIONABLE CREDIBILITY OF INDIAN STATISTICAL DATA

#### Context

The credibility of India's statistical system has come under intense scrutiny in recent years because of apprehensions raised over the procedural lapses in the release of the gross domestic product (GDP) data, methodology for computing national income series with a new base year, delay in the release of data like Periodic Labour Force Survey for 2017-18, withholding of the Annual Consumption Expenditure Survey for 2017-18 and the Mudra survey in recent times.

For instance, last year, former **Chief Economic Adviser Arvind Subramaniam** claimed that **GDP was actually 2.5% lower than the official figures** between 2011-12 and 2016-17. In May 2019, as many as **108 economists and social scientists expressed concerns over "political interference"** and **"the tendency to suppress uncomfortable data"** and called for restoration of **"institutional independence"** and integrity to the statistical organisations. **IMF** had raised the issue of "transparency" with Indian officials in data collection and, in particular, measurement of the **GDP deflator** - the adjusted inflation rate used to estimate real GDP.

Faced with criticism over quality of data as well as allegations of manipulation, the government has begun discussions on a much-delayed revamp of official statistics.

#### A brief overview of the Indian Statistical System

- The **National Sample Survey Organisation (NSSO)** was established in 1950 by the government on the advice of Professor P C Mahalanobis, then statistical adviser to the Cabinet.
- The **Indian Statistical Institute (ISI)**, too, got a statutory status, with the passing of the ISI Act, 1959.
- To address problems of data collection, tabulation and interpretation the **Indian Statistical Service (ISS)** took shape in 1961.
- In October 1999, the NSSO became an attached office in the ministry of statistics and programme implementation (MoSPI).
- The Ministry of Statistics and Programme Implementation has **two wings i.e.** a) Statistics and b) Programme Implementation.
  - The **Statistics Wing**, till recently, consisted of the **Central Statistical Office (CSO)**, the Computer Centre and the **National Sample Survey Office (NSSO)**.

Agency	Statistics
<b>Central Statistical Office (CSO)</b>	GDP, Index of Industrial Production, Energy Statistics, Infrastructure Statistics, National Income Accounting, Conduct of Annual Survey of Industries, Consumer Price Indices for Urban Non-Manual Employees, Human Development Statistics, Gender Statistics, Imparting training in Official Statistics.
<b>National Sample Survey Office (NSSO)</b>	Primarily data are collected through nation-wide household surveys on various socio-economic subjects, Annual Survey of Industries (ASI). Also collects data on rural and urban prices, crop statistics.

    - ✓ **CSO** coordinates the statistical activities in the country and also evolves statistical standards. Its activities include preparation of National Account Statistics (NAS), conduct of Annual Survey of Industries (ASI), Economic Censuses, Index of Industrial Production compilation, computation of Consumer Price Indices etc.
    - ✓ **NSSO** is responsible for conducting large-scale sample surveys in diverse fields on an all India basis.
  - The **Programme Implementation Wing** has three Divisions, namely:
    - ✓ **Twenty Point Programme**

- ✓ **Infrastructure Monitoring and Project Monitoring and**
- ✓ **Member of Parliament Local Area Development Scheme (MPLADS)**
- Subsequently in line with the recommendations of the **C Rangarajan Commission (2001)**, **Chief Statistician of India (CSI)** and **National Statistical Commission (NSC)** came into existence in **2006**. Both the CSI and NSC are independent in their functioning, **not part of the general bureaucracy**, and were brought to **ensure autonomy and transparency** of the statistical system.
  - **NSC** was supposed to be an apex body for standard setting, quality control, regulation of statistical data collected by multiple ministries and departments, including the Ministry of Statistics and Programme Implementation (MoSPI) and the **governing body for the NSSO**.
  - **CSI** was the functional head of the statistical system.
- As per a **May 2019 order**, the **National Statistics Office (NSO)** and its constituents - National Sample Survey Office (NSSO) and Central Statistics Office (CSO) - became "an integral part of the main ministry" with the **NSSO and CSO merging into the NSO** and the Secretary of MoSPI becoming the new head of the NSO.

### Concerns raised about Indian statistical system in recent times

The problems can be broadly bracketed under 3 categories: Administrative structure or institutional infirmities, methodology and data. Various concerns raised are:

- **Institutional and structural issues:**
  - **Effects of restructuring order of May 2019**
    - ✓ The restructuring order is silent on both the CSI and NSC. So, there is no clarity on what happens to their functioning.
    - ✓ **Apprehensions regarding NSSO:**
      - Under MoSPI, it has become the part of the general bureaucracy and ceases to exist as an autonomous body. **Moreover, the fear is that in absence of the oversight of independent bodies like the CSI and NSC, the statistical system may become amenable to political interference.**
    - ✓ The NSO will be headed by the secretary of the Ministry of Statistics and Programme Implementation (MoSPI). This is in contrast to the original plan proposed by experts to merge various statistical bodies such as the NSSO and others to create a unified statistics body that is accountable to Parliament, rather than the government.
  - **Timely releases:** As of now, the government does have a calendar for release of data sets such as national accounts, Index of Industrial Production and inflation. But there are no specific timelines for release of labour force statistics and consumption expenditure surveys.
    - ✓ Timely release of data sets is crucial for both government policy formulation and investment decisions by the industry.
  - Moreover, **need of more skilled manpower and getting additional resources** in the government is a major problem. The NSC has been pressing for more resources to improve its capabilities, review of data collection, collation and aggregation to ensure quality, timeliness and credibility of the collected statistical output.
- **Methodology:** It includes how raw economic data should be collected, and about the various assumptions that should go into the calculation of GDP and other economic estimations. Concerns are:
  - Government statisticians have for long used small surveys to gather the raw data that are required to make "blown up" estimations about the growth of the wider economy.
  - The data on GDP are initially estimated at current price and then deflated for constant price for comparability of data over time. However, the present series encountered serious **problems for price adjustment, specifically for the services sector** contributing about 60% of GDP, in the absence of appropriate price indices for most service sectors.
    - ✓ The deflators used in the new series could not effectively separate out price effect from the current value to arrive at a real volume estimate at constant price. Price indices going into a low and negative zone in 2014-17 distorted real growth.
  - **Continuation of faulty approach to collect or collate other data:**
    - ✓ In certain cases, such as sugar, production is calculated on average yield data which is over three decades old.
    - ✓ When it comes to calculating agriculture produce prices, agencies depend on "farmgate prices" (net price of the product when it leaves the farm, after marketing costs have been subtracted), which



government economists admit is faulty given that many farms do not have significant marketing costs and it is now possible to get mandi rates of various commodities.

- **Nature of Data:**

- **Coherence of GDP data:** The difference between estimates on household consumption based on the NSSO surveys and the CSO data is large and widening over time. For instance, Arvind Subramanian (in 2019) analysed alternate sets of data to tell a different story than what the GDP data shows (as mentioned above).
  - Data on the large unorganised sector are even cruder and can be extremely unreliable. The proportion of the Indian economy that is based on the unofficial sector, such as household enterprises, makes it a nightmare to assess economic activity.
- **Shortcoming of data under MCA21:**
  - ✓ In May, the NSSO came out with a report which cast serious doubt on the reliability of raw data that is used to calculate India's gross domestic product (GDP).
    - The NSSO stated that it could not either trace or classify 36% of the companies included in the MCA-21, a database of private companies that is maintained by the Ministry of Corporate Affairs, whose financial numbers the government currently uses to calculate GDP figures.
  - ✓ MCA21 data used in the new series **do not have a comparable long series of back data prior to 2009**. The only data was from the Reserve Bank of India (RBI) studies on company financiers covering just a few thousand companies.
  - ✓ The use of MCA21 data and blow up factors thereof **without weeding out defunct enterprises**, and then insufficient work on mapping of comparable ASI data, followed by similar survey on services sector enterprises were another major lacuna. Responding to this, government that these will be weeded out via KYC norms.

### Steps taken

- The Ministry of Statistics and Programme Implementation (MoSPI) has sought suggestions on the **Draft National Statistical Commission (NSC) Bill 2019** to make data collection more transparent and reliable.
  - The statutory provisions of the bill are in line with the recommendations of the **Rangarajan Commission (2001)**, international best practices and the country's commitment for basic principles of "**data as public good**" as set out in the **United Nations resolution (2014)**, and notified in **GOI's gazette** in 2016.
  - The bill proposes a **permanent set-up for the commission**, headed by a full-time chairperson and five full-time members, whose tenure is proposed to be of **three years**. Among the other members recommended are the deputy governor of the RBI, the Chief Statistician of India and the Chief Economic Adviser.
  - The bill also proposes to create a powerful set-up **for statistical audit** to maintain and enforce **high quality of data**, financial **independence** through **endowment grants** for the fund, and an **independent secretariat**.
- A broad-based **Standing Committee on Economic Statistics (SCES)** with 10 non-official members and 16 official members has been set up by the government under former Chief Statistician of India Pronab Sen.
  - It will seek to bring consistency among various government economic indices such as Periodic Labour Force Survey, the Annual Survey of Industries, the Annual Survey of Services Sector Enterprises, Index of Industrial Production, Economic Census etc.
  - It will work on developing survey methodology including sampling frame, design, oversee the finalisation of the reports of the surveys, and conduct pilot surveys, if necessary, before finalising schedules for data collection.
- The **Sub-committee on Annual Survey of unincorporated sector enterprises and services sector data** is working on mapping the unorganised sector for data, along the lines of the present Annual Survey of Industries.
- The Indian Council of Medical Research (ICMR)'s National Institute for Medical Statistics (ICMR-NIMS), in partnership with Population Council (International non-profit NGO that conducts research in biomedicine and social science) has launched the **National Data Quality Forum (NDQF)**.
  - The National Data Quality Forum (NDQF) is an integrated national-level platform that aims to improve the quality of health and demographic data by generating meaningful dialogue around the improvement of data quality in general, and for health and medical research in particular.

#### Success Story of Indian Statistics- The RBI

- The monetary and banking data of the Reserve Bank of India is probably the best in the country and respected everywhere.
- This is possible because the data flows from a regulated set of entities which have to comply with the structures.
- The presentation of accounts by banks has been homogenised to ensure that there is no ambiguity in definitions, and hence there are no revisions in the data.

- NDQF's activities will help establish protocols and good practices of data collection, storage, use and dissemination that can be applied to health and demographic data, as well as can be replicated across other industries and sectors also.
- **NITI Aayog has recently released a Vision Document for the NDAP:** National Data and Analytics Platform (NDAP) is a pan-India initiative by NITI Aayog. First version of NDAP is proposed to be released in 2021.
  - NDAP aims to democratize access to publicly available government data.
  - NDAP will spearhead the standardization of formats in which data is presented across sectors.

## Way Forward

- **Institutional strengthening and related structural reforms:**
  - Internationally, there is a process for going for the **National Strategy for the Development of Statistics (NSDS)**. It covers the legal and institutional framework, statistical capacity-building, statistical infrastructure, network for integration and dissemination of data etc. A clear strategy is needed that will be guided by the NSC, for building the capacity to **modernise our data system**.
  - Further, there is a **need for a strong coordination with the states**. This may be served well if each of the states have similar arrangements, and a mechanism for tight coordination, in a holistic manner, is established.
- **Fill data gaps and improve data consistency, quality and coherence:**
  - **Creating regular processes within the Central Statistical Organization (CSO) for systematically testing for data consistency.**
    - ✓ For instance, the difference between estimates on household consumption based on the National Sample Survey Organization (NSSO) surveys and the CSO data, which are large and widening over time, need to be addressed.
  - **Need of an integrated system to produce consistent official statistics:** Along with GDP, we need data to assess competitiveness, inclusive growth, biotechnology, robotics-influencing employment and productivity, environmental protection, sustainable development and social welfare. Hence GDP data needs to be linked with a host of other data for deeper insight. We need to re-engineer the existing system, **creating an integrated system populated with granular data**.
  - **For data coherence**, we should go for big data technology and web-based reporting and have **Data Warehouse** with conformed dimensions and relevant data to try to sort them out considering the bottom-up approach for coherence, wherever possible.
  - **Revamping the systems of data collection:** The urban blocks and village panchayats must be empowered to submit key data on output, employment, price, education and health through the application programming interface (API). The higher levels of administration already have people for reporting data, who can coordinate the training of personnel, undertake quality checks and so on.
- **Need for better price deflators in GDP calculations:** income from the services sector, which accounts for around 60% of GDP, lacks the appropriate price index.
- **Timely releases of surveys and reports:** Putting in place a release calendar for all official economic data sets and ensuring their timely release is key to restoring the credibility of India's statistics
- **Adopting new approach of collecting data in agriculture:** When productivity and remunerative price of output are major concerns for agriculture, it is necessary to collect data on factors such as soil conditions, moisture, temperature, water and fertilizer use determining yield, impact of intermediary and forward trade on farm gate price and so on.
  - For example, Israel collects these data for analysis to support productivity.

## Conclusion

Data is the new oil in the modern networked economy in pursuit of socio-economic development. An integrated statistical system, supported by advanced technology and professionalism, has advantages for producing reliable data. The system should have enough possibilities for quality checks and audit, following the code of practice. Recognising that credible official statistics can enhance democratic fervour, our lawmakers will do well to empower the NSC to discharge its role effectively, dispelling any apprehension on its independence in the production of high-quality official statistics.

## Summary

The credibility of India's statistical system has come under intense scrutiny since the revision of GDP estimates in 2015. It further eroded with the accusations and resignations of key statisticians over political interference.

## Background

- **Chief Statistician of India (CSI) and National Statistical Commission (NSC)** came into existence in **2006**.
- In 2019, the **NSSO and CSO were merged into the NSO** and the Secretary of MoSPI became the new head of the NSO.

## Concerns raised about Indian statistical system in recent times

- Institutional and structural issues:
  - The restructuring order is silent on both the CSI and NSC.
  - NSSO has become the part of the general bureaucracy and ceases to exist as an autonomous body.
  - Timely releases: there are no specific timelines for release of labour force statistics and consumption expenditure surveys.
  - Lack of skilled manpower and resources to improve capabilities, review of data collection, collation and aggregation to ensure quality, timeliness and credibility of the collected statistical output.
- Methodology:
  - In 2015, MCA-21 database was introduced as the mainstay for calculating GDP figures which replaced Annual Survey of Industries (ASI) marking a shift from establishment to enterprise approach.
  - Absence of appropriate price indices for most service sectors.
  - Continuation of faulty approach to collect or collate other data:
    - ✓ Much of the services activity is largely estimated on the basis of the output of organised sector entities making up just a little over quarter of the sector.
    - ✓ In certain cases, such as sugar, production is calculated on average yield data which is over three decades old.
- Nature of Data:
  - Shortcoming of data under MCA21
    - ✓ The NSSO stated that it could not either trace or classify 38.7% of the companies included in the MCA-21.
    - ✓ MCA21 data used in the new series do not have a comparable long series of back data prior to 2009.
    - ✓ The use of MCA21 data and blow up factors thereof without weeding out defunct enterprises
  - Coherence of GDP data: The difference between estimates on household consumption based on the NSSO surveys and the CSO data is large and widening over time.

## Steps taken

- **Draft National Statistical Commission (NSC) Bill 2019** was prepared with an aim to make data collection more transparent and reliable.
- A broad-based **Standing Committee on Economic Statistics (SCES)** with 10 non-official members and 16 official members has been set up.
- ICMR-NIMS, in partnership with Population council has launched the National Data Quality Forum (NDQF).
- NITI Aayog has recently released a Vision Document for National Data and Analytics Platform (NDAP).

## Way Forward

- **Institutional strengthening and related structural reforms:**
  - Adopting **National Strategy for the Development of Statistics (NSDS)**: it covers the legal and institutional framework, statistical capacity-building, statistical infrastructure, network for integration and dissemination of data etc.
  - Further, there is a **need for a strong coordination with the states**.
  - Rationalise all statistical activities **to avoid duplication** and integration of data and **hive off programme implementation wing of the MoSPI** so that the CSI concentrates only on statistics.
- **Fill data gaps and improve data consistency, quality and coherence:**
  - **Need of an integrated system to produce consistent official statistics**
  - **For data coherence**, we should go for big data technology and web-based reporting and have **Data Warehouse**.

- **Revamping the systems of data collection:** The urban blocks and village panchayats must be empowered to submit key data on output, employment, price etc.
- **Need for better price deflators in GDP calculations:** income from the services sector, which accounts for around 60% of GDP, lacks the appropriate price index.
- **Timely releases of surveys and reports**
- **Adopting new approach of collecting data in agriculture:** it is necessary to collect data on factors such as soil conditions, moisture, temperature, water and fertilizer use determining yield, impact of intermediary and forward trade on farm gate price and so on.



## PERSONALITY TEST PROGRAMME 2019

### RESERVATION ISSUE

#### RESERVATION ISSUE (PROMOTION, EWS, LOCAL JOB QUOTA, WOMEN RESERVATION ETC.)

- The objective of reservation as envisioned by the founding fathers of the Constitution was to ensure social justice by granting special status to backward classes as they were denied equal opportunities for generations and required special assistance to catch up with the other forward castes.
- Later, reservation was extended to other backward classes (OBCs) under the recommendation of Mandal Commission. OBCs were granted reservation in education & employment, but no reservation in State Assemblies or Parliament.
- Reservation in education & employment is now being increasingly seen as the only tool available for upward social mobility, for getting good jobs and stable sources of livelihood for the youth.

#### **Related constitutional provisions and amendments:**

- **Article 15(4):** State can make any special provision for the advancement of any socially and educationally backward classes of citizens or for the Schedule Castes (SC)/Schedule Tribes (STs).
- **Article 15(5):** State can make special provisions for advancement of any **socially & educationally backward** classes of citizens or for SCs/STs, in relation to their admission to **public/private** education institutions. Minority educational institutions are excluded (**added by 93<sup>rd</sup> Constitutional Amendment Act 2006**)
- **Article 16(4):** State can make any provision for the reservation in appointments in favour of **any backward class** of citizens which is **not adequately represented** in the **services under the State**.
- **Article 16 (4A):** State can make any provision for **reservation in matters of promotion** (Added by 77<sup>th</sup> Constitutional Amendment Act (CAA) 1995), with consequential seniority (Added by 85<sup>th</sup> Constitutional Amendment Act 2001) in favour of the **Scheduled Castes & the Scheduled Tribes**, which are not adequately represented.
- **Article 38:** State must work to eliminate inequalities in status, facilities and opportunities amongst groups of people.
- **Article 46:** State to promote educational and economic interests of weaker sections, particularly SC/ST, and protect them from social injustice and exploitation.
- **Article 334** mentions period of reservation (i.e. 70 years) for SC/ST and representation of Anglo-Indians in Lok Sabha, State Legislative Assemblies, Panchayats and Municipalities.
- **Article 335:** As a safeguard against unreasonable or extravagant reservation, consideration to maintenance of efficiency of administration must be given, while making appointments to Central and State Government posts.
- **82nd Constitutional Amendment Act** provides for relaxation in qualifying marks/standards of evaluation for reservations in matter of appointment/promotions of members of Schedule Castes (SCs)/Schedule Tribes (STs)
- **Art 340 directs** central govt to **investigate** the conditions of socially and educationally backward classes within the territory of India and take appropriate measures for their advancement
- **Art 341/342** prescribes procedure in matter of specification of SCs/STs communities in a particular state/Union Territory (UT) can be declared as "Scheduled Caste/Tribe" by the President through an initial public notification after consultation with state government. Parliamentary law can include/exclude any community from the list of Scheduled Tribes.

## Reservations in promotions

### Background

- In **Indra Sawhney & Others v. Union of India, 1992**, SC held that reservation policy cannot be extended to promotions. However, 77<sup>th</sup> and 85<sup>th</sup> CAA allowed state to make any law regarding reservation in promotion for SCs/STs and according “consequential seniority” to SC/ST promotees.
- In **M. Nagaraj v. Union of India Case 2006**, SC validated Govt’s decision to extend reservation in promotion for SCs/STs, but directed the state to provide:
  - Quantifiable data on the backwardness of SCs/STs
  - Facts about their inadequate representation
  - Justification in favour of maintaining overall administrative efficiency
- In **Jarnail Singh & Ors v. Lachhmi Narain Gupta & Ors (2018)**, SC allowed for grant of quota in promotions in the government jobs to SCs and STs without the need to “collect quantifiable data” to demonstrate their backwardness.
  - SC asserted that requirement to collect quantifiable data showing backwardness of SCs/STs was “contrary” to the 9-judge bench Indra Sawhney judgement, as it introduced sort of a ‘**creamy layer**’ criterion corresponding to SCs/STs.
  - However, it must satisfy criteria of inadequate representation and maintenance of administrative efficiency.
  - It has asked the government to examine the possibility of introducing creamy layer for Scheduled Castes (SCs) and Scheduled Tribes (STs).

### Arguments against reservation in promotion

- **Not a fundamental right:** Provisions under articles 16(4), 16 (4A) and 16 (4B) of the Constitution are only enabling provisions, and not a fundamental right.
- **Doesn’t ensure end of social discrimination:** Gaining employment and position does not ensure the end of social discrimination and, hence, should not be used as a single yardstick for calculating backwardness.
- **Hurts efficiency of administration** particularly in highly technical domains such as super-specialization in medicine, nuclear research, space program etc.
- **Cornering of Benefits:** Critics point out that like the reservation aspect, even the promotions will be cornered by a select few castes and tribes.
- **Already adequate reservation:** There should not be quota in promotions for higher posts as backwardness indicators of SC/ST employees are effectively mitigated once they join government service.

### Arguments in favour of reservation in promotion

- **False notion of “efficiency”**
  - The ‘loss in efficiency’ argument is largely the result of an extremely conservative understanding of ‘merit’.
  - No person can be promoted unless they obtain a good rating in their annual confidential report which is currently the measure of efficiency.
- **Skewed SC/ST representation at senior levels:** Currently, representation of SCs/STs, recruited at lower levels of the services & aiming to reach the higher echelons, is highly skewed due to prejudices. E.g. only 4 SC/ST officers of secretary rank in the government in 2017, while around 40% of STs are in ‘Group D’ services.
- **Large number of vacant posts:** Post-Nagaraj case, reservation in promotions was struck down on the grounds that there was no quantifiable data on ‘backwardness’, which itself was not defined.

### Way forward

- Talks should be conducted with all stakeholders before moving ahead on the contentious issue of introducing ‘creamy layer’ criteria within SC/ST reservations.
- Constitution envisages not just formal equality of opportunity but also achievement of substantive equality. Currently, there is ambiguity in promotion process. Thus, there is a need for a new, comprehensive law to be enacted.

## Reservation for Economically Weaker Sections

124<sup>th</sup> Constitution Amendment Bill provides 10% reservation in government jobs and educational institutions to the economically weaker sections (EWS) among those who are not covered under any reservation plan.



## Key features of the amendment

- The Act amends **Article 15** to enable the government to take special measures (not limited to reservations) for the advancement of “economically weaker sections” (EWS).
- Up to 10% of seats may be reserved for such sections for admission in educational institutions. Such reservation will not apply to minority educational institutions.
- The amendment adds **Article 16(6)** which permits the government to reserve up to **10% of all posts** for the “economically weaker sections” of citizens.
- The reservation of up to 10% for the EWS will be in addition to the existing reservation cap of 50% reservation for SC, ST and OBCs.
- The central government will notify the “economically weaker sections” of citizens on the basis of family income and other indicators of economic disadvantage.
- Constitutional recognition to **Economically Weaker Section (EWS)** for the very first time, as vulnerable section & as a basis of affirmative action programme. It is a departure from traditional centrality of caste in deciding affirmative action.

## Arguments in favour of reservation based on economic status

- **Need for new deprivation assessment criteria:** In **Ram Singh v. Union of India (2015)**, SC asserted that social deficiencies may exist beyond caste (e.g. economic status / gender identity as in transgenders). Hence, there is a need to evolve new yardsticks to move away from caste-centric definition of backwardness, so that the list remains dynamic and most distressed can get benefit of affirmative action.
- **Growing economic disparity** as evident from agrarian crisis (due to low productivity & wages) & demands for reservation by dominant peasant castes.
- **Class-Caste Dichotomy:** Class (created by economic conditions) and identity (created by birth identity caste) politics have been in conflict increasingly in recent times, as benefits from affirmative action and class movements have been cornered by middle class and elites. This has created a sense of dissatisfaction amongst communities with similar or poorer economic status but excluded from caste-based reservation.

### Related Information

In recent years, **dominant castes**, which were historically rich, landowning, politically influential communities (Marathas in Maharashtra, Patidars in Gujarat, Jats in Haryana, Kapus in Andhra Pradesh), are demanding quotas in jobs and higher education.

### Reasons of demand for reservation by dominant castes:

- **Structural changes in the economy:** Land is no longer a source of power that it used to be with increasing urbanization, importance of knowledge/skills and greater premium attached to English education.
- **Agrarian distress:** Traditionally agricultural castes which are socially dominant don't see future in agriculture, driven by low wages driven by poor productivity and extensive fragmentation of farm land (Jats/Patidars/Marathas)
- **Wage Crisis:** Income in private sector is considerably low for worker and labour level jobs, in comparison Class C & D level Government jobs for people with equivalent qualification, leading to a rush for government jobs.
  - According to Labour Bureau in 2011-12, the average daily earnings of workers was ₹249 and regular employees was ₹388 in private sector in comparison to ₹679 and ₹945 in public sector correspondingly.
  - Payout is further increased after the implementation of 7<sup>th</sup> Central Pay Commission (CPC)
- **Perception of loss of power:** There is feeling among powerful farming communities that real economic power lies in the hands of the big corporations, and the state acts in their interest. So, these communities feel their power slipping away.
- **Relative deprivation:** When a community feels other communities in their region (which are economically and socially in similar conditions) are getting the benefits of reservation, they also claim for the same status.

## Arguments against extending reservations on economic basis

- **Against equality norm:** To balance the equality of opportunity of backward classes ‘against’ the right to equality of everyone else, a cap of 50% was put on the reserved seats. When the quota exceeds 50% limit, it breaches the equality norm.
- **No under-representation:** Upper caste is adequately represented in public employment. It is not clear if the government has quantifiable data to show that people from lower income groups are under- represented in its service.
- **Problem with the ceiling:** By fixing income ceiling for eligibility at ₹8 lakh a year — same as ‘creamy layer’ limit above which OBC candidates become ineligible for reservations — a parity has been created between socially & economically backward classes.
- **Challenges in the identification of beneficiaries:** In a country where taxable population is still very low due to misrepresentation of income, implementing economic eligibility criteria would be a bureaucratic nightmare.

- **Pandora's box' of demands:** There may be demand from sections of the SCs/STs and OBCs to introduce similar sub-categorization, based on economic criteria, within their respective quotas.
- **Anti-Merit:** In common perception, reservation has also become synonymous with anti-merit, which might get further ingrained in public psyche post EWS reservation.
- **Tool of populism:** Offering reservations has increasingly become tool for political gains in politics. This affects their credibility as a tool for social justice.

### Way Forward

- **Independent and transparent verification:** Based on the affidavits furnished by the candidates, independent, transparent and non-intrusive verification methods have to be devised so that reservation provisions cannot be misused easily.
- The logic of providing reservation to economically backward people can further be carefully extended to **exclude creamy layers among SC/ST groups**.
- **Improving job creation in private sector:** The only way out of the quota quagmire is to create an enabling environment for the formalization and creation of more and better jobs in the private sector to cater to a more aspirational India.

### Women's Reservation

- **India ranks 149 of 193** countries in women's representation according to the **Inter-Parliamentary Union 2019** ranking behind not just countries like UK, US and France but also neighbours like Pakistan, China, Nepal and Bangladesh.
- The ratio of women representatives in Lok Sabha stands at 14.3% (78 members), while the world average is around 25%.
- While female representation is low in the Lok Sabha, representation in state assemblies is even lower. The national average of women in state assemblies and state councils was 9% and 5%, respectively. Mizoram, Nagaland & Puducherry had no elected women representatives in their assemblies.
- At the Panchayat level, 1/3<sup>rd</sup> seats are reserved for women and also 1/3<sup>rd</sup> of seats for the SC and ST women within the SC and ST quotas.
- According to the Economic Survey 2018, prevailing cultural attitudes regarding gender roles, domestic responsibilities, female illiteracy, lack of confidence or finances and the threat of violence, are some of the **reasons for low women representation in India**.

### Women's Reservation Bill (108<sup>th</sup> Constitutional Amendment Bill)

- 108<sup>th</sup> Constitutional Amendment Bill, 2008 seeks to reserve 1/3<sup>rd</sup> of all seats for women in the Lok Sabha and the state legislative assemblies on a rotation basis. 1/3<sup>rd</sup> of total seats reserved for SCs/STs will be reserved for women of those groups.
- Reservation of seats for women shall cease to exist 15 years after the commencement of this Amendment Act.

### Arguments in favour of the Bill

- **Empowerment:** Several studies show the positive effect of reservation on empowerment of women and on allocation of resources on gender specific issues.
- **Greater Economic Growth:** A paper by United Nations University World Institute for Development Economics Research (UNU-WIDER) in 2018 studied the impact of women politicians on economic performance in state legislative assemblies. It examined data for 4,265 state assembly constituencies between 1992–2012 using night luminosity as a measure of economic performance.
  - The paper estimated women legislators raise luminosity growth in their constituencies by about 15% points per annum more than male legislators. They were also found to be far more effective at completing road projects and hence creating infrastructure for growth.

### Arguments against it

- Reserving a constituency for a woman would translate to a loss of opportunity for the men who could have been better or more qualified candidates. This could also result in disregarding the choice of the voter.
- It might perpetuate the unequal status of women since they would not be perceived to be competing on merit. It is also contended that reservation policy diverts attention from the larger electoral reforms such as decriminalisation of politics & inner party democracy.
- Rotation of reserved constituencies in every election may reduce the incentive for an MP to work for his constituency as he may be ineligible to seek re-election from that constituency.
- It is argued that reservation can at best be 'palliative' and no decisive transformation can take place unless such a measure is accompanied by structural changes in the nation's productive relations.



## Conclusion

- There is an absence of political will to introduce women's reservation, since the Bill, first introduced in 1996, is yet to see the light of the day. Both national parties, Congress and BJP, who have promised passage of the bill in their manifesto in 2014 and 2019, are not showing due commitment.
- However, regional parties like Odisha's BJD & West Bengal's TMC have given 33% & 41% representation to women candidates respectively in last general elections.
- Some experts have suggested alternate methods such as **reservation in political parties** and **dual member constituencies**.

**Table 2: Pros and cons of reservation in political parties and dual member constituencies**

	Advantages	Disadvantages
<b>Political parties</b>	<ul style="list-style-type: none"><li>▪ Provide more democratic choice to voters</li><li>▪ Allow more flexibility to parties to choose candidates and constituencies depending on local political and social factors</li><li>▪ Can nominate women from minority communities in areas where this will be an electoral advantage</li><li>▪ Allow flexibility in the number of women in Parliament</li></ul>	<ul style="list-style-type: none"><li>▪ No guarantee that a significant number of women would get elected</li><li>▪ Political parties may assign women candidates to constituencies where they are weak</li><li>▪ Might lead to resentment if a woman is accommodated to the disadvantage of a stronger male candidate</li></ul>
<b>Dual- member constituencies</b>	<ul style="list-style-type: none"><li>▪ Does not decrease the democratic choice for voters</li><li>▪ Does not discriminate against male candidates</li><li>▪ Might make it easier for members to nurture constituencies whose average size is about 2 million people</li></ul>	<ul style="list-style-type: none"><li>▪ Sitting members may have to share their political base</li><li>▪ Women may become secondary persons or add-ons</li><li>▪ To fulfil criteria of 33% women, half of the seats need to be dual constituencies. This would increase the total number of MPs by 50%, which could make deliberation in Parliament more difficult</li></ul>

## Demand For Local Job Quotas

### Background

- There has been growing demand by the people in the states to have local jobs in their states itself, particularly in the Southern and the Eastern states. The demand of local reservation has emerged as a **major poll issue**.
- In this direction, Andhra Pradesh assembly passed Andhra Pradesh Employment of Local Candidates in Industries/Factories Act, 2019, under which 75% of private jobs across all factories, joint ventures and industries in the state, including those taken up under public-private partnership mode, will be reserved for local Andhra people.
- Similar demands are being raised in other states like Karnataka, Maharashtra, Gujarat, Maharashtra etc.
- Recently, Madhya Pradesh (MP) also announced that it would bring in legislation to provide 70% reservation in private jobs for locals.

### Analysis of the move

- **May not pass the legal scrutiny** as Article 16 does not empower the state government, but the Parliament, to provide for such reservation.
- **Politically motivated move which doesn't address the major roadblocks** in the Ease of Doing Business (EoDB) and industrial infrastructure.
- **Dangerous for unity of the country** as it could lead to a Pandora box where other states start implementing such policies, restricting the mobility of people across the country.
- **Mobility of labour force** is not only **important** for the industrialized states to maintain their comparative advantage by accessing cheap and requisitely skilled labour, but also to reduce **inter-state disparity** in income through **remittances**.
- **Difficult to attract investments under such constraints** which in turn would affect job creation e.g. Andhra Pradesh, already struggling to attract investments after bifurcation, may further alienate the potential investors.
- **Difficult to ascertain 'locals'** who are domiciled in the state of Andhra Pradesh without elaborate requirements on 'domicile' status.
- **Previous such efforts were not successful** in states like Maharashtra and Karnataka, where it wasn't enforced.

### Way Forward

- Tackle the issues of unemployment by **promoting greater industrialization and equitable regional development**.
- **Promote inclusive development** like in Germany, where every village has a factory providing jobs to the local people. However, there should be an overarching framework at the Union level to promote such development.
- Focus on **making the youth of a state employable** with proper investments in education, health and skill development.
- Promote **labour intensive industries** to make use of the labour surplus in the country.
- Need to promote entrepreneurship where 'job seekers' themselves become 'job creators'. State can further strengthen incentives to the more deprived.

## Summary

The Constitutional objective of affirmative action is to ensure social justice by giving special status to backward castes as they were denied equal opportunities for generations and required special assistance to catch up with the other forward castes.

### Reservations in promotions

Recently, a five-judge Constitution bench allowed for grant of quota for promotions in the government jobs to SCs and STs without the need to "collect quantifiable data".

In **M. Nagaraj vs. Union of India Case 2006**, SC validated state's decision to extend reservation in promotion for SCs/STs, but gave direction that the state should provide proof on the following three parameters to it:

- **Empirical Data on Backwardness** of the class benefitting from the reservation.
- **Empirical Data on Inadequate Representation** in the position/service for which reservation in promotion is to be granted.
- **Impact on administrative efficiency**

Arguments against Reservation in promotion	Arguments in favour
<ul style="list-style-type: none"><li>• Not a fundamental right</li><li>• Gaining employment does not ensure the end of social discrimination</li><li>• Hurts efficiency of administration</li><li>• Already adequate reservation</li></ul>	<ul style="list-style-type: none"><li>• False notion of "efficiency"</li><li>• Skewed SC/ST representation at senior levels</li><li>• Historical disadvantage</li></ul>

### Reservation for economically weaker sections

The Constitution (103<sup>rd</sup> Amendment) Act, 2019 (124<sup>th</sup> Constitution Amendment Bill) provides 10% reservation in government jobs and educational institutions to the economically weaker sections (EWS) among those who are not covered under any reservation plan.

Arguments in favour of reservation based on economic status	Arguments against extending reservations on economic basis
<ul style="list-style-type: none"><li>• Need for new deprivation assessment criteria</li><li>• Social deficiencies may exist beyond the concept of caste (e.g. economic status / gender identity as in transgenders).</li><li>• Increasing dissatisfaction among various sections.</li></ul>	<ul style="list-style-type: none"><li>• Against equality norm</li><li>• 50% ceiling is a constitutional requirement without which the structure of equality of opportunity would collapse.</li><li>• No under-representation of upper caste</li><li>• Definition of EWS</li><li>• Challenges in the identification of beneficiaries</li><li>• Pandora's box' of demands</li><li>• Tool of populism</li></ul>

### Women's Reservation

Percentage of women representatives in Lok Sabha stands at 14.3%, much below the world average of around 25%. According to the Economic Survey 2018, prevailing cultural attitudes regarding gender roles, domestic responsibilities, female illiteracy, lack of confidence or control over finances and the threat of violence, are some of the reasons for low women representation in India. **Women's Reservation Bill (108<sup>th</sup> Constitutional Amendment Bill)** seeks to reserve 1/3<sup>rd</sup> of all seats for women in the Lok Sabha and the state legislative assemblies, as well as 1/3<sup>rd</sup> of the seats among total reserved seats for SCs/STs.

Arguments in favour of the Bill	Arguments against it
<ul style="list-style-type: none"><li>• Reservation in Panchayats has shown positive effect on empowerment of women and on allocation of resources.</li><li>• Spur greater economic growth and infrastructure development</li></ul>	<ul style="list-style-type: none"><li>• Reduces the incentive for an MP to work for his constituency</li><li>• Only 'palliative', if not accompanied by attitudinal changes and changes in socio-economic gender relations</li><li>• Might affect the efficiency and working of the parliament</li><li>• Might generate conflicts and tensions due to demand for sub-quotas</li></ul>

### Demand for local job quotas

Recently, Andhra Pradesh became the first state in the country to offer 75% reservation to locals in private jobs. Similar demands are being raised in other states like Karnataka, Maharashtra, Gujarat, Maharashtra etc.

### **Reasons behind demand for local jobs**

- Agrarian Distress
- Lack of jobs
- Displacement of landowners
- Lack of participation of all sections in the workforce
- Perception that Central devolution is insufficient

### **Analysis of the move**

- May not pass the legal scrutiny and a politically motivated move
- Dangerous for unity of the country
- Concerns for the Industry
- Difficult to attract investments
- Lack of details
- Previous such efforts were not successful



## PERSONALITY TEST PROGRAMME 2019

### TAX REFORMS IN INDIA

#### Introduction

Taxation is **not just a vehicle for raising state revenue**. It can also be critically **important for economic and political development**. In recent times, India has introduced some far reaching reforms to increase compliance (like Goods and Services Tax (GST), reduction in corporate tax rate and phasing out of exemptions etc.) and to reduce tax evasion (like Place of Effective Management, Black Money Act etc.). In addition, the legacy of contentious, adversarial tax issues from the past is being cleaned up. Tax administration is being improved: now around 95% of filings are electronic, tax refunds are now being issued in a record 7-8 days.

However, the success has only been limited and sporadic in mobilizing larger tax revenue and still, **India remains largely a tax non-compliant society**.

- Only 6.08 cr individuals pay taxes (~4.9%) much below the desired level of 23%.
- In India, only 15.5% of net national income is reported.
- Overall, Tax-to-GDP ratio (at 17.82% in FY 2017-18) still remains below that of emerging economies (~21%) and much below OECD average (~34%).
- According to the Union Budget 2018-19, gross tax revenue as a proportion of GDP declined to 10.9% of GDP in 2018-19 from 11.2% in 2017-18, primarily due to shortfall in Goods and Services Tax (GST).

#### Reasons behind low Tax-to-GDP ratio in India

- **Low tax base:**
  - **Income Tax:** In India, the **exemption threshold** of income tax has been **consistently raised**, much rapidly than underlying income growth. This implies that **relatively well off people are subsidized** at the cost of services which could be provided to poor with the forgone money.
  - **Corporate Tax:** Before the recently unveiled tax-cuts, India was branded as a **high-tax destination with corporate tax rate over 30%**.
    - ✓ Moreover, a complex system of exemptions, tax cuts, preferential tax rates, deferral of tax liabilities etc. has led to large tax collection expenditure and a significant amount of revenue foregone.
- **Tax Evasion:** **Tax evasion** and **corruption** undermines the legitimacy of the State. It creates a belief among the citizens that the public resources are being wasted, reducing the willingness to pay.
  - A state that over-emphasizes or prioritizes redistribution over delivery of services ends up having middle class '**exit from the state**' i.e. people start avoid paying taxes, start associating state with inefficiencies, promote using private hospitals or sending children to private schools etc. This will reduce demand of services from state, further eroding its legitimacy to earn taxes.
  - **Multiplicity of exemptions** and **exclusions** further increase the **complexity of the tax structure** and acts as a disincentive for tax compliant society, as in case of GST.
- **Weak Tax Administration:** is considered a key barrier to effective and fair tax collection in the country.
  - Tax administration and tax compliance is weak due to **lack of technical expertise** and **financial resources**, as well as due to **corruption**.
  - Tax administrative capacity at **sub-national** and **local government levels** (e.g. user charges, property tax etc.) is particularly wanting.
- **Structural Issues:** Several structural factors have impinged upon India's tax revenue performance such as:
  - large share of agriculture (historically untaxed sector) & service sector (lightly taxed sector)

- low literacy rate and large rural population
- large informal economy partly due to onerous regulations on businesses, including labor regulations and high corruption
- low financial development, due to which financial transactions are conducted in cash, making it difficult to track tax evasion

## Implications of low Tax-to-GDP ratio

- **Limited Fiscal Capacity:** Low Tax-to-GDP ratio reduces the resources available to the government and puts a **constraint on Government spending**. It increases the **fiscal risk from cyclical factors** such as rural deprivation, slow credit generation and weak corporate sentiment.
- **Government Accountability: Democracy** is a **contract** between **the state and its citizens**. This contract has a vital economic dimension: the state's role is to **create the conditions for prosperity** for all by providing essential services and protecting the less well-off via redistribution. In tax-compliant societies, Govt is more accountable to citizens. So, there is a better provision of essential services to people.
- **Citizen Participation in Governance: Taxation** is the **economic glue** that binds citizens to the state in a necessary two-way relationship as part of the social contract. It is the responsibility of citizens to hold state accountable. If a citizen does not pay, he becomes a free rider (using the service without paying), and cannot complain if the state provides a poor quality service. If he exits (not using the service at all), he loses interest in holding the state accountable.

### Fiscal Capacity

- **Fiscal capacity** refers to the **ability of government to generate revenue**.
- The fiscal capacity of governments depends on a variety of factors including **industrial capacity, natural resource wealth** and **personal incomes**.
- Identifying fiscal capacity helps governments to determine the tax rate necessary to finance such expenditure.
- Country's existing fiscal capacity is limited, primarily due to low tax base & poor quality spending.

## Direct Tax Reforms

### Background

- Various committees, to consolidate the direct taxes, were constituted by the government like **Raja Chelliah Committee** (early 1990s), **Vijay Kelkar Committee** (2002), and recently **Easwar Panel**.
- Recently, with the constitution of **Arbind Modi Committee** on Income Tax Reforms and **Akhilesh Ranjan Panel** on formulating a new Direct Tax Code (DTC), Government seems to be moving firmly in the direction of Direct Tax reform.
- **Direct Taxes Code (DTC)** aims to revise, consolidate and simplify the structure of direct tax laws (like Income-tax Act, 1961; Wealth Tax Act, 1957) in India into a single legislation.

### Direct Tax

- It is the tax where the incidence and impact of taxation fall on the same entity.
- It is termed as a **progressive tax** because the proportion of tax liability rises as an individual or entity's income increases.
- It is of various types such as: income tax, corporate tax, dividend distribution tax, securities transaction tax, fringe benefit tax and wealth tax.
- **Income Tax Act 1961 (ITA)** has provision for income tax, corporate tax, property tax etc.

## Need for Direct Tax Code (DTC)

The Income Tax Act 1961 should be redrafted to account for the **structural changes** in the Indian economy, **new models of doing business** (e.g. international businesses, digital businesses etc.) and **evolving methods of income calculation** based on the objectives of economic policy.

- **Rationalization and simplification of Income Tax Structure:**
  - The rate structure – slabs of 10%, 20% & 30% in personal income tax - has broadly remained the same in the last 20 years. Further, there is a need for **rationalization of exemptions** and a rethink of incentives on savings (such as small savings schemes like PPF)
  - Over the past two decades, countless amendments, deletions & additions in the Income Tax Act, 1961 has made it incomprehensible to an average tax payer.
  - The problem has been further compounded by judgements (often conflicting) on ambiguities rendered by the courts at different levels.

- **Simplify corporate tax rate structure and phase out exemptions**
  - The **differential** in effective corporate tax rate **across sectors** is very high. E.g. in 2014-15, effective tax rates for cement manufacturers, consultancy service firms and banking service firms were 9 %, 16 % and 35 % respectively.
  - Moreover, the exemptions to corporate tax are not equitable vertically. E.g. in 2014-15, small companies having a profit of up to ₹1 cr paid an average tax rate of 29.37% while companies having a profit of greater than ₹500 cr paid an average tax rate of only 22.88%.
  - According to Ministry of Finance, in 2014-15, there were a total of 32 exemptions on corporate tax that had a projected impact on revenues of around ₹1 lakh crore.
- **Wide tax base** will help deal with the problem of potential revenue loss due to lower tax rates and simplified tax structure.
- **Reducing tax litigation:** Tendency of tax officials to **initiate an action** without the necessary justification or assessment is reflected from **low success rate of appeals** (~30%).
  - Protracted tax litigation in India has not only put a burden on Indian judiciary but has also cost the government exchequer.
  - **Reduction in tax terrorism** is needed through clarity in taxation framework in the country and by reducing the discretionary powers of the tax department.
  - New Act needs to provide for **alternate methods of dispute settlement** such as negotiation, mediation etc.
- **Provide level playing field between large businesses and start ups & young companies:** A complicated tax structure in effect helps large business groups who can manipulate the system with the help of their in-house tax experts (tax avoidance strategies).
- **Taxation based on Ease of Doing Business:** Traditionally, for the sake of administrative convenience, the tax laws have **segregated tax-payers only on the basis of ability to pay**. It has seldom tried to differentiate between high-risk & low-risk income; legal & illegal income; recurring & non-recurring income etc. Considering such nuances in tax policy would make the **structure more equitable**. E.g. treating income from earned for Government securities (one of the most secure sources of investment) at par with high risk business income or share holder income is an anomaly that needs to be addressed.
- **Ensure balance between direct and indirect taxes:** Contribution of direct taxes has declined from 60% in 2010-11 to 52% in 2017-18. **Increasing share of indirect taxes** in revenue is alarming as **indirect taxes are regressive** which hurt poor people more.
- **Clarity in cross border transactions:** Till now, source rule of taxation for non-residents was linked to **physical presence** (permanent establishment) which has led to protracted litigation, base erosion and profit shifting.
- **Better sync with global economy:** Since India is much more integrated with the world globally in terms of business linkages and capital account convertibility, the differential treatment of foreign and domestic companies in the country should be gradually phased out.
- **Need of Technology infusion** in the tax administration to improve efficiency of tax collection as well as to aid the taxpayer.

### Measures taken by the Government

- **Increasing Tax Compliance**
  - CBDT launched '**E- Sahyog**' portal to facilitate online filing of the returns
  - **Project Saksham** was launched by CBIC to help in implementation of Goods and Services Tax (GST) and in extension of Indian Customs Single Window Interface for Facilitating Trade (SWIFT)
  - **Extending the scope of Tax Collected at Source (TCS):** For e.g. 1% TCS is charged on luxury items (cars > 10 lakh/ cash payment > 2 lakh) collected by seller.
  - Push towards digitalization and formalization will increase expansion of tax net.
- **Anti Tax Avoidance Measures**
  - **Advanced Pricing Agreements (APAs):** APA is an agreement between a tax payer and tax authority determining the **transfer pricing methodology** for pricing the tax payer's international transactions for future years.
  - **GAAR (General Anti-Avoidance Rules)**, effective from April 1<sup>st</sup>, 2017, is a set of rules which helps the revenue authorities to decide: (i) whether a particular transaction has commercial substance or not (ii) tax liability associated with a genuine transaction.



- ✓ It enables Government to tackle instances of tax avoidance due to practices like **transfer pricing, round tripping** (parking money in low tax jurisdictions and rerouting it as FDI or FII) etc. E.g. Vodafone Case
- ✓ GAAR provisions are applicable on firms who **claim a tax benefits of over ₹ 3 crore**.
- **Place of Effective Management (POEM)** guidelines were introduced for the determination of residency of foreign company, applicable from FY 2017-18. If PoEM of a firm is in India, then its worldwide income would be taxed here.
  - ✓ It intends to curb the formation of shell companies, which are located abroad but controlled from India, mainly for the purpose of avoiding taxes.
  - ✓ PoEM is decided by the indicators like place from where management & commercial decisions are taken (not where the decisions are implemented), location of source of income, % assets held in India, % employees "situated or residing" in India and are on the local payroll expense etc.
- **Efforts to curb black money/tax evasion**
  - India has signed up for a multi-lateral regime for sharing of financial information known as **Automatic Exchange of Information (AEOI)** with European Union and Switzerland.
  - India has also entered into information sharing agreement with USA under **Foreign Account Tax Compliance Act (FATCA) of USA**.
  - Recently, India made **modifications in Double Taxation Avoidance Agreement (DTAA)** with Mauritius & Cyprus so that all transactions attracting **capital gains tax** for investments made out of such tax havens will be taxed at full rate prevailing in India.
  - **Operation Clean Money and Project Insight** was launched to use data analytics to improve tax compliance and effectively utilize information in tax administration.
- **Corporate Rate Cut:** To boost industrial activity and increase compliance, tax rate for all corporates is reduced from 30% earlier to 22%. Effective tax rate for all **domestic companies** would now be **25.17%** – nearly 10% less than the existing 34.94%, providing they don't avail any exemptions. New manufacturing companies will have to pay an **even lower corporate tax rate of 15%**.
- **Administrative Reforms:** Based on the recommendations of **Tax Administration Reforms Commission under Parthasarathi Shome**, a Tax Policy Research Unit headed by Revenue Secretary has been created for better research capability on fiscal topics and a Tax Policy Council chaired by Union Finance Minister to help the government make better policy decision on tax policies.
  - The panel also **recommended integration of CBDT & CBIC** for holistic tax compliance regime

### Suggested Reforms

- **Tax treatment of cross border transactions:** **Arbind Modi Panel on Income Tax Reforms** recommended that an income shall be deemed to be derived from a source in India, if the payment has been made from India, for any goods/services consumed or towards interest, dividend, bonus, or any other return on capital.
- **Reintroduction of wealth tax:** Moderate rates of personal income tax are not sufficiently progressive to contain growing inequality. Thus, wealth tax can be reintroduced.
  - However, in order to keep the **compliance cost low** and prevent **protracted litigation** as experienced under the Wealth Tax Act, 1957, the valuation of the assets should be done transparently.
  - Threshold limit should be such (for e.g. ₹10 cr) to keep the **middle class out of the purview** of this tax.
  - It will help **fill the void created by the inadequacy of property tax** at the local level.
- **E-assessment:** New Income Tax Act should provide a complete legal framework for the introduction of e-assessment based which will be **paperless** and **faceless**. It will enhance **efficiency, effectiveness** and **accountability** and eliminate all opportunities for rent seeking behaviour.
  - In faceless assessment, tax-payer doesn't have to appear before the assessing officer neither will he know who is assessing his/her return. **Information will be sought** from the assessee via **email** and there will be **no physical movement** of the document.
  - Budget 2019-20 has initiated '**faceless assessment**' on the pilot basis.
- **Dispute resolution mechanism:** A **Directorate for Public Rulings** has been created mandated to issue **pre-assessment clarifications** to prevent litigation and provide certainty. Similarly, **in-house dispute resolution panel** must be empowered to settle disputed issues.
- **Performance assessment of tax officials** based on success rate of their cases.
- **Penalties for technical offences** should be replaced by **graded fees** to be automatically levied.
- **Voluntary compliance** through Tax Deducted at Source, Tax Collected at Source etc. Such mechanisms need to be strengthened

- Arresting tax evasion when non-agricultural income is declared as agricultural income
- **Reducing stamp duty on property registrations** would increase the declared property value by the buyers and reduce incentive to pay a part of the payment in black.

Recently, Akhilesh Ranjan Committee on formulation of new Direct Tax Code (DTC) is expected to have recommended (report not public): (i) Widening of tax slabs: 10% tax slab is expected to be widened to incomes upto 10 lakh. This would benefit over 27% (1.47 cr) of the country's individual taxpayers who had incomes between ₹5 lakh and 10 lakh; (ii) Scrapping of the surcharges/cesses (iii) Review of the existing long term capital gains (LTCG) tax, the securities transaction tax (STT) and dividend distribution tax (DTT).

**Securities transaction tax (STT)** is a tax levied at the time of purchase and sale of securities listed on stock exchanges in India. This tax came into effect from 1 October 2004. The rate of STT differs based on the type of security traded.

**Dividend Distribution Tax (DDT)** is on the dividends paid by a domestic company at 15%. The effective rate is 20.35%, including a surcharge and education cess.

## Goods & Services Tax (GST)

Hailed as the biggest tax reform, GST has completed 2 years of operation. It was launched on 1<sup>st</sup> July, 2017 in a special session of Parliament.

### About Goods and Services Tax (GST) and its present structure

- GST is a **destination-based indirect tax** and is **levied at the final consumption point**.
- Under GST, **17 indirect taxes** like excise duty, VAT, service tax, luxury tax etc are subsumed.
  - **Taxes not subsumed under GST:** Basic Custom Duty, Anti-Dumping Duty, Central Excise on Petroleum Products, VAT on alcohol for human consumption, Stamp Duty, Property Tax (levied by local bodies), Professional Tax etc.
- GST is currently levied on every product [except **petroleum products, alcohol, real estate & electricity**] in four slabs of **5, 12, 18 and 28%**.
  - Most of the daily use articles have zero GST as per the latest revision of the tax rates last year. Almost **50% of the items** in the **Consumer Price Index** are exempt.
  - Special rates on precious metals (0.25%), gold (3%) and job work in diamond industry (1.5%).
  - In addition, a cess is levied on automobiles, luxury, and demerit and sin goods.
- From Government's perspective, it is **easier to collect** and **reduces tax evasion**, for customer it is **easier to understand** & will **reduce tax burden** and for industry, it ensures that there is **no cascading effect of the tax** and there is **harmonization of tax laws, procedures and rates of tax**
- Businesses upto an annual turnover of **₹40 lakh** are GST exempt.

### Successes of GST

GST marks a fundamental **resetting of the Indian economy**. It redefines the way business is done (with increased formalisation), expands the market for goods and services (replacing many small and fractured markets with a single common one) and totally overhauls the Indirect Tax regime (one nation one tax regime)

- **Tax Compliance:**
  - GST has been **successful in increasing compliance** among small traders through **Composition Scheme**.
  - Self-policing mechanism of GST helps to check tax evasion and expand the tax net
    - ✓ Seamless flow of input tax credit (ITC) is possible only when all the suppliers of a business pay GST. So each business will make sure that its suppliers have paid the GST, so that they can take input tax credit.
    - ✓ It has significantly **reduced cascading of taxes** (tax on tax, mark-up on taxes and tax on mark-ups) through better ITC and inclusion of taxes like central sales tax, octroi, purchase taxes & luxury taxes etc.
- **Revenue Base:** GST has helped the Government to **expand the revenue base** by about 85% in the past two years from 65 lakhs to 1.2 crore.
- **Revenue Collections and Buoyancy:** Relative buoyancy of GST revenue compared to pre-GST period is a result of 2 factors. (1) design of GST that integrated the entire value chain from raw material to retail; (2) tax incidence on services increasing from 14% pre-GST to 18% post-GST.
- **Rationalization of taxes:** Currently, **around 97.5% articles are covered by 18% or lower GST slab**, a significant reduction from tax rates under VAT regime where standard VAT rate was 14.5% along-with excise duty at 12.5%



- **Re-engineering of supply chain:** GST has presented an opportunity to reduce physical supply chain costs (costs attributable to transportation, warehousing etc.)
  - A **unified tax and seamless availability of credit** has reduced the **cost of procurement of raw material**.
  - **Consolidation of storage points** and a **reduction in the number of inefficient nodes** (e.g. opening branch offices merely to avoid inter-state sales tax) in supply chains has helped such companies to reduce their distribution costs.
- **Introduction of E-Way Bills** marks a shift from departmental policing model to self-declaration model for movement of goods
  - Enable hassle free inter-state movement of goods by **eliminating the requirement of separate transit pass** for each state.
- **Use of technology** for all front-end services (registration, payments etc.) and backend IT modules (processing of returns, audits, assessments, appeals)
  - **Reduces interface** between tax collector and taxpayer, thereby reducing corruption, generates **quality quantifiable data** to enable better policy making, improves **GDP estimation, encourages compliance gain** due to **linkage & exchange of information** between income-tax & GST departments
- **Role of GST Council:** GST council has emerged as a successful example of cooperative federalism and its functioning has been free from political predilections.

#### Key terms associated with GST

##### GST council

- It is a **constitutional body** under article 279(A) for making recommendations to the Union and State Government on issues related to GST.
- It is **chaired by the Union Finance Minister** and also includes Union State Minister of Finance and Ministers in-charge of Finance of all the States.

##### GSTN

- Goods and Services Tax Network (GSTN) is a not for profit company governed under section 8 of the companies Act.
- The Company has been set up primarily to provide IT infrastructure and services for implementation of the Goods and Services Tax (GST).
- Recently, GSTN was restructured to allow 100% government ownership equally distributed between the Centre (50%) and the States (50%).

##### Reverse Charge Mechanism

- The GST has to be typically paid by the supplier of goods and services. But in some cases, the liability to pay the tax falls on the buyer. This is called reverse charge.
- This is only applicable in certain instances e.g. when a business buys goods or services from a supplier who is not registered to pay GST or in cases of import.

##### GST Composition Scheme

- Taxpayers registered under this scheme with turnover upto ₹1.5 cr can pay a small tax (1%, 5% or 6%)
- It reduces administrative burden of taxpayers but makes it difficult for them to sell to larger firms as they are not eligible for input tax credits.

##### E-way Bill (Electronic-way bill)

It is a document introduced under the GST regime that needs to be generated before transporting or shipping goods exceeding ₹50,000 in for sales beyond 10 km in GST regime within state or inter-state.

## Challenges remaining in GST Regime

While gains are real, full potential of the reforms is still to be unleashed. GST revenues have been falling short of the target. Budget Estimate for 2018-19 for the Central government was ₹7.43 lakh —the actual collection was 22% lower at ₹5.81 lakh cr. Hence, there is a need for further simplification and rationalization.

- **List of exclusions:** Petroleum products (crude oil & natural gas), diesel, petrol, aviation turbine fuel, potable alcohol and real estate, which contribute 35-40% of indirect tax revenue, are still out of GST's ambit.
- **Complex GST Structure with multiple tax slabs:** World Bank study said that the Indian GST rate was 2<sup>nd</sup> highest among 115 countries with a national value-added tax.
  - **4 different rates, several exemptions & cesses, separate rate for gold** etc undermine eventual goal of simplifying tax compliance & leads to foregoing of efficiency gains.
  - **Administering multiple rates** is challenging, such as high cost of auditing the classification of products into tax slabs across every stage and long standing litigation in case of disputes.

#### Recent Changes in GST Regime

- **E-Invoicing:** GST Council has approved the standards for e-invoicing to increase interoperability across the entire GST eco-system. i.e. an e-invoice generated by one software should be capable of being read by any other software. In the new GST forms, real time invoice uploading has been introduced.
- **Document Identification Number (CBIC-DIN):** Central Board of Indirect Taxes and Customs started using DIN for any communication related to search, seizure, investigation related matters.
- **Setting up of Goods and Services Tax Appellate Tribunal:** It is a quasi-judicial body that will mediate in indirect tax disputes between states and centre.

- **High tax rates on automobiles and building & construction material** at a time when **demand conditions are compressed** has caused further slowdown in these sectors.
- **Digital infrastructure and data privacy:** Implementation of GST required **registration at humungous scale** for input based tax crediting and **creating a common database of registered traders to be managed centrally**. This has emerged as a major challenge to GST's IT landscape, along with technical glitches. Until now, states maintained the database individually.
- **Matching concept for claiming input tax credit not implemented:**
  - Matching concept requires a buyer to reconcile his tax payments with the tax collected, deposited and reported by the supplier on the government portal to claim input credit.
  - Any incorrect or unmatched transactions filed by supplier leads to denial of credit to the buyer
- **Refund problem for exports:** Exporters are facing **acute crunch of working capital** due to issues such as delays in refund of Integrated Goods and Services Tax (IGST) on export.
- **GST Dues:** Recently, several states had written to the Finance Minister regarding **delays in payment of GST due by the centre**.
- **Tax Frauds:** In absence of viable means of invoice matching, fake invoice industry has emerged. So far, 9,385 cases of tax fraud by this means have been detected involving an amount of ₹45,682 cr.
- **Agriculture: Farmers are required to pay GST** on agro-chemicals, fertilizers, safety kits (eyewear, masks and gloves), drip irrigation systems etc. but don't receive input tax credit.

### Suggested Reforms in GST Regime

- **GST taxable base must include petroleum products**, especially aviation turbine fuel and natural gas, real estate and electricity. Inclusion of real estate will clean up the land market and will lead to revenue gains on direct tax side as well as more transactions will be reported.
- Although indirect taxes tend to be regressive in nature, a **low standard or modal rate with a small list of exemptions** is the ideal GST structure that Government should try to achieve.
  - **Loss of revenue** would be **compensated by higher demand and better compliance**.
- **Revenue performance of Composition Scheme** needs to be improved by ensuring better compliance among small traders.
- Introduction of **new GST single format annual return form** and **matching of invoices** is expected to substantially improve compliance.
- A **single authority for sanctioning and processing GST refunds** has been proposed to simplify the procedure for exporters. Under the proposed reform, a single tax office will assess, check and sanction refunds of both centre and state GST portions.
- GST Council must be assisted by a **strong technical secretariat** comprising administrators, economists, accountants and lawyers etc.
  - At present, the GST Council relies on the analysis done by the **"fitment committee"**, which consists of the nominated officials of the Tax Research Unit in Central Board of Indirect Taxes and Customs (CBIC), and officials of the commercial taxes department from some states.
- **Greater coordination between Central Board for Direct Taxes (CBDT) and Central Board for Indirect Taxes & Customs (CBIC)** could yield better results. IT Department has already incorporated GST registration and turnover information in their return formats.

Although it is at its early days still, the GST started on a positive note and the benefits for all stakeholders are evident. It is now time for the Government to stabilise the system, remove uncertainty, facilitate compliance by easing processes and expand the tax base to make the GST a real success

## Summary

Taxation is critically important for economic and social development of the country. It provides the Government the resources to provide goods and services to the people.

Though India has introduced far-reaching reforms in the domains of both direct and indirect taxes, it remains largely a tax non-compliant society as evident from the low tax-to-GDP ratio. Underperformance in tax revenue generation is not only due to paucity in tax policy reforms, but also due to slow pace of reforms in tax administration, ease of doing business and governance in general.

### Reasons behind low tax-to-GDP ratio

- **Low tax base:** High exemption threshold in case of personal income taxes and convoluted system of exemptions, tax cuts, preferential tax rates, deferral of tax liabilities etc. in case of corporate taxes
- **Tax evasion:** Tax evasion and corruption undermines the legitimacy of the State. It creates a belief among the citizens that the public resources are being wasted, reducing the willingness to pay.
- **Weak tax administration,** particularly at sub-national level, as a consequence of lack of technical expertise and financial resources, poorly drafted laws and corruption.
- **Structural issues** like untaxed agricultural sector, low financial literacy, large share of informal economy and large number of cash based transactions.

### Implications of Tax-to-GDP ratio

- **Limited Fiscal Capacity:** Reduces the resources available to the government and puts a constraint on Government spending
- **Reduces Government Accountability:** In tax-compliant societies, Govt is more accountable to citizens. So, there is a better provision of essential services to people
- **Citizen Participation in Governance:** A citizen's stake in ensuring accountability would be greater if he pays taxes.

### Need for Direct Tax Reforms

- Rationalize and simplify of personal income tax rate structure and reduce exemptions
- Simplification of corporate tax rate structure & phase out exemptions/preferential tax treatments etc.
- Widen tax base and reduce tax terrorism and promote ease of doing business
- Allow better technology infusion in tax administration
- Balance between direct and indirect taxes
- Reduce tax disputes and associated litigation
- Provide better clarity in rules of taxation for cross border transactions and foreign businesses operating in the country

### Measures taken by the Government

- Increasing tax compliance by facilitating digital filing of returns (**E- Sahyog by CBDT**) and (**Project Saksham** by CBIC), promoting tax collection at source etc.
- Anti avoidance measures such as **Advanced Pricing Agreements (APAs)**, **GAAR (General Anti-Avoidance Rules)** and **Place of Effective Management (POEM) guidelines**
- International collaboration to curb tax evasion (e.g. **Automatic Exchange of Information (AEOI)** with European Union and Switzerland)
- Corporate tax rate cut
- Administrative reforms such as creation of Tax Policy Research Unit and Tax Policy Council

### Suggested Direct Tax Reforms

- Widening of tax slabs and scrapping of the surcharges/cesses
- Reintroduction of wealth tax
- E-assessment for Personal Income Tax
- Dispute resolution mechanism based on arbitration, reconciliation and negotiations
- Performance assessment of tax officials based on success rate of their cases.
- Pushing for voluntary compliance
- Arresting tax evasion when non-agricultural income is declared as agricultural income

- Reducing stamp duty on property registrations

Akhilesh Ranjan Committee on formulation of new Direct Tax Code (DTC) has submitted its report to the Government has suggested significant reforms, but the report hasn't been made public.

### **Goods & Services Tax (GST): Indirect Tax Framework**

GST marks a fundamental resetting of the Indian economy. From Government's perspective, GST is **easier to collect** and **reduces tax evasion**, for customer it is **easier to understand** & will **reduce tax burden** and for industry, it ensures that there is **no cascading effect of the tax** and there is **harmonization of tax laws, procedures and rates of tax**. It redefines the way business is done (with increased formalisation), expands the market for goods and services (replacing many small and fractured markets with a single common one) and totally overhauls the Indirect Tax regime (one nation one tax regime). Use of technology in the GST regime has further simplified tax administration to a great extent.

### **Challenges remaining in GST framework**

- GST revenues falling short of the target
- Large list of exclusions including petroleum products, aviation turbine fuel, potable alcohol and real estate etc.
- Complex GST Structure with multiple tax slabs
- Concerns related to digital infrastructure and data privacy
- Matching concept for claiming input tax credit not implemented
- Refund problem in case of exports
- Pending dues for large number of states
- Tax frauds

### **Suggested reforms in GST framework**

- Include petroleum products, especially aviation turbine fuel and natural gas, real estate and electricity
- Low standard or modal rate with a small list of exemptions
- New GST single format annual return form and matching of invoices
- Single authority for sanctioning and processing GST refunds
- Strong technical secretariat
- Greater coordination between Central Board for Direct Taxes (CBDT) & Central Board for Indirect Taxes & Customs (CBIC).



## PERSONALITY TEST PROGRAMME 2019

### UNEMPLOYMENT

The **quantity and quality of employment** in India has remained a matter of concern since long. In the context of the ongoing debate on India's employment scenario, currently there are **two contesting narratives**. The first narrative is of **jobless growth**, which implies that **India is creating insufficient jobs**. This is evident from **CMIE** (Centre for Monitoring Indian Economy) report published in January 2019 which stated that the count of unemployed has increased by a substantial 11 mn over the year 2018. The second narrative advocates that the issue is **not paucity of jobs**, as there are **sufficient jobs in informal & gig economy** which remain unaccounted in employment statistics but the **quality of jobs and related wages**. India currently suffers from **underemployment** with substantially **low wages**.

#### Findings of the Periodic Labour Force Survey 2017-18

- Government's Periodic Labour Force Survey carried out in 2017-18 revealed that unemployment in the country reached an all-time high rate of **6.1%**.
- At the heart of the unemployment problem in India were **young, unemployed men aged 15 to 29 years** who comprised 21.1 million or 68.3% of all the unemployed in the country.
- **Labour force participation rate** (% of people working or seeking work in the above-15 years age category) has shrunk from 55.5% (2011-12) to 49.7% (2017-18). There is an absolute decline in the number of workers from 467.7 mn in 2012 to 461.5 mn in 2018.
- The rise in overall unemployment has both **locational and gender dimensions**. The highest unemployment rate of a severe nature was among the urban women at 10.8%; followed by urban men at 7.1%; rural men at 5.8%; and rural women at 3.8%.
- The decline in female labour force participation rate (FLFPR) from 31% to 24% means that India is among the countries with the **lowest participation of women in the labour force**.
- **Educated unemployment** (defined as unemployment among those with at least a secondary school certificate) is at 11.4% compared to the previous survey's figure of 4.9%.
- There is a **clear divide between aspirations of young Indians** and opportunities available. This is evident from worrying trend of growing number of educated youths (15-29 years) who are 'Not in Employment, Education and Training (NEET)' [70 mn in 2004-05 to 115.6 mn in 2017-18] hence likely to go through a longer waiting period than their less-educated counterparts

India's developmental model, to an extent, is responsible for the current state of joblessness. Inadequate focus on labour intensive sector, languishing reforms in the labour market, inadequate edifice of vocational education and skill upgradation etc. has lead to the state where there is significant mismatch in the demand and the supply of well paying quality jobs.

#### Reasons behind increasing unemployment

- **Size of the labour force** in India is getting a boost from the rapid expansion of the working-age population in the country — the population of 15-59-year-olds increased at the rate of 14 million a year in the 2000s.
- **Nature of labour supply** is changing too, with increasing enrolment of young adults for education and their rising job aspirations. Of all 15-29-year-old females in India, 31% had been attending schools or colleges in 2018, up from 16.3% in 2005, though the skills acquired by the young people seems inadequate to cater to the demand.
- **Movement of workforce out of agriculture**: As the average size of land holdings decrease due to greater fragmentation and farming becomes less remunerative, more and more people are moving out of agriculture. But non-agriculture employment is not enough to absorb excess labour supply.

- Size of the workforce engaged in agriculture & allied activities has been declining in India: from 258.8 million in 2005 to 197.3 million in 2018.
- The problem of disguised unemployment in agriculture has increased due to modernization of agriculture.
- Marginal farming is becoming more unviable in present times, forcing small cultivators to join as agricultural labourers and also seek non-agricultural casual employment. This has increased the number of landless farmers.
- Even allied agricultural activities saw an absolute decline in employment due to mechanization of the sector, feminization of rural agriculture (more women have less time for livestock/poultry as male migration increases).
- Lack of adequate regular jobs may be one of the reasons behind frustrations of educated and landed sections of rural India, like Jats, Patidars, Marathas etc, who are demanding job quotas.
- **Poor growth in manufacturing jobs:** Indian manufacturing sector suffers from twin issues of inadequate job creation and low quality jobs that, in turn, raises the level of working poverty
  - Manufacturing is becoming more capital-intensive and automated, which provides growth but doesn't provide mass employment (blue-collared jobs).
  - The focus is on skill intensive (e.g. Gems & Jewellery etc.) instead of labour intensive sectors (e.g. leather/textile/food processing/electronics).
    - ✓ Cut-throat competition from neighbouring countries like Bangladesh, Vietnam etc., unfavourable currency movements, temporary impact of duty drawback rates, are some of the reasons for this neglect.
  - Currently, indigenous manufacturing faces numerous challenges such as high corporate tax rate, inverted duty structure etc.
  - After 1991, India liberalized the capital markets, but not the land and labour markets. Since capital was easier to come by, the bias against employing labour got accentuated.
- **Service sector jobs with low employment potential:** In India, the period of growth of service sector coincides with that of “jobless growth”.
  - Services **growth has been led by sectors with low employment potential** such as IT, business services, financial services etc.
  - **Exports low in employment intensive services** such as hotels and restaurant, construction services, transport etc.
  - Generally, the share of services in employment rises faster than its share in GDP, but this didn't happen in India. In India, services sector is marked by a dualism.
    - ✓ There is a sub segment which is high paying but employs very less number of people and bulk is low paying, but has large volume of jobs.
    - ✓ According to the ILO's *World Employment Social Outlook - Trends* (2018), a significant portion of the jobs created in the services sector over past couple of decades have been in **traditional low wage and low value-added services** (e.g. retail trade, urban services like domestic maids, drivers etc), where informality & vulnerable forms of employment are dominant.
  - Between 2005 and 2012, **construction** absorbed workforce exiting agriculture in rural areas, especially in Uttar Pradesh, Rajasthan, Bihar and Madhya Pradesh. However, post 2012, new employment opportunities in construction sector shrunk rapidly.
- **Not enough formal jobs:** Majority of job growth has been in the **informal sector (65%)** in comparison to formal sector since liberalization.
  - **Slow pace of labour reform** has encouraged firms to resort to strategies such as **hiring of informal contract workers**.
  - Also, with increased labour demand in infrastructural growth, workers have joined construction sector rather than manufacturing or services. Unlike manufacturing, it only affords seasonal and non-steady employment.
  - **> 50% informal labour** is employed in own account enterprises/unpaid family labour (High disguised employment).
- **Absence of job security:** A shift in government policy is observed, from job security to job creation, thereby **deprioritizing the issue of quality of jobs**. This is evident from the fact that the Government has rolled out **fixed-term contractual jobs** across all industry segments to facilitate faster job creation.
  - **Job quality** is determined by tenure of job (guarantee that unless affected by unforeseen circumstances, workers will not be fired easily) & by social security benefits such as pensions.
  - Share of regular workers with some form of **social security** - provident fund (PF)/pension or gratuity or healthcare/health insurance or maternity benefits - has declined steadily over the past decade. Nearly ~50%

of all regular workers had access to some form of social security in 2004-05. That proportion fell to 45% in 2011-12 and declined further to 38% in 2016.

- According to NSSO's 2014 data, **less than 1/3<sup>rd</sup> of India's workers have written contracts**. This creates large scale inequality in income and quality of work and eliminates the scope of skill upgradation and career progression.
- **Shrinking Public Sector:** Public sector has generally shrunk post liberalization due to its withdrawal from many economic activities.
  - Government jobs, which were 19.5 million in 1996-97, are about 17 million in 2015-16.
  - The recruitment over the last 3 years through the main agencies — UPSC, SSC &RRB — show a declining trend in selection and recruitment, from 1.1 lakh cumulatively in FY2015 to 1 lakh in FY2017.
- **Wage crisis:** A large majority of Indians are not being paid what may be termed a 'living wage'.
  - When economic conditions are bleak and only lower-wage jobs are available, many unemployed people may temporarily drop out of the job market, thus showing an artificial drop in the unemployment rate.
  - Conversely, as economic optimism returns, more people may start looking for jobs, and this may create a temporary spike in the formal unemployment rate.
  - Hence, the problem of jobs must also be looked as a wage crisis in an aspirational India.
- **Gender and labour market:** Women's decision to join labour force is primarily influenced by economic stability at home, rather than educational attainment & age. With increasing family income, many women are opting out of the workforce.
  - They engage in '**status production**', which refers to work that maintains and enhances family's social standing (e.g. unpaid care work). It doesn't necessarily enhance a woman's status within the household.
- **Mindset issues:**
  - Preference to **white collar jobs** symbolic of social status and **low dignity of labour**
  - Rise in voluntary unemployment due to **people choosing not to work below a certain wage** after 'investing' in education
- **Education doesn't focus on employable skills:** This has led to a situation where, inspite becoming increasingly more educated, Indian labour force lacks skills required by the industry.
  - Also, there is an inherent gender bias in choice of subjects. According to UNESCO (2017), only 30% of all girl students in India select Science, Technology, Engineering & Mathematics (STEM) related fields in higher education. This rules them out from higher paying STEM jobs.
- **Lack of data:** The government's decision to discontinue the NSSO's 5 year household surveys, failure to regularly release Labour Bureau's Quarterly Report on Changes in Employment and delay in releasing the NSSO's Periodic Labour Force Survey has not left policymakers with any credible latest data.

## Way Forward

India's **demographic dividend**, touted as **competitive advantage**, is critically dependent on meeting growing aspirations of those entering or wishing to enter labour force. To satisfy these aspirations, India needs to create more jobs, than currently being created, and critically, more 'good' jobs.

- **Analyzing and Improving Labour Market Data:** Availability of detailed, reliable, and comprehensive information on the labour market is critical to meet the employment challenge through well-targeted policies and programmes.
  - Create **Labour Market Information System (LMIS)** for identifying skill shortages, training needs and available employment opportunities. This would facilitate greater synchronization with portals like **National Career Service** to address skill shortages and meet the demand for labour in different sectors.
- **Education and Skill Development:** Government must ensure that the education, training and skill development system is aligned with the changing requirements of the labour market.
  - It includes measures to integrate vocational education with formal education, ensure greater participation of the private sector in skill development and wider use of the apprenticeship programmes by all enterprises.
- **Improving Women's Participation in the Economy:** The employment policy, in line with SDG 5 on Gender Equality, should focus on developing women's human capital and capabilities; providing support for their care responsibilities (e.g. Maternity Benefits Act 2016); establishing gender-sensitive labour market regulations; and enhancing their voice and capacity for collective action.
- **Address the issues facing agricultural sector.** It will have a direct impact on the welfare of nearly half the country's workforce, increase in domestic demand, reduce the rural-urban earnings gap, migration, informality and unemployment, and therefore lead to better working conditions in the cities and a fall in commodity prices and reduced inflationary pressures.

- Increased public investment in the form of irrigation, extension services, local storage and value-addition capacity, and better transport
- Increased outlays for MGNREGA, making it a truly demand-led programme
- Direct income subsidies and phasing out subsidies which allow leakages
- Increase social infrastructural investment in rural areas
- **Focus on small and medium enterprises (SMEs) & entrepreneurship** under Make in India programme: SMEs employ 40% of the country's workforce and represent about 45% of India's manufacturing output and 40% of India's total exports.
  - Special packages for labour intensive industries such as food processing, leather & footwear, wood manufacturers and furniture, textiles and apparel and garments.
- **Revamping industrial policy** to provide for tax incentives, FDI, coastal & special economic zones, and change in labour regulation regimes.
  - Wage subsidy is an effective way of incentivizing formal employment. For e.g. According to Odisha Apparel Policy & Gujarat Apparel Policy, state governments bear a share of employee wages.
    - ✓ In Budget 2018-19, the Union Government announced a scheme, wherein, it bears the entire 12% of the employers' contribution to the Employee Provident Fund Scheme for new employees of all sectors for 3 years.
  - An industrial policy is needed which provides for adequate infrastructure, credit, market access & IP rights protection. It can be the basis on healthy and expanding non-farm sector in rural areas contribution to job creation, increasing productivity and alleviating pressure on cities.
- **Adopt a Universal Basic Services approach:** Non-tradable service sector, particularly in social segment of education, health etc. has significant potential for job creation as well as the capacity to deliver equitable and green growth. A 'universal basic services' (UBS) approach can be imagined that delivers human capital advances alongside job growth.
- **Income Support:** For e.g. *Mukhya Mantri Yuva Nestam Scheme* in Andhra Pradesh: Unemployment allowance of ₹1000/- pm for youth between 22-35 years of age through DBT using Aadhaar
- **Targeted Programmes for Employment Generation:** Programmes like Mahatma Gandhi National Rural Employment Guarantee Scheme must be reformed to ensure that rural unemployed find adequate employment on a more sustainable basis and there are increased opportunities for women and other socially disadvantaged groups.
- **Employment and Labour standards:** Policy initiatives must be aimed at improving incomes, working conditions, and promoting occupational health and safety for those engaged in the informal sector.
  - Implement the recommendations of 2<sup>nd</sup> National Commission on Labour by amalgamating and rationalizing the existing labour laws into 4 codes:
    - ✓ Labour Codes on Wages
    - ✓ Industrial Relations
    - ✓ Social Security & Welfare
    - ✓ Safety and Working Condition
- Lastly, the government must **curb corruption** and **regulate other drivers of inequality** and **joblessness** such as **crony capitalism**. It must focus on **progressive taxation, reducing tax evasion and maintaining buoyancy of tax revenue**. Additional revenue generated from these measures must be invested in social protection and essential services such as health and education.



## Summary

The **quantity** and **quality** of employment in India has remained a matter of concern since long. One narrative is that there is a **paucity of jobs** in the economy. Another narrative is that, while there are jobs created in informal and gig economy (which remain unaccounted in employment statistics), quality of jobs is poor and wages are low.

### Findings of the latest Periodic Labour Force Survey (2017-18)

- Unemployment in the country reached an **all-time high rate of 6.1%**.
- 68.3% of all unemployed were aged between 15-29 years.
- **Labour force participation rate** has shrunk from 55.5% (2011-12) to 49.7% (2017-18).
- Highest unemployment rate is among the urban women at 10.8%. India is among the countries with the **lowest participation of women in the labour force**
- The issue of **educated unemployment** is also quite acute at present.
- Growing number of educated youths (15-29 years) who are 'Not in Employment, Education and Training (NEET)' shows clear divide between aspirations of young Indians & opportunities available.

### Reasons behind increasing unemployment

- **Size of labour force** increasing due to rising working-age population. **Nature of labour supply** is changing too, with increasing enrolment of young adults for education & their rising job aspirations.
- **Movement of workforce out of agriculture** due to fragmentation of landholding, poor price realization etc. **Disguised unemployment** due to increasing mechanisation of agriculture.
- **Poor growth in manufacturing sector** due to greater focus on skill/capital intensive sectors instead of labour intensive sectors, taxation issues, lack of labour market reforms etc.
- **Service sector growth led by sectors** with low employment potential while majority of jobs are created in traditional low wage and low value-added services (e.g. repair, urban services like domestic maids, drivers etc.)
- **Share of informal employment is large.** Slow pace of labour reforms has encouraged hiring of informal contract workers.
- Shift of focus from job security to job creation has de-prioritized the issue of quality of jobs.
- Shrinking public sector.
- Wage crisis prevalent as a large majority of Indians are not being paid a 'living wage'.
- Overall low participation of women in the paid workforce is low as well as gender segregation in industrial (predominantly male) and services workforce (e.g. male in financial services/women in domestic workers)
- Preference to **white collar jobs** symbolic of social status and **low dignity of labour**.
- Education not leading to employability as well as gender bias in choice of subjects
- Lack of data on unemployment post discontinuation of NSSO's 5 year household surveys.

### Way Forward

- Analyzing and improving labour market data for well-targeted policies and programmes by creating a **Labour Market Information System (LMIS)**
- Integrating vocational education with formal education, ensuring greater participation of the private sector in skill development and wider use of the apprenticeship
- Developing **women's human capital** and **capabilities by providing support for their care responsibilities** and establishing gender-sensitive labour market regulations
- Address the issues facing agricultural sector by increasing **public investment** in agriculture, **increasing MNREGA outlay, social infrastructural investment** in rural areas etc.
- **Focus on small and medium enterprises (SMEs) & entrepreneurship** with special packages for labour intensive industries
- **Revamping industrial policy** to provide for tax incentives (e.g. wage subsidy), FDI, coastal & special economic zones, industrial craft clusters and change in labour regulation regimes.
- Adopt a **universal basic services approach** particularly in health, education, transportation etc can have significant multiplier impact on job creation.
- Income support schemes like Mukhya Mantri Yuva Nestam Scheme in Andhra Pradesh
- Lastly, the government must **curb corruption** and **regulate other drivers of inequality** and **joblessness** such as **crony capitalism**.



## PERSONALITY TEST PROGRAMME 2019

### UNIFORM CIVIL CODE

The call for a **Uniform Civil Code (UCC)** has long featured in the political and legislative debates ever since before the days of formulation of the Constitution. Time and again, the Supreme Court has also been asserting the need for a UCC. Recently, Supreme Court described **Goa (with a common family law) as a “shining example”** where “uniform civil code is applicable to all, regardless of religion except while protecting certain limited rights”. **21<sup>st</sup> Law Commission** also submitted a consultation paper on Reforms in Family Laws in India.

#### About Uniform Civil Code

- A Uniform Civil Code seeks to provide one law for the entire country, applicable to all religious communities in their personal matters such as marriage, divorce, inheritance, adoption etc.
- A Uniform Civil Code seeks not only to ensure uniformity of laws between communities, but also uniformity of laws within communities ensuring equalities between the rights of men and women.
- In 1941, BN Rau Committee recommended a codified Hindu law, which would give equal rights to women in keeping with the modern trends of society.
- Tracts of the Constituent Assembly debates reveal that there was no consensus in the Constituent Assembly about what a potential uniform civil code would entail.
  - While many thought **uniform civil code would coexist alongside personal law systems**, while others thought that it was to replace personal law.
  - There were yet others who believed that a uniform civil code would **deny freedom of religion**.
  - It was due to this uncertainty about what exceptions were acceptable as ‘freedoms’ and what exceptions would in fact deny this very freedom that led the assembly to contain the provision of uniform civil code in Article 44 of the constitution among Directive Principles of State Policy rather than Fundamental Rights.
- **Article 44 of the Directive Principles of State Policy (Part 4) of the Indian Constitution** lays down that the state shall **endeavour** to secure a **Uniform Civil Code** for the citizens throughout the territory of India.
- The codification of personal laws has historically generated protests. The Hindu Code Bill, one of the foremost pieces of social legislation, had triggered enormous opposition.

#### History of Uniform Civil Code in Goa

- Portuguese during their rule in Goa and Daman & Diu had separately codified local customs of each of these territories.
- After liberating the territories in 1961 & integrating them into a Union Territory, the Indian government ruled that the Portuguese laws would continue until amended or repealed by a competent authority; among these was the Portuguese civil code, 1867.
- Under this Code practised in Goa,
  - a Muslim man whose marriage is registered in the State cannot practice polygamy,
  - a married couple share property equally,
  - pre-nuptial agreements are the order of the day & assets are divided equally between the man and woman on divorce.

#### Need of Uniform Civil Code

- **Ensuring equality:** Presently, in India, **different communities** are governed by **different Personal laws** like **Hindu Marriage Act 1955, Hindu Succession Act 1956, Hindu Adoption and Maintenance Act 1956 & Hindu Minority & Guardianship Act (1956)**. Similarly, Muslims, Parsis and Christians are governed by their own personal laws.
  - Even **within a religion**, there is **not a single common personal law** governing all its members. E.g. for **registration of marriage among Muslims, laws differ from place to place**. It was compulsory in J&K (1981 Act), and is optional in Bengal, Bihar (both under 1876 Act).
  - It can be argued that Personal Law system violates the **principle of equality** of the Constitution.

- Also the Uniform Civil Code will act as a means to achieve clarity, simplicity and intelligibility in personal laws.
- Supreme Court in Indian **Young Lawyers Association v. State of Kerala (2018)** stated that personal/customary law comes under the ambit of Article 13. No body of practices can claim supremacy over the Constitution and its vision of ensuring the sanctity of dignity, liberty and equality.
- **Needed for national integration:** Uniform Civil Code will separate religion from **social relations and personal laws**, ensuring equality and thus harmony in the society.
  - In **Mohd. Ahmed Khan v Shah Bano Begum (1985)**, Supreme Court observed that, “A common civil code will help the cause of national integration by removing disparate loyalties to law which have conflicting ideologies.”
  - It will help in **integration of India**, as a lot of the animosity is caused by preferential treatment by the law of certain religious communities. This could in time **induce custodians of faith** to look inwards and seek to codify and reform age-old personal laws in conformity with **current modernizing and integrative tendencies**.
- **Gender Justice:** UCC will **promote gender justice** by removing the inbuilt discriminatory provisions of personal laws.
  - Under the Hindu law, the Mitakshara branch of law denied to a Hindu daughter a right by birth in the joint family estate and this flowed logically from the fact that her place in the paternal family was only temporary as she was belonged to her husband’s family on marriage.
  - Islamic law prescribes that generally a man’s share of the inheritance is double that of a woman in the same degree of relationship to the deceased.
  - Under Muslim law, the father is the sole guardian of the person and property of his minor child.
- **Freedom of Choice:** A religion neutral personal law would encourage protection of couples in case of inter-caste and inter-religious marriages.
  - Even Acts like the **Special Marriage Act, 1954** permits any citizen to have a civil marriage outside the realm of any specific religious personal law.

#### Challenges and issues related to UCC

- **Existence of legal pluralism in civil laws:** Indian laws do follow a uniform code in most civil matters – Indian Contract Act, Civil Procedure Code, Sale of Goods Act, Transfer of Property Act, Partnership Act, Evidence Act etc. States, however, have made hundreds of amendments and therefore in certain matters, there is **diversity even under these secular civil laws**.
- **Contradictory provisions of the Constitution:** Articles 371 (A) to (I) and the sixth schedule of the constitution of India provides certain protections or rather exceptions to the states of Assam, Nagaland, Mizoram, Andhra Pradesh and Goa with respect to family law.
  - While uniformity in personal laws is envisaged through the Article 44, the inclusion of personal laws in concurrent list indicates protection of diversity in personal laws.
  - While framing a law it has to be borne in mind that cultural diversity cannot be compromised to the extent that our urge for uniformity itself becomes a reason for threat to the territorial integrity of the nation

#### UCC: Supreme Court’s various judgements since 1985:

The Indian Judiciary has been an important instrument for putting an impact on the question of Uniform Civil Code.

- “A common civil code will help the cause of national integration by helping different loyalties to the conflicting ideologies” – (**Shah Bano Case**)
- “When more than 80% of citizens have been placed under the personal law codified, there is no justification, so to keep whatever in the absence, even more, the introduction of the uniform civil code for all citizens on the territory of India” - (**Sarla Mudgal Case**)
- “It is regrettable that Article 44 of the Constitution has not entered into force ... The above provision is based on the premise that there is no necessary link between religion and the law of persons in a civilized society. A common civil code will help the cause of national integration by removing contradictions based on ideologies” – (**John Vallamattom case**)

#### Secularism and UCC

The principle of UCC essentially involves the question of secularism. There are various interpretations of secularism and it is on the altar of all these interpretations, the UCC is both glorified and criticized. Some factions of our society consider the UCC anti-secular while some regard it as the harbinger of communal harmony and secularism.

- Many experts argue that personal laws are the part and parcel of religion and culture. Any interference with the personal laws would tantamount to interference with the very way of life of those who had been observing such laws from generation to generation.
  - State must not do anything which hinder the religious and cultural ethos of the people.
- While others argue that Uniform Civil Code is not opposed to secularism and will not violate Article 25 and 26 of the Constitution of India.
  - Article 44 of the Constitution of India is based on the concept that there is no necessary connection between religion and personal laws in the civilized society.
  - It has also been argued that right to religious freedom did not extend to freeing secular dimensions of religion from the law of the land.

- ✓ Nagaland witnessed a strong protest against provision of reservation of 33% seats for women. The ground for such opposition was that the carving out of reservations for women confirms their status as inferior and in need of special protection
- **Plurality and diversity:** It has been argued that UCC threatens a pluralistic society like India, where people have confidence in their respective religious beliefs or doctrines that have been presented by different religions.
  - In 2018, Law Commission of India opined that the Uniform Civil Code is **“neither necessary nor desirable at this stage”** in the country. The Commission said **secularism cannot be contradictory to plurality**. It only ensures peaceful co-existence of cultural differences.
  - It is this plurality that also makes it difficult to evolve consensus on UCC.
- **Indian Secularism:** The Supreme Court in **T.M.A Pai Foundation v. State of Karnataka** reiterated that the **essence of secularism** in India is **recognition** and **preservation** of the different types of people, with diverse languages and different beliefs, and placing them together so as to form a whole united India. The idea of UCC might not be in consonance with the spirit of Indian secularism where multiple individual identities co-exist under the umbrella of the national identity.
- **Issue of Drafting the UCC:** One of the biggest obstacles in implementing the UCC, apart from obtaining a consensus, is the **drafting**. There is no **guideline or a vision document**, whether UCC be a blend of all the personal laws or a new and common law adhering to the constitutional mandate.
- **Concerns of Minorities:** There are **impediments** in adoption of the UCC when it comes to addressing Minority concerns, such as **separatism, conservatism and misconceived notions** about personal laws. Most minorities feel a **sense of insecurity, complete loss of identity and marginalization** within Indian society and imposition of a majoritarian outlook on minority religions, if UCC comes into play.

## Conclusion

The state's endeavours to secure a Uniform Civil Code are to be found in the miscellany of laws of general application that were sporadically enacted since 1954. Among these are the Acts facilitating civil marriages, banning marital dowries, protecting women from domestic violence, preventing child marriages, ensuring ancestors' maintenance and protection, and facilitating adoption. The process has, of course, been slow-paced particularly because of difficulty of evolving a common consensus. However, there is abundant scope for enacting more such laws that are applicable to all regardless of religion and personal laws.

An **evaluation survey among different communities to suggest reforms within personal laws** on modern, liberal lines and a **broad consensus** must be drawn to facilitate India's religious and legal history.

**Uniform Civil Code must be an amalgamation of the elements** from the personal laws based on gender equality, non-discrimination of religion, caste and creed. Laws such as Indian Marriage Act, Indian Divorce Act etc. can then be applicable to every citizen of India irrespective of their religion. There is need for **bringing awareness** through **discussion and deliberations** among members of various communities.

## Summary

Uniform Civil Code seeks to provide one law for the entire country, applicable to all religious communities in their personal matters such as **marriage, divorce, inheritance, adoption** etc. It aims to ensure uniformity of laws between communities, but also uniformity of laws within communities ensuring equalities between the rights of men and women.

**Article 44** of the **Directive Principles of State Policy** (Part 4) of the Indian Constitution lays down that the state shall **endeavour** to secure a **Uniform Civil Code** for the citizens throughout the territory of India.

But, as evident from Constituent Assembly debates, there was no consensus over the structure of UCC to be adopted. It is also seen as a threat to **freedom of religion**, especially among minority communities.

## Need for Uniform Civil Code

- It will ensure equality among citizens in civil matters
- It will separate religion from social relations and personal laws, thereby helping the cause of national integration and ensuring harmony in the society
- It would promote gender justice by removing the inbuilt discriminatory provisions of personal laws
- A religion neutral personal law would uphold freedom of choice especially in cases of inter-caste and inter-religious marriages

## Challenges and issues related to UCC

- Difficult to contain such a multitude of civil laws into a single, comprehensive UCC
- Difficult to evolve consensus to blend all personal laws into a common law
- Provisions in the Constitution under Article 371 provides for special and differentiated treatment for certain states on the issues like inheritance, succession, marriage and divorce as well as administration of justice, which will be an hindrance to formulation of UCC
- UCC threatens a pluralistic society like India, where people have strong confidence in their respective religious beliefs or doctrines
- UCC might not be in consonance with the spirit of Indian secularism where multiple individual identities co-exist under the umbrella of the national identity
- Minority concerns of a sense of insecurity, complete loss of identity & marginalization within Indian society and imposition of a majoritarian outlook on minority religions, if UCC comes into play.

## Conclusion

The state's endeavour to secure a Uniform Civil Code has met with slow progress because of difficulty of evolving a common consensus. There is need for **bringing awareness** through **discussion and deliberations** among members of various communities to reach a common ground. Moreover, there is an abundant scope for enacting more such laws that are applicable to all regardless of religion and personal laws. An evaluation survey must be conducted among different communities to suggest such reforms in the upcoming laws.



## PERSONALITY TEST PROGRAMME 2019

### YES BANK CRISIS

#### Introduction

Yes Bank has reported a dramatic rise in gross non-performing assets. RBI has undertaken a series of measures to control the situation.

#### More on News

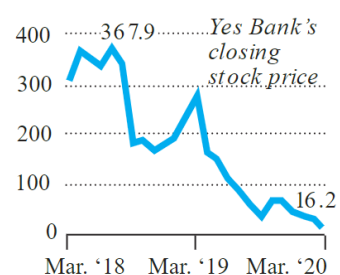
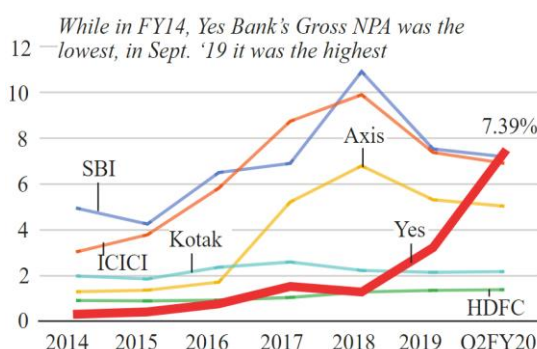
- Chief Economic Advisor while commenting on the health of banking sector in India has said that Indian banks are very well capitalized. He said that while international norm for capital to risk weighted assets ratio (CRAR) is 8% but RBI has mandated a CRAR of 9% for Indian banks. Against this limit, Indian banks maintain an average of 14.3% CRAR.

#### Crisis as it unfolded

- 10 years after the initial liberalisation of banking sector in 1993, Yes Bank was given banking license. It was doing good in its first decade and reported NPAs of just 0.31% in 2014.
- From 2014-2019, its total advances rose by 334% the highest rise among comparable banks in the period.
- It was found that the Bank had been indulging in high-risk lending without adequate risk-mitigating measures. RBI also found large divergence between NPAs notified by the bank and its own estimates. **Gross NPAs** zoomed to 7.39% at the end of Sept 2019 and since then jumped to **around 19%**.
- The loan spree & high NPA meant poor profitability, which is evident from Yes Bank's sinking Return on Assets (RoA) ratio ( $\text{RoA} = \frac{\text{net income}}{\text{total assets}}$ ). For instance, Yes Bank's RoA in FY19 was 0.52, in FY18 it was 1.78.
- So, RBI refused to extend the term of then CEO Rana Kapoor and he stepped down in Jan 2019. RBI also appointed a former deputy governor of the RBI on the board of bank.
- In the meantime, the bank was facing **regular outflow of liquidity**. While bad loans piled up, **Yes Bank did not make enough provisions in its profits**. Its Provision Coverage Ratio in FY19 was 43.1%, the lowest among comparable banks. RBI says a PCR of >70% is desirable.
  - The **provision coverage ratio (PCR)** gives an indication of the provision made against bad loans from the profit generated. Higher the PCR, lower is the unexposed part of the bad debts.

#### Reasons of poor health of the Bank

- Corporate Governance lapses:** it involves under-reporting of NPAs by at least Rs 3,277 crore in 2018-19, complains about kickbacks for loans, dysfunctional board etc.
- Absence of risk management practises:** reckless lending even to stressed companies including the Anil Ambani-led Reliance group, Dewan Housing Finance Corporation Ltd (DHFL) and IL&FS by earlier CEO.
- Slowdown of economy:** inability of companies to pay back affected profitability of bank (twin-balance sheet problem). According to an estimate, as much as 25% of all Yes Bank loans were extended to NBFCs, real estate firms, and the construction sector.
- Outflow of liquidity:** it means that depositors started taking back their deposits while bad loans were rising. From Sept 2019 to March 2020, 34% drop in the bank's deposit base was noticed.
- Other reasons:** poor external auditing standard, low supervisory competence, lack of political will and corrupt nexus between politicians, promoters and bankers.



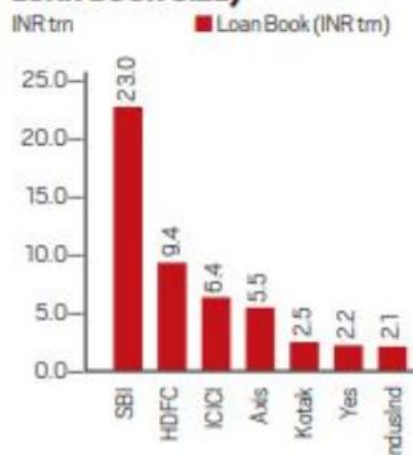


- In this scenario, **RBI started pushing it to raise more capital** in the hope of finding a market-led revival rather than a regulatory restructuring.
- **New CEO, who was appointed in March 2019**, made several unsuccessful attempts to raise capital in the last few months to improve the health of the bank in the light of potential non-performing assets.
- These failings resulted in **downgrades by credit rating agencies**, which in turn made capital raising even more difficult leading to a **vicious cycle** that further worsened its financials. Hence, the bank's **stock price fell steadily** in the past year.
- The **tipping point came when one of the bank's independent directors and chairman of the board's audit committee resigned** from the board in January citing governance issues. Moreover, **3<sup>rd</sup> quarter's report that was to be released in Feb was delayed by at least 1 month** as the bank said that it was in talks with potential investors for a cash infusion.
- Only when RBI found that no credible investor was coming forward that could stem a steady decline in Yes Bank's financial position, it decided to recommend the moratorium.

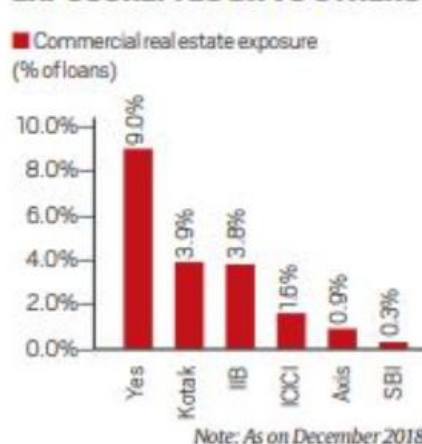
## Comparison of financial health of Yes Bank with other banks

### YES BANK AND OTHERS

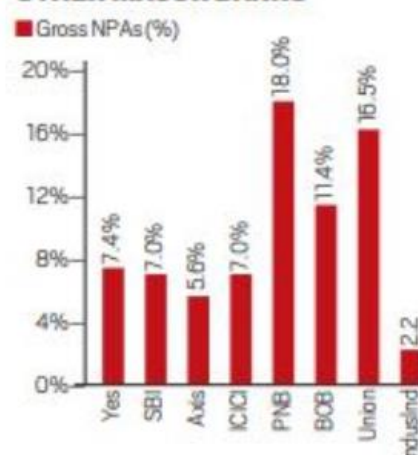
#### 1. TOP BANKS (IN ORDER OF LOAN BOOK SIZE)



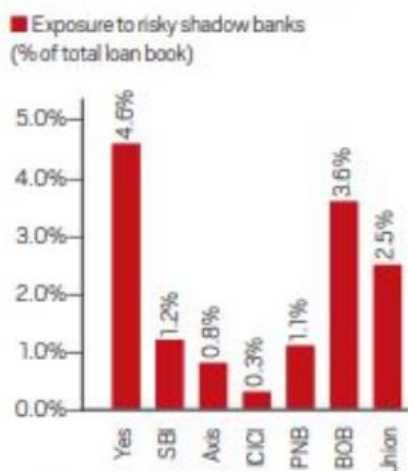
#### 3. COMMERCIAL REAL ESTATE EXPOSURE: YES BK VS OTHERS



#### 4. GROSS NPAs: YES BANK VS OTHER MAJOR BANKS



#### 2. EXPOSURE TO RISKY SHADOW BANKS (% OF TOTAL LOAN BOOK)



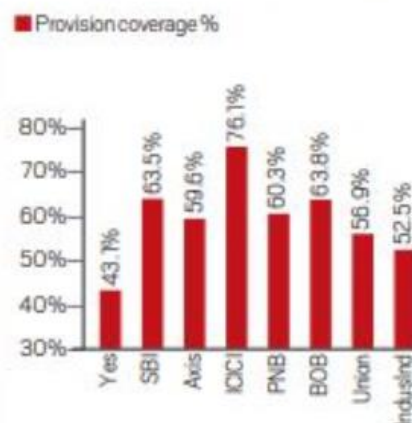
Note: 'Risky' = Exposure to DHFL, ADAG NBFC, Religare fintech, Altico, IHFL, Edelweiss, Piramal capital and housing, and SREI.

#### RISK-BASED SCORING

Rank	Bank	Risk Score
1	Yes*	99
2	Karnataka	67
3	South Indian	57
3	IndusInd	57
3	RBL	57
6	Federal	48
7	ICICI	43
8	Karur Vysya	42
9	DCB	40
10	Axis	26
11	City Union	15

Source: Company, Anand Rathi Research  
 \*Yes Bank for Q2 FY20  
 Higher score reflects lower risk  
 Lower ranks reflects lower valuations

#### 5. PROVISION COVERAGE: YES BANK VS OTHERS BANKS



Note: NPA: Non Performing Assets. Yes Bank data are as on Q3 2019, while other banks reflect Q4 2019 data

Source: Nomura research

## Regulatory concerns raised

- **Lack of asset quality recognition and lethargic response of RBI:** Yes Bank ended up at a resolution stage without crossing threshold of PCA, which is a kind of tailor-made solution to address weakness at banks at the pre-emptive stage itself. This is **despite the fact that the central bank had in recent years flagged several concerns**, including a divergence between the reported and RBI's own findings on the bank's financials.
- **Decision to suspend normal business operations** could have been avoided along with a **cap on withdrawals which is a big disservice to depositors**. Future of a bank depends on its depositors. The moratorium, although temporary, could discourage the depositors from putting their trust in the bank.
  - RBI could have used its own prowess to show that investors money is safe and sentiment is high in banking sector.
- **No Market-led revival in sight:** Just 6-week time was given to some foreign investors who were exploring investments into Yes Bank. Also, because of no clear answers by the regulators on the pricing or taxation, they decided to walk away.
- **AT-1 bond holders:** concerns are being raised and it is said that it is for the first time that **AT-1 bonds are being written off ahead of equity**. This means Rs 10,800 crore of AT-1 bonds could turn into wastepaper which constituted over 40% of the bank's net worth of roughly Rs 27,000 crore.
  - AT1 bonds, also known as CoCo bonds (contingent convertible capital instruments), are **unsecured debt instruments** that **rank lower to the claims of all creditors and only senior to common equity**.
- **Systemic risk:** RBI failed to check the **rise of shadow banking sector** which gained momentum by recklessly borrowing the savings deposited in banks after demonetisation. **Cheap credit was made available to refinance the stuck real-estate and infrastructure projects** which is now turning into NPAs as seen in IL&FS, DHFL, PMC Bank and now Yes Bank.
  - Fitch Ratings has said that the latest developments spotlight the governance risks in India's banking sector overall.
- **Lack of effective framework for resolution of financial sector:** SBI, LIC were large shareholders of IL&FS but still they failed to prevent the fall of the institution. Similarly, Yes Bank's resolution should not merely be based on the premise that large shareholders will be able to keep a check on it.

## Recent steps taken to handle the crisis

- On the advice of the Reserve Bank of India (RBI), the government has imposed a moratorium under **Section 45 of the Banking Regulation Act** for 30 days that puts a cap of Rs 50,000 on withdrawals by Yes Bank depositors with few exceptions. It will be withdrawn soon.
- Cabinet has approved the RBI's '**Yes Bank Ltd. Reconstruction Scheme, 2020**' under which State Bank of India (asked using the instrument of moral suasion) will pick up a maximum 49% stake and it cannot reduce holding to below 26% before three years from the date of capital infusion.
  - Some private sector banks like ICICI Bank, Axis bank etc. have also been roped in.
- Yes Bank will not be able to grant or renew any loan or advance, make any investment, incur any liability or agree to disburse any payment.
- All existing shareholders (except those holding not more than 100 shares) of Yes Bank have been barred from selling more than 25% of their current holding for 3 years.
- The RBI also superseded Yes Bank's Board of Directors and appointed former SBI Chief Financial Officer Prashant Kumar as its administrator.
- Temporary relief on maintaining cash reserve ratio (CRR) was provided along with liquidity support. RBI will continue to provide liquidity support once the moratorium is lifted to meet any deposit outflows if needed.

## Comparison with PMC Bank crisis

Section 45 of Banking Regulation Act is not applicable to cooperative banks. So, similar kind of forceful action was not taken during PMC crisis.

Recently, an amendment has been purposed to the Act in order to strengthen cooperative banks and avoid PMC Bank like crisis in the future.

## Lessons learnt from history

- **Merger of Global Trust Bank (GTB) with Oriental Bank of Commerce (OBC) in 2004:** failing private sector bank GTB was merged with well performing OBC which dented the profitability and growth of OBC itself as GTB's bad loans turned out to be way above what was revealed at the time of merger.
- **Satyam scandal case:** government kept the business running because of its viability by replacing the company's board by Company Law Board and appointing nominal directors. Satyam was eventually sold to Tech Mahindra. The current intervention of SBI is not a merger and its own balance sheet is not going to be liable for any future losses of the troubled bank.



## Way Forward

The overarching theme for government includes **restoring policy credibility, ensure depositor's and investor's confidence, improve corporate governance and accountability** of different stakeholders involved. Following steps need to be taken to ensure the same:

- RBI need to **review its PCA guideposts** and **revise them** to ensure that such a slipping under the radar does not recur.
- Government needs to **assure depositors that their money is safe by putting off the moratorium at the earliest.**
- The fear of default by the Bank is not going to go away until the Bank is able to find **market-led solution in the form of private investors.**
  - However, with creditors like Vodafone-Idea Ltd. which are at their brink of bankruptcy, this seems very challenging. If this doesn't happen, SBI may need to put more money in the Bank or go for merger in the future.
- Though its equity has eroded, Yes Bank has some underlying strengths like a **sound franchise, robust IT systems, skilled manpower and an extensive network of branches.** SBI should be able to harness these strengths and with proper pricing, its investment can become commercially attractive.
- **Need of more proactive role of regulators like RBI and SEBI:**
  - There is a **need of a watchdog for the financial sector outside of RBI** which is made accountable. Moreover, a full-fledged framework on the lines of Insolvency and Bankruptcy Code (IBC) is required for the resolution of financial sector firms.
  - SEBI needs to be empowered with **better surveillance and legal expertise** to be able to track **cases of insider trading**, and other **misdeeds in the markets**, and bring the culprits to book.
  - The government and RBI will have to be careful lest an impression is created that SBI is stepping in at their behest. If such a perception is created, questions of **interests of minority shareholders of SBI and other SEBI-related regulatory issues will crop up.**
- **Role of auditors and rating agencies:** they are rarely penalised for their mischievous acts. So, strict accountability and ethical guidelines are needed to be put in place. As pointed out in IL&FS crisis as well, the revenue model on which rating agencies work need to be changed and an independent and fair evaluation is the need of the hour.

## Conclusion

Given the criticality of the financial intermediation sector in any economy, failure of a bank can have economy-wide ramifications, and a run on one bank can very quickly have a contagion effect. For this reason, RBI has identified SBI, ICICI and HDFC Bank as Domestic Systemically Important Banks (D-SIBs). Yes Bank is not a D-SIB but still has large deposits and asset base. So, government's alacrity in its smooth resolution is a welcome move.

The Budgetary sop of increasing deposit insurance up to Rs. 5 lakhs in the aftermath of the crisis at the Punjab and Maharashtra Cooperative (PMC) Bank is also likely to go well with depositor's sentiments.

Moreover, **it should not be seen as socialisation of private sector losses** as government action was needed for the sake of depositors and shareholders are anyway the biggest losers in this ordeal.

## Summary

### Introduction

RBI has taken various steps in order to contain the NPA and liquidity crisis in Yes Bank.

### Major steps taken

- Imposing moratorium that puts a cap of Rs. 50000 on withdrawals.
- Buying of equity/shares by the likes of SBI, Axis bank, ICICI Bank etc. with SBI being the major investor.

### Financial health of Yes Bank

- Gross NPAs have ballooned to around 19% as per latest quarterly report. Its Provision Coverage Ratio in FY19 was 43.1%, the lowest among comparable banks. RBI says a PCR of >70% is desirable.
- Profitability has been declining. Yes Bank's RoA in FY19 was 0.52, in FY18 it was 1.78.

### Reasons of decline of the Bank

- **Corporate Governance lapses:** underreporting of NPAs, alleged kickbacks for loans etc.
- **Absence of risk management practises:** reckless lending even to stressed companies
- **Slowdown of economy:** inability of companies to pay back affected profitability of bank (twin-balance sheet problem).
- **Outflow of liquidity:** depositors started taking back their deposits while bad loans were rising.
- **Other reasons:** poor external auditing standard, low supervisory competence, lack of political will and corrupt nexus between politicians, promoters and bankers.

### Regulatory concerns raised

- **Lack of asset quality recognition and lethargic response of RBI:** Yes Bank ended up at a resolution stage without crossing threshold of PCA
- **Decision to suspend normal business operations** could have been avoided along with a **cap on withdrawals**.
- **AT-1 bond holders:** it is being argued that claims of AT-1 bonds rank higher than common equity holders.
- **Systemic risk:** Fitch Ratings has said that the latest developments spotlight the governance risks in India's banking sector overall.
- **Lack of effective framework for resolution of financial sector**

### Way Forward

- RBI need to **review its PCA guideposts** and **revise them** to ensure that such a slipping under the radar does not recur.
- Government needs to **assure depositors that their money is safe by putting off the moratorium at the earliest**.
- Underlying strengths like **robust IT systems, skilled manpower etc. of Yes Bank should be harnessed by SBI properly** for this investment to become commercially attractive.
- **Need of more proactive role of regulators like RBI and SEBI:** SEBI needs to be empowered with better surveillance and legal expertise. Moreover, a full-fledged framework on the lines of Insolvency and Bankruptcy Code (IBC) is required for the resolution of financial sector firms.
- **Role of auditors and rating agencies:** strict accountability and ethical guidelines are needed to be put in place.



## PERSONALITY TEST PROGRAMME 2019

### 5G

#### Introduction

India's new National Digital Communications Policy (NDCP) presents a positive vision for the industry and country, with the **goal of creating the digital infrastructure that supports the next generation of digital services** and allows India to realise the true potential of the digital economy. Mobile has already played a central role in realising the ambitions of the Digital India initiative, and will also be central to realising the NDCP's goals to 'Connect India', 'Propel India' and 'Secure India'. In this context, **5G is envisaged to be the key catalyst that would fuel this growth**

#### Growth of Wireless Networks in India

- The **first mobile phone service** was launched in 1985 on a non-commercial basis, but it was only in 1995 that commercial service was started. Beginning 2007, the subscriber base rapidly increased reaching 560 million in 2009 and well over **a billion by 2017**.
- **Early deployment of mobile networks was based on 2G technology**, with **3G technology** entering service in 2010 and **4G in 2016**. All mobile services from 2G to 4G offered services based on increasingly advanced phones, with smart phones arriving about a decade ago.
- 2G and the early 3G networks primarily offered voice services, but beginning with **later 3G and now 4G technologies**, **the networks provide internet-based services like video, email, and social media**.

#### Definitions and Concepts:

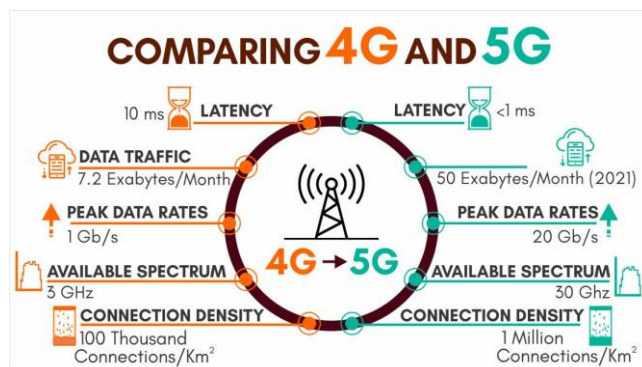
- **Bandwidth** commonly measured in bits/second is the maximum rate that information can be transferred
- **Throughput** is the actual rate that information is transferred
- **Latency** the delay between the sender and the receiver decoding it, this is mainly a function of the signals travel time, and processing time at any nodes the information traverses.
- **Use Case:** A use case is a software and system engineering term that describes how a user uses a system to accomplish a particular goal.
- A **test bed** is a platform for conducting rigorous, transparent, and replicable testing of scientific theories, computational tools, and new technologies.

**How 5G reduces latency?** Because communicating with a centralized computing and data repository takes time, the only way to save time (i.e. decrease latency) is to avoid using that centralized repository-which means moving big chunks of network's computing power to the edge of the network. The result is something called **"edge computing,"** with architectures referred to as "edge cloud computing," which, in turn, uses things called "cloudlets" or sometimes called "fog computing." A key driver is mobile computing, which necessarily uses data at the edge.

- The **edge of the network is the part that's closer to the ultimate user**. By moving the data to the edge of the network, delays are cut down in two ways: First it reduces the distance between the user of the data and the place where it's stored (the repository), which reduces the time it takes data to move back and forth. Second, by keeping just the required data near the user, it is also reducing the amount of data that the server has to handle, which also speeds things up.

#### 5G – The Next Generation Network

- 5G is a next generation mobile networks technology after 4G LTE networks using radio waves or radio frequency (RF) energy to transmit and receive data.
- It will provide **seamless coverage, high data rate, low latency, and highly reliable communications**.
- 5G technologies are entering into **services gradually, beginning in 2019** and is expected to be a full range of services by 2024.
- The final standard for 5G will be set up by the **International Telecommunications Union (ITU)**.



- 5G networks will **use radio technology known as 5G NR (New Radio)**.
  - This **allocates chunks of radio bands**, some below 6GHz, and others above 24GHz (also known as mmWave).
  - In contrast, **4G LTE frequencies are much lower** (Band 5 is around the 800MHz mark while Band 40 is around the 2300Mhz mark).
- 5G being the next generation of mobile networking standards, **promises to deliver improved end user experience by offering new applications and services**.
- It will **increase energy efficiency, spectrum efficiency, network efficiency** as well as efficiency of other systems.
- **Applications and Benefits of 5G:** 5G use cases can be categorized into three different use case classes namely- **enhanced Mobile Broadband (eMBB)**, **massive Machine-Type Communication (mMTC)**, and **Ultra-Reliable Low-Latency Communications (UR-LLC)**.

**Table 2: Envisage use case mapped with key 5G characteristics**

Enhanced Mobile Broadband (eMBB)	Ultra-Reliable and Low-Latency Communications (uRLLC)	Massive Machine Type Communications (mMTC)
Fixed Wireless Access service	Autonomous vehicles	Asset tracking and predictive maintenance
Enhanced in-building broadband service	Drones and robotic applications	Smart cities, buildings, and agriculture
Real-time augmented reality service	Health monitoring system / tele-health	Internet of Energy/Utility management
Real-time virtual and mixed reality service	Smart grid and metering	Industrial automation
Crowded or dense area service	Intelligent transportation	Smart logistics – advance telematics
Enhance digital signage	Factory automation	Smart grid and metering
High definition cloud gaming	Remote operation	Smart consumer wearables
Public Protection and Disaster Response (PPDR) Service	Self-driving car	Environment management
Massive Content Streaming service	Mission critical services - security & safety	Intelligent surveillance and video analytics
Remote surgery and examination	High definition real time gaming	Smart retail

## Is India 5G Ready?

### A. Prospects of 5G in India:

- According to GSMA intelligence (GSMAi), **208 million new subscribers will get connected in India by 2025**, accounting for a quarter of global and half of regional [Asia-Pacific (APAC)] new subscribers over 2017-2025 period.
- According to 5G HLF (High Level Forum), 5G is expected to be launched in India by 2020 and is predicted to create a **cumulative economic impact of \$1 trillion in India by 2035**.
  - Moreover, it will **unleash new business opportunities and bring substantial socioeconomic benefits** through increase in productivity, improvements in service delivery, optimum use of scarce resources as well as creation of new jobs.

### B. Technology Enablers and Challenges:

- **Spectrum:** 5G needs a significant amount of new harmonised mobile spectrum within three key frequency ranges to deliver widearead coverage and support all use cases: sub-1 GHz, 1-6 GHz and above 6 GHz.
  - Currently, every country has differing spectrum allocations for 5G. Regulators in Europe and China aim to deploy commercial 5G networks in the 26GHz range by 2020 while South Korea has carried out a successful pre-commercial 5G trial using the range 26.5GHz to 29.5GHz. A **globally harmonised spectrum** would enable economies of scale and facilitate cross-border coordination and roaming for end users: a critical factor for the initial deployment of 5G.
  - **India's Position:** In India, spectrum is usually allocated by auction. **TRAI has proposed sale** of 20 MHz blocks of 5G spectrum in the 3,300-3,600 MHz (3.3-3.6 GHz) band at a **price of Rs 492 crore per MHz which is 375% higher than what operators in South Korea paid**.
    - ✓ **Challenge: Pricing will be a key consideration in the success of these auctions**, especially given the high debt levels, low Average Revenue Per User (ARPU) levels and poor profitability of the industry.
    - ✓ Also DoT has accepted ISRO's demand to reserve 26 GHz band primarily for satellite services which will make deployment of 5G challenging.

Spectrum is the lifeline for any wireless communication. **Low frequencies (less than 1 GHz)** provide wide area and deep indoor coverage across urban, suburban and rural areas and support IoT for low data rate applications. **Medium frequencies (1-6 GHz)** provide good coverage and high speeds.

**High frequencies (above 6 GHz)** offer real promise for the provision of very high data rates and high system capacity in dense deployments.

Technically, **spectrum is technology neutral** i.e. any spectrum band can be used for deploying any technology. However, while deciding the deployment of a technology, apart from the technical factors, development of eco-system plays a significant role.

- **Infrastructure Support for 5G:** The switch from 4G to 5G will be infrastructure intensive, which means mobile service providers will have to upgrade their underlying hardware countrywide in order to provide 5G speeds.
  - **Backhaul Infrastructure:** Backhaul is a network that connects **cells sites to central exchange**. The high throughput offered by 5G will result in high traffic on cellular networks which will need to be backhauled from mobile sites to an operator's core network (Central Exchange). This will lead to the **roll-out of fibre to most mobile sites** although there is also option to connect wirelessly through **millimeter wave spectrum** (70-80 GHz).
 

A **Cell Site** refers to the antenna equipment and ground equipment that is used to transmit cell phone signals to and from the mobile phone back to the receiver.
  - ✓ **Challenge: India lacks a strong backhaul to transition to 5G.** Nearly 75% of cell sites are connected through **microwave backhaul**, while under 25% sites are connected through **fibre**. The former has bandwidth issues as it uses traditional bands while the latter provides low latency and unlimited capacity (a prerequisite for 5G).

**The backhaul infrastructure and technology for 5G will need to be strengthened in following manner**

- **Higher capacity density:** For 5g, the mobile networks would need to be **densified using small cells**. The compact size and low power (consumption and radiated) make small cells suitable for street level, lamp pole and indoor deployment.
 

Small cells would help **deliver targeted cellular coverage and capacity**, indoors and outdoors. This will **also enable content and cloud services** to be delivered close to the user.
- ✓ **Challenge:** Densification adds complexity to the network because it increases the number of cell borders, where interference and **handoffs (process of transferring an active call or data session from one base station (cellular tower) to another while roaming)** introduce the possibility of dropped connections. In a 5G world, networks will need to depend on intelligent, automatic spectrum allocation to maintain quality as well as speed. Wireline infrastructure will also require upgrades to provide adequate network.
- **Service and network virtualization:** Network virtualization is the process of consolidating hardware and software resources into a software-based, virtual network. Network virtualization is becoming increasingly important as mobile network operators (MNOs) seek to effectively manage their spectrum while maintaining their costs.
  - ✓ In the network core, 5G virtualization will use **network slicing** to support multiple virtual networks over one physical network infrastructure. **Network slicing** permits the logical separation of a network so that each slice provides unique connectivity-but all slices run on the same shared infrastructure. In this way, **5G virtualization** provides a new level of flexibility, allowing operators to-for example-devote a network slice to certain kinds of devices.

### C. Financial Enablers and Challenges

- **Capital Investment Challenges:** With 5G spectrum and network densification needs, it is anticipated that industry might require an **additional investment of \$60-\$70 billion to seamlessly implement 5G networks**. In midst of **rising debt levels** and **market consolidation** activity, the telcos are seen to be constrained on capital expenditure.
- **Poor Financial Health of the Telecom Industry:** Despite being home to over one billion mobile subscribers, the Average Revenue Per User (ARPU) for telecom service providers has reduced from Rs 123 in 2015 to just Rs 69 by the end of the second quarter of 2018. The industry had a cumulative debt of Rs. 7.7 trillion in 2018.
- **High Tax burden:** Close to 30% of Telephone company's revenue goes to the Government in taxes and levies.
  - The **Import duty for equipment** such as base stations, optical transport gear, 4G LTE products, gateway controllers, carrier Ethernet switches etc., has further been increased to 20% in 2018.
  - The DoT has sought a **reduction in the goods and services tax (GST)** on telecom gear and services from 18% to 12%, a refund of utilised and/accumulated GST input tax credits and a cut in the Universal Services Obligation (USO) levy to 3% from current 5% level.

### D. Electronic Equipment Manufacturing: Imports account for a whopping 90% of India's telecom equipment market. India's exports of telecom instruments in 2017-18 were worth USD 1,201.7 million, against imports of 21,847.92 million.

- The Telecom Regulatory Authority of India (TRAI) has recommended measures to **bring imports to 'net zero' by 2022, for both economic and security reasons**. However, it is widely acknowledged that equipment manufacturing holds a small share in the overall telecom business.

- E. **Right of Way (RoW) and lack of uniform policy framework:** Delays due to complex procedures across states, non-uniformity of levies along with administrative approvals impact telecom service providers in rolling-out Optical Fibre Cables (OFC) and telecom towers.
- F. **5G Market Readiness:** Though operators recognise the potential for 5G to transform aspects of the consumer and enterprise experience, they also have concerns around identifying specific business models and how much scope there is to monetise the new services that 5G will enable.
  - **India's scenario:** Various indicators suggest the **mobile ecosystem still needs to develop further** for India to be truly ready for 5G launches. These include the **relatively low levels of 4G adoption** across the Indian market as a whole, and **low network download speeds**. However, 4G adoption is accelerating rapidly and by 2025 will exceed averages globally and for developing markets. This highlights the importance of operators continuing to invest in the latest LTE network technologies, including network densification and additional fibre deployments, as building blocks for 5G.

**Issues arising out of 5G technology adoption:** The rise of new business architecture evolving through 5G networks are likely to present **new challenges to security and privacy protection**. As industries are expected to thrive on 5G and cloud-based ecosystem, it is expected to lead to promoting **huge number of interconnected devices**.

- **Digital Divide:** Because it requires density, **5G is feasible mainly for more populated areas**, where many antennas can be placed close together. This brings challenge of widening of the **digital divide by geography**. Rural areas where user density would be relatively low as compared to urban areas could be left out.
- **Ethical Concerns:** 5G has the power to change the world, and with that come massive responsibilities. **Two questions naturally arise:**
  - **How can we ensure 5G is benefiting the entire world?** If 5G is seen solely as a way to generate revenue, rather than a way to solve problems, then only a few will effectively benefit from the breakthrough technology. Applications such as **AI and Robotics could be used by few ahead in technology to leap forward their own dominance over the rest** who are lacking in such technology. Moreover, the adoption of **AI itself may have inherent biasness** with respect to gender, race, ethnicity etc. and fuel further discrimination.
  - **How can people's data be secure?** As 5G networks allow for a holistic connected life, consumers will expect their data to be protected at all costs. This is **especially true for India as India lacks a strong data protection policy and law**.
- **Cyber threat:** In 5G, the network has moved away from centralized, hardware-based switching to distributed, software-defined digital routing. Previous networks were hub-and-spoke designs in which everything came to hardware choke points where cyber hygiene could be practiced. In the 5G software defined network, however, that activity is pushed outward to a web of digital routers throughout the network, thus denying the potential for chokepoint inspection and control.
  - **India's critical infrastructures such as atomic power stations, power grid and government services etc. are very much prone to these threats.** It was manifested in **recent cyber attacks** on Kudankulam Nuclear Power Project as well as on ISRO.
- **National Security Challenge:** To adopt the 5G, **Indigenous manufacturing, on its own, is not a solution**. The entire manufacturing process is based on global supply chains and hence will affect not only national security, but foreign policy and its technological future. **The present case of Huawei manifests this challenge.**

**Huawei case:** Technologies such as 5G, AI, machine learning, autonomous systems, quantum computing etc. are rapidly emerging as the new **Technological Cold War** between US and China which has spread across the Globe now. The Chinese telecommunications company Huawei is under scrutiny around the globe. The **main reasons are**

- **Security Concerns:** It was found by an engineer who had earlier worked in PLA and is also a member of the Communist Party of China. It is claimed that Huawei has received state support at crucial points in its development.
- There is a **perceived security risk posed by Huawei** to countries it is operating in. Its is being alleged that its equipment are snooping into data and supply these to China. **For example, Vodafone had identified hidden backdoors** in the software that could have given Huawei unauthorised access to the carrier's fixed-line network in Italy.
- **Economic interests:** It is the **world's largest telecommunications equipment manufacturer**.
  - Huawei is widely acknowledged for reliable equipment, engaging customer service and lower pricing models. It's the lowest-cost provider (about 30% cheaper than Ericsson and Nokia) and the only provider of end-to-end solutions for national telecoms.
- **Stealing trade secrets:** US allege that Huawei Technologies Co., stole trade secrets from US business partners, including technology used by T-Mobile US Inc. to test smartphones.



## 5G technology in India: Steps taken

- **A 5G High Level Forum was set up by the Government in September 2017** to articulate the Vision for 5G in India and to recommend policy initiatives and action plans to realize this vision.
- The Government has **launched a program titled 'Building an End-to-End 5G Test Bed'**. The programme envisages close collaboration between the universities and startups and create an ecosystem that closely resembles a real-world 5G deployment.
  - Ericsson has installed the first public access 5G test bed at IIT Delhi in July 2018.
- **Several smaller academic R&D programs around 5G themes** have also been funded by DST and MEITY.
- In October 2019, Swedish telecom company Ericsson and American telecom equipment maker Qualcomm, collaborated to **demonstrate the first 5G video** call in the country at the India Mobile Congress (IMC) in Delhi.
- The **National Digital Communication Policy-2018** (NDCP-2018) also lays out the following objectives with respect to 5G services in India:
  - Enabling **Hi-speed internet, Internet of Things and M2M (Machine to machine)** by rollout of 5G technologies:
  - Implementing an **action plan for rollout of 5G applications** and services
  - **Enhancing the backhaul capacity** to support the development of next generation networks like 5G
  - Ensuring **availability of spectrum for 5G** in 6 GHz bands
  - **Reviewing industry practices with respect to traffic prioritization** to provide 5G enabled applications and services
  - Developing **framework for accelerated deployment of M2M services** while safeguarding security and interception for M2M devices

## Way Forward

The **three priorities for India in 5G** are: **Deployment** – rolling out early, efficient and pervasive 5G networks to maximize the value offered by this new technology; **Technology** – building India's industrial and R&D capacity in the design and IP dimensions of 5G; and **Manufacturing** - expanding the manufacturing base in 5G for both semiconductor fabrication as well as assembly & test plants. In this regard, **the High-Level Forum on 5G made following recommendations-**

- **Spectrum Policy:** 5G spectrum be allocated as follows in three phases based on readiness of the various bands
  - For **wireless access**, licensed spectrum with an aggregate of 405 MHz + 137 MHz below 4 GHz and 5.25 GHz + 8.3 GHz below 45 GHz.
  - For **backhaul**, 14 GHz of unlicensed and 10 GHz of lightly licensed spectrum in the 57 to 86 GHz band.
  - For **WiFi**, opening additional bands of unlicensed spectrum in the 5 GHz band for outdoor use.
- **Regulatory Policy:** **Three expert committees on business, security and safety segments** be created to develop clear guidelines on regulatory policy that can be promulgated by the Government.
- **Education and Awareness Promotion Program:** The Committee recommends three initiatives - **Attract global 5G conference events to India, set up national 5G events and create a comprehensive skills** development program.
- **Participation in International Standards:** Telecom networks need standards to ensure interoperability and to avoid market fragmentation. Getting active in **global standards development eco-system** will open up a new realm of opportunities for India.
  - The Committee recommends **short term initiatives** like setting up '**Standards Project Teams**' to participate in standards activities. **For the longer term**, the Committee recommends a ten- year strategy for Information Technology Standards in India.
- **Technology Demonstration and Major Trials:** 5G trials will be an important learning opportunity for our Telecom Service Providers (TSP), academia and industry. The Committee recommends that the major global **Original Equipment Manufacturers be invited to conduct major 5G trials in India** in collaboration with local partners.
- **Implementation and Oversight:** Create a **5G Implementation Oversight Committee with participation from Government, Academia, Industry and R&D Labs** to supervise 5G program implementation and take corrective steps where necessary.
  - Create a **5G Program Office** within DoT, with a Program Lead and a supporting team **to coordinate all 5G implementation issues** among the three departments DoT, MeitY, DST.
- **Core Technology and Manufacturing:** Building India's capacity in core technology development (Design and IP) and manufacturing for 5G and more broadly for all Information Technologies needs a deep and long- term effort. However, the enabling measures of the report related to deployment are envisaged to trigger R&D and manufacturing aspects of 5G ecosystem as well considering India's market and innovation potential.

## **Conclusion**

5G technology has the potential for ushering a major societal transformation in India by enabling a rapid expansion of the role of information technology across manufacturing, educational, healthcare, agricultural, financial and social sectors. India must embrace this opportunity by deploying 5G networks early, efficiently, and pervasively, as well as emerge as a significant innovator and technology supplier at the global level. Emphasis should be placed on 5G touching the lives of rural and weaker economic segments so as to make it a truly inclusive technology.



## Summary

- 5G is a 5<sup>th</sup> generation wireless communication technology using **radio waves** or radio frequency (RF) energy to transmit and receive data.
- Applications: **Driven by faster data rates** for access to multi-media content, services and data and low latency 5G technology is likely to bring to fruition a number of technologies, such as augmented reality, IoT and self-driving cars.

## Is India 5G Ready?

- 5G in India has lot of prospects in terms of number of subscribers increasing, economic benefit and opening avenues for new businesses.
- But at the same, India needs to overcome the hurdles which are required for adoption of 5G in India like
  - India needs **expanded spectrum for 5G** network in which pricing will be key.
  - **India lacks a strong backhaul infrastructure to transition to 5G.**
  - It is anticipated that industry might require an **additional investment of USD 60 to 70 billion** to seamlessly implement 5G networks. In midst of **rising debt levels** and **market consolidation** activity, the telcos are seen to be constrained on capital expenditure.
  - India needs to **lower its import of telecom instruments** and focus on electronic equipment manufacturing within India.

## Issues arising out of 5G technology adoption

- As industries are expected to thrive on 5G and cloud-based ecosystem, it is expected to lead to promoting **huge number of interconnected devices**.
- This has its own consequences which includes **privacy concerns, national security issues as well as the ethical dilemma of technological divide and technological war**.
- Building a **new trust model secured with business continuity** will be one of the key essential drivers for enabling connected industries.

## Steps taken

- **5G High Level Forum was set up in 2017** to articulate the **Vision for 5G** in India and to recommend policy initiatives and action plans to realize this vision.
- The Government has **launched a program titled 'Building an End-to-End 5G Test Bed'** envisaging close collaboration between the universities and startups and create an ecosystem that closely resembles a real-world 5G deployment.
- **Funding** to several smaller academic R&D programs around 5G themes by DST and MEITY.
- **National Digital Communication Policy-2018 which aims at enabling hi-speed internet, Internet of Things and M2M (Machine to machine) by rollout of 5G technologies:**

## Way forward

- Key priorities are
  - **Deployment** of early, efficient and pervasive 5G networks
  - **Technology** – building India's industrial and R&D capacity in the design and IP dimensions of 5G; and
  - **Manufacturing** - expanding the manufacturing base in 5G
- **Recommendations of the High-Level Forum on 5G:**
  - **Spectrum Policy** based on the recommendations of **international regulatory and standards bodies, availability of spectrum in the country**, co-existence with other domestic services and the need to align India with the global market place.
  - **Regulatory Policy:** Create **three expert committees on business, security and safety segments**.
  - Attract **global 5G conference events** to India, set up **national 5G events** and create a **comprehensive skill**.
  - Setting up of **Applications and Use Case Labs** providing functions like – interoperability testing for new applications, fostering innovation in 5G use cases etc.
  - Getting active in **global standards development eco-system** will open up a new realm of opportunities for India.
  - **Invite global Original Equipment Manufacturers to conduct major 5G trials in India** in collaboration with local partners.
  - Create a **5G Implementation Oversight Committee with participation from Government, Academia, Industry and R&D Labs** to supervise 5G program implementation.
  - Building India's **capacity in core technology development and manufacturing for 5G**.



## PERSONALITY TEST PROGRAMME 2019

### ABROGATION OF SPECIAL STATUS UNDER ARTICLE 370

#### Introduction

The Parliament abrogated the special status given to the erstwhile state of Jammu and Kashmir under Article 370. In addition to it, the Parliament also passed the legislation bifurcating the State of Jammu and Kashmir into Union Territory of Ladakh and the Union Territory of Jammu and Kashmir.

#### Background

- Article 370 of the Indian Constitution granted special autonomous status to the erstwhile state of Jammu and Kashmir. It was incorporated as a temporary provision, which allowed the state have its own Constitution.
  - Except for **defence, foreign affairs, finance and communications**, the Parliament needed the state government's concurrence for applying all other laws.
- The peculiar position of Jammu and Kashmir was due to the circumstances in which the State acceded to India. The Government of India had declared that it was the people of the state of J&K, acting through their constituent assembly, who were to finally determine the constitution of the state and the jurisdiction of government of India.
- The applicability of the provisions of the Constitution regarding this State was accordingly, to be in nature of an interim arrangement. This was the substance of the provision embodied in Art. 370 of the Constitution of India.
- Now this substance of Article 370, which granted it special status, has been abrogated, although the article still exists in the Constitution.

J&K BEFORE AUGUST 5	J&K AFTER AUGUST 5
State with special status	No special status
Dual Citizenship	Single citizenship
Separate flag for J&K	Tiranga will be the only flag
No reservation for minorities such as Hindus and Sikhs	Minorities eligible for 16% reservation
Indians from other states can not buy property like land or house	All Indians can buy or sale property in Jammu & Kashmir
RTI not applicable	RTI will be applicable
Duration of Legislative Assembly for six years	Assembly will be for 5 years
Woman from J&K marries person from outside state, she loses citizenship	Woman will retain citizenship even after marriage like any other part of India
Right to Education not applicable for children	Children brought under RTE as per rest of the country

#### Timeline of scrapping Article 370

- President issued the **president's rule** after the tenure of governor's rule ended. Using the power under **Article 356 (1) (b)**, the President declared that the powers of the Legislature of the State **shall be exercisable by or under the authority of Parliament**. With this the Parliament of India was given the powers of the Legislative Assembly of the State of Jammu and Kashmir.
- President issued a **presidential order under Article 370 (1)** of the Constitution. This clause enables the President to specify the matters, which are applicable to Jammu and Kashmir in concurrence with the Jammu and Kashmir government.
- The **order amended Article 367**. Article 367 contains guidance on how to read or interpret some provisions. The amended Article declares "the expression '**Constituent Assembly** of the State...' in Article 370 (3) shall be read to mean '**Legislative Assembly of the State**'. Article 370(3) provided that the Article 370 was to be amended by the concurrence of the Constituent Assembly. However, because of the amendment, it can now be done away by a recommendation of the state legislature.
- In other words, the government used the power under **370(1)** to amend a provision of the Constitution (Article 367) which, then, amends Article 370(3). And this, in turn, becomes the trigger for the statutory resolution - Resolution for Repeal of Article 370 of the Constitution of India. As Jammu and Kashmir is under the president rule, **concurrence of governor** is considered as "**Jammu and Kashmir government**".

## Arguments in favour of scrapping Article 370

- **Temporary Provision-** Article 370 was added as a “**temporary provisions with respect to the State of Jammu and Kashmir**”. The constitutional framers including Jawaharlal Nehru envisaged that it will erode eventually, but contrary to it, this article had assumed permanency.
- **Impediment in Integration-** Allowing a separate constitution, flag and powers to Jammu and Kashmir had created a sense of separate identity among the people of the state. This had been used to misguide youth and create a demand of separatism among them.
  - The article was also not successful in protecting the interests of entire demography of Kashmir, rather some sections like the Kashmiri Pandits had to flee from their houses following the ethnic attacks on them.
- **Security and Terrorism-** Owing to cross border terrorism, around 42 thousand people have lost lives in the state. The special status was considered an impediment in fight against terrorism.
- **Governance-** It was alleged by various activists that due to poor anti-graft architecture (anti-corruption agencies could not enter the state), the resources would never reach the common man. For instance, the average money spent in Jammu and Kashmir is Rs. 14000/ person compared to Rs. 3683/ person for the rest of the country.
- **Lack of economic development-** Owing to a different applicability of laws, following concerns remained-
  - **Land Prices-** The land in the state could only be sold and bought by the permanent residents of the state. This did not allow the land prices to rise in the region.
  - **Lack of investments-** Large businesses houses did not invest in the region owing to land concerns. It resulted in monopoly of some businesses. E.g. Cement prices remain near Rs. 100 against a much lesser price in rest of the country.
- **Recent International events-** The situation in western neighbourhood i.e. Afghanistan has been turbulent in recent times owing to possible ascendance of Taliban after withdrawal of US forces.
- **Local Democracy-** Owing to the concerns of capture of power by certain political parties and killing of elected village heads (sarpanch), the idea of democratic system of Indian Constitution could not reach at the grassroots level.
- **Central Laws inapplicable-** Since all the laws enacted by the Parliament were not applicable automatically to the state, various enabling legislations such as Right to Education, Right to Information were not available to the citizens of Jammu and Kashmir.
  - **Reservations Benefits-** which are available to marginalized sections like OBCs, SC, STs, in rest of the country were not available to the marginalized sections of the state.
- **Equitable Development-** The entire governance machinery was felt to be concentrated on Kashmir valley with less attention to Jammu and Ladakh, which may now be given adequate attention.

### Article 35-A

- Article 35A was incorporated into the Constitution in 1954 by a Presidential order issued under Article 370 (1) (d) of the Constitution
- It empowered J&K legislature to define state's "**permanent residents**" and their special rights and privileges without attracting a challenge on grounds of violating the Right to Equality of people from other States or any other right under the Constitution. As a result of this-
  - It denied property rights to native women who marry from outside the State. The denial of these rights extend to her children also.
  - It barred non-J&K state subjects to settle and buy property in J&K.
- It was contended to be violating fundamental rights under Article 14, 19 and 21 as it is discriminatory against non-residents as far as government jobs and real estate purchases are concerned.

On the other hand, there are limited arguments against this step, as there has been a broad consensus among political parties over the above arguments for scrapping the Article 370. However there have been some concerns over the process being followed to do so. Petitions have been filed in the Supreme Court challenging the recent action of the Union Government on Jammu and Kashmir.

## Concerns over the process being followed to scrap special status under Article 370

- **Legality of the Presidential order:** Article 370 itself cannot be amended by a Presidential Order. Even though the Order amends Article 367, the content of those amendments, however, do amend Article 370. And as the Supreme Court has held on multiple occasions, you cannot do indirectly what you cannot do directly. Therefore, legality of the order – insofar as it amends Article 370 – is questionable.
- **Misusing the President Rule and Making Governor as a substitute for the elected assembly:** The governor is the representative of the Union Government in the State. In effect, the Union Government has consulted itself.
  - Also, President's Rule is temporary and is meant to be a stand-in until the elected government is restored. Consequently, decisions of a permanent character – such as changing the entire status of a state- taken without the elected legislative assembly, but by the Governor, are inherently problematic.

- **Equating state assembly with constituent assembly:** The difference is that the one has to exercise its powers as per the constitution, while the other develops the constitution. This distinction that is at the heart of India's basic structure doctrine that prevents certain constitutional amendments on the ground that Parliament, which exercises representative authority, is limited and cannot create a new constitution and thereby exercise sovereign authority.
- **Going against the Jammu and Kashmir's Constitutional position:** Presidential order has assumed that legislative assembly has power to scrap Article 370. But Article 147 of the Jammu and Kashmir Constitution prohibits such a move. The Article makes it clear that any changes to the Jammu and Kashmir Constitution needs the approval of two-thirds of the members of the legislative assembly.
- **Protests in Kargil-** as it is a Muslim majority region, which identifies culturally more with Kashmir, but has been placed under the Ladakh union territory after bifurcation. Further, the status of UT to Ladakh has not gone well with Kargil as it had an autonomous council earlier.
- **Clampdown on political parties-** Many leaders from political parties in the state were put under house arrest in the light of security considerations. It has been argued that all these parties had alliances with national parties in the country, so curbing their freedom is inappropriate.

#### Analysis of situation in Kashmir after abrogation of special status

- **No Loss of Life due to protests-** The history of Kashmir valley has been turbulent as and when any step had been taken against the state. E.g. Huge uproar and gatherings following the encounter of the terrorist Burhan Wani in 2016 or the agitation in 2008.
  - However, since the 5<sup>th</sup> of August, there has been no loss of life in the protest against the state.
- **Slow Normalisation setting in-** as the shops are opening, schools have started and hospitals are working fine. E.g. the daily OPD visits to the hospitals in the region has been 60,000 which highlights their normal functioning.
  - It shows that the life of a common person has not witnessed much change in terms of daily essentials.
  - Although people had grievance against the abrogation in the early days, but now many in regions have **reconciled** to this abrogation.
  - Recently, the Confederation of Indian Industry (CII) has announced an industrial program in October.
- **Terrorism-** There hasn't been any major terror attack following the abrogation of special status. However there has been a change in **nature of terror attacks**.
  - There has been targeting killing of labour, truck drivers, Apple traders, school staff and some events at mosques to create panic.
  - There is an attempt to create a fear in the minds of residents regarding outsiders in terms of various opportunities in the state.
- **Cross border infiltration.** It has also facilitated reduction in infiltration attempts.
  - Jammu and Kashmir Police (JKP) has been able to work much better in the current administrative system, since the control is under the LG.
  - Earlier, the OGWs (**Over-Ground Workers**) had a fair idea of the working of the forces, which allowed them to man the **reception areas** where the terrorists could infiltrate.
  - Now **Political patronage** has been eroded, so JKP is much better equipped to handle the issue. Further because communication system has been curbed, so this infiltration has come down.
- **Governance-** Following the division of the state and conversion into Union territories, there has been a better accountability framework in place.
  - As per reports, villagers have responded that administrative implementation of various schemes has improved.
  - However, it has also led to **excessive bureaucratisation**, which may work anti-thetical to the development of democracy at the grassroots. For instance, in some regions, finding officials to sanction the finances is still a challenge.
- **Democratic Processes-** The recently concluded **panchayat elections** have been successful. It can be seen from the voting percentage, which has been around 98%. Even South Kashmir (Anantnag-94%), Jammu (99%) and Srinagar (100%) has witnessed good voting.

#### Over-Ground Workers (OGWs)

- There is no proper definition of the term, however as per the Jammu and Kashmir Police, an OGW is "**anybody who supports the militants**".
- A person providing a safe house, passage, information or acting as a messenger for suspected militants automatically comes under the radar of the police as an OGW.
- The OGWs also help militants plan and execute their activities.
- The 2018 data compiled by State Crime Record Bureau (SCRB) highlights that the number of Over Ground Workers (OGWs) was nearly ten times higher than the militants in the Jammu and Kashmir.

- As per government data, around 60-70 lakhs has already been credited to accounts of Panchayats and equipments like JCBs have been bought in some villages.
- However, the house arrest of main political party cadres of the region remains a concern, which need to be addressed.
- The Central Government has stated that once the situation improves, the UT of Jammu and Kashmir can be upgraded back to the status of a state.
- **Has exposed the Propaganda-** of various stakeholders which was keeping Kashmir to hostage such as-
  - **Pakistan-** which had repeatedly convinced, its population about 'Kashmir Banega Pakistan' has been completely destroyed. Also, Pakistan has failed to convince the international community of its position on Kashmir.
  - **Terrorists-** They are also facing a dilemma whether to tow the Pakistani line or follow independence movement. If they follow the former, then the call gets converted to Islamic Jihad. Today the recruitment is inspired by the caliphate and not by independence of Kashmir.

#### Has this issue been internationalised?

There has been discussion on internationalization of Kashmir issue and hyphenation of India's ties with Pakistan. But, the External Affairs Minister S. Jaishankar has remarked that **uninformed comments abroad on our internal affairs are hardly internationalization**. And the reputational and real differences between India and Pakistan puts paid to any hyphenation effort. It can be seen from the following points-

- **No mediation from other country:** India has mostly succeeded in conveying that it would brook no third-party mediation.
- **Diplomatic win:** India has been able to get its way mostly on this — the nuclearisation of South Asia and the growing global interest in India's economy.
- **United nations:** United Nations Secretary-General in January 2018 too ruled out any mediation for resolving the Kashmir issue unless all parties agreed to it -- and asked India and Pakistan to address all outstanding issues through talks.
- **Support from Gulf Countries:** The Gulf countries, with which Pakistan has enjoyed a long-standing "brotherly" relationship for decades, have stayed away from condemning India's crackdown in Kashmir.

However, **international media** is creating a perception on Kashmir. The recent visit by a delegation of MPs from the European Union was also criticised by some as a manufactured visit.

#### What needs to be done?

- **Accept the reality-** There needs to be an understanding that there is **no magic wand** to bring the things to normal state, rather it will take time.
- **Change the discourse of valley-** Where an ecosystem of India bashing, like abuse the Indian democratic institutions, was thriving on the back of separatists and support of Pakistan has to be halted. The people need to be shown the true agenda of these propagandists and the value, which India creates in their lives.
- **De-radicalization-** More aggressive attempts must be made towards de-radicalization of youth in the valley, especially targeted towards the OGWs.
- **Promote democratic setup-** Government must release the leaders of political parties and allow a more constructive debate where all the stakeholders of region can come, discuss and work towards more prosperity in Jammu and Kashmir. Further, the government must also work towards reducing the security footprint to allow democratic institutions work smoothly.

## Summary

The special status accorded to the state of J&K under Article 370 has been abrogated and the state has been bifurcated into the Union Territories of Ladakh and Jammu and Kashmir.

## History of Article 370

In light of the circumstances under which J&K acceded to India, the Government assured that constitutional relationship between India and Jammu & Kashmir will give due recognition to the unique socio-cultural identity of the state and “to the will of the people to govern themselves” through an internal Constitution. Thus, Article 370 in provided for the special relationship with J&K.

## Special provisions related to J&K

Under Art 370, J&K is allowed to have a separate Constitution. Except for defence, foreign affairs, finance and communications, Parliament needs the state government's concurrence for applying all other laws. Further, no amendment under Art 368 is applicable directly to the State except when through Presidential Order. Article 370 enabled provisioning of special rights such as right to public employment, acquisition of immovable property and government scholarships. Under Article 35A, J&K legislature was empowered to define state's "permanent residents" and grant them special rights and privileges without attracting a challenge on grounds of violation of rights of people from other States.

## Arguments in favour of scrapping the special status under Article 370

There has been a long standing demand for abrogation of Article 370 on the grounds that it was deemed to be a “temporary provision” by the Constitution makers. It has further contributed to the feeling of alienation and a sense of separate identity among the people of Kashmir. This has been abused by separatists and pro-Pakistani groups to perpetuate seditious activities and terrorism in the region. The security implication is of particular concern due to rise of groups like Taliban & ISIS in the neighbourhood.

Article 370 has also proved to be a hindrance in socio-economic integration of the region with rest of the countries as the Government has not able to implement laws and developmental policies in the region like (Right to Education Act, Right to Information Act etc.). It has been a drag on economic development of the region impeding investments, undermining the potential of tourism industry and creating disincentives for human resources to work in the region.

## Concerns over the process followed to abrogate special status

While there has been a broad consensus among political parties over the above arguments for scrapping the Article 370, there have been some concerns that it has been scrapped without consultations or due process. Doubts have been cast over the legality of the amendment of Article 370 itself through Presidential order. Also, misusing the President Rule and making Governor as a substitute for the elected assembly as well as equating state assembly with constituent assembly. Abrogation goes against J&K's position promised in the original constitution. Further, clampdown on political parties and civil liberties has been criticized as undemocratic.

## Analysis of situation in Kashmir

There hasn't been any major loss of life due to protests or violence or any terror attack post the announcement of abrogation of Article 370. There have been significant curbs on the working of Over-Ground Workers (OGWs). Political space available to separatists is gradually shrinking. At the ground level, normalization has been setting in the region slowly and there has been a significant reduction in the infiltration attempts. Further, attempts have been made to strengthen governance and democratic processes in the State as evident from successful conclusion of Panchayat elections. The move also sends a strong message that India is willing to take tough and authoritative steps to preserve its territorial integrity and ensure its national security. International response has been in consonance with India's stance that no 3<sup>rd</sup> party mediation would be accepted on the issue & Pakistan's attempts to internationalize the matter have bore little fruit.

## Way Forward

Abrogation of Article 370 in itself would not solve the alienation of Kashmiris. Besides ‘security oriented approach’ to contain radicalization of the youth and reducing the terror attacks and infiltration attempts, the Government needs to strengthen the democratic setup in the region. It can begin with releasing the leaders of political parties and allowing a more constructive discussion on the future prospects of the region. Further, the government must also work towards reducing the security footprint to allow democratic institutions work smoothly. The Government needs to win hearts and minds of the people through better governance and economic empowerment of the people. Not only this, it needs to gradually work towards improving public perception towards the Indian Government and the State by working in close collaboration with community organizations and encouraging public participation in governance.



## PERSONALITY TEST PROGRAMME 2019

### AFGHAN ISSUE

Afghanistan enjoys a strategic location in South Asia and is particularly relevant to India as a geographical neighbor. Progressive and stable Afghanistan can act as a connecting link between India-West Asia, India-Central Asia and India's further integration with Eurasia. Afghanistan's geo-strategic importance in Asia **drew the attention of US and Russia during the Cold War period.**

#### Brief background of Afghan war

- The Republic of Afghanistan was created in 1973 after ending monarchy, in a non-violent coup.
- In 1978, a military coup, instigated by the **communist People's Democratic Party of Afghanistan**, led to the emergence the **Soviet-allied Democratic Republic of Afghanistan**.
- In 1979, the Soviet army intervened in Afghanistan to support its **communist government**. It along with the Afghan Army fought against rebel factions known as the **"Afghan mujahideen"**, backed by the United States and Pakistan.
- In 1989, Soviet troops withdrew but the civil war continued. In the chaos that followed, the **Taliban** (which means "students" in the Pashto language) sprang up.
- The Taliban, a **Sunni Islamic fundamentalist political movement and military organization** ruled Afghanistan after 1996 as a totalitarian regime till 2001.
- The **United States invaded Afghanistan in 2001**, to remove the Taliban from power as they were hosting **al-Qaeda** terrorists, who were the main suspects of the **September 11 attacks**. This marked the start of the **United States's War on Terror**.
- The **War in Afghanistan (2001-present)** is between Afghan Army troops, backed by additional United States troops, fighting against insurgents of the Taliban. NATO has also been involved in this war. In 2001 **some 1300 NATO troops arrived in Afghanistan for the first time which grew to around 1 lakh** by 2010.
- After US and NATO intervention, Hamid Karzai became the **first ever democratically elected head of state in 2004** and the current President is Ashraf Ghani, since 29 September 2014.
- Since 2001, the US policy on Afghanistan relied on permanent presence in the country to ensure smooth transition of Afghanistan towards democratic governance; however US' prolonged intervention in Afghanistan started gathering criticism for its **failure to usher in political stability, for failing to check the resurgence of Taliban** and for the innumerable **loss of lives on the foreign soil**.

#### Recent developments

- Withdrawal of US troops demand arose during the Obama Administration which was further supported by President Donald Trump who announced the policy of complete US' withdrawal from Afghanistan.
- However, this policy has remained largely on paper and the US' Afghan Policy has witnessed many twists and turns during last four years. **Lack of clarity on the part of US vis-à-vis Afghanistan has also affected India's engagement with Afghanistan which relies on the US acting as a security provider in Afghanistan.**
- The US announced its **South Asia/ Afghan Policy in 2017** which consisted of following propositions:
  - Instead of pulling out of Afghanistan, it decided to **press ahead with an open-ended military commitment** to prevent the emergence of a vacuum for terrorists. It announced **deployment of additional 4000 troops** in Afghanistan.
  - US called out to **India & other regional players** in South Asia to **do 'burden sharing'** & play more proactive role in contributing towards a stable Afghanistan.



- The US **reprimanded Pakistan for harbouring insurgents** (Taliban) and fomenting terrorist activities in Afghanistan.
- Any **negotiation with Taliban was ruled out** without involvement of democratically elected Afghan government.

### Impact of this Policy

- US deployed more troops in Afghanistan.
- It also cut off security assistance worth billions of dollars to Pakistan.
- However, there was a resurgence of terrorist activities in Afghanistan as a result of this policy.

As a result, a rapprochement was reached between the two sides and the US and the Taliban agreed to hold peace talks in Doha, Qatar. The first meeting between the US envoy, Zalmay Khalilzad and Taliban was held in Doha in October 2018, popularly known as **Doha Peace Talks**. Meanwhile, a separate meeting of world leaders (**Moscow Format**) took place in Moscow, Russia in November, 2018 to hammer out a settlement process for Afghanistan which was led by Russia.

### Doha Peace Talks

**Peace talks between US officials and Taliban** were initiated in 2018 in order to arrive at a political settlement for Afghanistan.

**India has not been included in the Doha negotiations** nor has been the Afghan government. **The peace talks have been focused on four broad issues:**

- A Taliban guarantee that it will **not allow foreign armed groups and fighters to use Afghanistan** as a launch pad to conduct attacks outside the country.
- A **complete withdrawal of US and NATO** forces from Afghanistan.
- An **intra-Afghan dialogue** between various representatives.
- A **permanent ceasefire** of attacks and violence by all the parties.

After nine rounds of negotiations the US pulled out of the deal in September 2019 without any agreement being concluded.

### Why did the talks fail?

- The instant trigger behind US' exit from the Doha negotiations was a Taliban car bomb explosion in Kabul's diplomatic enclave just few days before the final document was scheduled to be signed by both parties. However, the stalemate was based more on the lack of consensus by both sides on the timeline of US complete withdrawal.
- **Taliban's Stand:** It wanted a timetable from the US for complete withdrawal of US and NATO forces from Afghanistan. Without such a guarantee, it remains adamant about not moving forward with intra-Afghan negotiations and issues related to future political governance.
- **US' Stand:** According to the US, it would agree to withdraw troops provided the Taliban must also agree to 'control' and prevent transnational terror networks from using Afghan territory to conduct terror attacks. However, the talks failed as each party asked the other to act first.

### Moscow Format

- It was attended by a delegation from Taliban as well as a delegation of Afghanistan's High Peace Council (**no official representatives from Afghan government attended event**), along with 12 countries which included US, China, Central Asian Republics, Pakistan, Iran and India.
- **India was represented by two former diplomats 'non-officially'** and this **marked the first time an Indian delegation took part in negotiations with the Taliban**.
- Russia's approach aims to maintain its channels with Taliban to gain leverage in negotiation process & to block any attempts by US to maintain any military presence in post-conflict Afghanistan.

India's participation in Moscow Format with Taliban representatives has been considered unprecedented as India has always refused to consider Taliban as a democratic representative of the people of Afghanistan. India had also refused to recognise the Taliban regime of 1996-2001 considering it to be a brainchild of Pakistan's army and the ISI. India also actively supported militarily and financially the anti-Taliban forces in Afghanistan.

### Why did India shift its stance from complete rejection to non-official talks with the Taliban?

- India felt buoyed by permanent US presence in Afghanistan as it would secure India's investments in Afghanistan & keep Pakistan guided Taliban in check.
- Taliban had been gaining popularity and acceptance among Afghan people and also among world leaders like the US, Russia and China. In such a situation a complete dissociation from Afghan deliberations would be against India's long-term interests if Taliban comes to power.
- By being a part of the deliberations India can ensure favourable terms of agreement.

### Heart of Asia- Istanbul Process (HoA-IP)

- It is a regional initiative of Afghanistan and the Republic of Turkey, launched in 2011 in Istanbul.
- It aims to promote regional security, economic and political cooperation centered on Afghanistan (considered as heart of Asia) through dialogue and confidence building measures amongst 15 regional countries.
- The 8<sup>th</sup> Ministerial Meeting of HoA-IP was held recently in December 2019 in Istanbul, Turkey with the theme "Peace, Partnership and Prosperity".



- Recently, in December 2019 the US has decided to restart the negotiations with the Taliban three months after it cancelled the Doha talks.

### India's interests in Afghanistan

A stable, peaceful, economically strong Afghanistan is crucial for India's security, economic, political and geostrategic interests. Because:

- A stable Afghanistan bordering India is crucial for **regional and domestic security and stability** in the South Asia and within India. Hardliners in Afghanistan have often been used by Pakistan to export terrorism in Kashmir. E.g. The **hijacking of the Indian Airlines flight IC-814** to Kandahar in 1999.
- **Central Asia has large deposits of oil and natural gas**, which is why the US, China, India and Russia are competing for influence in what is known as the New Great Game. Afghanistan is an energy bridge and thus key to achieving India's strategic objectives. Further, a favourable Afghanistan is a sine-qua-non for accessing Central Asia and Eurasia by India through the Chabahar, which bypasses Pakistan.

### India's approach towards Afghanistan

- India's **Afghanistan policy**, especially after the 1979, was based on the premise that an external friendly power (E.g. USSR earlier, US now) would do the heavy lifting in Afghanistan's security and political sector. India, meanwhile, would invest in **soft sectors**, such as infrastructure development, and would limit its involvement in the security domain.
- Thus, during the Soviet-Afghan war, **India was the only South Asian nation** to recognize the Soviet backed Democratic Republic of Afghanistan. However, USSR's withdrawal in 1989 reduced India's presence in Afghanistan.
- India had no engagement with the Taliban directly and had no deep understanding of their prowess and sway in Afghanistan. In 1999, India became one of the key supporters of the **anti-Taliban Northern Alliance**.
- In 2001, with the U.S.-led war on Taliban, **India found its way back** into Afghanistan. However, in the overall geopolitical calculations, **Pakistan emerged as an all-important country** in USA's war on terror due to its **proximity to the Taliban heartland and its strong leverage over the militant group**.
- Thus, despite India and the United States sharing common goals and principles in relation to democracy and development in Afghanistan, **India's active involvement in Afghanistan has been discouraged** to cater to Pakistani wishes. Also, India was not invited to the **Bonn conference 2001**, where the post-Taliban order in Afghanistan was discussed.
- However, Hamid Karzai (President of Afghanistan from 22 December 2001 to 29 September 2014) after his outreach to Pakistan failed and with the Taliban having made a comeback, **looked toward better and closer ties with India**.
- India's relation with Afghanistan improved markedly under the Karzai presidency and New Delhi invested heavily in **developmental and infrastructural projects Afghanistan** which built India's soft power and led to recognition of India as key partner in solving Afghan problem.
- In 2011, Afghanistan signed its **first Strategic Partnership Agreement with India**, after Karzai had rejected a similar offer from Pakistan.

### How India has contributed in Afghan development?

- **Infrastructural development:** India contribution include the construction of the **Parliament Building** in Kabul, the **Zaranj Delaram highway** project connecting western Afghanistan with the strategic Chabahar port in Iran and the **Salma Dam Project** (Afghan-India Friendship Dam) which includes a power transmission line. India has also signed a trilateral preferential trade agreement with Afghanistan and Iran.
- **Defence and administrative support:** India is engaged in strengthening Afghan public institutions and supporting them with technical advisers, training for Afghan public servants, policemen and soldiers. Supplying military hardware like military vehicles for the Afghan National Army and Mi-25 and Mi-35 choppers for the air force.
- **Education, health and medical care:**
  - India has provided multiple scholarships to Afghan students with thousands of Afghan nationals studying in India along with providing vocational training and skill development classes to Afghan women and youth.
  - India has bestowed an amount of 5 million USD for the Afghan Red Society Programme to treat congenital heart disease in children.
  - India's liberal visa policy has made it easier for Afghan patients to travel to India which has further enhanced people-to-people interaction between the two countries.

- **Cultural efforts:** Bollywood movies display the cultural links between India and Afghanistan and Indian cinema has a large market in Afghanistan. India's involvement and contribution to the development of cricket in Afghanistan has been one of its primary means of soft power influence in the nation.

### India's current stance vis-à-vis Taliban

India supports an **Afghan led, Afghan owned and Afghan administered peace process** and has laid down **three red lines** for negotiating with the Taliban i.e.

- All peace initiatives and processes **must include all sections of the Afghan society**, including the legitimately elected government.
  - This would ensure that two decades of work done by the international community in ushering in democratic normalcy in Afghanistan remains secured.
  - This also shows an acceptability in India about talking to the Taliban, since they represent a "section of the Afghan society"
- Any process should **respect the Afghan constitutional legacy and political mandate**. This is important as the Taliban remain reluctant to commit themselves to broader democratic processes and key aspects such as women's rights even while pushing through their own interpretation of the Sharia law.
- Any process in Afghanistan **should not lead to any ungoverned spaces** where terrorists and their proxies can relocate.

### What challenges are posed to India vis-à-vis developments in Afghanistan?

The political developments in Afghanistan present a tight rope for India to walk on.

- **How much to engage?** Uncertainties in Afghanistan and global policy reversals pose challenges for India to commit itself to long term economic and strategic engagement as Taliban coming back to power could probably hurt India's investments.
  - India's strategic engagement with Afghanistan has been contingent on peace and security which were hitherto guaranteed by American presence.
  - However, India had recently cut its allocation to Chabahar Port (Iran) as recognition of the changing ground realities in Afghanistan where future Indian role looks uncertain.
- **Power sharing agreement with Taliban:** If U.S. talks with the Taliban resume, this puts Afghanistan back on a reconciliation path which may see a political settlement that features a power-sharing arrangement with the Taliban. However, this would not be a preferred eventuality for India as it would **give Pakistan a virtual veto to manage Afghan affairs externally**.
- **Failure of talks:** In case the talks fail, Afghanistan may slip into a civil war and would suffer rapid destabilization eventually resulting into seizure of power by force by Taliban, thereby constraining India's ability to operate in Afghanistan, its key strategic partner.

### Way Forward

India cannot afford to remain on the sidelines of the peace process in Afghanistan as the country is an important partner and is of great strategic value for India. The situation in Afghanistan has often been described as a "line in the sand," one which changes too often. It is in India's strategic interests to engage with the Taliban to not only maintain its influence in Afghanistan but to better understand the power dynamics of the broader South Asian region. Indian non-official representation in the Moscow Format marks a practical shift in India's approach towards Taliban.

- The results of recently held elections in Afghanistan have been withheld citing concerns of widespread rigging. India can share its rich experience to support Afghan election authorities and security forces in every way to conduct free and fair elections as an exercise of Afghan sovereignty.
- India must **up the ante in Afghanistan by initiating track II diplomacy**, engaging with tribal elders, and convincing the Taliban to adopt and maintain a favorable stance towards India. India's neutral image as a development partner and strong people-to-people contacts would provide legitimacy to its overtures.
- Crucial to Afghanistan's future is its ability to stand on its own feet economically, through investment in Afghanistan's mineral sector and militarily, through a progressive 'Afghanistan' of security forces at a lower budget. India should be able to help in this.
- India must push for **Afghan-led, Afghan-owned and Afghan-controlled peace** and not as dictated from Washington, Islamabad, Doha or Moscow. India's engagement with Taliban should be built upon evolving a national domestic consciousness and consensus framed by people of Afghanistan without any external diktat.

- India can **explore options with other countries** for development in Afghanistan like its '**India-China plus**' initiative under which both sides have embarked upon a training programme of Afghan diplomats in New Delhi and in Beijing.
- In a post-U.S. Afghanistan, India can safeguard its interests through an approach that is **balanced, nuanced, and conciliatory in nature, but also moderately partisan when and if required**. There are possibilities for India to build a stronger consensus among Afghan stakeholders through largely conciliatory approaches, to present a united front against the Taliban while simultaneously also engaging in or facilitating negotiations with the Taliban.

## Summary

- Foreign interventions during and after the Cold War led to the emergence of armed militias in Afghanistan. Hardline political groups like the Taliban seize power in 1996 and harbor militant groups like Al-Qaeda.
- Al-Qaeda carries out 9/11 attacks in US following which US forcibly captures power in Afghanistan to flush out Taliban and Al-Qaeda. US deployed NATO troops in Afghanistan to facilitate the formation of democratic government.
- US faces criticism for prolonged external intervention in Afghanistan, heavy casualties in ensuing terror activities and for its failure to check resurgence of the Taliban. Political opinion in the US turns against US intervention in Afghanistan.
- US releases its South Asia Policy in 2017 which proposes deployment of extra troops, more role for regional players like India (burden sharing), reprimands Pakistan for its support to Taliban and rules out bilateral negotiations with the Taliban. However, this results in an increase in terror activities by the Taliban in Afghanistan.
- Doha Peace talks commence in 2018 (without Indian involvement) and the US announces a new Afghanistan Policy in 2019 which proposes withdrawal of troops, active role for Pakistan, direct negotiations with the Taliban.
- Strong Indo-Afghan relations and people-to-people contacts have been established due to India's support in the fields of social and political development, defence support, economic aid and cultural homogeneity.
- Afghanistan remains an integral part of India's West Asia and Central Asia policy providing the much-needed connectivity and logistical support. However, peace talks without Indian involvement make India apprehensive of its future relations with Afghanistan and security of its strategic investments in the region.
- India must vouch for democratic government in Afghanistan and uphold its image as a development partner. Complete alienation with the Taliban would not be in long term India's interests and dialogue process could be established on the basis of the three conditions laid down by India.
- India must leverage its rapport with other countries (like the US and Russia) to push for an Afghan led, Afghan owned and Afghan administered inclusive political settlement for long term sustainability of the peace award.



## PERSONALITY TEST PROGRAMME 2019

### AIR POLLUTION IN NORTHERN INDIA

#### Introduction

Recent spike in pollution levels in Delhi brought to the fore the grave situation of toxicity of air, not only in Delhi but also whole of north India. Air pollution has significant economic, environmental, health costs which will have severe repercussions on developmental goals of India in coming years. This necessitate appropriate long-term strategic plan to tackle air pollution.

#### Appraisal of air pollution in India

- **India ranks 178 out of 180 countries in Environmental Performance Index, 2018** in terms of air quality.
- India's annual average level PM<sub>2.5</sub>, was 90 µg/m<sup>3</sup> is the fourth highest in the world. This is **more than twice the limit** of 40 µg/m<sup>3</sup> recommended by the National Ambient Air Quality Standards in India and **nine times the World Health Organization annual limit** of 10 µg/m<sup>3</sup>.
- India accounts for **26% premature deaths** and disease burden due to air pollution.
- According to WHO the **three of the world's largest nitrogen oxide air pollution emission hotspots are in India**. Delhi-NCR, Sonbhadra in Uttar Pradesh, Singrauli in Madhya Pradesh and Talcher-Angul in Odisha.
- Recently, a '**public health emergency**' was declared in Delhi on the afternoon of November 1, 2019, after air quality plunged to '**severe plus**' levels since the night of October 31 as **AQI crossed 500 in many locations**.
- In Delhi, **pollution levels are 40% to 80% higher in the winter months** compared to the rest of the year.

#### How air quality is measured?

- **National Air Quality Index (AQI)** has been launched for monitoring the quality of air in major urban centres across the country on a real-time basis and enhancing public awareness for taking mitigative action.
- Air Quality Index transforms complex air quality data of various pollutants into a single number (index value), nomenclature and colour.
- AQI measures **eight pollutants (PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, SO<sub>2</sub>, CO, O<sub>3</sub>, NH<sub>3</sub>, and Pb)**. Based on the measured ambient concentrations of each pollutant, sub-index is calculated and the worst sub-index determines the overall AQI.

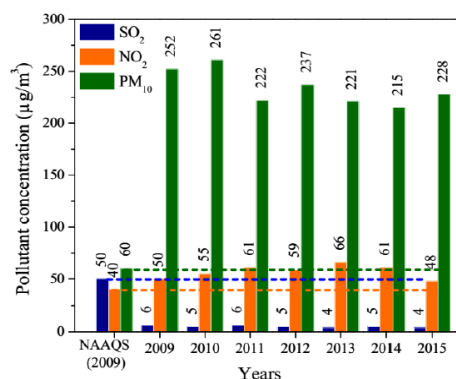
AQI Category	AQI
Good	0 - 50
Satisfactory	51 - 100
Moderately polluted	101 - 200
Poor	201 - 300
Very poor	301 - 400
Severe	401 - 500

#### Impact of Pollution

- **Economic Cost:** By the World Bank's calculations, health-care fees and productivity losses from pollution cost India as much as 8.5 per cent of GDP.
- **Health Cost:** Lancet Commission on Pollution and Health, attributed to air pollution an estimated 6.5 million premature deaths globally in **2017**, with **1.1 million deaths in India**.
- **Environmental cost:** **Global warming** (due to increased volumes of GHGs), **sea level rise** (rising at an average rate of 1.8 mm per year over the last century), **acid rain**, **depletion of the ozone layer**, **eutrophication etc.** are some of the many consequences on environment due to air pollution.
- **Political Discourse:** It creates a havoc in the city to live for. Growing dissatisfaction with the government agencies is visible in the recent **Urban Chipko Movement** being seen in the Delhi and Mumbai against the cutting of trees for various government residential and infrastructure projects.

## Key sources of air pollution in Delhi

- According to study conducted by The Energy and Resources Institute (TERI) in 2018, 36% of the pollution has its source in Delhi itself, 34% in National Capital Region while 30% comes from across international borders.
- According to study by IIT Kanpur in 2015-16:
  - In summer, maximum contribution of PM 2.5 is from Soil and Road dust followed by Cool and Fly ash.
  - Whereas in winter, maximum contribution of PM 2.5 is from secondary particles followed by Biomass burning.
- **Vehicular Pollution:** TERI's study shows that vehicle pollution is the cause of **28 per cent of PM<sub>2.5</sub> emissions**. The total number of vehicles in Delhi increased from **4.24 million in 2004 to more than 10.8 million in March 2018**.
- **Stubble burning:** Crop residue burning during winter is one of the chief causes for rising air pollution levels in Delhi. (see box)
- **Industrial pollution:** Industries contribute 30 per cent to PM<sub>2.5</sub> levels, with 14 per cent from small industries.
  - **Power Plants:** India is the world's second largest coal burner after China. Burning of coal releases many harmful pollutants like Sulphur.
  - The **north-westerly winds** that come into Delhi transport Sulphur dioxide (SO<sub>2</sub>) emitted from large power plants and refineries that **are situated upwind of Delhi**.



Air quality trends in Delhi (2009 – 2015) based on manual air quality monitoring stations

### Stubble burning: Analysis

- **Problem:** The **states surrounding Delhi are known collectively as the "grain bowl" of India** after the agricultural sector underwent a green revolution in the 1960s, leading to a dramatic increase in rice and wheat productivity.
  - But **as production grew, the sector could not keep up with an increasing demand for labor**, with farmers eventually abandoning hand harvesting in favor of less labor-intensive methods such as **the combine harvester**.
  - Unlike manual harvesting techniques however, **combine harvesters leave behind rice stubble**, which prevents machines from sowing wheat seeds.
  - With as **little as 10 days between rice harvesting season and the sowing of wheat**, farmers often turn to stubble burning to quickly remove the remaining rice crop residue.
  - Also adding to the problem was law passed in **2009: Punjab Preservation of Subsoil Water Act** which has delayed the date for paddy transplantation from June 1 to June 20 **in order to arrest rapid decline in the groundwater table**.
    - ✓ But late transplanting has meant that farmers are now setting fire to their fields mostly **clashing with the time just before the onset of winter**, when wind movement is very slow and moisture levels in the lower atmosphere are also high.
  - The wind carries all the pollutants and dust particles, which gets locked in the air. A study estimates that crop residue burning released 149.24 million tonnes of **CO<sub>2</sub>, along with CO, oxides of sulphur, particulate matter and black carbon**.
- **Policy Response:**
  - **National Green Tribunal (NGT)** had banned crop residue burning in the states of Rajasthan, Uttar Pradesh, Haryana and Punjab.
  - **The Air Prevention and Control of Pollution Act, 1981; The Environment Protection Act, 1986; The National Tribunal Act, 1995; and The National Environment Appellate Authority Act, 1997** have provisions pertaining to crop residue burning.
  - Ministry of Agriculture of India recently developed a **National Policy for Management of Crop Residue (NPMCR), 2014** to ensure prevention of burning of crop residues, by incentivizing purchase of modern machineries to minimize left-over crop residue in the field, in situ conservation and mixing of residue in soil to increase soil fertility, multiple uses of crop residue, formulation of fodder pellets and briquettes.
  - Central Sector Scheme on **'Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi'** for the period from 2018-19 to 2019-20 has been launched to address air pollution and to subsidize machinery required for in-situ management of crop residue.

- States like Rajasthan, Punjab and Haryana **imposed fines** between Rs. 2500 to Rs. 15,000 on farmers indulging in crop-burning.
- Following the **Supreme Court guideline to incentivise farmers for stopping** the burning of paddy crop stubble to check air pollution, the governments of Punjab and Haryana have announced **a bonus of Rs 2,500 an acre for small and marginal farmers** who are yet to start such activity.

However, farmers continue to **burn because of lack of alternatives**:

- Expensive labour and less times mean manual extraction is not possible. Combine harvesters have become easier to buy, and even rent. But combine harvesters leave the stubble. That stubble has value as fodder, more for wheat, less for rice. **Moreover there is no viable market for crop residue.**
- The Economic Survey 2017-18 observes: “Once the machine has harvested **the cost of getting the stubble removed is Rs 3,500 per hectare...**it is more economic **for the farmers to just burn by using 1 Rupee match box and clear the fields.**”

**In this context some suggestions are:**

- NGT suggested that states **shall provide Machines, Mechanism and Equipment or its cost to the farmers** to ensure that agricultural residue in the field in these states are removed, collected and stored at appropriate identified sites in each district.
- Using stubble in **different ways** like cattle feed, compost manure, roofing in rural areas, biomass energy, mushroom cultivation, packing materials, fuel, paper, bio-ethanol and industrial production can be incentivised.
- **MS Swaminathan suggested** that the Delhi, Haryana and UP Governments put up **Rice BioParks** where farmers can convert stubble into income and employment.
- **Happy Seeder Machine** (used for sowing of crop in standing stubble), Zero till seed drill (used for land preparations directly sowing of seeds in the previous crop stubble) are some other alternatives.
- **Monitoring fire counts and rural air quality** which will help in better policing on air pollution.
- **Promotion of short duration rice varieties and crop diversification** like pulses, millets etc. for sustainable agriculture.

The Impact of above-mentioned sources is **accentuated by following meteorological and geographical factors** making Delhi the most polluted city in the world.

- **Lack of winds in winter season:** The lack of winds that can carry away pollutants is one of the most important factors impacting air quality. Dust particles and pollutants in the air become unable to move and get locked in the air and affect weather conditions, **resulting in smog.**
- **Delay in monsoon withdrawal:** Late monsoon withdrawal is not good for air quality in north India as the time progresses towards winter. When monsoon begins to withdraw, **an anti-cyclonic circulation gets formed nearly 4-5 kms above the surface of earth.** This period is marked by **dry weather, clear skies and very low speed of surface winds.** So, whatever the particulate matter is in the air, **it does not get dispersed and gets arrested in the atmosphere.**
- **Geography of Delhi:** Delhi lies to the north-east of the Thar Desert, to the north-west of the central plains and to the south-west of the Himalayas. As winds arrive from the coasts, bringing with them pollutants picked up along the way, they get ‘trapped’ right before the Himalayas.
- **Dust storms: Destruction of the Aravallis** that protects north India from dust storms has increased impact. Delhi-NCR comes under a thick blanket of dust primarily due to dust storms from Rajasthan which is facing extremely dry weather conditions, with high temperatures and wind speeds.
  - According to a study in 2017 by the System of Air Quality and Weather Forecasting and Research (under the Ministry of Earth Sciences) and India Meteorological Department (IMD) “multi-day dust storm” in Iraq, Kuwait and Saudi Arabia was one of the main causes of Delhi’s smog.
- **Despite the ban on cracker sales,** firecrackers were a common sight this Diwali which also contributed to build up of air pollution.

#### **Stubble burning: The bright picture of Haryana**

- Haryana and Punjab recorded **29,780 cases of farm fires between October 1 and November 3**, this year. Of this, Haryana’s contribution was only 4,414.
- Haryana has managed to bring down its last year’s fire count by **11.7 per cent as against Punjab’s 8.7 per cent.** These figures are quite similar to NASA’s fire maps showing crop residue burning in the region.

#### **What Haryana did right?**

- Haryana government **identified villages** where farm fires were rampant last year and just as the kharif season began in June, **it started distributing machines**, like Super sms, Rotavator, Happy Seeder and Zero Till Seed Drill **that can eliminate crop residue burning. E.g 5170 machines were given to individual farmers.**

- Through **Custom Hiring Centres** which act machine banks that give expensive machines to poor farmers on rent 8,281 machines were distributed.
- Understanding crop residue burning as a **behavioural problem**, the district authorities were asked to **spread awareness** among farmers, through gram sabhas and panchayats, about the alternatives to crop residue burning and also **shaming those lighting up their farms and praising those who did not**.
- Those farmers **who used machines last year realised that the overall cost was less (due to subsidy) and the yield was high**. Now many farmers are **willing to shift** to these machines.
- **Increased sowing of Basmati rice** was another reason for fewer crop residue burning cases this year. The **straws of this rice can be used as fodder**, and are, therefore, not burnt down.

#### Steps taken to curb Air Pollution

Action	Features
<b>Environmental Pollution (Prevention and Control) Authority enforce Graded Response Action Plan (GRAP)</b>	<ul style="list-style-type: none"> <li>• For Delhi and the NCR region, which comprises the graded measures for each source framed according to the Air Quality Index categories. <ul style="list-style-type: none"> <li>◦ Like During 'very poor' air quality, it recommends <b>banning diesel generators and parking fee</b> increased by three to four times.</li> </ul> </li> <li>• <b>Similar to EPCA's GRAP</b> the NGT divided air pollution into four categories, for graded measures, which include odd-even scheme among others</li> </ul>
<b>Vehicular pollution</b>	<ul style="list-style-type: none"> <li>• Delhi government came up with <b>GREEN Budget in 2018</b>, which combines 26 programs and schemes of Transport, Power, Environment and PWD (Public Works Department) for devising a unified system of pollution control, bringing down levels of different pollutants.</li> <li>• <b>Shift to compressed natural gas</b> for commercial vehicles.</li> <li>• Ministry of Environment's orders issued in 2015 under the Air (Prevention and Control of Pollution) Act, 1981 to <b>comprehensively green Delhi's road margins and open spaces</b>.</li> <li>• <b>Advancing Bharat Stage-VI norms</b> to April 2018 from April 2020. Delhi became first city running on BS VI fuels.</li> </ul>
<b>National Clean Air Programme (NCAP)</b>	<ul style="list-style-type: none"> <li>• It is a <b>pollution control initiative to cut the concentration of particles (PM<sub>10</sub> &amp; PM<sub>2.5</sub>)</b> by 20-30% by 2024. It will have 2017 as the base year for comparison and 2019 as the first year.</li> <li>• It is to be implemented in 102 <b>non-attainment cities</b>. These cities are chosen on the basis of <b>Ambient Air Quality India (2011-2015) and WHO report 2014/2018</b>.</li> <li>• A <b>non-attainment city</b> is considered to have air quality worse than the National Ambient Air Quality Standards.</li> <li>• <b>Various steps include:</b> <ul style="list-style-type: none"> <li>◦ <b>PM 2.5</b> monitoring infrastructure to be expanded.</li> <li>◦ <b>Number of manual monitoring stations to be increased</b> from 684 to 1000 stations across the country</li> <li>◦ <b>Tackling pollution from various sources</b>-power plants, transport, industry, residential and agricultural sector.</li> </ul> </li> </ul>
<b>Carbon Emission by Thermal Power Plants (TPPs)</b>	<ul style="list-style-type: none"> <li>• Ministry of Environment, Forest and Climate Change had notified environmental norms to reduce emission of PM 10, SO<sub>2</sub> and oxide of nitrogen.</li> </ul>
<b>Pradhan Mantri Ujjwala Yojana (PMUY)</b>	<ul style="list-style-type: none"> <li>• <b>Subsidy to cooking fuel under this scheme</b> to curb indoor pollution.</li> </ul>
<b>Focus on short-lived climate pollutants (SLCP)</b>	<ul style="list-style-type: none"> <li>• Like methane, HFCs, black carbon (soot), tropospheric ozone etc. SLCP mitigation has the potential to avoid up to 0.6°C of warming by mid-century while aggressive CO<sub>2</sub> mitigation in a comparable scenario leads to less than half as much near-term reduction in warming.</li> </ul>
<b>Other steps</b>	<ul style="list-style-type: none"> <li>• <b>Ban on pet coke and furnace oil:</b> Supreme Court banned the use of furnace oil and pet-coke in Haryana, Rajasthan and Uttar Pradesh.</li> <li>• Many other steps like <b>Clean Air- India Initiative, Dust Mitigation Plan, India's Paris pledges etc.</b></li> </ul>



## Way forward

- NITI Aayog released report titled **Breathe India** giving following policy suggestions:
  - **Drive Mobility through Zero Emission Vehicles:**
    - ✓ Electrify last mile connectivity by 2022, including public transport, taxis and three-wheelers.
    - ✓ **Research and development activities should be enhanced in the areas of battery cell technologies,** electric vehicle power train system integration, electric motors and power electronics.
  - **Enact Strong Measures to Curb Vehicular Emissions:**
    - ✓ **Implement a large scale Feebate program from 2020 onwards:** A feebate is a policy by which inefficient or polluting vehicles incur a surcharge (fee) while efficient ones receive a rebate (bate). Austria, Denmark, France, the Netherlands, Norway, Ontario (Canada) and Singapore have introduced variations of feebates.
    - ✓ **Issue guidelines for vehicle ownership and usage:** Measures like congestion pricing, escalation of taxes and insurances, higher costs of parking, and implementing restrictions on certain areas and times need to be employed to reduce private vehicle usage.
    - ✓ Introduce a scrapping policy and ensure fleet modernisation.
  - **Reduce Emissions by Optimizing the Power Sector:**
    - ✓ Expedite strategic decommissioning of old and inefficient power plants.
    - ✓ Upgrade efficient thermal power plants to meet the requirements of dynamic operation.
    - ✓ Push rooftop solar and distributed generation.
    - ✓ Ensure high grade low polluting coal to the power plant.
  - **Reform Regulatory Framework for Industrial Air Pollution**
    - ✓ **Revise standards and practices:** The ambient air quality standards of Central Pollution Control Board (CPCB) as well as individual categories of industrial emissions should be considered for revision.
    - ✓ **Improve audit process:** Development of a right incentive structure for the **environmental auditors will lead to an improved auditing process.** Shift from current practice of self-audit.
    - ✓ **Incentivise law enforcement:** Improving law enforcement at the state level, for stricter law enforcement against polluting industries. Incentivising the performing states will be instrumental to speed up corrective action against air pollution.
  - **Implement a National Emissions Trading System:** Introducing a market-based instruments within a regulatory framework based on the concept of '**polluters pay principle**'.
  - **Adopt Cleaner Construction Practices:**
    - ✓ Mandate Environmental Risk Assessment for construction projects.
    - ✓ Expand the ambit of Green Building ratings to include adherence to construction process indicators that follow cleaner construction guidelines.
  - **Implement a Business Model to Utilize Crop Residue**
    - ✓ Direct procurement of crop residue by large agro-waste management companies
    - ✓ Promote inter-state trading for paddy stubble. E.g. paddy straw collected from Punjab can be procured by other States for mushroom cultivation, ethanol production and various other purposes
  - **Implement an Integrated Waste Management Policy:** Including Extended Producer Responsibility, landfill taxes and regulation, decentralised processing, waste to energy systems etc.
  - **Integrated Efforts to Tackle Forest Fires** by a comprehensive National Policy for Prevention and Control of Forest Fires.
  - **Encourage Clean Cooking Practices** like fuels such as LPG, biogas, solar energy and electricity.

### Reasons for limited success of Pollution Control Actions-

- As per UN Environment, "If current policies aimed at reducing air pollution are effectively enforced, air quality will be no worse in 2030 than now, despite population growth, rapid urbanization and an ever-increasing demand for goods and services, but neither will air quality be better".
- **An efficient governance mechanism is central to the success of any anti- pollution effort.** The GRAP notified by EPCA is being implemented by at least 16 different agencies. Some are under the control of Union Government, some under the Delhi government and some are under the administrative control of neighbouring states. In general, there are no political and executive level coordination among them.
- **Delhi's air pollution is a regional problem.** No Policy is likely to work unless it takes regional considerations into account. Inter-agency efforts need to be controlled and coordinated by a central source.
- **Delhi needs to search for sources of emissions.** While sources of emissions remain same in all the studies, the contribution from different sources to Delhi's pollution varies greatly. Identification of sources is critical for appropriate policy actions.
- **Finally, Delhi lacks infrastructure:** for instance, The DPCC which has a mandate to enforce compliance with the air pollution rules in the city, suffers from a serious scientific and technical manpower shortage (operating at about 3/4th since 1990). The rising population added to woes of inadequate infrastructure.

- **Drive Public Ownership through Behavioural Change:** by targeted, national-level IEC campaign that reaches out to the various stakeholders with relevant messaging.
- **Improve Air Quality Monitoring Systems:** As monitoring movement is vital to provide comprehensive data for interventions aimed at improving air quality. It can be accomplished by using the data captured via geostationary satellites – like the Sentinel 5-P launched by European Space Agency.
- Recently, the Supreme Court asked the Centre to explore two emergency solutions: **hydrogen-based fuel for the city's transport system and setting up giant smog towers to help purify the air in a 10-km radius.**
  - **Smog tower** is a purifier which will be 40-feet tall and 20-feet wide.
    - ✓ **It sucks** 30,000 cubic meters of polluted air per hour, cleans it at the nano level — the PM<sub>2.5</sub>, PM<sub>10</sub> particles — and then releases the clean air back into the city. (The tower is powered by solar energy.)
    - ✓ One such purifier will be able to provide clean air in the 3-km radius of its location, impacting about 75,000 lives. The purifier will take air from all angles, which in turn, will help generate 13,00,000 cubic meters of clean air per hour.
  - **Hydrogen fuel cell:** At the cathode, the hydrogen protons and electrons bind to the oxygen, forming water molecules. The only by-product or emission that results from the usage of hydrogen fuel is water — making the fuel 100 per cent clean.
    - ✓ Hydrogen fuel vehicles have the advantage of faster recharging - it takes a matter of minutes to refill the tank through a hydrogen dispensing station unlike hours to charge an electric vehicle (EV).
    - ✓ However, hydrogen fuel vehicles are still being **tested on quality and efficiency parameters and not used on a commercial basis on a large scale.**
    - ✓ Also, Hydrogen is **not competitive** with conventional fuels (1 kg of hydrogen is equal to roughly 3.8 liters of petrol).
    - ✓ Handling **hydrogen is considered risky and tricky.** Also given the early stage of evolution, **hydrogen fuel cell vehicles cost significantly more than even EVs.** Hydrogen cells cost can be prohibitive. For instance, the Toyota Mirai fuel cell car costs a minimum of \$60,000 (Rs 42 lakh).

#### The need for regional approach to combat air pollution:

- Recently, when a severe smog episode hit northern India, not just the big cities, but also **small cities recorded peaks, some even higher** than bigger cities.
- Thus, when **the entire region is covered in a blanket of smog**, small urban regions of human settlements cannot remain insular.
- This calls for a **regional action plan based on airshed (part of the atmosphere that behaves in a coherent way with respect to the dispersion of emissions OR a geographic boundary for air-quality standards)** approach, that spreads across multiple state jurisdictions and governance systems.
- Whereas, **traditional legal approach** remains confined within the boundaries of state, city and municipal areas.
- For instance, in order to address the **pollution crisis in Beijing**, the Chinese government has adopted the approach of **unified planning, unified monitoring and alerting, and unified standards in multiple contiguous regions.**
- In 2017, a combined work plan was adopted for Beijing, Tianjin etc. that demanded **“2 + 26” cities to decrease average PM 2.5 concentrations** and the number of heavy-pollution days by more than 15 per cent from the previous year.
- For **combined monitoring and inspection system**, Beijing Environmental Protection Inspection team is responsible for 15 provinces (autonomous regions and municipalities) contiguous to Beijing.

#### Best practices for air pollution

- **Success of Beijing:** In twenty years since 1998, the GDP, population and vehicles of Beijing sharply increased by 1078%, 74% and 335% respectively at the end of 2017. In the same period on-ground observation data shows that the annual average concentrations of SO<sub>2</sub>, NO<sub>2</sub> and PM<sub>10</sub> **decreased by 93.3%, 37.8% and 55.3% respectively.**
  - Beijing introduced **comprehensive air pollution control programs in phases since 1998.**
  - local **environmental economic policies**, including subsidies for environment friendly technologies, electric vehicles, subsidies for phasing out old vehicles, buying new clean vehicles etc.
  - To tackle **coal-fired power plants**, Beijing has implemented a “coal-to-gas” policy since 2005 and reduced coal combustion by nearly 11 million tons by 2017.
  - To tackle vehicular pollution the integrated **“Vehicle-Fuel-Road”** framework was developed.
  - **Coordination** with surrounding areas.
- **Emission control device:** Delhi-based Chakr Innovation curbs air pollution with the world's first retro-fit emission control device for diesel generators. It **captures ~90% of particulate matter emissions** from the exhaust air without reducing energy efficiency. The diesel soot captured from the exhaust is converted into inks and paints.
- **CleanTech for Health and Clean Air:** Cellzyme Biotech from Coimbatore uses an engineered enzyme to make antibiotics at room temperature without using solvents – a main contributor to air quality. The novel production process reduces the environmental footprint by replacing harsh industrial chemicals and conserving energy.

## Summary

- North India is reeling under a **wave of severe air pollution accompanied with smog as many cities** records an air quality index (AQI) of 400 and above, falling in the severe category.
  - **India ranks 178 out of 180 countries in Environmental Performance Index, 2018** in terms of air quality.
- Recently, a '**public health emergency**' was declared in Delhi on the afternoon of November 1, 2019, after air quality plunged to '**severe plus**' levels since the night of October 31 as **AQI crossed 500 in many locations**.
- Air pollution has **significant economic, environmental, health costs** which will have severe repercussions on developmental goals of India in coming years.
- **Key sources of air pollution are** Vehicular Pollution, Stubble burning, industrial pollution, construction activities etc. and contribution of these sources in air pollution of Delhi also **differs according to season**.
- The impact of above-mentioned sources is accentuated by **other meteorological and geographical factors** like lack of winds in winter season, delay in monsoon withdrawal, geography of Delhi, dust storms etc. making Delhi the most polluted city in the world
- Both Centre and state government had taken various steps to curb air pollution such as:
  - **Environmental Pollution (Prevention and Control) Authority enforce Graded Response Action Plan (GRAP),**
  - **Shift to compressed natural gas,**
  - **National Clean Air Programme (NCAP),**
  - **Restiction on Carbon Emission by Thermal Power Plants (TPPs),**
  - **Focus on short-lived climate pollutants (SLCP) etc.**
- Also, there many other suggestions for curbing the air pollution like: **NITI Aayog released report titled Breathe India giving following policy suggestions on**
  - Drive Mobility through Zero Emission Vehicles
  - Enact Strong Measures to Curb Vehicular Emissions
  - Reduce Emissions by Optimizing the Power Sector
  - Implement a National Emissions Trading System
  - Adopt Cleaner Construction Practices etc.



## PERSONALITY TEST PROGRAMME 2019

### ARTIFICIAL INTELLIGENCE

#### Introduction

Artificial intelligence refers to the **ability of machines to perform cognitive tasks like thinking, perceiving, learning, problem solving and decision making**. It enables computer system to carry out task on their own that otherwise requires human intelligence.

Artificial intelligence system **learns from experience, uses the learning to reason, recognises images, solves complex problems, understands languages and creates perspectives**.

The term Artificial Intelligence was first coined in **1955 by Professor John McCarthy**.

Although it has evolved overtime in the last 60 years but it recently came to the forefront with huge chunk of data being generated, advanced algorithms and high-end and faster computer systems to process them.

**Examples of AI include:** SIRI/Personal assistants in mobiles, chess playing computer, self-driving car etc.

#### Three ways of Human-AI Collaboration

- **Supportive Mode** - AI performs alongside humans by facilitating human judgements by providing resources such as predictive outputs.
- **Reimagining the Business** - AI performs activities that **go beyond the cognitive abilities of humans** like addressing some previously intractable problem. For e.g. large-scale genome study in bioinformatics.
- **AI replaces the Humans** - This is especially useful in potentially harmful situations for humans such as environments and rapid system response in nuclear reactors.

#### Related terms

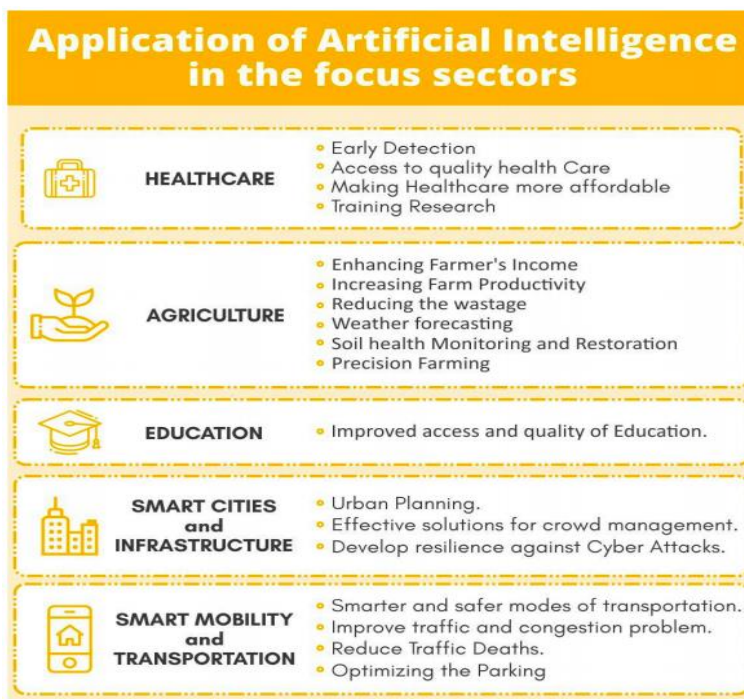
- **Machine Learning** is a subset of Artificial Intelligence and is based on algorithms that gives the ability to computers to learn from data, identify patterns and make decisions or predictions with minimal human intervention. For e.g. YouTube video recommendations.
- **Deep Learning** is the subset and next evolution of machine learning concerned with algorithms inspired by the structure and function of the brain called artificial neural networks. Like a human brain, computer can identify various features in data automatically. For e.g. speech recognition.
- The **Internet of Things** is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.
- **Big data** is high-volume, and high-velocity and/or high-variety information assets that demands cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation.
  - Big Data analytics helps organizations to harness their data and use it to identify new opportunities, develop smarter strategies, efficient operations, and increase returns and customer centricity.

#### Enablers for AI promotion

- Availability of large data sets and an **ecosystem (digital data marketplaces, exchanges, infrastructure)** which encourages free flow of data & information.
  - **Economic Survey 2018-19** also talks about collaboration between various departments to create such an ecosystem.
- **Enabling policy & regulatory framework**. E.g. stronger IP regime.
- Establishment of standards for **data safety**.
- **Skill sets** available with workforce.
- **Synergy between government, civil society, industry, academia** for encouraging R&D.
- **Data literacy** to create awareness about value of their own data
- Positive social attitudes towards machines and trust in autonomous systems.

## Important role and benefits of AI

- **Boost growth:** According to some estimates cited by NITI Aayog, AI has potential to add around \$1 trillion to India's economy and boost India's annual growth rate by 1.3% by 2035. AI has the **potential to overcome the physical limitations** of capital and labour and **drive growth** by enabling:
  - **Intelligent automation** i.e. ability to automate complex physical world tasks. For e.g.: A recent study found that a Google neural network correctly identified cancerous skin lesions more often than expert dermatologists did.
  - **Innovation diffusion** i.e. propelling innovations through the economy.
- **Manufacturing:** AI can help predict more reliable demand forecasting, a flexible responsive supply chain, quality assurance, accurate scheduling etc.
  - It can complement human capabilities and improve capital efficiency by enabling humans to focus on parts of their role that add the most value.
- **Financial Services** – It can ensure early detection of financial risk and systemic failures, and automation to reduce malicious intent in financial systems, such as market manipulation, anomalous trading etc.
- **Energy:** It includes energy system modelling and forecasting to decrease unpredictability and increase efficiency in power balancing and usage.
- **Logistics** – Products can be transported more efficiently with adaptive scheduling of deliveries and routing of vehicles.
- **Science and Technology** – It can help scientists and researchers to test hypotheses using robotic systems.
- **Role in social development and inclusive growth:** NITI Aayog has identified five focus sectors that are envisioned to benefit the most from AI in solving societal needs (see picture).
  - It is estimated that AI and connected farm services can impact 70 million Indian farmers by 2020, thereby adding US\$ 9 billion to farmer incomes. <sup>[SEP]</sup>
- **Defence and Security:** AI can be used for intelligence gathering, cyber defence, risk terrain analysis, detecting anomalous behaviour in humans, etc.
- **Governance and Policy Implementation:**
  - Deep learning can be used to effectively achieve various schemes' targets. For example: under the Swachh Bharat Abhiyan, officers are bound to upload pictures of toilets built. So, here AI can be implemented to flag out the one that haven't been properly built and also the location they are from.
  - It can also be used to enhance citizen-government interface, categorisation and arrangement of documents etc.
  - It can be used to **link various information to reach at a decision**. For e.g. It can help pick soil reports from various government agencies and link them to the environmental conditions using the data from a remote sensing satellite to predict the optimal crop for an area, appropriate inputs such as fertilisers and chemicals and provide real-time advisory to farmers.
- **Law Enforcement:** AI technologies can be used by law enforcement which include facial recognition, speech recognition, predictive analytics etc. <sup>[SEP]</sup>
- **Disaster Management and Recovery** – It shows remarkable potential in providing remedial measures and control in aftermath of man-made and environmental disasters.
  - For e.g. unmanned drones and satellite feeds combined with image processing and recognition can be used in infrastructure damage assessments.
  - Distribution of food packages and medicines and other relief material.





## Current Status of AI in India

- **Delayed start:** Adoption of AI in India has been slow and remains limited. At present, India's capabilities in AI research are rather limited, both in quantity (distant fifth globally) and especially in quality (disappointing impact of research produced).
- **Participation of private sector:** Despite the country's prominence in the global IT industry, it has been slow to adapt to new digital technologies compared to its counterparts in China and the US.
  - Estimates indicate that only 22% of the firms in India use AI in any business process. While AI is deep algorithm, most start-ups are focused on digitisation and data analytics only.
  - Around \$150 million have been invested in more than 400 companies over the past five years whereas US invested around \$9.7 billion in AI in 2018.
- **Major applications of AI in India:** Currently it is majorly being used for:
  - Automation of business processes like AI Trading technology in stock market
  - Developing better diagnostic services like increasing usage of mHealth apps such as Mobiwebtech, Mobisoft Infotech, which are facilitating easy remote diagnosis.
  - Natural language processing and working of multiple languages
  - AI based facial recognition softwares like SAFR are being deployed
  - Increased use of big data to analyze student information & customize online content.
  - Off-the-shelf robotic applications are getting utilized to work in parallel to manual labours at construction sites
  - AI based Guest Management System in hospitality sector is being deployed to provide personalized experience to customers regarding their tastes or consumption by accessing real-time information.
- **Moving forward:** Although India is moving ahead towards **digitization** with the **Digital India initiative**, it is still far away from AI revolution. It lacks the ecosystem fostering innovation for AI. There is **no particular policy for the implementation, research and development of AI in India**.

### What India can learn from other countries?

- US, the global leader in AI is heavily investing on AI based research and US leadership has largely been driven by the private sector.
- China has ambition of becoming world leader in AI by 2030. The top 9 universities of China have received large government funding to establish AI schools.
- EU's Robotics Public Private Partnership, launched in 2013, is believed to be the biggest civilian research programme in AI in the world.

## Key challenges to adoption of AI in India

- **Inadequate availability of AI expertise, manpower and skilling opportunities.** For instance, only around 4% of Indian AI professionals are trained in emerging technologies such as deep learning. [SEP]
- **Unattractive Intellectual Property regime** to incentivise research and adoption of AI [SEP]
- **Data related issues:** Lack of standards, perceived poor transparency around data use and ownership, and the difficulty of gathering and sharing data has led to a situation where AI algorithm developers are still starved for data. [SEP]
- **Lack of Funding and High resource cost:** Obtaining funding for developing AI driven solutions is a challenge that any emerging economy faces in the present day. [SEP]
- **Job vs Automation debate:** It is being argued that if given the window to expand, AI will completely replace the need for manual labour. On the other hand, those in favour of AI believe that it will augment human potential to get better results.
  - According to a 2017 study by the McKinsey Global Institute, about 800 million people around the world will lose their jobs to automation by 2030.
  - Various studies on the effect of AI in India have been shown in the infographic.
- **Lack of enabling infrastructure:** For ex: cloud computing data which is an essential prerequisite for various AI functions is largely located on servers abroad.

## Automation Fallout

**52-69% of repetitive/predictive roles at risk of automation**

**Sectors getting affected:** IT, financial services, manufacturing, transportation, packaging, shipping

**The numbers** do not imply jobs disappearing but substitution of jobs

Source: Teamlease Services

**Changing workforce mix by 2022**

**9%** of the workforce will be deployed in new jobs that do not exist today

**37%** will be deployed in jobs that have radically changed skillsets

**54%** will fall under unchanged jobs category

Source: EY-Nasscom - Future of Jobs in India report

**49%** of companies have implemented AI solutions in their businesses and are reaping productivity benefits: AIMA and PWC study

- **Privacy and Security:** AI could also have grave impacts on the freedom of expression as it is applicable in a vast number of situations that impact how individuals access information online. Data loss and data security framework need to be robust which is lacking as of now.
- **Lack of awareness:** There still exists a lack of familiarity with high tech machine learning solutions across most parts of the world.
- **Ethical Issues involved in AI**
  - **Biasedness:** in the process of self-learning, stereotypes present in the society can be absorbed or transferred to them by developers and make decisions based on them.
  - **Accountability:** Difficult to hold someone accountable in case of failure of solutions provided by AI.
  - **Safety Issues:** AI machines might not work in a situation which has never been envisioned. This can create safety issues for others.
  - **Manoeuvrability:** The AI algorithms can be manipulated by ill-intentioned people who want to take advantage.
  - **Transparency:** Transparency in algorithms of AI is needed especially when it is involved in cognitive works with social dimensions, such as decision of an AI enabled car during an accident.
  - **Super-intelligence:** A sufficiently intelligent AI system can redesign itself or can create a better successor system which creates fear and debate around whether super-intelligence will be good or evil to humans.

### Steps taken for AI

- **Budget 2019-20:** proposed setting up of National Research Foundation with an aim to catalyse and energise research and innovation across all academic disciplines including AI. Development of a National AI Centre and National AI Portal was also announced.
- **Centre of Excellence in Artificial Intelligence (CoE in AI)** has been setup by National Informatics Centre (NIC) which is a platform for innovative new solutions in AI space, a gateway to test and develop solutions for projects undertaken by NIC at Central and state level.
- An Inter-Ministerial **National Artificial Intelligence Mission (N-AIM)** has been proposed to be established with an allocation of Rs 1,200 crore for a period of five years. Key features of N-AIM include:
  - Fund establishment of a network of alliances among Academia Services Industry, Product Industry, Start-ups and Government Ministries;
  - Establishing & administering National AI Challenge funds;
  - Increasing awareness of AI through AI-yatras;
  - Coordination of projects of national importance: to accelerate development and commercialisation of AI based products and technology through PPP models and start-ups;
  - Establishing Centres of Excellence for promoting interdisciplinary research;
  - Setting up of a generic AI test bed for verification & validation of AI based products
  - Funding an inter-disciplinary & dedicated large data integration center.
- Government has begun the use of Artificial Intelligence on pilot basis for crop cutting and yield estimation under scheme **Pradhan Mantri Fasal Bima Yojana**.
- For improving production and productivity, **government has inked a pact with IBM** where, IBM will utilise Artificial Intelligence (AI) and weather technology solutions in agriculture to provide weather forecast and soil moisture information.
- Moreover, Microsoft India is using AI sensors to make farming and healthcare smart.
- In a **joint initiative with industry**, the government has set up **4 centres for promoting Industry 4.0**, across the country. Their task is to enhance competitiveness in every industry cluster across the country.

### Way forward for AI adoption in India

- A **Task force on Artificial Intelligence (AI)** was constituted under the Department of Industrial Policy and Promotion in August 2017 that had following recommendations:
  - It identifies **10 specific domains** for rapid AI incorporation such as: manufacturing, fintech, healthcare, agriculture/food processing, education, retail/customer engagement, aid for differently abled/accessibility technology, environment, public utility services and national security.
  - Establishment of the **National Artificial Intelligence Mission (N-AIM)**- a centralised nodal agency for coordinating and facilitating research, collaboration and providing economic impetus to AI start-ups.
  - It proposed **public private partnership model** for research and start-ups in AI.



- An inter-disciplinary large **data integration centre** in pilot mode to develop an **autonomous AI Machine** that can work on multiple data streams in real time and provide relevant information and predictions to public across all domains.
- Fund a **national level survey on identification of cluster of clean annotated data** necessary for building effective AI systems.
- **Establishing operation standards** for data storage and privacy, communication standards for autonomous systems, and standards to allow for interoperability between AI based systems.
- NITI Aayog published a discussion paper that outlines India's **National AI Strategy** as a roadmap to adopt AI.
  - NITI Aayog has identified **five priority sectors** where AI investments should be focused: health, education, agriculture, smart cities, and smart mobility.
  - It proposed a 2-Tier Research Architecture to address India's AI Aspirations:
    - ✓ **Centre of Research Excellence (CORE)**- It is focused on developing better understanding of existing core research and pushing technology frontiers through creation of new knowledge.
    - ✓ **International Centre of Transformational AI (ICTAI)**- It is entrusted with a mandate of developing and deploying application-based research. Private sector collaboration is envisioned to be a key aspect of ICTAIs.
  - It also recommends to set up a common cloud platform for Big Data Analytics and Assimilation.
- **Addressing ethical concerns:**
  - Resolutions can be brought to regulate Robotics, creating an ethics advisory committee and code of ethical conducts can be brought for Robotic engineers, as well as Research ethics committees.
  - AI systems can be made legally liable for their actions through making their programmers and users accountable.
  - Following ethical principles should be followed:
    - ✓ **Beneficence:** robots should act in the best interests of humans
    - ✓ **Non-maleficence:** robots should not harm humans
    - ✓ **Autonomy:** human interaction with robots should be voluntary
    - ✓ **Justice:** the benefits of robotics should be distributed fairly
    - ✓ **Transparency:** developing algorithms that can be tested and verified
- **Other steps that can be taken:**
  - **Strong data infrastructure:** The data infrastructure will need to become more robust before large scale AI deployment can be successful. <sup>[L]</sup><sub>[SEP]</sub>
  - **Improve capacity and enhanced understanding of emerging technologies:** Across sectors, there is a need to grow capacity within the government for effective implementation of AI driven solutions. <sup>[L]</sup><sub>[SEP]</sub>
  - **Open source platform:** An open source platform would make the solutions more affordable, resulting in rapid adoption and higher penetration among the beneficiaries. <sup>[L]</sup><sub>[SEP]</sub>
  - **Incentives to farmers:** Government needs to step in by giving incentives to farm to adopt AI and making it more affordable and attractive for farmers. <sup>[L]</sup><sub>[SEP]</sub>
  - **Ensure adequate government funding and investment in R&D:** There is a need for significant financial commitment from governments towards research and development surrounding AI. Initiatives such as Centres of Excellence (CoE) in AI should be increased to improve more research in the field of AI. <sup>[L]</sup><sub>[SEP]</sub>
    - ✓ **Allocation of Resources in STEM** (Science, Technology, Engineering and Mathematics) need to be increased. <sup>[L]</sup><sub>[SEP]</sub>
  - **Collaboration between stakeholders:** Industry, Government and all other stakeholders need to come together for viable solutions to various socio-economic problems. <sup>[L]</sup><sub>[SEP]</sub>

## Summary

**Artificial intelligence** refers to the ability of machines to perform cognitive tasks like thinking, perceiving, learning, problem solving and decision making. It enables computer system to carry out task on their own that otherwise requires human intelligence.

- **Machine Learning** is a subset of Artificial Intelligence and is based on algorithms that gives the ability to computers to learn from data, identify patterns and make decisions or predictions with minimal human intervention.
- **Deep Learning** is the subset and next evolution of machine learning concerned with algorithms inspired by the structure and function of the brain called artificial neural networks. Like a human brain, computer can identify various features in data automatically.

## Important role and benefits of AI

- Boost India's annual growth rate by 1.3% by 2035.
- Can help in labour and capital augmentation and offer more reliable demand forecasting, predictive maintenance, quality assurance etc.
- Early detection of financial risks, reducing malicious intent in financial systems etc.
- Automation of business processes like AI Trading technology in stock market.
- Products can be transported more efficiently with adaptive scheduling of deliveries.
- Can help scientists and researchers to test hypotheses using robotic systems.
- Can be used for intelligence gathering, surveillance, cyber defence etc.
- Improved governance and Policy Implementation through better citizen-government interface, categorisation and arrangement of documents etc.
- Law Enforcement through facial recognition (SAFR application), speech recognition, predictive analytics etc.
- Infrastructure damage assessments by using drones, distribution of food packages etc.
- Developing better diagnostic services like increasing usage of mHealth apps such as Mobiwebtech, Mobisoft Infotech, which are facilitating easy remote diagnosis.
- Increased use of big data to analyze student information & customize online content.

## Key challenges to adoption of AI in India

- **Inadequate availability of AI expertise, manpower and skilling opportunities.**
- **Unattractive Intellectual Property regime** <sup>[SEP]</sup>
- **Data related issues** such as lack of standards, poor transparency around data use etc.
- **Lack of Funding and High resource cost**
- Fear of job losses because of AI
- **Lack of enabling infrastructure** such as cloud computing data.
- **Lack of awareness**
- **Ethical Issues involved:** such as lack of strict accountability, transparency of algorithms etc.

## Way Forward

- Major recommendations of **Task force on Artificial Intelligence (AI)**:
  - Establishment of the **National Artificial Intelligence Mission (N-AIM)**
  - **Public private partnership model** for research and start-ups in AI.
  - An inter-disciplinary large **data integration centre** in pilot mode to develop an **autonomous AI Machine**
  - Fund a **national level survey on identification of cluster of clean annotated data.**
  - **Establishing operation standards** for data storage and privacy, communication standards for autonomous systems, and standards to allow for interoperability between AI based systems.

### Steps taken so far

- **Budget 2019-20:** proposed setting up of **National Research Foundation, National AI Centre and National AI Portal.**
- **Centre of Excellence in Artificial Intelligence** (CoE in AI) has been setup by National Informatics Centre (NIC)
- An Inter-Ministerial **National Artificial Intelligence Mission (N-AIM)** has been proposed to be established
- Government has begun the use of Artificial Intelligence on pilot basis for crop cutting and yield estimation under scheme **Pradhan Mantri Fasal Bima Yojana.**
- **Following a pact with the government,** IBM will utilise Artificial Intelligence (AI) and weather technology solutions in agriculture to provide weather forecast and soil moisture information.
- In a **joint initiative with industry,** the government has set up **4 centres for promoting Industry 4.0,** across the country.

- **Recommendations by Niti Aayog:**
  - A 2-Tier Research Architecture involving **Centre of Research Excellence (CORE) and International Centre of Transformational AI (ICTAI)**.
  - It recommends to set up a common cloud platform for Big Data Analytics and Assimilation.
- **Addressing ethical concerns** by improving transparency, by introducing Code of ethics etc.
- **Ensure adequate government funding** and investment in R&D. Allocation of Resources in STEM (Science, Technology, Engineering and Mathematics) need to be increased.
- **Open source platform:** An open source platform would make the solutions more affordable
- **Incentives to farmers:** Government needs to step in by giving incentives to farm to adopt AI
- **Collaboration between all stakeholders** like Industry and Government is needed



## PERSONALITY TEST PROGRAMME 2019

### BEHAVIORAL ECONOMICS & ITS RELEVANCE FOR INDIA

#### INTRODUCTION

Traditionally, economics conceptualizes people as calculating, rational and unemotional people who tend to maximize their gains. Traditional economists (classical, neo-classical et al) defended this “unbehavioral” economic agent concept as it was easier to formalize and practically more relevant. Behavioural economics seeks to counter this above mentioned point of view.

#### DEFINITION

Behavioral Economics is the combination of psychology and economics that investigates what happens in markets in which some of the agents display human limitations and complications. It uses variants of traditional economic assumptions (often with a psychological motivation) to explain and predict behavior, and to provide policy prescriptions.

Behavioral economics is not a rejection of traditional economics rather a series of amendments to it. There are complementarities between the two. The core principles of traditional economics have been adopted & refined by behavioral economics. These are:

- *Optimization*: People try to choose the best feasible option for them.
- *Equilibrium*: People try to choose their best feasible option when interacting with others
- *Empiricism*: Economic models need to be tested with data.

#### CORE PRINCIPLES OF BEHAVIORAL ECONOMICS

- *People try to choose the best feasible option, but they sometimes don't succeed.* Training and experience help decision-makers to make optimal choices.
- *People care about how their circumstances compare to reference points.* People take decisions based on how their circumstances compare to certain self-determined reference points. For instance, people have more aversion to losses than affinity to gains. They tend to internalize losses more in comparison to gains even as they may be the same magnitude.
- *People have self-control problems.* Unlike traditional economic models, behavioral economics identifies a gap between a person's good intentions and their actions. The *present bias* amongst people tends to distract them towards present gains more than future rewards.
- *Although people mostly care about their own material payoffs, they also care about the actions, intentions and payoffs of others in the society.* These “social preferences” come in many systematic forms, especially negative reciprocity, behindness aversion, and social pressure.
- *Sometimes market exchange makes psychological factors cease to matter, but many psychological factors matter even in markets.* For instance, if biased investors compose a large portion of the total asset market (and marginal traders), their beliefs will matter.
- *In theory, limiting people's choices could partially protect them from their behavioral biases, but in practice, heavy-handed paternalism has a mixed track record and is often unpopular.*

#### THE BEHAVIORAL ECONOMICS OF ‘NUDGE’

Nudges refer to **positive reinforcements** that gently steer the people towards desirable behaviour even while preserving their



liberty to choose. Hence, it can be seen as lying somewhere in between the two extremes of the spectrum of choices available to the policy makers: Laissez Faire and Coercion/Mandate.

- Laissez faire, in essence means doing nothing and leaving individuals/firms to chart their own course. It works well only to the extent to which markets achieve socially desirable outcomes on their own. Consequently, where markets fail, *laissez faire* fails. For instance, individuals/firms in a free market would not restrain pollution.
- Coercion, on the other hand, mandates people to act in a socially desirable manner through incentives or disincentives.

The idea behind the ‘Nudge theory’ is that real people are not Homo Economicus. Real people are fallible. They won’t go for the most rational/optimal choices for they suffer from certain biases or lack information. Hence, the way in which policy makers **design the choice architecture** will have impact on their decision making. And since choice architecture is unavoidable, there is **no incentive in designing a bad choice architecture**. In the economics of ‘nudge’ there is **no compulsion**. Consequently, the agent’s **freedom of choice** remains well preserved.

## THE RELEVANCE OF BEHAVIORAL INSIGHT FOR INDIA:

Most people either want to behave or be seen to behave in congruity with social norms. Behavioral economics takes advantage of this observation and leverages the power of the “social norm”. People are more likely to change their behaviour if the changed behavior is seen as the social norm. Thus, the principles of behavioural economics can be tapped both to start new revolutionary campaigns and enhance the efficiency and impact value of several existing programs.

The Indian experience with behavioral economics guiding policy making has been remarkably successful. Many Indian schemes that employ insights from behavioural economics have met with success (see Fig). The Swachh Bharat Mission (SBM) and the Beti Bachao, Beti Padhao (BBBP) scheme are cases in point.

### CASE 1: SWACHH BHARAT MISSION (SBM)

SBM is the first sanitation programme to emphasize behaviour change as much as infrastructural requirement. The success of the mission owes in part to the behavioral change techniques adopted by the same.

- **Choice of Symbol & Launch Date:**

**Behavioral Insight:** The role of context is very important in influencing choices and decisions. **Method:**

The launch day i.e. 2<sup>nd</sup> October, 2014 was chosen to leverage the values propagated by Mahatma Gandhi and thereby create a mass movement on the lines of ‘satyagraha’ for a cleaner India. The symbol used for SBM invokes Gandhiji’s ideas.

- **Appointing local Swachhagrahis:**

**Behavioral Insight:** People are more likely to listen to and emulate someone they know. Hence, local ambassadors of change are more effective in getting through to people than mass media campaigns.

**Method:** SBM recruited more than five lakh *swachhagrahis* to initiate behavioural change in usage of toilets. Each village has at least one *swachhagrahi*, who is a local resident.

- **Community Based Approach:**

**Behavioral Insight:** The fear of community scorn or the desire to fit in led many non-conformers to give up open defecation.

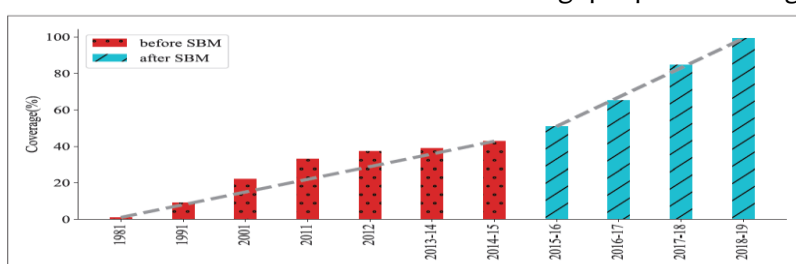
**Method:** Behavior change techniques like Participatory Rural Appraisal and Community-led Total Sanitation were adopted by SBM to induce people to come together, appraise their community’s open defecation situation and plan the next course of action.

- **Messaging:**

**Behavioral Insight:** Appealing to people’s emotions has a better chance of moving people to change.

**Method:** The messaging made use of by SBM often tried to attach a sense of disgust or shame people for defecating in the open. Many *swachhagrahis* delivered the message that open defecation is akin to eating one’s own excreta, as flies sit on excreta left in open spaces and then sit on food. As much as these campaigns have been criticized to be disrespectful, they have nevertheless been efficient.

Policy	Level of influence			
	Laissez faire	Nudge	Incentivize	Mandate
Give It Up				
Aadhaar				
Jan DhanYojana				
Beti Bachao, Beti Padhao				
Swachh Bharat Mission				
Taxes on tobacco				
Compulsory voting in panchayat elections in some states				
Ban on alcohol in some states				

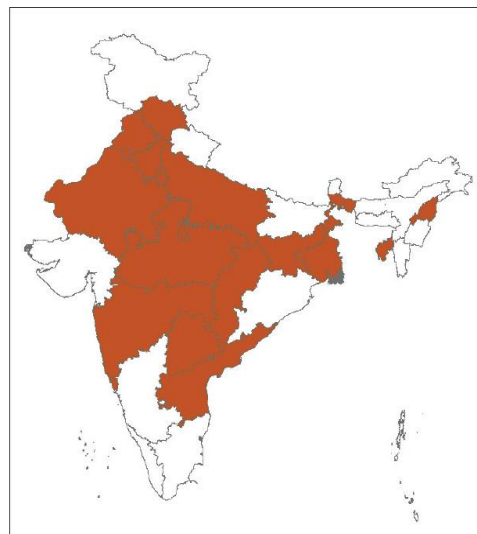


Within five years of the launch of SBM, household access to toilets has increased to nearly 100% in all states. SBM has achieved success in not only providing toilets but also in ensuring that these toilets are used. The National Annual Rural Sanitation Survey (NARSS) 2018-19 found that 93.1% of rural households had access to toilets, 96.5% of the households in rural India who have access to a toilet use it. This reconfirmed the Open Defecation Free (ODF) status of 90.7% of villages that were previously declared and verified as ODF by various districts/states.

### CASE 2: BETI BACHAO, BETI PADHAO

BBBP was started to check the declining trend of child sex ratio in India and generate social consciousness on the issues of empowerment of girls and women. The campaign was flagged from Panipat, Haryana, which had the worst child sex ratio at 834 among Indian states as compared with the national average of 919 in 2011.

- **Behavioral Insight:** It leveraged the use of messaging to correct 'failure bias' amongst agents. The failure bias is the tendency to focus on failures rather than successes, mostly because failures have greater visibility. Because failures get the spotlight, people tend to think failing is more prevalent than it really is.
- **Method:** The success of the BBBP Scheme owed much to the success of its 'Selfie with Daughter' initiative. The selfie campaign showcased examples of parents around the country who did not view their daughters as burden & were proud of them. The celebration of the girl child quickly became the norm. Most people wanted to conform, and more and more parents posted selfies with their girls.



States with improvement in Child Sex Ratio since 2015-16

Besides, SBM and BBBP, several other programmes have utilized behavioral insights particularly when it comes to clear messaging. The use of socially and culturally identifiable names gives a clear message of the objectives of the programme. Consequently, numerous government initiatives have started using culturally or socially identifiable names. E.g. NAMAMI Gange, POSHAN Abhiyan, Ayushman Bharat, Jan Dhan Yojana etc.

Behavioral economics thus provides us a framework to understand when and how people make errors. The lessons so learnt can be used to design a choice architecture that nudges people towards desirable outcomes for example health, education, savings etc. Thus behavioral insight has the potential to create impactful social change and balance societal inequalities.

### EXAMPLES OF BEHAVIOURAL PRINCIPLES RELEVANT TO POLICYMAKERS

- **Leverage Default Rules:** The agent can be made to choose the right default that aims to maximize welfare.
  - When presented with choice, people rather stick to the default action since there is tremendous inertia. If default action itself is changed in a cost effective manner to overcome this inertia, the desired behaviour can be encouraged without affecting people's choices.
- **Make it easy to choose:** The options can be made easy to comprehend and few to choose from.
- **Emphasize on beneficial social norm:** Drawing attention towards positive influencers can strengthen the cause of beneficial social norms. These positive influencers could include friends, neighbours etc that represent role models with which people can identify.
- **Disclose Outcomes:** Disclose the realized benefits of good behaviour.
- **Repeated Reinforcement:** People tend to continue their past behaviour, especially when reminded about the same. Elicit a pre-commitment for desired behaviour, and if possible, enable immediate action as per the commitment.
- **Leverage Loss Aversion:** Design incentives to reward good behaviour ex ante with threat to revoke reward later if behaviour fails to match expectations.
- **Make messages match mental models:** Train people to shift to new 'rules of thumb'. Make these rules of thumb catchy, easy to remember and intuitive.

### CHALLENGES TO MAINSTREAMING NUDGE AS A TOOL FOR EFFECTIVE PUBLIC POLICY

The adoption of behavioural insights as a policy tool, while welcome, calls for a critical evaluation of philosophical, ethical, and pragmatic dimensions

- It is important to prevent the nudge interventions from going down the slippery slope from education to outright manipulation to coercion and bans.

- The premise that the choice architect has the ability to ascertain the true preferences of individuals in helping them avoid welfare reducing decisions might be questionable at times.
- In a bid to steer people into doing what the government thinks is right for them, the focus shifts on the importance of the choice rather than the outcomes of the choice. E.g.
  - More workers with poor financial illiteracy committing 'default bias' in a retirement savings plan may be good for the metrics of the policy makers when subscription rate or national savings rate is the metric. However, a focus on such an outcome removes the need for safeguards and accountability.
  - Furthermore, a lack of concern about the opportunity cost of the choice and the dynamic implications on consumption and investment for the illiterate worker raises serious concerns.
- A 'one size fits all' nudge policy assumes that the level of irrationality is homogeneous. Such a nudge centric policy design also runs the risk of being narrow in focus about what works.

## IMPLEMENTING THE AGENDA FOR BEHAVIOURAL CHANGE

While social norms impact behaviour significantly in India, the power to employ behavioural change to alter these norms has not been adequately tapped. The prospects of employing the principles of behavioural economics to policymaking, especially in India where social norms so crucially influence behaviour are enormous.

To avail these benefits, the following measures are suggested for implementation.

- The proposal to set up a **behavioural economics unit** in the **NITI Aayog** must be immediately implemented.
  - Centralized hubs can be developed like UK's Behavioural Insights Team (BIT) to advise UK government on incorporating findings from behavioural economics into its policies.
- Every program must go through a "behavioural economics" audit before its implementation.
- The behavioural economics team can work with various state governments not only to inform them about the potential benefits but also help them to improve the efficacy of the programs.

## BEHAVIORAL ECONOMICS & RANDOMISED CONTROL TRIALS

Use of randomized control trials to determine the best tweaks to existing policy has been critical to the success of behavioural economics interventions. In fact, 2019 Nobel laureates Abhijit Banerjee, Esther Duflo & Michael Kremer are considered to be instrumental in using randomised controlled trials to test the effectiveness of various policy interventions to alleviate poverty.

### DEFINITION

A randomised controlled trial is an experiment that is designed to isolate the influence that a certain intervention or variable has on an outcome or event. It is an experiment-based approach that breaks larger questions about policy interventions into smaller, easier to test studies. E.g. big questions like 'poverty' are broken down into its various dimensions like poor health, inadequate education etc. Within poor health, they look at nutrition, provisioning of medicines, vaccination etc. Within vaccinations, they decide what needs to be done based on experimental "evidence".

This is of particular utility in low- and middle-income countries, where state capacity is quite limited and it is particularly necessary to be able to prioritise more effective policies over less.

### HOW RCTS WORK?

- For instance, if one wanted to understand whether providing a mobile vaccination van and/or a sack of grains would incentivize villagers to vaccinate their kids, then under an RCT, village households would be divided into four groups A, B, C and D.
  - Group A would be provided with a mobile vaccination van facility,
  - Group B would be given a sack of food grains,
  - Group C would get both, and
  - Group D would get neither.
- Households would be chosen at random to ensure there was no bias, the groups are equal, and that any difference in vaccination levels was essentially because of the "intervention".
- Group D is called the "control" group while others are called "treatment" groups.
- Such an experiment would not only show whether a policy initiative works, but would also provide a measure of the difference it brings about.
- It would also show what happens when more than one initiatives are combined. This would help policymakers to have the evidence before they choose a policy.



## Some studies using RCTs

- **Vaccination:**
  - **Problem:** Low service quality one reason why poor families invest so little in preventive measures. E.g. staff at health centres responsible for vaccinations are often absent from work.
  - **Solution:** Mobile vaccination clinics, where the care staff is always on site – could fix this problem. Vaccination rates tripled in the villages that were randomly selected to have access to these clinics, at 18% compared to 6%.
  - This increased further, to 39%, if families received a bag of lentils as a bonus when they vaccinated their children.
  - Because the mobile clinic had a low level of fixed costs, the total cost per vaccination actually halved, despite the additional expense of the lentils.
- **Education:**
  - **Problem:** In many poor country's schools, curricula and teaching do not correspond to pupils' needs. There is a high level of absenteeism among teachers and educational institutions are generally weak.
  - **Solutions:** Reason for high level of absenteeism was lack of clear incentives and accountability for teachers. One way of boosting the teachers' motivation was to employ them on short-term contracts that could be extended if they had good results.
  - Experiments found that pupils who had teachers on short-term contracts had significantly better test results than that having fewer pupils per permanently employed teacher.
  - Studies suggested that additional resources are, of limited value whereas, targeted support for weak pupils had strong positive effects, even in the medium term.
- **Health subsidy:**
  - **Problem:** Whether medicine & healthcare should be charged for and, if so, what they should cost?
  - **Experiment:** A field experiment showed how the demand for deworming pills for parasitic infections was affected by price. 75 % of parents gave their children these pills when the medicine was free, compared to 18 % when they cost less than \$1, which is still heavily subsidised. It suggested that poor people are extremely price-sensitive regarding investments in preventive healthcare.

## LIMITATIONS OF RANDOMISED CONTROLLED TRIALS

- An unbiased event is one that if repeated many times, would give the closest to the actual outcome on an average. It is virtually impossible to achieve unbiased estimates with only one RCT and hence, the need to conduct **multiple such trials**.
- Randomization excludes the role of "prior information" about the sample, which is necessary to get precise results.
- The study population is often not the population that we are interested in, especially if subjects must volunteer to be in the experiment and have their own reasons for participating or not. Many of the differences in results between experimental & non-experimental studies can be traced to **differences in the populations** to which they apply.
- RCT outcome working in one situation might not work in the other. This is the **'transportation' problem**. It can only be addressed by using previous knowledge and understanding i.e. by interpreting the RCT within some structure. This is the same structure that the RCT paradoxically gets its credibility from refusing to use.

## Summary

Behavioral Economics is the combination of psychology and economics that investigates what happens in markets in which some of the agents display human limitations and complications. It takes a deviant viewpoint from traditional economics which conceptualizes people as rational and unemotional ('Homo Economicus') who tend to maximize their gains.

## Principles of Behavioural Economics

- People try to choose the best feasible option, but they sometimes don't succeed due to lack of training and experience.
- People take decisions based on how their circumstances compare to certain self-determined reference points. Also, people have more aversion to losses than affinity to gains
- People have self-control problems when choices and their consequences are separated in time
- Although people mostly care about their own material payoffs, they also care about the actions, intentions, and payoffs of others in the society.
- Many psychological factors matter in markets evident in the form of positive or negative sentiment

## Behaviour Economics of Nudge

Nudges refers to **positive reinforcements** that gently steer the people towards desirable behaviour even while preserving their liberty to choose. The idea behind these three claims is that real people often lack common knowledge & information comes at a cost. They won't go for the most rational/optimal choices for they suffer from certain *biases*. Hence, the way in which policy makers design the choice architecture will have impact on their decision making.

## Relevance of Behavioural Insight for India

People are likely to change their behaviour if the changed behaviour is seen to be upholding the 'social norms'. This principle can be used by policymakers to enhance the efficiency & impact value of several existing programs.

- The success of Swachh Bharat Mission (SBM) can be attributed to its using of Gandhian symbology to create mass movement, making sanitation a community level concern, appointing local ambassadors as *swachhagrahis* and appealed to the people's emotions.
- Similarly, Beti Bachao Beti Padhao (BBBP) showcased the examples of parents who celebrated the birth of a girl child through initiatives like 'Selfie with Daughter' for positive reinforcement.
- Numerous government initiatives have used socially and culturally identifiable names to give a clear message of the objectives of the programme. E.g. NAMAMI Gange, POSHAN Abhiyan, Ayushman Bharat, Jan Dhan Yojana etc.
- Policymakers can leverage default rules in favour of desired behaviour (as people tend to stick to default rules), highlight the role of positive influencers in society, disclose benefits of good behaviour to incentivize people, repeatedly reinforce positive behaviour, leverage the tendency of loss aversion and utilize catchy messaging.

## Challenges to mainstreaming nudge as a policy tool

- Preventing nudges to go down the slippery slope from education to outright manipulation to coercion and bans
- Ascertaining true preferences of individuals by the choice architect
- Excessive focus on choices rather than outcomes of those choices and lack of safeguards and accountability of choice architects
- 'One size fits all' nudge policy tends to be narrow in focus and ignores multiplier effects of the choice made
- Unclear if nudge should be used as a tool by private actors

## Behavioural Economics and Randomized Control Trials (RCTs)

RCTs can help to test the effectiveness of various policy interventions and design evidence based policies. In fact, Abhijit Banerjee, Esther Duflo & Michael Kremer were awarded Nobel Peace Prize 2019 for their work on randomized control trials.

## Examples of studies using RCTs

- **Vaccination:** Low service quality is one reason why poor families invest so little in preventive measures. E.g. staff at health centres responsible for vaccinations are often absent from work.
  - **Solution:** Mobile vaccination clinics, where the care staff is always on site – could fix this problem. Vaccination rates tripled in the villages that were randomly selected to have access to these clinics, at 18%

compared to 6%. This increased further, to 39%, if families received a bag of lentils as a bonus when they vaccinated their children.

- Similar inferences were drawn in the fields of education and health subsidies using the RCT methodology.

### **Limitations of RCTs**

RCTs require multiple trials for complete randomization and 'prior information' for precise results. Moreover, randomization cannot ensure equal groups and there might be differences in the study population and the population that actually needs to be targeted.



## PERSONALITY TEST PROGRAMME 2019

### CIVIL SERVICES REFORMS

#### Introduction

Though the term “bureaucracy” is an eighteenth-century innovation, bureaucracy-like organisational structure had existed even in the ancient period and since then have been existing, though in varying form, to perform the functions of the state. In India, modern bureaucracy had **evolved during the British Raj** and it worked to promote and preserve the interests of the British till 1947. After Independence, Indian bureaucracy had been entrusted with the key **responsibility of nation-building**. After India’s independence, the bureaucracy had worked satisfactorily to uplift the nation until it started wilting gradually. Particularly with the advent of LPG model, bureaucracy attracted greater criticism due to its underperformance. This necessitates the civil services to brace up with the tempers of the changing times and meet the requirements of the citizens. The contemporary developmental challenges and those of public service delivery necessitate new delivery models, delivering value for money and making policies better designed for implementation.

#### Observations regarding the functioning of Civil Services in India

It is widely recognised that the civil services have contributed to stability in terms of maintenance of peace, the conduct of fair elections, managing disasters and the preservation of the unity of the nation, providing stability and maintaining order in a vast country prone to various conflicts – ethnic, communal, regional etc. Nonetheless there are certain concerns about the performance of the civil service in the context of realizing a results-oriented governance. In this light, several efforts have been made to both recognize the challenges facing the Indian Civil Services as well as identify their solutions. One of the most pertinent of such efforts has been that of the **2<sup>nd</sup> Administrative Reforms Commission**, that makes the following observations regarding civil services in India:

- Civil Service in India is **more concerned with the internal processes** than with results.
- The systemic **rigidities**, needless **complexities** and **over-centralization** in the policy and management structures within which the civil service functions are too complex and often too constraining.
- The structures are based on **hierarchies** and there are a large number of veto points to be negotiated for a decision to eventually emerge.
- The size and the number of ministries and departments have both **overloaded the decision-making system** and diminished the capacities of the individual civil servants to fulfil their operational responsibilities.
- **Rapid and fundamental changes** are taking place in the country in terms of rapid economic growth, urbanization, environmental degradation, technological change and increased local awareness and identity. The response time to adapt to these changes is much shorter than it used to be. On the other hand, the perception is that they **resist change** as they are wedded to their privileges and prospects and thereby have become ends in themselves.
- With the passage of time, the role of civil society organisations and private sector in governance and delivery of public services has increased. Consequently, civil servants should view civil society organisations and the private sector as partners in the process of the country’s governance.
- There is need to shift from **pre-eminence of governance to effective governance** with a focus on decentralization and citizen-centricity.

The aforementioned observations point at the fault lines in the effective functioning of Indian Civil Services. This has also instigated a debate in the public discourse over the relationship between Civil Services and Democracy.

There are differing voices over the suitability and relevance of civil services to the modern-day democracies as shall be covered in the following subhead.

### Relationship between Civil Services and Democracy

- Democracy is the process whereby the government is elected by the people whereas Bureaucracy is the system in which elected government employs competent state officials to run state matter. They are selected by government through merit-based process.
- The relationship between bureaucracy and democracy is both **paradoxical and complementary**. On one hand, democratic governance institutions are assumed to be responsive to the wishes of the public, and to be attempting to map those preferences of the public into positive outcomes for their citizens. Here, **effective democracy may require an effective and well-functioning bureaucracy**.
- On the other hand, bureaucracies are typically conceptualized as being legalistic and largely **indifferent to the wishes and demands of individual citizens**. Bureaucracies also tend to be associated with **hierarchical and even authoritarian forms of governing**.
- This, despite the fact that the very **reason for institutionalizing the bureaucratic form of governing** was to ensure equal treatment of citizens, and to provide clients with records and justifications for the decisions being made about them within the public sector.
- However, the experience in the LPG era, and coming of market in public service delivery underlines the extent to which the **values of formalized bureaucracy may be important for the effective functioning of a democracy**. It can be argued that rigidity associated with bureaucracy may, in fact, be the result of a well-functioning bureaucracy that emphasizes equality, and attempts to ensure that all members of society receive the same treatment according to law, even if that style of delivery appears to be inefficient.
- Similarly, formal civil services were partly adopted **to minimize the arbitrary and capricious actions** in which governments might otherwise be tempted to engage and in which markets may find it very appropriate to engage in order to maximize efficiency.
- Bureaucracy & Democracy may appear to be antithetical but they are both necessary for providing effective and responsive governing. They provide complementary benefits for society. The **responsiveness of democratic governing** must be balanced with the **predictability and impartiality** assumed to reside within bureaucratic institutions. Likewise, the democratic process is important to confer legitimacy on the governing process.

### Reforms required in the Indian Civil Services

Some of the issues concerning civil services include, the generalist nature of Indian Administrative Services; frequent postings resulting in an average of less than 16 months spent on a particular job, dearth of merit based postings (only 24% of postings are viewed as “merit-based” by bureaucrats themselves), political patronization, issues with recruitment, autonomy and accountability etc. Consequently, there is a need to reform the Civil Services as they exist in their present form. Some of these reforms broadly include:

- **Flexibility** to ensure development work needs some flexibility from a strict observance of rigid rules and regulations.
- **Reforms in the field of recruitment** of civil servants to find people who can ensure smooth functioning of democracy.
- **Training** of civil servants should be able to bring about behavioural and attitudinal changes.
- Minimization of red-tapism through **simplification of administrative procedures**, rules and regulations; **decentralization** of authority and collegiate decision making; de-emphasis of hierarchy in the administrative structure
- Adoption of **modern management techniques**; elimination of corruption, impartial and efficient administration; creation of new work culture and encouraging creativity.

The ground work for reforming Civil Services in India has been laid by several notable panels and committees starting with the 1947 Secretariat Reorganization Committee. Below is a brief account of recommendations made by these eminent panels and committees.

### Summary of Recommendations of the Second Administrative Reforms Commission

- **Stage of Entry:**
  - A **National Institute of Public Administration** to run Bachelor’s Degree courses in public administration/governance/management. Selected Central and other Universities should also be assisted to offer

graduate level programmes in these courses.

- Graduates in other disciplines would also be eligible to appear in the Civil Services Examination provided they complete a '**Bridge Course**' in the core subjects mentioned above.
- Other Modes of Induction: The induction of officers of the State Civil Services into the IAS should be done by the UPSC on the basis of a common examination.
- **Disciplinary Proceedings:** In the case of disciplinary proceedings, consultation with the UPSC should be mandatory only in cases involving likely dismissal or removal of a government servant.
- **Training and Capacity Building:** Every government servant should undergo a mandatory training at the induction stage and also periodically during his/her career. Successful completion of these trainings should be a minimum necessary condition for confirmation in service and subsequent promotions.
  - The objective of mid-career training should be to develop domain knowledge and competence required.
  - Public servants should be encouraged to obtain higher academic qualifications and to write papers for reputed and authoritative journals.
- **Placement at Middle & Senior Management:**
  - At the middle level, domains should be assigned by a **Central Civil Services Authority**.
  - A **Central Civil Services Authority** should deal with matters of assignment of domains to officers, fixing tenures for senior posts, deciding posts to be advertised for lateral entry etc.
  - There is need to introduce competition for senior positions in government by opening these positions in Government to all Services.
  - At higher levels in government, it is necessary to ensure that the tasks assigned to a public servant match his/her domain competence as well as aptitude and potential.
- **Performance Management System:** Making appraisal more consultative and transparent, Performance appraisal formats to be made job specific and scope of the present performance appraisal system of its employees be expanded to a comprehensive performance management system (PMS).
- **Motivating Civil Servants:** There is need to recognise the outstanding work of serving civil servants including through National awards. Awards for recognizing good performance should also be instituted at the State and district levels.

#### Recommendations of some other committees

A number of Committees and Commissions were set up to make recommendations on various aspects of civil services. Few of the relevant recommendations of these committees are given below:

- **Recruitment**
  - The Civil Services Examination Review Committee, 2001 (chaired by Professor **Yoginder K. Alagh**) favored testing the candidates in a common subject rather than on optional subjects.
  - The Committee on Civil Service Reforms (**Hota Committee Report**, 2004) recommended that aptitude and leadership tests may be introduced for selection, and that probationers may be allowed one month's time after commencement of training to exercise their option for Services.
  - The **Basawan Committee (2016)** recommended a meaningful assessment to be done about requirement of IAS officers every year to send a realistic requirement of Direct Recruits to Government each year, and to monitor the vacancies under the promotion ceiling.
- **Training:** Yugandhar Committee, 2003 recommended the need for three mid-career training programmes in the 12th, 20th and 28th years of service. Trainings at these 3 stages was suggested as there is a "major shift" in the nature of work of the officer, at these stages of their career.
- **Domain Expertise**
  - The **Surinder Nath Committee**, 2003 suggested 11 domains, Agriculture and Rural Development; Social Sectors, Culture and Information; etc. The Committee suggested that officers may be assigned to a maximum of three domains out of the eleven listed.
  - **The Hota Committee** on Civil Services Reforms, 2004, had recommended that domain assignment should be introduced for civil servants to encourage acquisition of skills, professional excellence and career planning.
- **Efficiency:**
  - **Hota Committee**, 2004 emphasised the use of information and communication technologies (ICT) to transform Government by making it more accessible, effective and accountable.
- **Accountability**
  - The Committee on Prevention of Corruption (**Santhanam Committee**) made a range of recommendations

to fight the menace of corruption. It recommended the constitution of the Central Vigilance Commission. Changes were also suggested in Article 311 of the Constitution of India for conducting disciplinary proceedings against government servants. It was also recommended that offering of bribes should be made a substantive offence.

- The **first ARC** recommended that the departments and organizations which were in direct charge of development programmes should introduce **performance budgeting**. The ARC also recommended the establishment of two special institutions, **the Lok Pal** to deal with complaints against the administrative acts of Ministers and Secretaries to the government at the Centre and the **Lok Ayuktas** to deal with such complaints in States.
- The **Hota Committee** recommended that Sections of the Prevention of Corruption Act and the Code of Criminal Procedure may be amended to **protect honest civil servants** from malicious prosecution and harassment. It also recommended that a **Code of Ethics** should be drawn up for civil servants incorporating the core values of integrity, merit and excellence in public service.
  - ✓ It also recommended that a **Model Code of Governance** should be drawn up benchmarking the standards of governance to be made available to the citizens.
- **Performance Appraisal:**
  - **Surinder Nath Committee, 2003** recommended that - performance appraisal should be primarily used for the overall development of an officer and for his/her placement in an area where his/her abilities and potential can be best used.
  - **The Hota Committee** recommended a system of performance assessment in which greater emphasis is placed on objective assessment against agreed work plans.

### **Lateral Entry into Civil Services**

Lateral entry means recruiting new entrants into a system from a pool of candidates who are outsiders to the system. In context of bureaucracy, **Lateral Entry** refers to the direct induction of **domain experts** at the middle or senior levels of administrative hierarchy, rather than only appointing regular recruits through promotion. The idea of lateral entry into civil services is seen by many as a panacea to the inertia that has crept in because of which it failed to respond to the need of the times.

The idea of lateral entry is not new to the Indian experience. Domain experts have been brought in from outside to head various committees. Some of the names include heavyweights like Dr. Manmohan Singh, Montek Singh Ahluwalia, Arvind Virmani, Raghuram Rajan, Vijay Kelkar among others. **1st ARC** talked about **need for specialization** as early as in 1965. The **2nd ARC** also recommended an **institutionalised transparent process** for lateral entry at both central and state levels. The **Surinder Nath Committee and Hota committee** in 2003 and 2004 made similar recommendations favouring lateral entry into the civil services. **YK Alagh (2001) Committee** also had recommended lateral entry into middle and senior levels of the government.

In this context, the Central Government has taken a leap into the idea of inducting specialists to middle and senior level positions in the Indian Administrative hierarchy. After asking the Department of Personnel & Training (DoPT) to prepare a proposition on lateral entry into Civil Services, **nine professionals** were selected to work in the capacity of **joint secretaries** in the Government of India.

### **Arguments that favour Lateral Entry into Civil Services:**

- **Shortage of Officers:** According to a report by Ministry of Personnel, Public Grievances and Pensions there is a **shortage of nearly 1,500 IAS officers** in the country. The **Basawan Committee (2016)** had pointed out that the bigger states like Bihar, MP and Rajasthan have a deficit of over 75 to 100 officers. Lateral induction is, therefore, being seen as a small step towards essential housekeeping in central government staffing.
- **Changes in contours of policy making and need for specialisation:**
  - Shift from uniformity of centrally planned economic policy to diverse demands of **competitive federalism** requires specialized skills and knowledge for informed policy making.
  - Policymaking is also becoming complex due to emergence of new issues like globalisation, digitalisation of governance, cybercrime, climate-change etc. This warrant having people with specialized skills and domain expertise in important positions.
  - Various think-tanks have also explained how the IAS is hamstrung by political interference, out-dated personal procedures and a mixed record on policy implementation.



- The IAS officers see the government only from within, lateral entry would enable government to understand the impact of its policies on stakeholders — the private sector, the non-government sector and the larger public.
- **Increase in efficiency and governance**
  - Career progression in the IAS is almost automatic which could put officers in comfort zone. Lateral entrants could also **induce competition** within the system.
  - Niti Aayog, in its **Three-Year Action Agenda** for 2017-2020 had said that sector specialists be inducted into the system through lateral entry as that would “bring competition to the established career bureaucracy”.
- **Entry and retention of talent in Government:** Justice BN Srikrishna-headed **Sixth Central Pay Commission report (2006)** said lateral entry could “ensure entry and retention of talent in the government even for those jobs that have a high demand and premium in the open market”.
- **Widen the talent pool for appointment:** The existing system makes it difficult to test potential administrative and judgement capabilities. Mid-career lateral entrants with proven capabilities will help bridge this deficiency.
- **Experience from our past and other countries:**
  - Lateral Entry has been **successful in RBI** and the erstwhile Planning Commission, as well as its successor, the Niti Aayog.
  - **Ministry of finance** has institutionalised the practice of **appointing advisors** to the government from the world of academia and the corporate sector.
  - This concept is already being followed by countries such as the United Kingdom, the United States of America, Australia, Belgium, New Zealand etc.

#### Arguments that go against Lateral Entry

- **Difficult to ensure responsibility and accountability:** Given the short tenures of 3-5 years of lateral recruits, it will be difficult to ensure responsibility and accountability for the decisions taken by them. While, the advantage with the current civil service is that policy makers have **long-term interests** in government.
- **Transparency in Recruitment:** Political interference in the selection process may occur and it may promote **Nepotism and Spoils System** (an arrangement that employed and promoted civil servants who were friends and supporters of the political group in power).
- **Lack of field experience:** Officers who will join might score on domain knowledge, but they may fall short on the experience of working in the “fields”.
- **Deters existing talent:**
  - Lateral entry gives a message that experienced civil servants are less efficient and expert than private professionals, which is a not necessarily true.
  - The best talent can be attracted only if there is reasonable assurance of reaching top level managerial positions.
  - By suggesting a contract-based system for positions of joint secretary and above, the signal would be sent out that only mid-career positions would be within reach in about 15-18 years of service and there would be considerable **uncertainty about career progression** thereafter.
- **Earlier experiences:** The past experience of inducting private-sector managers to run public-sector enterprises has not been particularly satisfactory. For e.g. Air India, Indian Airlines etc.
- **Issue of Reservation:** It is unclear whether there would be reservation for recruitment through lateral Entry or not.
- **Scope of utility:** Much of how far the government can leverage the expertise of entrants will depend on how far the political executive is willing to facilitate the functioning of these external experts and whether an enabling environment is created for utilizing their full potential.
- **May face resistance from the Bureaucracy:** Existing officials might resist functioning with **outsiders** and inevitable tensions between **generalists and specialists** may surface.
- **Difficulty in adjusting to the bureaucratic work culture:** Including manners of addressing each other, speed of working, knowledge of rules, punctuality among others.

## Way Forward

- The manner and **philosophy of training bureaucrats** remains a neglected dimension and lateral entry will not remedy this. The focus should also be on a new approach to training administrators, which is the success factor for public administrative reform.
- The task of recruitment must always be entrusted to a body supervised by UPSC to ensure merit based, politically neutral civil service.
- Inductions through the competitive examinations must also expand incrementally in keeping with the country's needs.
- The government must move towards ensuring **longer tenures of lateral entrants** to allow them sufficient time to settle, learn and implement their approach, blueprint for work.
- Other reforms apart from institutionalised lateral entry are the need of the moment such as:
  - **Deputation to Private Sector:** A Parliamentary panel has recommended deputation of IAS and IPS officers in private sector to bring in domain expertise and competition.
  - **Institutionalize goal setting and tracking for each department:** Each Ministry and government agency should set outcome-based goals with a clear timeline.
  - **Appraisal mechanisms:** Such as government's new **"360 degree" performance appraisal mechanism** for senior bureaucrats, whereby officers are graded based on comprehensive feedback from their superiors, juniors and external stakeholders.
  - Incentives for bureaucrats that are linked to their district's annual development indicators can also be offered.

## Summary

- In India, modern bureaucracy had **evolved during the British Raj** to promote and preserve the interests of the British. However, after Independence, Indian bureaucracy had been entrusted with the key **responsibility of nation-building**.
- Current status: 2<sup>nd</sup> ARC made following observations regarding civil services in India
  - **More concerned with the internal processes** than with results.
  - Plagued with systemic **rigidities**, needless **complexities** and **over-centralization**
  - Structures based on **hierarchies**
  - **Overloaded decision-making system** and **resistance to change**
  - Need to shift from **pre-eminence of governance to effective governance**
- **Relationship between Civil Services and Democracy:** It is both paradoxical and complementary.
  - Effective democracy may require an effective and well-functioning bureaucracy. Yet, it might become indifferent to the wishes and demands of individual citizens.
  - However, it brings **predictability** and **impartiality** to democratic governing.
- **Reforms required: 2<sup>nd</sup> ARC recommendations:**
  - **Stage of entry**
    - ✓ **National Institute of Public Administration** to run Bachelor's Degree courses in public administration
    - ✓ Bridge course to other graduates
    - ✓ Induction of officers of the State Civil Services into the IAS
  - **Training and Capacity Building:** Mandatory training at the induction stage and also periodically.
    - ✓ Public servants should be encouraged to obtain higher academic qualifications and to write papers for reputed and authoritative journals.
  - **Placement at Middle & Senior Management:** Role to **Central Civil Services Authority**.
    - ✓ Need to match domain competence, aptitude and potential at higher levels.
  - Deputation to Organizations outside Government
  - **Performance Management System** to be more consultative, transparent and job specific.
  - **Motivating Civil Servants** through National awards for good performance
- **Recommendations of other committees:**
  - **Recruitment**
    - ✓ Y.K Alagh committee: Test in common subject rather than on optional subjects
    - ✓ Hota committee: Introduce aptitude and leadership tests
  - **Training:** Yugandhar Committee, 2003 recommended the **three mid-career training programmes** in the 12th, 20th and 28th years of service.
  - **Efficiency:**
    - ✓ **Hota Committee** emphasized the use of ICT to transform Government by making it more accessible, effective and accountable.
  - **Accountability:** 1<sup>st</sup> ARC suggested **performance budget** in Hota Committee recommended a **Code of Ethics** for civil servants and **Model Code of Governance**.
  - **Performance Appraisal:** Surinder Nath Committee recommended that performance appraisal should be primarily used for the overall development of an officer.
- **Lateral entry** is direct induction of domain experts at the middle or senior levels of administrative hierarchy.
- **Arguments in favour**
  - **Shortage of Officers:** Basawan Committee had pointed out that the bigger states like Bihar, MP and Rajasthan have a deficit of over 75 to 100 officers.
  - **Need for Specialization** due to globalisation, digitalisation of governance, financial frauds, cybercrime, organized crime, terrorism, climate-change, competitive federalism etc.
  - **To increase efficiency:** Niti Aayog's Three-Year Action Agenda- 2017-2020 talked about sector specialists
  - To ensure **entry and retention of talent in Government**
  - **Past experience** of being successful in RBI, the Planning Commission, and Niti Aayog.
- **Arguments against:**
  - **Difficult to ensure responsibility and accountability** due to short tenures
  - May lack **transparency in recruitment** leading to Nepotism and Spoils System
  - Lack of field experience
  - Deters existing talent
  - Issue of Reservation

- May face resistance from the Bureaucracy
- Earlier experiences of Air India, Indian Airlines are not satisfactory
- **Way forward**
  - Task of recruitment to supervised by UPSC
  - Ensure **longer tenures** of lateral entrants
  - **“360 degree”** performance appraisal mechanism
  - **Deputation to Private Sector** of IAS and IPS officers



## PERSONALITY TEST PROGRAMME 2019

### DRAFT NATIONAL EDUCATION POLICY

#### Introduction

Education is a catalytic tool to transform the population of the country. It becomes more critical when there is forecast that India will become the youngest country in the world, with a **median age of 29**. Providing universal education has been one of the main objectives of successive Indian governments since Independence. This has resulted in various policy and financial interventions over the last several decades. In this direction, government has come up with the draft National Education Policy 2019.

#### Background

- India has had **two National Education Policies** in 1968 and 1986 (modified in 1992) respectively.
  - After **more than thirty years** of operation of the last policy, India's education system has seen a number of achievements. However, it has remained plagued by a number of problems and shortcomings. (*Refer the box below*)
- The Ministry of Human Resource Development initiated a multi-stakeholder, multi-pronged, participatory consultation process from January 2015.
  - In order to frame the new Education Policy based on these consultations, government constituted **Subramanian Committee** which submitted the report titled, '**Some Inputs for the Draft National Education Policy, 2016**'.
  - Then a committee under **Dr. K. Kasturirangan** was setup to examine all the inputs/ suggestions and submit a draft policy.
- Recently, the Kasturirangan committee submitted its report on the **Draft National Education Policy 2019** to the Ministry of Human Resource Development, Government of India.
  - The policy is founded on the guiding goals of **Access, Equity, Quality, Affordability** and **Accountability**.
  - It has looked at the sector in a **single organic continuum** from pre-school to higher education and also touched on related sectors that form the part of the larger picture.

#### Evaluation of previous National Education Policies (1968 and 1986)

##### Achievements in Education System

- Early Childhood (0-8 yrs) Education:** At age 3, two-thirds of children were enrolled in some form of preschool. Enrollment patterns only stabilize at age 8 when over 90% of children are enrolled in primary school.
- Increased enrollment:** In rural India, only 3.3 percent of children in the 6-14 years of age were out of school in 2016. Over the past two decades, the tertiary student population increased from 5.7 million in 1996 to an estimated 36.6 million in 2017/18.
- Trust in Public education:** The proportion of children (age 6-14) enrolled in private school has almost remained unchanged at 30.9% in 2018 which indicate overall trust in public schooling.
- Increased educational infrastructure-** 98 percent of the habitations have access to primary education (class I-V) located within one kilometer and 92 percent have access to secondary education (class VI-VIII). The number of universities, likewise, grew from 190 in 1990/91 to 903 in 2017/18.
- Increasing role of Central Government-** which committed itself to financing a portion of development expenditure, and around 10 per cent of primary education was funded under centrally sponsored schemes.
- Education as a Fundamental Right-** following the Constitution (Eighty-Sixth Amendment) Act, which inserted Article 21-A in the Constitution of India in 2002. Hence, free and compulsory education is provided to all children between 6 and 14

year age by the Central and State governments and Union Territory Administrations.

- **Discussion on quality of education-** Several initiatives were taken like Operation Blackboard, Minimum Levels of Learning etc.

#### **Drawbacks in Education System**

- **Inequality in Educational Opportunity (IEO)-** Despite working towards universal enrollment, the **high dropout rates** have questioned the effectiveness of the education policy multiple times.
  - During teenage, the percentage of girls studying decreases, nearly 92.3 percent are studying, at the age of 13 years. Whereas only 65.5 per cent are studying at age 19.
  - There is a stark gap in educational status as 41% of STs are illiterate as against 31% non-STs and less than 2% attain higher education.
- **Lack of synergy between enrolment and learning outcomes** - Mere increase in enrolment in elementary and secondary education has not resulted in any improvement in learning outcomes. Poor foundational skills also mean that many of these youth won't be employable.
  - All India figure for children in class 3 who are able to do at least subtraction has not changed much, from 27.6% in 2016 to 28.1% in 2018.
- **Inequality in Occupational Attainments (IOA)-** The vocational education ecosystem in its current form did not succeeded in creating adequate employable job seekers in India as more than 60 per cent candidates and employers find the educational courses ineffective.
- **Heavy Emphasis on Marks-** The current education system of India lays extra heavy emphasis on scores rather than education itself. Around 12 percent of Indian students between the ages of four and 12 suffer from some form of psychiatric disorder.
- **Encouraged Flock Mentality-** The education system of India encourages flock mentality, first among parents and then among their children. The most favored courses remain engineering, medicine, and management.
- **Digital Divide-** Access to mobile, computer and internet as well as frequency of digital transactions shows a great digital divide which becomes relevant in government's campaign to push for digital India.
- **Regulation issues:** The existing regulatory structure requires redefinition based on changing priorities of education at different levels. The Central and state governments, in their hurry to increase the number of educational facilities, have not kept adequate quality checks on these institutions.

#### **Need for new Education Policy**

- **Important developments since last education policy (NPE 1986/92)-** such as the **Internet revolution, Globalisation, Right to Education Act** among others mandate these factors to be considered comprehensively and to remain responsive to **changing dynamics of the population's requirement**.
- **Changed demands of a knowledge economy-** that calls for emphasis on the need for acquisition of new skills by learners on a regular basis, for them to '**learn how to learn**' and become lifelong learners.
- **Narrow time lag between the generation of new knowledge and its application-** that necessitate the periodic renewal of education curriculum to maintain their relevance to the changing societal and personal needs of learners.
- **Small window of India's Demographic Dividend-** that is expected to last for only a little over 20 years. It demands that apart from education, the children acquire actionable skills also in their schools and colleges itself.
- **Alignment with the global Sustainable Development Goals-** The SDG 4 seeks to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by 2030.
- **Curb the innovation gap-** Indian innovations are invariably incremental and not disruptive. They are often 'first to India' and not 'first to the world'. They copy the 'current best practice' but don't create the 'next' practice. This gap needs to be overcome by institutionalizing research and development.

#### **Approach adopted by the draft Education Policy**

##### **Vision**

To create an **India centered** education system that contributes directly to transforming our nation **sustainably** into an **equitable** and **vibrant** knowledge society, by providing **high quality** education to all.

##### **School Education**

- **Early Childhood Care and Education (ECCE):**
  - **Develop new curriculum framework-** by giving this task to NCERT, which consists of two parts, one for the age group of 0-3 years and other for the age group of 3-8 years.

- **Strengthening of facilities-** through expansion and co-location of Angandwadis and pre-schools with primary schools where possible.
- **Design of learning-friendly environments-** by a committee of cognitive scientists, early childhood education experts, artists, and architects in each state.
- **Extension of the Right to Education Act** to include **Early Childhood Care and Education (ECCE)**.
- **Foundational Literacy and Numeracy-** The Policy recognizes the learning crisis in language and mathematics during the primary school years and its impact on attendance, retention and later learning.
  - **Remedial Instructional Aides Programme-** to induct instructors from local communities to formally help students who have fallen behind.
  - **National Tutors Programme-** where the best performers in each school work as tutors during the school for fellow (generally younger) students.
- **Ensuring Universal Access & Retention**
  - Addressing **access gaps** in infrastructure such as transport facilities, hostels and security of students and tracking out-of-school children through social workers and counselors.
  - **Second-chance education programmes** for long-term out-of-school adolescents.
- **New Curricular & Pedagogical Structure-** The Policy envisages a new curricular and pedagogical structure for school education.
  - **Adopt a 5-3-3-4 design comprising:**
    - ✓ 5 years of the **Foundational Stage:** 3 years of pre-primary school and Grades 1, 2.
    - ✓ 3 years of the **Preparatory Stage:** Grades 3, 4, 5.
    - ✓ 3 years of the **Middle Stage:** Grades 6, 7, 8.
    - ✓ 4 years of the **High Stage:** Grades 9, 10, 11, 12.
  - **Reduce curriculum load** in each subject to its essential core content, in order to make space for more holistic, experiential, discussion-based, and analysis-based learning.
- **Transformation of Curriculum & Pedagogy-** The Policy aims to transform curriculum & pedagogy to encourage holistic development with minimal rote learning.
  - **Integrated curriculum-** with equal emphasis all subjects; no hard separation of curricular, cocurricular or extra-curricular areas and equal status for all integration of vocational and academic streams
- **Effective Administration & Management of Schools-** The Policy aims to render school governance more **local, effective and efficient** while facilitating the sharing of resources through **school complexes**.
  - **School Complex** is a cluster of public schools from Foundational to Secondary stage within a contiguous geography. It will work as an effective administrative unit without compromising access i.e. physical relocation of schools.
- **Regulation of School Education:** Regulation and operation of schools (service provision) carried out by **separate bodies to eliminate conflict of interest**.

### **Higher Education**

- **Institutional Restructuring-** A new vision and architecture for higher education has been envisaged with **large, well-resourced, vibrant multidisciplinary institutions**.
  - **Consolidation** of current 800 universities and 40,000 colleges into about 15,000 large, well-resourced, vibrant multidisciplinary institutions with programmes across disciplines
  - A new institutional architecture with three kinds of institutions-
    - ✓ **Type 1: Research universities-** focus equally on research and teaching
    - ✓ **Type 2: Teaching universities-** focus primarily on high quality teaching, while also significantly contributing to cutting-edge research
    - ✓ **Type 3: Colleges-** focus almost exclusively on the goal of high-quality teaching
- **Towards a More Liberal Education-** An imaginative and broad-based liberal undergraduate education with rigorous specialization in chosen disciplines and fields.
- **Optimal Learning Environments and Support for Students-** The Policy envisions a joyful, rigorous and responsive curriculum, engaging and effective pedagogy, and caring support to optimize learning and the overall development of students.
  - A **National Higher Education Qualifications Framework (NHEQF)** outlining the learning outcomes. Focus on assessment for **development and not judgement**.
  - **National Skills Qualifications Framework** aligned with the above to ensure equivalence and mobility.
  - Focus on **occupational readiness** of students and involve them in **institutional processes**.



- **Energised, Engaged & Capable Faculty:**
  - Appropriately designed **permanent employment (tenure) track system** in all institutions by 2030
  - Faculty recruitment and development, career progression, compensation management to be part of every **Institutional Development Plan**.
  - Faculty empowered to **make curricular choices** for their courses; pursue research with academic freedom.
- **Empowered Governance & Autonomy in Higher Education Governance:**
  - **National Higher Education Regulatory Authority**- only regulator for all higher education including professional education
  - **New General Education Council** - develop National Higher Education Qualifications Framework.
  - All institutions free to start and run programmes, decide curricula, student capacity and resource requirements, develop internal systems for governance and people management
- **Integrating Professional Education into Higher Education:**
  - **Preparation of professionals** must involve an education in the ethic and importance of public purpose, an education in the discipline, and an education for practice - for this to happen, professional education must not happen in the isolation of specialty.
  - All institutions **offering either professional or general education** must organically evolve into institutions offering both by 2030.
- **Establishment of a National Research Foundation**- to fund, mentor, incentivize, and build capacity for quality research in education. It will have four major divisions: sciences, technology, social sciences, and arts and humanities, with the provision to add additional divisions.

#### ***Additional key focus areas***

- **Teacher Management-**
  - **Merit-based scholarships** to encourage outstanding students to enter the teaching profession
  - All “**para-teacher**” (Shikshakarmi) systems across the country will be stopped by 2022.
  - Teachers will **not be allowed to participate in any non-teaching activities** (e.g. cooking mid-day meals) during school hours that could affect their teaching capacities.
  - All teachers will have possible career progression paths to become **educational administrators**.
- **Technology in Education** at all levels:
  - **National Mission on Education through information and communication technology** to setup virtual laboratories that provide remote access to laboratories in various disciplines.
  - A **National Education Technology Forum** will be setup under the Mission, to facilitate decision-making on the induction, deployment and use of technology.
- **Vocational Education:**
  - Policy aims to provide access to **vocational education to at least 50% of all learners** by 2025.
  - Vocational education integrated into all education institutions in a phased manner over the next decade.
  - **National Committee for the Integration of Vocational Education** to oversee the effort.
  - ‘**Lok Vidya**’, knowledge developed in India, made accessible to students through integration into vocational education courses
- **Adult Education**- This Policy aims to achieve 100% youth and adult literacy by 2030, and significantly expand adult and continuing education programmes.
  - Cadre of Adult Education Centre managers and instructors created through the **National Adult Education Tutors Programme**.
- **Financing Education:**
  - **Increase in public investment** by Central and State Governments to 20% of overall public expenditure over a 10-year period.
  - **Clamp down on commercialization of education**- with the nature ‘light but tight’ regulation, substantial investment in public education, mechanisms of good governance.
- **Rashtriya Shiksha Aayog/ National Education Commission (NEC):** To provide inspiring leadership to ensure excellence of execution.
  - It will work as apex body to be constituted, **chaired by the Prime Minister**.
  - It will comprise eminent educationists, researchers, Union Ministers, representation of Chief Ministers of States, eminent professionals from various fields.
- **Promotion of Indian Languages**- It is critical to preserve the truly rich languages and literatures of India - the Policy will ensure the preservation, growth, and vibrancy of **all Indian languages**

## Pros of the Draft Policy

- **Developed after extensive consultations** covering 2.5 lakh Gram Panchayats, 6600 Blocks, 6000 Urban Local Bodies (ULBs), 676 districts and 36 States/Union Territories with specific questions on 33 themes for all levels. Also, all other stakeholders including ministries, states have been deliberated for their views to develop a consensus over the provisions of the draft.
- Look at education as a **continuous process and comprehensively addresses all stages** of education including different verticals of professional education, vocational education, technical education etc.
- **Focus on foundational stages of education-**
  - The actions suggested on **ECCE** can be the best investment that India could make in education since neuroscience evidence indicates that over 85% of a child's cumulative brain development occurs prior to the age of 6.
  - The curriculum for Grades 1 and 2 will be developed in upward continuity with the pre-school curriculum, in terms of both content and pedagogy, which can have a positive impact on children's learning.
- The contents of the draft policy are specific and action oriented that talks about **outcome driven education**.
- Schools will be given autonomy in setting syllabus under the broad **National Curriculum Framework**. This will motivate principals and teachers to **innovate**.
- It has laid out a framework for ensuring **quality of teacher education**, which is paramount in terms of ensuring quality education.
- The idea of **Special Education Zones (SEZ)** that will be set up in **disadvantaged regions across the country** helps address the inequitable development across regions - even within States.
- **Focus on research**, as it talks about financing and involvement of private sector and intends to make all institutes **comprehensive teaching-research institutions**. A **National Research Foundation** on the lines of what exists in the US is a promising step to coordinate and give direction to research.

## Cons in the Draft Policy

- The policy's implementation is **predicated on the assumption** that the education budget would be almost doubled in the next 10 years. Also, the sheer scale of **changes expected**, the rapid **timeline** and the absence of a **strong mechanism** for handholding states on this journey raises questions on the full implementation of this policy.
- **Misses to address the gap of access to quality education between India's rich and poor children-** by proposing to remove the expectations that all schools meet common minimum infrastructure and facility standards, and that primary schools be within a stipulated distance from children's homes.
- Representatives of **CBSE Schools Management Association** expressed concern over expanding the ambit of the **Right to Education Act** to pre-kindergarten to Class 12 from the present Classes 1 to 8. Already, the schools were facing difficulties in determining the fee structure and getting reimbursement of the fee of the student.
- Integrating pre-school with government school system may pose **infrastructure and logistics challenge**.

## Conclusion

This Policy envisages creation, transmission, use and dissemination of knowledge as a part of this continuum. However, the challenges and concerns with the policy need to be addressed to ensure the learnings from previous two policies are implemented under this policy.

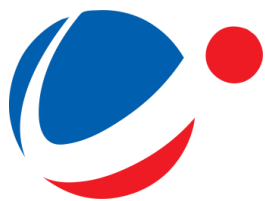
## Summary

- India has had **two National Education Policies** in 1968 and 1986, latest one being 30 years old.
- **Need for new policy**
  - Developments since last education policy e.g. Internet revolution, Globalisation, Right to Education Act.
  - Changed demands of a knowledge economy and the need for acquisition of new skills on a regular basis.
  - Narrow time lag between the generation of new knowledge and its application.
  - Small window of India's Demographic Dividend that is expected to last for only a little over 20 years.
  - Alignment with The SDG 4- "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by 2030.
  - Curb the innovation gap of Indian innovators.
- **Draft National Education Policy 2019** was submitted by **Kasturirangan committee**.

### Key features of **Draft National Education Policy 2019**

- **Vision:** To create an **India centered** education system that contributes directly to transforming our nation **sustainably** into an **equitable** and **vibrant** knowledge society, by providing **high quality** education to all.
- **School Education**
  - Extension of the **Right to Education Act** to include **Early Childhood Care and Education**
  - Increased focus on **Foundational Literacy and Numeracy** by inducting instructors from local communities etc.
  - Ensuring Universal Access & Retention
  - **New Curricular & Pedagogical Structure:** Adoption of a 5-3-3-4 design comprising:
    - ✓ 5 years of the **Foundational Stage**
    - ✓ 3 years of the **Preparatory Stage**
    - ✓ 3 years of the **Middle Stage**
    - ✓ 4 years of the **High Stage**
  - **Transformation of Curriculum & Pedagogy**
  - **Local, effective and efficient** school governance and sharing of resources through **school complexes**.
- **Higher Education**
  - **Consolidation** of current 800 universities and 40,000 colleges into about 15,000 large institutions
  - A new **institutional architecture** with three kinds of institutions-
    - ✓ Type 1: Research universities
    - ✓ Type 2: Teaching universities
    - ✓ Type 3: Colleges
  - Towards a **More Liberal Education** with a common core curriculum for undergraduates.
  - **National Higher Education Qualifications Framework (NHEQF) outlining the learning outcomes**
  - **Energised, Engaged & Capable Faculty** by designing **permanent employment (tenure) track system**.
  - Empowered Governance & Autonomy in Higher Education: **National Higher Education Regulatory Authority**- only regulator for all higher education including professional education.
  - Integrating **Professional Education** into Higher Education and Establishment of a **National Research Foundation**.
- **Other provisions**
  - Focus on **quality of Teachers: Merit-based scholarships** to encourage outstanding students to enter the teaching profession etc.
  - **Technology at all levels: E.g.** National Mission on Education through information and communication technology
  - Focus on **Vocational Education** to provide access to **vocational education to at least 50% of all learners** by 2025.
  - Focus on **Adult Education** to achieve 100% youth and adult literacy by 2030.
  - Increase in **public investment** to 20% of overall public expenditure and no to commercialisation of education.
  - **Rashtriya Shiksha Aayog/ National Education Commission (NEC)** to provide inspiring leadership headed by Prime minister
  - Focus on language, literature, scientific vocabulary in **Indian languages**

- **Pros**
  - Developed after extensive **consultations**
  - Looks at education as a **continuous process** addressing **all stages of education**
  - Focus on **foundational stages** of education i.e. **Early Childhood Care and Education**
  - **Special Education Zones (SEZ)** to cater to **disadvantaged regions**
  - **Focus on research**
- **Cons**
  - **Finances** and the absence of a **strong mechanism** for handholding states
  - Does not address the **lack of accountability of schools**
  - Does not consider **Direct Benefit Transfer (e.g. vouchers)** as a means to eliminate fake beneficiaries
  - Misses to address the gap of access to quality education between **India's rich and poor children**
  - No separate **funding** for **school complexes**



## PERSONALITY TEST PROGRAMME 2019

### ECONOMIC SLOWDOWN IN INDIA

Recently, according to the **World Bank's South Asia Economic Focus report**, India's GDP growth projection has **come down to 6% from 7.5%** as projected in April 2019. Quarterly GDP growth slowed for 5 quarters in a row, declining from a peak of 8.1% in the first quarter of 2018 to only 5.0% in the 2<sup>nd</sup> quarter of 2019, the lowest in over six years. Even the latest annual report of the RBI for the fiscal year 2018-19 confirmed that the Indian economy has indeed hit a rough patch.

Ministry of Commerce and Industry released numbers showing that growth in eight core sectors of the economy had slipped to 2.1% during July as compared to 7.3% during the corresponding month last year. The above numbers make it clear that India is in a middle of a sharp growth slowdown.

#### What is an economic slowdown?

- The technical term for an economic slowdown is **growth recession**. A recession is defined in economics as three consecutive quarters of contraction in GDP.
- This is the third instance of an economic slowdown for India in the past decade after the ones that began in June 2008 and March 2011, primarily driven by external environment.

#### Nature of the slowdown

There is an existing debate whether the economic slowdown is a **cyclical downturn** or a **structural correction**. While cyclical slowdowns can be dealt with using temporary fiscal and monetary stimulus, structural problems require long-run policy responses. There are many signs which indicate that the problem is more structural than cyclical. For e.g.:

- The introduction of the 2016 Insolvency & Bankruptcy Code (IBC) and re-capitalization of state-owned banks, though necessary reforms, turned out to be inadequate to resolve the weakness.
- Further, since the beginning of 2019, even the relaxed monetary policy stance and toned-down Prompt Corrective Action (PCA) norms are not push up credit demand.

#### Reasons

- **Collapse in Private Consumption**
  - The most prominent factor seen as the cause behind the slowdown is **deceleration of the domestic demand**, reducing **Private Final Consumption Expenditure (PFCE)**. Private consumption grew 3.1%, compared to 7.3% a year ago.
  - RBI's annual report points out that significant reduction in sales of motorcycles and tractors during Q1 2019-20 is a clear reflection of the **slowdown in rural consumption demand**.
  - **Low income trap of the farm sector** is believed to be a major contributor to the demand downturn, as evident from Q1 GDP numbers for the agriculture, forestry and fishing segment released by the NSO. The segment grew at 2% in FY20 as opposed to 5.1% in the same quarter of the previous year.
  - Similarly, **urban consumption demand** is also slackened as observed by a strong contraction in passenger car sales, domestic air passenger traffic as well as consumer durables such as TV sets. As demand slackens and consumers begin to consciously reduce their spending, the slowdown that the economy is already experiencing becomes self-reinforcing.
  - If consumption spending falls, the economy would **stagnate** and prices **deflate**. Lower prices, if **unable to recover the costs**, would **halt the operations of any firm** and would **initiate the layoff process**. This, in turn, reduces earnings further. Hence, this **vicious cycle** keeps upon repeating itself until the economy slips into a deeper state of shock.

- **Rising unemployment and layoffs in employment intensive sectors** such as automobiles and construction have not just created utter distress in the labour market but also shaken consumer confidence and choked demand.
- The bargaining power of the working class in industries and services except in the top layer in the IT and finance sectors, has been falling due to **informalisation** and **contractualization** of almost 80% of employment in the formal sector. Share of the labour in value-added formal sector has dropped from 33% in 1990-91 to 23% in 2012-13.
- India's growth numbers were earlier justified through private consumption, with large-scale employment being created in the gig economy, which is not adequately captured in official figures. Yet, recent events like layoffs at restaurant aggregator Zomato indicate slowdown in such sectors as well.
- **Global Slowdown**
  - Consumption demand has fallen in all the major markets including Europe and China. From the early months of 2018, a combination of global spillovers - from attempted monetary policy normalization by central banks (i.e. increasing short-term interest rates and money supply contraction); elevated and volatile crude oil prices; geopolitical tensions; US-China trade war; and Brexit – have not only **contracted world trade** and, in turn, **Indian exports**, but have also triggered **capital flows out of emerging market economies** (EMEs).
  - Growth is also being weighed down by country-specific factors in **emerging market economies**, and by structural forces, such as **low productivity growth** and **aging demographics** in advanced economies.
  - The deceleration in growth in the context of slowing global GDP and trade growth, as well as an uncertain external environment, bears resemblance to 2008 and 2012/13 when GDP growth in India slumped.
- **Declining private investment**
  - It is unrealistic to expect that the private corporate sector or even foreign investment would invest in an economy with a shrinking market.
  - Absence of investment accentuates the crisis. Investment creates jobs & incomes. As this income flows from one hand to the other, the 'state of confidence' of businessmen to invest goes up, reinforcing the virtuous cycle.
- **Restrained government spending**
  - Government spending, which kept the economy afloat during the last 5 years, was cut back in the last quarter of 2018-19 to meet the fiscal deficit target of 3.4%.
  - Most of the growth during the period of 2014-17 was marked by increased Government spending, allowed by fiscal space due to sharp decline in the world oil prices.
  - Using creative accounting methodologies like such as 'rolling over' a part of the overall subsidy bill & dues to the states to the next financial year; using PSEs like LIC to purchase divested stakes in the disinvestment process leads to understatement of fiscal deficit. This not only makes India's fiscal consolidation numbers appear less attractive to investors and makes Govt. reluctant to spend more.
  - Budgeted schemes such as PM-KISAN, Ayushman Bharat etc. already constrain Government's hand in spending.
- **Structural Issues:** In such a weak economic environment, structural issues, like weak financial sector, are more starkly evident.
  - Despite high economic growth in the last decade, India's banking system still has a significant level of non-performing assets of close to 10% of total assets. This has resulted into a fall in overall credit availability, as the banks are unwilling to lend to overleveraged corporate sector.
  - Non-banking financial companies (NBFCs), which complemented credit availability from banks, were plunged into a liquidity stress post IL&FS crisis. NBFCs financed 40% of car sales, and hence the squeeze contributed to the recent consumption slowdown.
- **Issues with GDP Estimation:**
  - The absolute GDP in the base-year (2011-12) contracted 2.3%, while annual growth rates in the following years increased substantially. For 2013-14, GDP by the new series grew at 6.8% compared with 4.2% in the old series. The growth in manufacturing moved from -0.7% to +5.3%.
  - Such wild swings drew widespread doubts, given that it was out of line with other economic correlates such as bank credit growth, industrial capacity utilisation, exports & imports, Index for Industrial Production (IIP) etc.
  - In a recent published research paper, Former Chief Economic Adviser Arvind Subramanian had concluded that the country's growth has been overestimated by around 2.5% between 2011-12 and 2016-17.
- **Disruptive events** such as **demonetization and implementation of Goods & Services Tax (GST)** are believed to have hurt the supply chains and adversely impacted agriculture, construction and manufacturing, albeit temporarily.

## Measures taken by the Government

- **Monetary Policy Measures**

- **Repo rate cut:** In Oct 2019, RBI lowered the repo rate to 5.15%, lowest in 9 years. This year, RBI has cut down the repo rate by 135 basis points signaling continued accommodative stance.
- **Monetary Policy Transmission:** Despite surplus inter-bank liquidity, however, monetary transmission has been weak and bank lending rates have not reacted much. Linking floating rate loans extended to both retail consumers as well as MSMEs to external benchmarks (e.g. repo rates, yield on 3/6 months treasury bills etc.) might improve monetary policy transmission.
- **Higher flow of funds to NBFC sector:** RBI relaxed liquidity norms to allow more lending to non-banking finance companies (NBFCs) by banks

- **Manufacturing Sector:** While monetary policy will continue to act as the main countercyclical tool, the fiscal measure is expected to have a positive economic impact. Government of India has also launched a stimulus package that will support the ongoing expansionary monetary policy.

- It includes **lowering down of effective corporate tax** and **tax holidays** for fresh investment in manufacturing.
- Scope of **Corporate Social Responsibility (CSR)** funding was increased to funding of incubators, contributions to publicly funded universities, autonomous bodies engaged in conducting research in science & technology etc. CSR violations are no longer treated to be criminal offences.

- **Exports:** India's share in manufacturing exports is barely 2% and therefore, there is a potential to increase that amidst global slowdown

- **Trade facilitation** by leveraging technology to reduce turn-around-time (TAT) at airports/ports/customs through process digitization and elimination of offline/manual services
- Reducing **GST Refund Period Delay**
- **Special FTA Utilisation Mission** to promote awareness of preferential duties among Indian exporters and facilitate compliance requirements (Rules of Origin/Certificate of Origin etc.)
- Extending **higher insurance cover** to banks lending working capital to exports
- Proper management of **exchange rate**

- **Foreign Investments**

- Government withdrew additional surcharge on long and short term capital gains earned by Foreign Portfolio Investors (FPIs) arising from transfer of equity shares
- Know Your Customer (KYC) norms were simplified for foreign investors to improve market access
- Government recently opened up FDI in contract manufacturing sector

- **Housing Sector**

- **Relaxation of External Commercial Borrowings (ECB) guidelines** for affordable housing to facilitate financing of home buyers who are eligible under the Pradhan Mantri Awas Yojana
- Lower interest rates on House Building Advance and link it with 10 year G Sec yields
- Special ₹20,000 cr fund as a last-mile funding for completion of ongoing housing projects that are not classified as non-performing assets (NPAs) or are facing bankruptcy proceedings under NCLT

- **Private Demand:**

- GST on many consumption items such as automobiles has been cut down.
- Government is trying to address the problem of rural distress & put more money in the hands of poor through income support schemes like PM-KISAN.
- Recently, to increase rural wages & purchasing power and thereby reviving rural demand, Government linked wages under MNREGA to Consumer Price Index for Agricultural Labourers.

## Way Forward

- **Counter cyclical fiscal response:** Currently, we are facing an unusual situation of low inflation and low GDP growth in nominal terms and hence, there is a need to take the risk of cyclical fiscal expansion.

- State governments must be encouraged to increase their capital expenditure relative to their respective gross state domestic products

- **Government Spending: Long-term revival of consumption demand** is predicated largely on the government's ability to create **jobs** and **raise wages** in a classical Keynesian manner. For that, Government needs to spend more.

- Government must continue pursuing its asset sale and disinvestment programme to generate additional fiscal space for spending.
- ₹1.76 lakh cr windfall that the Government received from RBI should be judiciously utilized for **reviving rural demand** primarily by increasing expenditure on rural infrastructure projects.
- Through public-private partnership (PPP) mode, the private sector may be incentivized to supplement government's investment.

- **Redesign MNREGA:** Over the years, due to paucity of funds and untimely disbursal, MNREGA has become a supply-based system from a demand based system.
  - MNREGA must be redesigned back to its original form where people can demand work from the government.
  - Implementing successful social audit models on the lines of states like Andhra Pradesh & Rajasthan would lead to better wage realization for workers in rural areas.
- **Structural Reforms:**
  - Public Sector Banks which account for 75% of the India's banking assets face serious misgovernance issues as evident from increasing number of bank frauds. In the 1<sup>st</sup> quarter of FY19-20, a total of 2480 cases of fraud involving a sum of ₹32,000 cr were reported from PSBs.
    - ✓ Therefore, there is a need to ensure **transparent and meritocratic appointments to upper management and functioning of Board of Directors independent of the Government**
    - ✓ Additionally, **management** must be made **more accountable to the Board** through proper performance evaluation mechanisms
    - ✓ To avoid the situation of 'regulatory capture' by the Government, the independent functioning of RBI has to be ensured, particularly in case of appointments to the upper management and the Board.
    - ✓ In fact, **domain expertise** and **functional competence** should be prioritized in appointments to all regulatory bodies since functions like monetary policy, banking supervision, data collection & dissemination, audit of government financial accounts etc are all technical jobs.
  - **Increase female labour force participation rate (FLFPR)** (which has fallen from 31% in 2004 to 23.3% in 2017-18) by providing tax rebates/increasing threshold income for zero income tax. This would encourage paid jobs among women and give a definitive boost to consumption.
    - ✓ Such a policy (called "**Womenomics**") **was adopted in Japan** under President Shinzo Abe to get more women into the workforce
  - Moreover, greater Government spending cannot sustain growth for long unless **major supply-side reforms** such as **land and labour reforms** are undertaken.
  - Structural shifts over the long run can be achieved through **additional investments** in the **health and education sectors** that will have multiplier effect on the economy.
- Finally, **international cooperation** is very much required to counter this synchronized slowdown (according to IMF) in the world's economy, which continues to be weakened by rising trade barriers and increasing geo-political tensions. There must be a decisive and inclusive discourse on issues ranging from free trade, safely adapting to FinTech, implementing the financial regulatory reform agenda, data localization etc.

Therefore, to fend off other risks to growth and to raise potential output, economic policy should involve both monetary and fiscal measures in a coordinated manner. Besides, it is also the time to look at the slowdown as an opportunity to bring widespread structural corrections in the economy, be it in the banking sector, governance in general and fiscal reforms relating to direct taxes and GST. Milton Friedman, a Nobel laureate in economics, once wrote: "Only a crisis — actual or perceived — produces real change. When that crisis occurs, the politically impossible becomes the politically inevitable."



## Summary

- Indian economy is going through a **phase of slowdown** which is indicated by- quarterly GDP growth slowing for 5 quarters in a row, dip in the growth in eight core sectors of the economy, and World bank's revised GDP growth rate of India to 6% from 7.5%.
- The inadequacy of fiscal and monetary stimulus like prompt corrective action, relaxed monetary policy, in addressing the slowdown indicates that **it is structural, and not cyclical in nature.**

## Reasons for slowdown

- **Collapse in private consumption** as both urban and rural demand are falling, due to low income trap of the farm sector, rising unemployment and layoffs, informalization and contractualization.
- **Global Slowdown** due to increasing interest rates, volatile crude oil prices, US-China trade war leading to fall in consumption demand in major markets like Europe and China, resulting in fall in Indian exports, and out flow of capital.
- **Decline in private investment** due to shrinking market.
- **Restrained government spending** to meet the fiscal deficit target, and due to budgeted schemes, such as PM-KISAN, Ayushman Bharat etc. that constrain Government's hand in spending
- **Structural Issues**, like weak financial sector, evident in rising NPAs (close to 10% of total assets), IL&FS crisis resulting in low credit availability.
- **Issues with GDP Estimation** further raised doubts as it was out of line with other economic indicators like bank credit growth, Index for Industrial Production (IIP)
- **Disruptive events** such as **demonetization and implementation of Goods & Services Tax (GST)** are believed to have hurt the supply chains across the sectors.

## Measures taken

- **Monetary policy measures** including lowered the repo rate to 5.15% (lowest in 9 years), better monetary policy transmission, eased liquidity norms to NBFCs.
- **Fiscal measures include** lowering down of effective corporate tax and tax holidays, scope for CSR utilisation in funding of incubators, contributions to R&D etc.
- **Measures to boost exports** including trade facilitation by use of technology, Special FTA Utilisation Mission, higher insurance cover to capital lending banks, proper management of exchange rate, Reducing GST Refund Period Delay etc
- **To boost foreign investments** easing KYC norms for foreign investors, withdrawal of additional surcharge on long and short-term capital gains, opening new areas for FDI etc
- **To boost private demand, relaxation of ECB norms** for housing sector, GST reduction on consumption goods, schemes to boost rural demand like PM KISAN, revising wages under MNRGA etc

## Steps to be taken

- Fiscal response by **increasing capital expenditure** including state governments, in infrastructure projects and incentivising private sector via PPP mode.
- **Redesign MNRGA** to make it demand driven and implement social audit system like in Andhra Pradesh, Rajasthan.
- **Structural reforms** like addressing governance issues in public sector banks, bringing in domain experts for technical jobs, like auditors etc.
- **Increase female labour force participation rate (FLFPR)** (which has fallen from 31% in 2004 to 23.3% in 2017-18) by providing tax rebates/increasing threshold income for zero income tax. (Like **"Womenomics"** adopted in Japan).
- **Major supply-side reforms** such as **land and labour reforms** and **additional investments** in the **health and education sectors** that will have multiplier effect on the economy.
- **International cooperation** on issues ranging from free trade, safely adapting to FinTech, implementing the financial regulatory reform agenda, data localization etc.



## PERSONALITY TEST PROGRAMME 2019

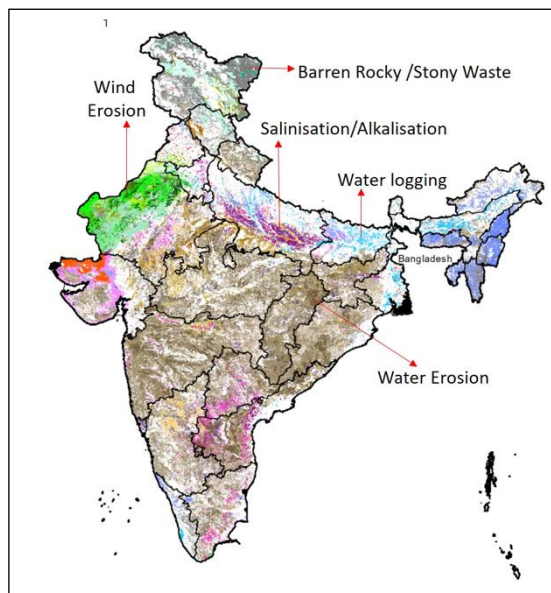
### INDIA AND LAND DEGRADATION NEUTRALITY

#### Introduction

Land degradation is increasingly becoming a major concern for Indian economy, especially the agriculture on which two-third of the population depend for their livelihood. Many policies and programs have been initiated in the last two decades to address this problem, but the results have not been much encouraging.

#### Land Degradation and India

- Land degradation is a **reduction or loss of the biological or economic productivity and integrity of land** (rainfed cropland, irrigated cropland, pasture, forest etc.) resulting from land uses, processes arising from human activities and habitation patterns, such as soil erosion caused by wind and/or water; deterioration of properties of soil; and long-term loss of natural vegetation.
- When land degradation occurs in dryland areas, more specifically arid, semi-arid and dry sub-humid areas, it is referred to as **desertification**. Around 69% of India falls under drylands.
- State of India's Environment 2019** shows that 30% of India's total geographical area is being affected by land degradation.
  - 82% of these degraded land lies in just nine states: Rajasthan, Maharashtra, Gujarat, Jammu & Kashmir, Karnataka, Jharkhand, Odisha, Madhya Pradesh and Telangana.
  - It shows 1.87 million hectares of land in the country faced process of desertification between 2003-13 period.



#### Major causes behind land degradation in India

- Poor agricultural practices** such as improper crop rotations; overuse of agrochemicals etc.
- Soil erosion** which leads to surface runoff and removal of topsoil.
- Vegetation degradation** through activities such as deforestation, shifting cultivation etc.
- Increasing urbanization** driven by increasing population pressure has increased diversion of land.
- Overgrazing**- On one hand, India has one of the largest numbers of cattle population while on the other the grazing practices in India are not sustainable.

#### Impact of Land Degradation on India

- Economic Impact and food security**- As per TERI, the economic losses from land degradation and change of land use in 2014-15 stood at 2.54% of India's GDP.
  - Most affected are the small and marginal farmers who make-up about 86% of the total farmers in India.
- Climate Change**- It is exacerbating climate change events, which in turn, are causing even greater degradation.
  - For e.g. degraded land loses its capacity to absorb carbon-dioxide (CO<sub>2</sub>), a greenhouse gas (GHG) that is the biggest factor in worsening global warming.

- **Water Scarcity-** The dryland population vulnerable to water stress and drought intensity is projected to reach 178 million under the most ideal conditions of 1.5 deg-C warming by 2050.
- **Rights of indigenous people-** Insecure land tenure affects the ability of people and communities to fight climate change, which is further endangered by land degradation.

#### About Land Degradation Neutrality (LDN)

- As per the UNCCD definition, LDN is a state whereby **the amount and quality of land resources**, necessary to support ecosystem functions and services and enhance food security, **remains stable or increases** within specified temporal and spatial scales.
- The **overarching principle for LDN** includes:
  - **Avoid:** Land degradation can be avoided by **addressing drivers of degradation** and through proactive measures to prevent adverse change in land quality and confer resilience, via appropriate regulation, planning and management practices.
  - **Reduce:** Land degradation can be reduced or mitigated on agricultural and forest land through application of **sustainable management practices**.
  - **Reverse:** Where feasible, some of the productive potential and ecological services of degraded land can be restored or rehabilitated through actively **assisting the recovery of ecosystem** functions.
- LDN can prevent Soil erosion, desertification, water scarcity, migration insecurity and income inequalities caused by land degradation. Thus, it helps in combating the impacts of climate change.
- It represents a paradigm shift in land management policies and practices. It is a unique approach that counterbalances the expected loss of productive land with the recovery of degraded areas.
- **India** has adopted the goal of **achieving LDN by 2030 as adopted under Sustainable Development Goals. (Target 15.3 of SDGs).**

#### Government's broad approach towards addressing land degradation

- **Adoption of watershed approach-** planning based on micro-watersheds, use of remote sensing data and spatial data in planning at the micro-watershed level. E.g. **Integrated Watershed Management Programme (IWMP)**
- **Integrated treatment** incorporating contouring, gully plugging, vegetative as well as engineering-based solutions for soil-moisture conservation, covering agricultural as well as non-agricultural lands. E.g. **Fodder and Feed Development Scheme**-its component of **Grassland Development including Grass Reserves**.
- **Integrated farming-based approach-** e.g. National Afforestation Programme (NAP), National Mission for Green India (GIM), incorporating fodder and fuelwood supply, farm-forestry and agroforestry and silvi pastures (combination of **trees, forage plants and livestock** together as an integrated, intensively-managed system), stall feeding, improved chullahs etc.
- **Focus on water management-** aquifer recharge and water budgeting as well as crop planning. E.g. Command Area Development and Water Management (**CADWM**) programme, Soil Conservation in the Catchment of River Valley Project National Watershed Development Project for Rainfed Areas (**NWDPR**).
- **Focus on social aspects-** e.g. Constitution of **Watershed Committee** under the Gram Sabha, Water User Association development, Social Audit under **MGNREGA**, Joint Forest Management (**JFM**) and Social Fencing by involving local communities.
- **Incorporation of livelihood related activities-** Development of micro-enterprises, involvement of Self-Help Groups (SHGs), programmes such as Mahila Kisan Sashaktikaran Pariyojana (**MKSP**) focusing on increasing capabilities women farmers with a view to increasing sustainability.
- **Adoption of climate-adaptation related solutions-** both with regard to floods and intense precipitation as well as temperature and moisture stress.
- **Increasing the role of Panchayati Raj Institutions (PRIs)-** and ensuring "convergence" between Government programmes and programmes executed by PRIs.

#### Steps taken by India to achieve Land Degradation Neutrality

- **Comprehensive National Plan-** The National Action Plan (NAP) to combat desertification was launched in 2001 for 20 years.
- **Mapping of issue-** The ISRO and some other partners prepared the **Desertification and Land Degradation Atlas (2016)** of entire country using Indian remote sensing satellites data in GIS environment.
- **Mission Mode approach-** India adopted a **Bonn Challenge pledge**, (a global effort to bring 150 million hectares of world's deforested and degraded land into restoration by 2020 and 350 million hectares by 2030).
- **Sustainable land and Ecosystem Management (SLEM) Programme-** which is jointly implemented by Government of India and Global Environment Facility (GEF), aims to promote sustainable land and ecosystem management.

- **Initiatives launched-** Government has launched various schemes like Integrated Watershed Development Program, Per Drop More Crop, National Afforestation Program, National Green Mission, etc. have components to tackle Land degradation.
- **Delhi Declaration-** India hosted the COP 14 to UNCCD (*refer the box*) recently and adopted new targets.
  - India raised its total area that would be restored from its land degradation status, from 21 million hectares to 26 million hectares till 2030.
  - India has announced to set up a Centre of Excellence at the Forest Research Institute, Dehradun, for providing technical assistance to meet the challenges.

#### Important takeaways of the CoP 14 of the United Nations Convention to Combat Desertification (UNCCD)

- **Adoption of Delhi Declaration:** in which parties expressed commitment for a range of issues, including gender and health, ecosystem restoration, taking action on climate change, private sector engagement, **Peace Forest Initiative etc.**
  - **Peace Forest Initiative** is an initiative by South Korea to provide a practical platform that will foster international collaboration by demonstrating the value of achieving land degradation neutrality in cross- border post-conflict situations.
  - Emphasis on need to participate in **United Nations Decade on Ecosystem Restoration (2021–2030)**, which commits to adopting an integrated, best-practice approach to land restoration based on scientific evidence and traditional knowledge.
- **Drought Toolbox launched:** The Drought Toolbox is currently being developed as part of the Drought Initiative through the close partnership among UNCCD, WMO, FAO, GWP, National Drought Mitigation Centre (NDMC) of the University of Nebraska, and UNEP-DHI
  - It is being designed to provide drought stakeholders with easy access to tools, case studies and other resources to support the design of National Drought Policy Plan with the aim to boost the resilience of people and ecosystems to drought.
- **Release of Adapt Now:** A Global Call for Leadership on Climate Resilience' Report:
  - It has been written by the **Global Commission on Adaptation** — a group of 34 leaders in politics, business and science.
  - It focuses on making the case for climate adaptation, providing specific insights and recommendations in key sectors.
  - As per it, an investment of \$1.8 trillion (Rs 2 lakh crore) in climate-adaptation measures over the next decade will bring about concrete transformation on the ground
- India has called upon the leadership of UNCCD to create a **Global Water Action Agenda** which is central to the land degradation neutrality strategy.

#### Way forward

- To reduce land degradation, the increasing pressures on land resources should also be reduced. In this context, **Global Land outlook by UNCCD** outlines certain pathways that producers, consumers, governments and corporations can follow to stabilize and reduce pressure on land resources:
  - **Multifunctional landscape approach:** Prioritizing and balancing different stakeholder needs at a landscape scale while identifying those land uses in Land-use planning that best meet the demands of people towards safeguarding biodiversity.
  - **Farming for multiple benefits:** The agricultural practices should be shifted in a way to support a wider array of social, environmental, and economic benefits and optimize the most desirable suite of ecosystem services from food production activities.
  - **Managing the rural-urban interface:** Cities designed for sustainability in the wider landscape can reduce environmental costs of transport, food, water, and energy, and offer new opportunities for resource efficiency.
  - **Creating an enabling environment** to scale local successes into large-scale through stakeholder engagement, land tenure, gender equality, and the availability of sustained investment and infrastructure.

#### Some successful practices

- **Sustainable agricultural practices:** In Jamni village in Telangana, people cultivated vegetable kitchen gardens, where they grow vegetables and fruits, where the size of garden is less than half an acre. Here dung, household garbage and ashes are used as fertilizers.
- In Ghana, **community land management groups** were formed, trained and empowered as **community educators** in **sustainable land management (SLM)** practices like the formulation of participatory land use plans, establishment of SLM committees, etc. The project helped restore 30 ha of degraded woodland and placed them under SLM.
- In Cuba, after severe drought during 2014- 2017, **new varieties of crops** that are resistant to extreme weather, including tomato, onion, garlic, chili, banana etc. were encouraged to be cultivated, with **sustainable farming practices** were also introduced such as planting along contour lines to reduce soil erosion, crop rotation. This brought a total of 210 hectares of farmlands have come under sustainable management using climate-smart measures.

- **No net loss of healthy and productive land** by providing incentives for the sustainable consumption and production of natural resources. E.g. incentivizing reduction in the current levels of food waste and loss. Roughly **one third of the food produced** in the world gets lost or wasted accounting for **4.4 billion tons of annual greenhouse gas emissions**.
- **Conservation of Land degradation in rangeland** (areas that consist predominantly of grasses, grass-like plants, and shrubs - encompass almost half the world's land surface) through
  - Land capability and condition assessments and monitoring.
  - Grazing pressure management, Pasture and forage crop improvement, Silvo-pastoral management, Weed and pest management
  - Maintaining appropriate fire regimes and the reinstatement or development of local livestock management practices and institutions.
- Combating land degradation resulting from **invasive species** involves the identification and monitoring of invasion pathways and the adoption of eradication and control measures (mechanical, cultural, biological and chemical).
- **Conservation of Land degradation from mining areas** include:
  - On-site management of mining wastes (soils and water),
  - Reclamation of mine site topography and early replacement of topsoil
  - Restoration and rehabilitation measures to recreate functioning grassland, forest, wetland and other ecosystems
- **Conservation of Land degradation in wetland** include, controlling point and diffuse pollution sources, adopting integrated land and water management strategies and restoring wetland hydrology, biodiversity, and ecosystem functions through passive and active restoration measures, such as constructed wetlands
- **Creation of windbreaks** through afforestation, tree planting and ecosystem restoration programmes that can function as "green walls" and "green dams" that reduce dust and sandstorms and sand dune movement.
- Recognizing the **key role of Land managers**, including indigenous people and local communities in the design, implementation and evaluation of sustainable land management practices.
- **Urban planning**, replanting with native species, green infrastructure development, remediation of contaminated and sealed soils (e.g. under asphalt), wastewater treatment and river channel restoration.
- **Eliminating perverse incentives that promote degradation**, e.g. subsidies that reward overproduction, and devising positive incentives that reward the adoption of sustainable land management practices.

## Conclusion

Reversal of land degradation is important for countries for not just economic gains but also for the achievement of SDGs and Paris agreement goals. Reduction and reversal of land degradation could mitigate 1/3rd of greenhouse gas by 2030 through soil's carbon absorption and storage functions.

## Summary

- Land degradation is a **reduction or loss of the biological or economic productivity and integrity of land** resulting from land uses, processes arising from human activities etc. 30% of India's total geographical area being affected by land degradation.
- Land degradation in dryland, arid, semi-arid and dry sub-humid areas is referred to as **desertification**. 69% of India falls under drylands.
- **Major causes behind land degradation in India**
  - Poor agricultural practices like improper crop rotations; overuse of agrochemicals etc.
  - Soil erosion
  - Vegetation degradation
  - Increasing urbanization
  - Overgrazing
- **Impact of Land Degradation on India**
  - **Economic Impact:** 2.54% of India's GDP (in 2014-'15)
  - **Climate Change** as degraded land loses its capacity to absorb CO<sub>2</sub>
  - Food Security
  - Water Scarcity
  - Rights of indigenous people
- **Land Degradation Neutrality (LDN)**, is a state whereby the amount and quality of land resources, necessary to support ecosystem functions and services and enhance food security, remains stable or increases within specified temporal and spatial scales.
- LDN is based on **Avoid, reduce and reverse** principles. **India** has adopted the goal of **achieving LDN by 2030 as adopted under Sustainable Development Goals. (Target 15.3 of SDGs)**.
- **Steps taken by India to achieve Land Degradation Neutrality:**
  - The **National Action Plan (NAP)** to combat desertification was launched in 2001 for 20 years.
  - ISRO and other partners prepared the **Desertification and Land Degradation Atlas (2016)**
  - India adopted a **Bonn Challenge pledge**
  - Initiatives like Integrated Watershed Development Program, Per Drop More Crop, National Afforestation Program, National Green Mission etc.
  - **Focus on social aspects** like **watershed Committee** under the Gram Sabha etc.
  - **Sustainable land and Ecosystem Management (SLEM) Programme**
  - **Delhi Declaration of COP 14 to UNCCD**, hosted by India
- **Important takeaways of the CoP 14 of the United Nations Convention to Combat Desertification (UNCCD)**
  - **Peace Forest Initiative** to achieve land degradation neutrality in cross- border post-conflict situations.
  - **Drought Toolbox acting like** knowledge bank, for countries to anticipate and prepare for drought was launched.
  - **Adapt Now:** A Global Call for Leadership on Climate Resilience' Report was released.
  - India called upon to create **Global Water Action Agenda**
- **Way forward**
  - **Global Land outlook** by UNCCD outlines following pathways
    - ✓ Multifunctional landscape approach
    - ✓ Farming for multiple benefits
    - ✓ Managing the rural-urban interface
    - ✓ Creating an enabling environment to scale local successes
    - ✓ Ensure no net loss of healthy and productive land
  - Combating land degradation resulting from **invasive species**
  - **Conservation of Land degradation from mining areas**
  - **Conservation of Land degradation in wetland**
  - **Creation of windbreaks** through afforestation, tree planting etc.
  - Recognizing the **key role of Land managers** like indigenous people etc.
  - Appropriate **urban planning**

- **Some successful practices**
  - **Sustainable agricultural practices** like **vegetable kitchen gardens** In Jamni village in Telangana
  - **Community land management groups** in Ghana
  - Introduction of new varieties of extreme **weather resistant crops** with **sustainable farming practices** in Cuba.



## PERSONALITY TEST PROGRAMME 2019

### INDIA PAKISTAN RELATIONS

After the independence India and Pakistan charted out separate courses for nation building with a hope that there was little left to fight among the two countries. However, the history of India-Pakistan relations since last 72 years has been a mix of aggression-reconciliation.

#### Background

##### Phase of active aggression (1947 – 2001)

- The partition caused one of the largest **human migrations** ever seen and sparked riots and violence across the region.
- In October 1947 the **first India-Pakistan war over Kashmir** was fought following which Pakistan captured one-third major part of Kashmir (now referred to as Pakistan Occupied Kashmir (PoK)). Hari Singh, the then Maharaja of Kashmir, signed the Instrument of Accession with Indian government in return for military help. The war ended in 1949 after UN intervened leading to a ceasefire.
- Indo-Pak talks, initiated in 1963, failed to produce any agreement and two years later, in 1965, the **two countries fought their second war**. This war also saw a UN mandated ceasefire and in 1966, Indian PM Lal Bahadur Shastri and Pakistani President Ayub Khan signed the Tashkent Agreement agreeing to withdraw to pre-war lines and restoring the economic and diplomatic relations.
- In 1971, **India and Pakistan went to war a third time**, this time over East Pakistan when the West Pakistani central government refused to allow Awami League leader Sheikh Mujibur Rahman to assume the premiership. India launched a coordinated land, air and sea assault on East Pakistan following which the Pakistani army surrendered at Dhaka. India and Pakistan signed the Shimla Agreement in 1972.

**Shimla Agreement, 1972**

  - The Simla Agreement designates the ceasefire line of December 17, 1971, as being the new "Line-of-Control (LoC)" between the two countries, which neither side is to seek to alter unilaterally.
  - Both countries agreed to put an end to the conflict and confrontation and work for the establishment of a durable peace in the subcontinent. They agreed to settle any disputes "by peaceful means".
- During the 1970s Pakistan started permitting foreign expeditions in the area of the Siachen glacier to reinforce its claim on it as this area was not clearly defined under the ceasefire line between India and Pakistan. In response India launched **Operation Meghdoot in 1984** and flew its troops to the Siachen glacier, thus securing an area of approximately 3,300 sq km.
- Pakistan supported the **insurgency in Kashmir Valley in 1980s and 1990s** by providing weapons and training to fighters and fuelling a large influx of "mujahideen" in Kashmir who took part in the Afghan war against the Soviets in the 1980s.
- During 1998 both India and Pakistan successfully tested their **nuclear weapon capabilities**.
- In 1999, Pakistani forces and Kashmiri fighters occupied strategic positions on the Indian side of the LoC in Kargil which culminated into **the Kargil War** in which India pushed the enemy to the other side of the LoC.
- In 2001 the attack on the Indian Parliament in New Delhi by Lashkar-e-Taiba and Jaish-e-Muhammad was the last event of this phase of active aggression between the two countries.



### Phase of reconciliation (2001-2008)

- Even before 2001 there were efforts to improve the bilateral relations. The **Lahore Declaration** saw the start of **Delhi Lahore Bus Service** in 1999 during Indian PM's visit. The Declaration proposed several measures for confidence building (informing each other ahead of missile tests) and it was the second agreement covering nuclear non-aggression. (first was '**Non-Nuclear Attack Agreement**' signed between Rajiv Gandhi and Benazir Bhutto in 1988)
- Vajpayee's principles of *insaniyat* (humanism), *jamhooriyat* (democracy) and *kashmiriyat* (Kashmir's legacy of amity) further attenuated Indo-Pakistan differences.
- Despite the failure of Agra summit in the aftermath of Parliament attacks PM Vajpayee travelled to Pakistan for the South Asian Association for Regional Cooperation (SAARC) summit in 2004 where Pakistan agreed not to allow its soil to be used for anti-India activities.
- The year 2004 is marked as the **beginning of the Composite Dialogue Process**, in which bilateral meetings are held between officials at various levels of government (including foreign ministers, foreign secretaries, military officers, border officials etc.)
- In 2008, India joined a framework agreement between Turkmenistan, Afghanistan and Pakistan (TAPI) on a gas pipeline project. Also, several trade routes were opened between the two countries in the same year.
- The end of this phase is marked by the **Mumbai terror attacks in 2008** which were allegedly planned and abetted by the Pakistani intelligence agencies.

#### Why Siachen is important for India?

- The Siachen glacier demarcates central Asia from the Indian subcontinent, and separates Pakistan from China in the region.
- The Saltoro Ridge of the Siachen glacier serves as a divide that prevents direct linking of PoK with China, stopping them to develop geographical military linkages in the area.
- Siachen also serves as a watchtower for India to keep a deep watch on Gilgit and Baltistan regions of Pakistan.
- If Pakistan gets the location advantage in Siachen, it would become a big threat to India from the west in Ladakh in addition to Chinese threats from Aksai Chin of the east.

### Phase of passive bilateralism (2008 - 2015)

- This phase is marked by **low key interactions** between the two countries. The dialogue process either remained suspended during this period or was limited to official level talks majorly.
- The phase is marked by post Mumbai attack discussions where both countries were engaged in proving and rebutting the source of attacks.
- At the end of this period in 2014, the new government unveiled its '**Neighborhood First**' Policy which accorded priority to the South Asian countries in its foreign policy. **Prime Minister level visits** between the two countries started and good will gestures were shown by both sides (fishermen released by Pakistan, Pakistan PM invited to PM Modi's swearing-in ceremony etc.).
- Indian PM's visit to Pakistan in 2015 was first in a decade and was therefore a significant change in India's approach to Pakistan.

### Phase of renewed aggression (2015 - 2019)

- The present phase in India-Pakistan relations is marked by renewed hostility between the two countries.
- China and Pakistan signed the **China Pakistan Economic Corridor (CPEC)** infrastructural project in 2015 which was an affront to Indian sovereignty as the corridor passes through the PoK.
- Bilateral relations were dented by the series of attacks which started with Gurdaspur terror attacks in 2015 and included other major incidents like the Pathankot attack (2016), Nagrota attack (2016), Uri attack (2016), Amarnath yatra attack (2017) and finally the Pulwama attack in 2019.
- India responded to the Uri attack by carrying out a '**surgical strike**' inside PoK and to the Pulwama attack by carrying out the Balakot airstrike in Pakistan and **revoking the Most Favoured Nation (MFN)** status to Pakistan.
- Following the abrogation of Article 370 the diplomatic relations between the two countries have been downgraded. Pakistan launched a global diplomatic campaign to attract international support for Pakistan's position on Kashmir.

### What makes peace elusive between India-Pakistan?

- **Kashmir conundrum:** The tug of war over Kashmir represented the contest between identities of two nations. While Pakistan tries to alter status quo in Kashmir by force, India is content to retain its portion of Kashmir, without making serious efforts to change the situation on the ground.

- **Fractured internal dynamics of Pakistan:** In Pakistan both the army and the political parties failed to bring enduring stability, which provided a political space for Islamic extremism. Due to fractured polity, Pakistan could not develop an optimistic approach towards Kashmir and India. Also, army becoming increasingly entrenched in Pakistani politics, it developed a vested interest in sustaining hostility with India in order to justify its dominance.
- **Cross-border terrorism:** In order to achieve its ends, Pakistan fuels terrorist activities into India based on the military doctrine of '**bleeding India with a thousand cuts**' through these separate and scattered terror events. This often leads to violent escalations as witnessed during India's airstrike and Pakistan's retaliatory actions which severely limit and disrupt initiatives to build a stable relationship.
- **Boundary dispute:** Apart from Kashmir, India and Pakistan have not been able to come to terms on the exact boundary between the two nations in the north (along the LoC) and in the West (Sir Creek issue).
- **Water dispute:** As a response to the Pakistan based cross-border terrorism India has repeatedly called for abrogation of the Indus water distribution mechanism citing that blood and water cannot flow together. In the wake of the Uri attack, Delhi suspended the bi-annual water talks and promised to 'fast-track' projects to use hitherto unutilised water of the eastern rivers allocated to India via three national projects (the multipurpose Shahpurkandi and Ujh dams, and the Beas-Sutlej river-linking project.)

### Fallouts of the above issues

The core issues discussed above form the basis of conflicts of varying kind between the two nations. The fallouts of the fundamental issues can be witnessed as follows:

- **Limited economic integration:** The trade between two enemy countries has been far lower than its potential (around \$2 billion in 2018-19) due to complicated and non-transparent non-tariff and tariff measures. Without artificial barriers, this should be USD 37 billion. Cross-border trade usually follows the cycles of terrorist events showing ups and downs.
- **Stalled regional integration:** Intra-regional trade- accounts for a little more than 5 percent of South Asia's total trade while it accounts for 50 percent of total trade in East Asia and the Pacific and 22 percent in Sub-Saharan Africa. **SAARC and SAFTA** are also ineffective due to the conflictual relations between two.
- **Costly arms race:** In 2018, India allocated \$57.9 billion, or 2.1 percent of its gross domestic product (GDP), to support its troops, according to reports from the Stockholm International Peace Research Institute (SIPRI). Pakistan spent \$11.2 billion, about 3.6 percent of its GDP, on its 653,800 troops. This is despite South Asian region is one of the poorest in human development. Also. Both being nuclear weapons states makes South Asia nuclear hotspot, especially owing to rising terrorism in Pakistan and weak safety measures.
- **Affects India's external interests:** An unfavorable Pakistan hurts India's long-term engagement with South Asia, Central Asia and West Asia. Pakistan is geo-strategically more important in South Asia than India when it comes to issues like Afghanistan stability, Iraq etc. It plays an indispensable role for different countries like the US, China and Russia for different reasons.
- **Internationalization of dispute:** Pakistan is using every available forum – from animal husbandry to climate change– to raise the Kashmir issue and to forward its poisonous propaganda campaign against India in international fora.
- **Other issues** like capture of fishermen, drug smuggling from the Golden Crescent, fake Indian currencies sneaking through the western borders also loom large.

### Current events shaping India-Pakistan relations:

- The entire CAA-NRC-NPR issue is being stirred up by Pakistan not just to create trouble in India but also, internationally.
- The endgame in Afghanistan will probably see greater contestation between the two countries, in addition to new alignments.
- India's engagement with the US in the Indo-Pacific is being balanced by Chinese increasing engagement and reliance on Pakistan propping it up against India.
- Russia is opening up to Pakistan (during 2014-18 Russia was third largest supplier of conventional weapons to Pak, naval cooperation, energy cooperation and gas pipeline pact etc.) which is an unprecedented jolt to India.

### India-Pakistan Logjam: Cutting the Ice

Despite the bilateral relations at their historic low, a ray of hope is presented by events like opening of Kartarpur Corridor where political differences take a back seat and public sentiments are given primacy on both sides. At a

time when Indian government holds that talks and terror can't go together, political policy with Pakistan is that of complete isolation combined with disruption of bilateral and diplomatic talks the way out seems to be through non-political measures- trade relaxations, people-to-people confidence building measures and international mediation.

- **Normalcy in Kashmir:** India should concentrate on restoring normalcy in Jammu & Kashmir, mainstreaming the population, especially the youth, encourage investment in the state. Allaying minority fears in India through informed approach on issues like the NRC, CAA would unarm Pakistan at international forums.
- **People-to-people contacts:** At the ground level public opinion in both countries could be moulded through entertainment channels, media and music. Further cricket diplomacy can play a vital role in boosting such relations.
- **Trade facilitation:** Pakistan is undergoing severe economic crisis and is on the verge of receiving further international sanctions (FATF grey list). At this juncture, easing bilateral trade restrictions and facilitation of cross border trade could address the trust deficit between two countries.
- **International mediation:** Indirect mediation efforts via countries like US, China and Russia who have called for bilateral dialogue post 370 abrogation may provide the much-needed momentum. Annual summits of SCO, SAARC etc. could be useful in starting a non-adversarial bilateral dialogue between the two.

Instead of looking for any short cuts to peace and tranquility with Pakistan, India should wait for Pakistan to reset itself. Though India has limited control over internal political dynamics of Pakistan, it should not allow Pakistan to define contour of India-Pakistan relationship. India should pursue policy of both containment and negotiation. The best that can happen on the India-Pakistan front is that diplomatic relations are restored fully, trade opens up and there is some easing up on travel.

## Summary

- India – Pakistan relations since independence are marked by distinct phases of ups and downs.
- **Phase of active aggression (1947 – 2001):** This phase is marked by post-partition acrimony. The issues between India and Pakistan led to three Wars during this period fought in 1965, 1971 and 1999.
  - This phase is marked by rise in insurgency in Kashmir which was supported by Pakistan.
  - Both countries displayed their nuclear weapon capabilities also during this phase.
- **Phase of reconciliation (2001-2008):** This phase is marked by cordial overtures made by both countries. Permanent ceasefire was agreed by both across the border, confidence building measures were initiated; energy pacts agreed upon, trade and travel routes were inaugurated for the first time by both.
- **Phase of passive bilateralism (2008 - 2015):** Low key interactions take place, India's 'Neighborhood First' Policy unveiled, high levels visits initiated at the end of this period.
- **Phase of renewed aggression (2015-2019):** Cross-border terrorism peaked, several attacks on Indian soil took place, trade plummeted, internationalization of disputes and diplomatic isolation started, complete isolation and disruption of all levels of talks characterize this period.
- India and Pakistan's historic belligerence is founded on some basic irritants which include the history of partition, Kashmir dispute, water distribution, boundary disputes in some specific sectors and the continuing acrimony of Pakistan's military establishment for its failure in wars with India.
- Above irritants have been manifested into several face-offs in different domains which include low bilateral trade, separatism in Punjab, creation of external leverages to the detriment of each other, cross-border skirmishes, nuclear arms race etc.
- The international events and shifting of global power balance also effects India-Pakistan relations. It is in the light of these events that India should plan its policy vis-s-vis Pakistan in future.
- Now that the political level engagement is near zero, a start could be made through development of people-to-people level relations, international mediation, using multilateral forums to initiate sideline talks and focusing on development of and bringing normalcy in Kashmir.

