

History Of Civil Services In India

(i) Ancient India:

- Public administration in India can be traced back to the manuscripts of *Arthashastra* written by *Kautilya* which stipulates seven basic elements: *Swamin*(the ruler), *Amatya*(the bureaucracy), *Janpada*(the territory), *Durga*(the fortified capital), *Kosa*(the treasury), *Danda*(the army), and *Mitra*(the ally) - of the administrative apparatus. According to *Arthashastra*, the higher bureaucracy consisted of the *mantrins* (highest advisers to the king) and the *amatyas* (the civil servants).
- The next major phase was the rule of the *Guptas*, termed by many historians as the 'Golden Age'.

(ii) **Medieval India:** During the Mughal era, the bureaucracy was based on the *mansabdari* system – essentially a pool of civil servants available for civil or military deployment.

(iii) British India:

- The original conception of civil service can be traced back to the **Royal Charters** which gave the East India company, the power to raise a cadre of troops-for both civilian and military purposes. These officers gradually transformed from trade officers to administrative officers who signed "covenants" thereby, being part of the "covenanted civil service".
- The origin of civil service lies in the implementation of **Northcote-Trevelyan Reforms** of 1854. During the East India company period, the civil services were classified into three categories– covenanted, uncovenanted and special civil services. The covenanted civil service, or the **Honourable East India Company Civil Service (HEICCS)** largely comprised of civil servants occupying senior posts in the government.
- The covenanted and the uncovenanted or simply, the subordinate service marked the distinction based on recruitment. The former category of officers was recruited from England, the latter largely comprised Indian officers.
- **Competitive exams** were introduced in **mid-1800s** which gave primacy to merit-based appointment as opposed to the privilege-based appointment through a referral system. **Macaulay committee, Islington committee, Lee commission** reformed the public services and strongly suggested to bring statutory Public Service Commission into force.
- In 1858, the **HEICCS was replaced by the Indian Civil Service (ICS)** which became the highest civil service in India between 1858 and 1947 established to handle the affairs on behalf of the Queen. The civil services soon became the proverbial "steel frame" to maintain control over the vast British Empire.
- By Government of India Act, 1919, the Indian Civil Services were split into two arms - the All India Services and the Central Services.

(iv) **Post-Independence:** The current set up can be largely attributed to the role of Sardar Vallabhai Patel, who supported civil services, especially the All India Services in the Constituent Assembly on October 10, 1949 on the grounds of patriotism, loyalty, sincerity and ability. The provisions for modern Civil Services and All India Services is dealt under **Part XIV (Article 308-323)** of Constitution of India, and the All India Services Act, 1951.

Early Indians In The Civil Service

- Until 1922, when the Montague Chelmsford Reforms came, the exams were **only conducted in London** which restricted the access of Indians to clear the examination.
- **Choorayi Karnan** (1812)-the first Deputy Collector in India -the highest government post an Indian could hold at that time.

- **Satyendranath Tagore** was the first Indian to clear the ICS exam in 1864. **Bihari Lal Gupta** and **Ramesh Chander Dutt**, who later became the President of Indian National Congress in 1899 and wrote 'The Economic History of India', are other important names.
- **Netaji Subhas Chandra Bose** cleared but did not join the examination. **Sir Benegal Narsing Rao** was another eminent personality to join the ICS, later appointed as the constitutional advisor on 1 July 1946. He became the first judge of the International Court of Justice from India.
- **Sukumar Sen**, India's first Chief Election Commissioner who later became Sudan's first Chief Election Commissioner as well is another eminent personality.

Challenges and Reforms in The Civil Service

- Various committees, including the **Second ARC**, over the years have suggested improvement in civil services regarding *recruitment, mid-career training, capacity building, the impetus for specialisation, efficiency, accountability, etc.*
- Introduction of **lateral entry** to have expert consultants at the Joint Secretary Level, the regular training programmes at various levels for career of civil servants and a record of performance evaluation at some of the reforms.
- RTI Act, 2005, The Citizen's Charter in India initiated by the Department of Administrative Reforms and Public Grievances in Government of India (DARPG) to "*include standards of service and time limits that the public can reasonably expect, avenues of grievance redress and provisions for independent scrutiny with the involvement of citizens and consumer groups*" are revolutionary steps towards better governance, transparency and accountability.
- A more recent debate in bureaucracy, is about "**generalist**" versus "**specialist**". The role of an administrator is to ensure fair, equitable and efficient administration of his or her unit, right from the subdivision up to the ministries at State and Central levels. Therefore, an officer who can effectively handle all areas of administration and policy from health to agriculture to defence and ensure that work is done at levels junior to oneself needs to be one with "general skills", although some say that the ability to administer well is in itself a unique skill.

Civil Servants As A Role Model For The Youth

- **SR Sankaran**, a 1956 batch "People's IAS officer" is one of the very few civil servants in whose name the statue is erected and is a household name in Andhra Pradesh even today. His efforts in abolishing bonded labour and his pioneering work on welfare schemes to uplift the marginalised sections, especially with the *Safai Karamchari Andolan* is commendable.
- **BN Yugandhar**, further to the CEO of Microsoft, Satya Nadella also has a mass following. Right from rupees 2-a-kg rice scheme to watershed projects, his work is commendable.
- **IPS Madhukar Shetty** along with another IAS officer **Harsh Gupta** took on the rich planters in Chikmangalur who had encroached the land of poor villagers and restored it. As a mark of gratitude, the residents named the entire village as Gupta-Shetty Halli.

There are new challenges due to technological revolution – e.g. cyber security and complex business, trade, and legal aspects which the government needs to navigate. Thus, there is a higher demand of specialist officers for domain knowledge at the policy level.

Also there is a growing feeling within the services that existing specialist services like Indian Revenue Service, Indian Economic Service, etc. do not get adequate representation or opportunities as most of the coveted positions in the GoI have taken over by the elite services.

However, specialisation maybe considered higher up in the ladder based on the officer's qualifications, interest and work experience depending upon the needs and exigencies at the time.

Civil Service Reforms: Mission Karmayogi

Introduction

- Gol on September 2, 2020 announced Mission Karmayogi programme where civil servants would be trained to be "more creative, constructive, imaginative, innovative, proactive, professional, progressive, energetic, transparent and technology enabled". The fundamental focus is the creation of "citizen centric civil service" capable of creating and delivering services conducive to economic growth in public welfare.
- The Union Cabinet approved the new national architecture for **civil services capacity building** called Mission Karmayogi that aims to transform the capacity building apparatus at individual, institutional and process levels at Gol. It promises a shift from rules to roles, silos to coordination, interdisciplinary movements, and a continuous capacity building exercise.
- The national program for civil services capacity building has been so designed that it remains entrenched in Indian culture and sensibilities while learning from the best institutions and practices across the world.
- The mission will make available to all civil servants, an opportunity to build and strengthen their behavioral, functional, and domain competencies in the self-given and mandated learning paths.
- It will enable all the central ministries and departments and their organizations to directly invest the resources towards co-creation and sharing the collaborative and common ecosystem of learning through an annual financial subscription for every employee.
- The mission will encourage and partner with the best in class learning content operators including public training institutions, universities, startups and individual experts.

Components

- The program will be delivered by setting up an **integrated Government Online Training – (iGOT) Karmayogi** platform.
- A **Public Human Resources Council** under the chairmanship of the Prime Minister, with Union Ministers, Chief Ministers, eminent HR practitioners, national and international experts would oversee the entire capacity building exercise.
- An expert body called **Capacity Building Commission** will be set up to harmonise training standards, create shared faculty and resources. The role of the Commission will be:
 - To assist the PM public human resources Council on approving annual capacity building plans.
 - Exercise functional supervision over all Central training institutions dealing with civil services capacity building.
 - To make recommendations on standardisation of training and capacity building, pedagogy and methodology.

Finance

- A special purpose vehicle, SPV will be set up under section 8 of the companies act 2013 – a not-for-profit company which will own and manage the iGOT Karmayogi platform. The SPV will own all intellectual property rights on behalf of the Gol.
- An appropriate monitoring and evaluation framework will also be put for performance evaluation of all the users of iGOT Karmayogi platform. This model was tried successfully during Covid situation for training health professionals.

Recent Reforms

- The GoI approved the formation of the **Indian Skill Development Service** in 2015, **Indian Enterprise Development Service** in 2016.
- The Cabinet of India approved merger of all civil services under Indian Railways into **Indian Railway Management Service** as part of structural reforms in the sector in 2019.
- The Union Cabinet has also approved the **corporatisation of the Ordnance Factory Board**, a production arm of Department of defence production DDT, Ministry of Defence.
- The government has allowed **lateral entry into the Civil Service** to transform the civil service examinations conducted by the UPSC, to align it with the needs and aspirations of 21st century nation. These include positions such as Joint Secretaries and Directors in Central Ministries and Departments for which domain experts are being recruited for tenure-based contracts by the government.
- Another major marker is **disinvestment of the government's majority share** in public sector and Public Sector Enterprises (PSEs) to achieve higher productivity and promote better business practices while reducing government costs arising out of administrative functions, monetary leakages and suboptimal utilization of resources while also benefiting through better and more transparent use of taxpayers money and higher competitiveness.
- A **National Recruitment Agency (NRA)** has been created to conduct examinations for the middle and lower rungs of government service for streamlining public administration within the country and replacing the current web of agencies and examinations.

2. DYNAMICS-SWOT of CIVIL SERVICES

Bureaucracy As A Formal Organisation

Due to enlightenment, modern democracy evolved based on elections and the People's Representative (not the people themselves as happens in direct democracy such as Switzerland) started ruling and governing the state. To objectively administer day-to-day affairs, the administrative system evolved. Max Weber distinguished between three types of authority (legitimate power):

- **Traditional authority** - Based on succession, rituals, subjective desires etc.
- **Charismatic authority** - Based on gifted quality, example Swami Vivekananda, etc.
- **Rational-legal authority** i.e. Bureaucracy.

He defined bureaucracy as a 'formal organisation' with the following characteristics:

- a) *Formal selection and promotion* based on well-defined norms and criteria, primarily merit and transparency.
- b) *Written rules, regulations, processes, and procedures* so that biases and personal likes and dislikes do not favour or disfavour anyone.

Importance of Rational Thinking

- When Europe was enlightened in the 18th century, the central focus was on rationality. Philosopher **Immanuel Kant** says the supreme principle of morality is a standard of rationality, hence to act rationally by the universal moral law.
- Another famous scholar **Rene Descartes** doctors talked of "I am because I think", i.e., once existence depends on the reason thinking rationally and scientifically, not emotionally, subjectively, or in a biased manner.
- **Max Weber** (1864-1920) was the first sociologist who coined the term **bureaucracy** and explained it in detail.

- c) *Hierarchal structure*-well-defined senior, middle and junior levels so that the seniors may inspect, monitor, and give guidance to their juniors on the one hand, and may hear appeals arising against the orders of junior officers: further, feedback from below may result in changing rules/procedures/criteria/norms, etc.
- d) *Specialisation and Division of Labour and Responsibility* - a clear balancing of tasks, sharing power (discretion or force against others wishes), and responsibility.
- e) *Professionalism over Personal Whims*- It comprises four components in an integrated way: uniformity, neutrality, efficiency, and anonymity.
- f) *Career orientation*-To have stability and continuity, bureaucracy is by nature permanent-a long period of carrier with different assignments to gain experience in diverse fields brings maturity for preparing a public policy. However, the stability and continuity does not mean avoiding change. The idea behind stability, security and permanence has been to avoid greed and allurements for corrupt practices.

Weaknesses/Pathologies Of The System

- a) *Formal selection and promotion* - At different levels of group A, B and C, the candidates are selected based on competitive examinations-by UPSC, State PSCs, or State Staff Selection Boards. After training, they start working. In civil services, one has to serve for at least 14 years to become director, at least 18 years to become a joint secretary to GoI, at least 32 years to become Secretary GoI. There are *systemic inconsistencies* in promotion and empanelment.
- b) **Red-tapism**: Too much of rule orientation leads to inordinate delays and goal distraction. At times outmoded rules and procedures restrict the civil servant from performing effectively. Often a plea of "too much work" is given for delays; hence more decentralisation, better division of works, and separating 'urgent', 'important' and 'routine' tasks is highly required.
- c) *Hierarchal structure* - At times the hierarchal structure is eroded by favouring the lower officers on the ground of caste, religion, region, language, etc. The well-established and time-tested protocols are flouted leading to various systemic problems including insubordination.
- d) *Division of Work and Responsibility*: The principle of sharing both power and responsibility in a balanced way should prevail for obtaining the optimal outcome, otherwise **power without responsibility leads to autocracy and corruption**. Lord Acton has said, "power corrupts, absolute power corrupts absolutely." On the other hand, responsibility without power leads to activities without an outcome, i.e. utter failure to achieve goals, vision and mission.
- e) **Prevalence of "Transfer Industry"**:

- The principal of 3 years tenure is hardly followed, and many officers are transferred shortly without sufficient/genuine reasons. Civil Services Boards exist only formally in states, to sign on the proposal mooted by the above power, hence the very purpose of objectivity and transparency is defeated.
- Many officers continue on the same post for a long tenure because of political connection, backing, and favour due to particular caste or religious community, depriving other competent officers.

Sardar Patel National Unity Award

The award seeks to recognise notable and inspiring contributions to promote the cause of national unity and integrity and reinforce the value of a strong and united India. It is announced on 31st October, the birth anniversary of Sardar Patel. The award consists of a medal and citation, and no monetary grant is rewarded. Not more than three awards are given in the year and it shall not be conferred posthumously except in very rare cases. Any citizen of India, any institution /organization is eligible. Nominations are publicly invited every year and can be filed online on the website of MHA.

- Often favoured transfers are linked with a parochial consideration and money changes hands.
- There are certain 'shunting posts', where no work, no file, and no facilities exist. This wastes money, time and career.

3. PROBITY IN GOVERNANCE

Where do the evils like corruption arise from? It comes from the never-ending greed. The fight for corruption free ethical society will have to be fought against this greed and replace it with "what can I give" spirit.

- Dr. APJ Abdul Kalam

Concept of Ethics

The word ethics comes from the original greek term "ethos", meaning "arising from habit". It also refers to the framework of holding the public functionaries legally accountable for their acts of omission and commission. The Committee on Prevention of Corruption, 1964 aka "**Santhanam Committee**" had observed: "*the lack of moral earnestness, which has been a conspicuous feature of recent years, is perhaps the greatest single factor which hampers the growth of strong traditions of integrity and efficiency.*" Adherence to key principles of integrity, honesty, objectivity promotes trust and confidence among the stakeholders and enhances credibility.

Ethics In Governance-Traditional Experience

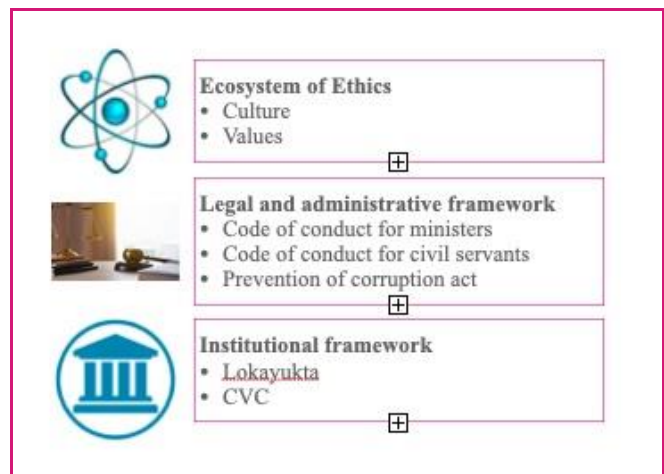
Values guide a society. However, as they are not codified and are subject to interpretation, situations of conflict arise. The second administrative reforms commission on ethics suggested the principles of ethics in the governance and stated that:

"Any framework of ethical behaviour must include the following elements:

1. *Codifying ethical norms and practises*
2. *Creating a mechanism for enforcing the relevant codes.*
3. *Disclosing personal interest to avoid conflict between public interest and personal gain.* Public functionaries should be careful about their relationships with stakeholders which may influence, compromise or threaten their ability to act objectively for the overall good of the society.
4. *Providing norms for qualifying and disqualifying a public functionary from office.*

- The GoI has prescribed a **Code of Conduct For Ministers** both in the Union Government and State Government. It envisages inter-alia, disclosure of assets and liabilities by the Minister, severing all connections with the business which he was interested in before joining the Government, not to accept any contributions or gifts for himself or for any family member, etc.

- The **Code of Conduct for Civil servants** has evolved over time. In pursuance of the recommendations of the Santhanam Committee, the Conduct Rules were revised and enlarged resulting in **CCS Conduct Rules 1964** being followed today. Some inclusions are the requirement of maintaining integrity, devotion to duty, observing courtesy, prohibiting demanding and accepting dowry, prohibiting sexual harassment of



women employees (in view of the Supreme Court judgement in Vishaka case) and, recently, prohibition to include children below 14 years of age as domestic help (in view of the amendment to the Prohibition of Child Labour Act).

- However, *there is no Code of Ethics prescribed for civil servants in India* although such codes exist in other countries. It may also be mentioned that deviations are observed through various mechanisms and there are strict penalty provisions as prescribed in CCS (CCA) rules as major penalty and minor penalty. However, the entire process of awarding penalties is rather tedious and time-consuming. Such procedural issues can be addressed by laying down the timelines for each stage of the process and monitoring the same so that it is adhered to.

International Exposure

United Nations Convention Against Corruption, 2003	Nolan Committee
Article 8 of the resolution refers to "codes of conduct for public officials". It envisages that in order to fight corruption, each State Party shall,	Seven principles of public life:
(a) Promote inter-alia – integrity, honesty and responsibility among its public officials.	(a) Selflessness
(b) Establish codes or standards of conduct for the correct honourable and proper performance of public functions.	(b) integrity
(c) Establish measures and systems to facilitate the reporting by public officials of acts of corruption to appropriate authorities.	(c) Objectivity
(d) Establish measures and systems requiring public officials to make declarations regarding, their outside activities, employment, investments, assets and substantial gifts or benefits.	(d) Accountability
(e) Take disciplinary or other measures against public officials who violate the codes or standards establish in accordance with the article.	(e) Openness
	(f) honesty
	(g) Leadership

***The committee on standards in public life in the United Kingdom is popularly known as Nolan Committee.*

Most of the principles annunciated in the UN Declaration or by Nolan committee are explicitly or implicitly enshrined in CCS code of conduct 1964.

Framework- The consultation paper on "probity in governance" issued in 2001 by the **National Commission To Review The Working Of The Constitution** highlighted many legislative and institutional issues including:

1. Need for enforcing section 5 of the Benami Transactions (Prohibition) Act,
2. Necessity for a law providing for the confiscation of illegally acquired assets of public servants,
3. Enactment of a public interest disclosure act,
4. Enactment of freedom of information act,
5. The necessity for enacting lokpal Bill in addition to the Central vigilance Commission Act
6. Strengthening of the criminal judicial system.

In India, an extensive legislative and institutional framework exists to address the issues relating to probity as detailed in the table though we do not have a code of ethics for the government functionaries and legislations like whistleblowers protection act, etc. as exists in other countries.

Apart from the existing framework accountability and transparency can be enhanced by:

- Minimizing the discretions on various functions.
- More extensive use of information technology in all fields of governance.
- Making citizens charter more elaborate with clear timelines for delivery of services and related activities as well as identifying an officer responsible for the same.

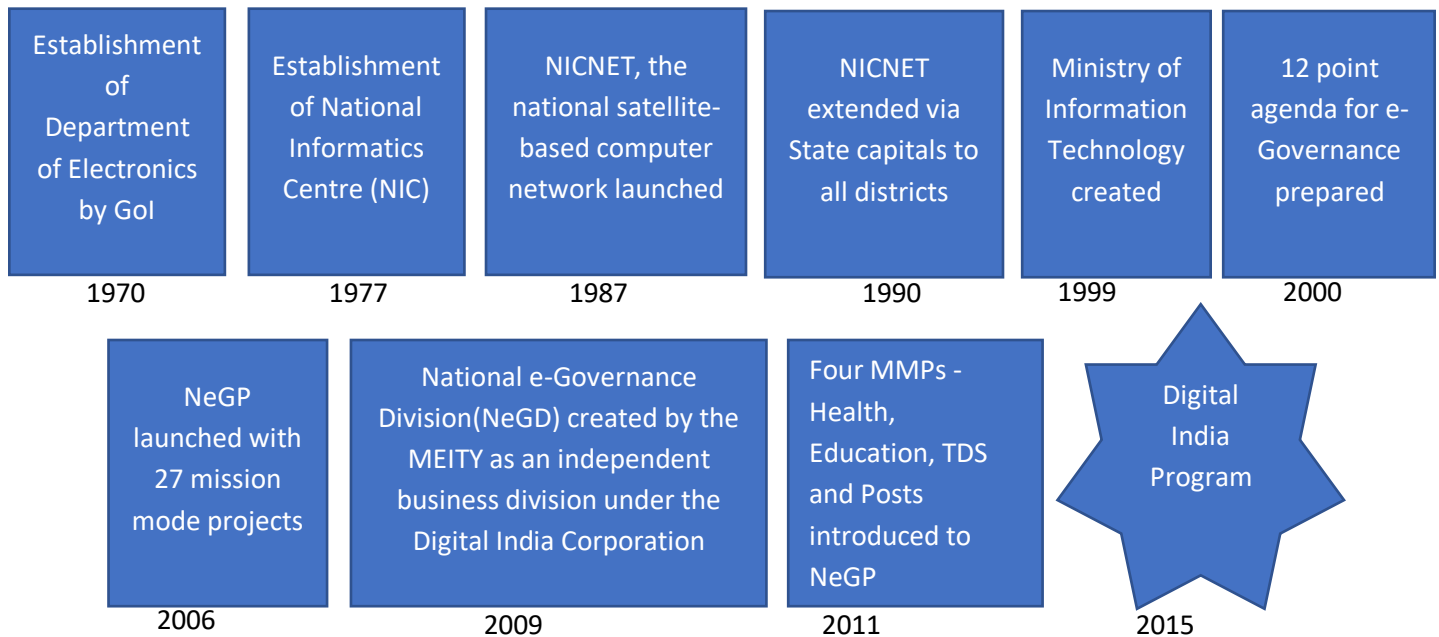
Institutions	Laws
CVC	Benami transactions Prohibition Act
CBI	Prevention of corruption act
CAG	Right to information act
Lokpal and Lokayukta	IPC & Cr.PC

Recent instructions of government of doing away with interviews in certain entry grade positions have tremendously enhanced transparency in the selection process. Examples of the use of information technology by Railways for booking of passenger tickets and by municipal bodies for issuing birth and death certificates and payment of property tax are very well-known.

"We must make the world honest before we can honestly say to our children that honesty is the best policy"-George Bernard Shaw

4. E-GOVERNANCE – PUBLIC ADMINISTRATION FOR SOCIAL CHANGE

Evolution of e-Governance System In India



Introduction

"Simple, Moral, Accountable, Responsive and Transparent" (**SMART**) **Governance** aims to make the interaction between Government and Citizens (G2C), Government and Business enterprises (G2B), and inter-agency relationships (G2G) convenient, transparent, friendly, and Cost-effective.

According to the "Gartner e-governance Maturity Model" - there are four phases of e-governance: phase 1 – Information; phase 2 – Interaction; phase 3 – Transaction; phase 4 – Transformation. It was enhanced by the UN e-governance Survey 2008 by adding phase 5 – connected government where the governments shall transform themselves into a connecting platform that responds to the needs of its citizens by developing an integrated back-office infrastructure.

According to UN Government Survey 2020 of the UN Department of Social And Economic Affairs (UNDESA), India was placed **100th in the e-Governance Development Index.**

Steps Taken By Gol

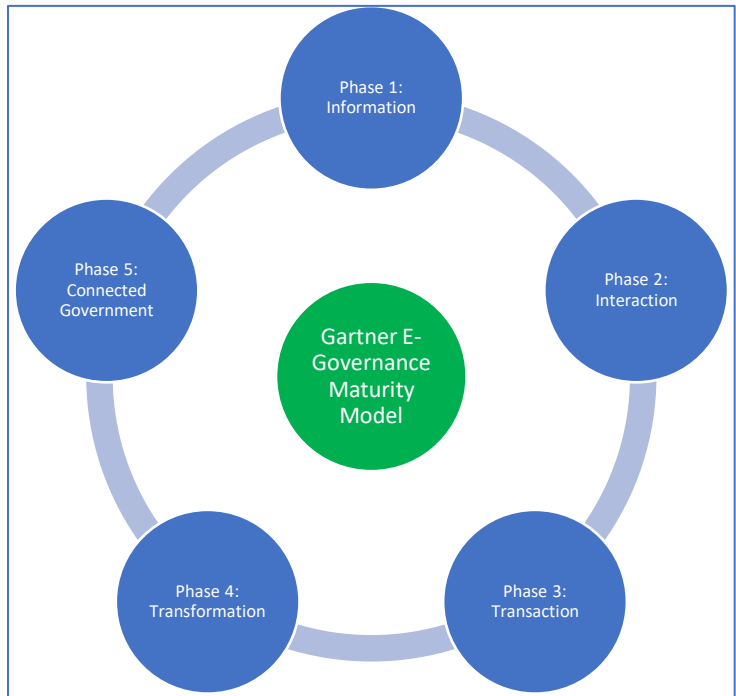
- The Gol introduced the National e-Governance Services Delivery Assessment **(NeSDA) framework** in August 2019 to assess the effectiveness of the e-governance initiatives of different government departments from the Central to the local levels. The Online Service Index (OSI) of NeSDA is based on the UNDESA governance survey to develop the e-governance structure of India at an international standard.
- The major core infrastructure components of e-governance initiatives of the Gol are State Data Centres (SDCs), State Wide Area Networks (SWAN), Common Service Centres (CSCs) and Middleware Gateways i.e., National e-Governance Service Delivery Gateway (NSDG), State e-Governance Service Delivery Gateway (SSDG) and Mobile e-governance Service Delivery Gateway (MSDG), Rapid Assessment System, Aadhaar Digital Biometric Identity Infrastructure, Umang, National Centre for Geo-Informatics, Programme Management Information System, OpenForge, Learning Management System, Digital Locker, Open Data, Government Procurement–Government e-Marketplace (GeM), GI Cloud (MeghRaj), Service Delivery Gateway, eTaal, Archive, SWAYAM portal – online education and portals like My Gov, DigiLocker, Udyami and e-visa services, etc.

National e-Governance Plan (NeGP)

Vision – "Make all government services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency and reliability of such offices at affordable cost to realise the basic needs of the common man".

Strategy And Methodology For NeGP -

- Common Support Infrastructure such as SWANS, SDC, CSE and electronic service delivery gateways
- Suitable governance systems development to monitor and coordinate the implementation
- Centralised initiative decentralised implementation in PPP mode through program approach at Central and State levels.
- Facilitative role of DIT in implementation by providing technical assistance.
- Ownership of Ministries over mission mode projects (MMPs)



Mission Mode Projects - NeGP comprises 31 mission mode projects

Central MMPs	State MMPs	Integrated MMPs
Banking; Central excise & customs; income tax; insurance; MCA 21; passport; immigration, Visa & foreigners registration & tracking; pension; e-office; posts and UID	Agriculture; commercial taxes; E Distt; employment exchange; land records (NLRMP); municipalities, e-Panchayat; Police (CCTNS), Road transport; treasuries computerisation: PDS; education and health	CSC; E-biz; e-Courts; e-Procurement; EDI for e-trade; national e-governance service delivery Gateway; and India portal

Digital India Initiative

It was launched in the year 2015 to bridge the gap between urban and rural areas by promoting investment in digital infrastructure, fostering digital literacy, and expanding online services provision. The vision of the programme is to transform India into a digitally empowered society and knowledge economy.

It is an umbrella programme with overall coordination being done by the Department of Electronics And Information Technology (DIET) with a focus on nine pillars of growth areas-[Broadband highways; Universal access to mobile connectivity; Public Internet access programme; E governance: reforming government through technology; e-Kranti – electronic delivery of services; Information for all; Electronics manufacturing; IT for jobs and early harvest programmes.](#)

NeGD is conducting the chief information officers (CIO): e-Governance Leadership Program targeting policy and programme-level officers involved in e-governance projects/initiatives in Centre and state ministries and departments.

Challenges Ahead

- Interoperability of e-governance infrastructure between intra-governmental departments/agencies
- Developing inclusive e-governance infrastructure to make sure no one is left out.
- Legislating effective data protection law and administrative regulations.
- Enhancing data security levels to avoid leakage, miss use, etc.
- Reducing digital divide.
- Mandatory sector specific service focus to attain SDG goals.

5. HEALTHCARE: EXPERIENCE FROM COVID-19 IN THE ASIA-PACIFIC

Introduction

India is known as the “**world’s pharmacy**” as it is the largest producer of generic medicines accounting for 20% of global production and also manufactures more than 60% of all vaccines sold across the globe. According to NITI Aayog, India's healthcare industry is expected to reach USD 372 billion in 2022. It is the fifth-largest employer in India since 2015.

Asia-Pacific region is home to 60% of world’s population, 263 million poor people live in this region and it contributes to 41% of under-5 deaths, 44% maternal deaths, 56% newborn deaths, 60% stunting and 2/3rd of low birth weight babies.

Steps Taken By India for COVID-19:

- Timely lock down
- Creation of extensive support system by setting up of COVID-19 warriors network and a national task force
- Aathmanirbhar Bharat economic stimulus relief package of 20,lakh crores (10% of GDP)
- 80,crore people being given free food-grains under PM Garib Kalyan Yojana
- 20,crore women Jan Dhan Holders being given Rs.500 per month for three months
- MGNREGA wage rate being raised benefiting more than 13,crore families
- From June 2021, the central government is procuring 75% of the indigenous vaccines and distributing to the states to vaccinate 18+ people for free of cost.

Steps Taken by India To Expand Health Coverage

- India offers affordable healthcare services for all and is a famous destination for medical tourism. To promote the same the Gol launched a single window portal in 2017.
- **National Digital Health Mission (NDHM)** was launched by the PM on 15th August 2020. It is being implemented by National Health Authority (NHA) under the Ministry of Health & Family Welfare, Gol. The plan is to create a Digital Health Ecosystem for India featuring health ID, personal health records, Digi doctor, and health facility registry. E-pharmacy and telemedicine services are planned to be included later. NDHM syncs with Ayushmann Bharat, a flagship scheme launched in 2018 under National Health Policy,2017 to achieve UHC covering 50 crore beneficiaries that has since become the world's largest government funded healthcare programme.
- Schemes like Startup India and Stand-up India have been lent support by the government.
- Currently 100% FDI for wellness is allowed in the construction of hospitals under automatic route and 100% in the AYUSH sector.
- **National Commission for Allied and Healthcare Professionals Bill 2020** is another healthcare sector reform passed in March 2021. Through this bill, a Central Commission with the provision of 10 separate councils will regulate 56 highly skilled professions in the healthcare and will also protect and enhance the overall standard of healthcare in the country. The bill is aimed to regulate and maintain standards of education and services by allied and healthcare professionals in India.

Lessons from Asia Pacific

- Sri Lanka has an intricate network of health facilities along with free and equal public healthcare including for Covid 19. A comprehensive policy of public-private pooling of funds; spaced separate preventive and curative healthcare sectors with new and improved expansions at the primary level; constitution of a high-level task force using and all of government and whole of society approach; with due emphasis on strict lock downs and travel restrictions created a conducive environment for the 3Ts-testing, tracing and treatment.
- The Republic of Korea due to its existing universal, single-payer national health insurance scheme which covers 97% of its total population with the remaining 3% covered by government subsidies and 2015 MERS outbreak experience effectively responded to COVID-19 in 2020.
- In Thailand, a UHC program covering about 75% of its population helped reduce OOPE to about 11% by 2017. Quick responses were catalysed with ground-level volunteers to help prevent, detect and report infected cases, minimising local transmissions, raising awareness and encouraging people to comply with disease control measures.

- Even Vietnam made exemplary strides with more than 87% of the people covered under national health insurance. Primary healthcare and collaborative participation of finance from public, private, not-for-profit sectors, and investments in digital technology optimised existing solutions with sustained deployment of stringent containment measures with the help of the military, private security services and grassroots NGOs, and help from public in creating awareness and service delivery, Vietnam handled the pandemic.

UHC Challenges

- Insufficient funds, high OoPE, poor access, rise in gender inequities, reduction in quality and efficiency of services.
- Political commitment towards a sustainable primary healthcare PHC approach to UHC as suggested in Astana Declaration's 2018.
- The private sector contributes to more than 70% of the total 4.2% contribution towards health in national GDP. Creation of new Development Impact Bonds alongside increasing scope for the greater budgetary allocations to health can put UHC back on track.
- Robust financing structures – pooling funds from compulsory funding resources such as government tax revenues can spread the financial risks of illness across a population. Private sector emphasis will help pool funds, spread administrative cost and improve accountability as shown by countries like Sri Lanka and Indonesia.
- Last mile populations have to be targeted for improvements in existing social determinants of health, such as nutrition, environment, gender equality, water, sanitation and hygiene. A multidimensional approach in conjunction with electorally important areas, including unemployment, pollution, other among other social determinants, needs to be taken.

6. CATCH THE RAIN: RAINWATER HARVESTING

Need for Alternatives to Groundwater Usage

- India is home to 17% of the world population but has only 4% of the world's freshwater resources.
- The average annual per capita water availability in India was assessed as 1545 cubic meters in 2011 and may further reduce to 1486 m³ in the current year. Annual per capita water availability of less than 1700 m³ is considered as water stressed condition.
- The per capita water storage capacity in India is about 209 m³ which is meagre compared to per capita storage in countries like Australia – 3223 m³, USA-2193 m³, Brazil-2632 m³.
- According to UN –SDG goal 6 – '*water and sanitation for all*', latest report, the level of water stress in India is as high as 66% with the trend showing an increase over the years.
- According to UN statistics, globally 72% of all water withdrawals are used by agriculture, 16% by municipalities for households and services, and 12% by industries. It is therefore, clear that agriculture will be the worst hit activity in case of a water crisis.

The Campaign

The PM's latest campaign "*catch the rain*" with the tagline "*catch the rain, where it falls, when it falls*" is to nudge the states and stakeholders to create appropriate rainwater harvesting structures (RWHS) suitable to the climate conditions and subsoil strata. The historic MOU for the *Ken-Betwa link project* was signed on the same day as the launch of the campaign.

- The campaign will include drives to make check dams, water harvesting pits, and rooftop RWHS, etc. while removing encroachments and de-silting tanks to increase the storage capacity. It also seeks to repair step wells and use defunct bore-wells and unused wells to put water back to aquifers.
- To facilitate these activities, states have been requested to open "rain centres" in each district with a dedicated phone number and manned by an engineer, or a person well-trained in RWHS.
- The campaign attempts to bring into action gram panchayats of water stressed districts to support the government in propagating sustainable agriculture through rainwater harvesting. The gram panchayats took "JalShapath" for water conservation during inauguration of the campaign.
- MGNREGA funds are being used for the campaign. It succeeds many previous missions such as Jagjivan mission. As a step towards better water governance, rural women have been made stakeholders in this campaign where around 4.5 lakh women have been trained for water testing with every village getting at least 5 trained women specially for this purpose.
- The campaign will also reduce water gushing onto roads, damaging them and will prevent urban flooding – settlements which are expensive and time consuming to construct.

Implementation

There are fundamentally three stakeholders – government, people and institutions – who must take up accountability in this mission. Freeing personal infrastructure for this cause and judiciously using what can be called "additional water" can significantly boost the government's initiative.

At the institutional level, institutions having large tracts of lands, have been requested to take steps to harvest rainwater. For example, the Indian Army is using treated sewage water from STPs for arboriculture for flushing systems. The SBI has consistently ensured grassroots level reach of water management programmes of the government through active social media engagement. IIT Roorkee – M.Tech program in Dam safety and rehabilitation, IISc Bangalore – Dam Engineering course, etc. are some significant steps.

Success Story

After the implementation of the earthen bunding project, the groundwater level in Coimbatore district has risen considerably and has helped in the recharging of the aquifers.

7. INDIAN SARS-CoV-2 GENOMICS CONSORTIUM

INSACOG - The INDIAN SARS-CoV-2 Genomics Consortium (INSACOG) is a national multiagency consortium of 28 genome sequencing laboratories (RGSL's) laboratories established by the Gol on 30 December 2020 which monitors the genomic variations in SARS-CoV-2.

Objective - To understand the whole genome sequencing of SARS-CoV-2 virus commonly known as COVID-19 virus and its spreading and evolution, the consortium was established:

- To ascertain the status of variants of interest (VoI) and variants of concern (VoC) in the country.
- To establish sentinel surveillance and search surveillance mechanisms for early detection of genomics variants and assist in formulating effective public health response.
- To determine the presence of genomic variants and samples collected during super spreader events and in areas reporting increasing trend of cases/deaths etc.

Start of SARS-CoV-2 Viral Sequencing

- In 2020, NIV and ICMR sequenced samples of international passengers arrived in India from or transmitted through the UK, Brazil, or South Africa as they reported a sudden surge in cases.
- RTPCR positive samples from states reporting sudden surges were sequenced on priority.
- This was expanded through efforts of the CSIR, Department of BioTechnology (DBT), and National Centre for Disease Control (NCDC), as well as individual institutions.
- The initial focus was on restricting the spread of global variants of concern in the country – alpha(B.1.1.7), beta(B.1.351), and gamma(p.1), which had high transmissibility.
- Subsequently, the Delta and Delta plus variants were identified based on full genome sequencing analysis conducted in the INSACOG laboratories.

Surveillance Strategy In India

- Initially, genomic surveillance was focused on the variants carried by the international travellers and their contacts and the community through sequencing 3 to 5% of the total RTPCR positive samples. The current strategy is:
 - **Sentinel Surveillance for all States/UTS:** Each state/UT has identified sentinel sites including RT-PCR labs and three healthcare facilities adequately representing the geographical spread of the region, from where RT-PCR positive samples are sent for whole genome sequencing.
 - **Surge Surveillance (for districts with COVID-19 clusters or those reporting a surge in cases):** Representative number of samples – as per the sampling strategy finalised by state surveillance officer/Central surveillance unit – are collected from the districts which show a surge in number of cases and sent to RSGs.

Current Status Of Variants Of Concern VOC

Alpha, Beta, Gamma and Delta are the current VOCs. The highest numbers have been reported from Maharashtra, Delhi, Punjab, Telangana, West Bengal and Gujarat. The B.1.617 lineage, first observed in Maharashtra was associated with unusual rise in several districts of the state. The B.1.617.2.1 (AY.1) commonly known as **Delta plus variant** is a Delta variant with additional mutation.

8. THE REBELLIONS OF PALAYAKKARS

Introduction

Historians have held three different versions of India's war of independence -

- One version is that it began with Puli Thevar and ended with Marudhu brothers. Three Palayakkar rebellions ultimately paved the way for South Indian Rebellion which started at Coimbatore. The South Indian Rebellion of 1799 to 1801 ultimately ended with the Vellore mutiny of 1806. The period from the first Palayakkars rebellion to the Vellore mutiny was called the first and early war of independence.
- As per the second version the first war of independence began in 1857 with the sepoy mutiny.
- A third version is the first war of independence began in 1885 in the nationalist give shape to the Indian National Congress.

The Palayakkars rebellions took place before the establishment of the British power in India. Native resistance to the authority of the British East India Company came from the Tirunelveli region and then Ramanathapuram.

Background

The rule of the Nayaks of Vijaynagar Governors had a strong base in Tamil region with Madurai as capital. The Pandya region was divided into Palayams only then. Each Palayam had forts and armed soldiers. Tirunelveli and Ramanathapuram were Palayams in the Southern Palayakar region. The Ramanathapuram and Sivaganga were the biggest Palayams and the former served as headquarters of the Southern Palayakkars. The chiefs of the Parliament had the status of the princes of states and were called "Little Kings". Palayakkars of the eastern region of Tirunelveli belonged to the Nayak community, called Kambalattors. Their mother tongue was Telugu. They were settled in the wake of expansion of the Vijaynagar. The Marva Palayakkars were settled in the western part of the Tirunelveli.

After the end of the Nayak's regime, the southern region came under the rule of the Nawab. Then the struggle of the Palayakkars started again because the Nawab sought the help of the British to suppress the rebellious Palayakkars who refused to pay the tax collected by the *amuldars* of Tirunelveli. The Palayakkars of Panjalamkurichi were given the supervising power over a few other Palayakkars and were functioning as the intermediaries for collecting taxes for the Nawabs. The Palayakkars were not as subservient to the Arcot Nawab as they were to the Nayak kings of Madurai due to the comparatively weaker regime of the Nawab and also his indifference towards Palayakkars.

On appeal of the Nawab, the British Company conducted military expeditions into Southern Palayakar. As the Nawab, Muhammad Ali of the Wallajah dynasty ascended the throne with success in the Carnatic wars with the military aid of the company, he was indebted to the British. The Nawab's debt was immense and was called "**Carnatic debts**". To mitigate the debts, the Nawab conceded the tax rights to the company in Southern Palayakkars region which led to the Palayakkars wars.

Puli Thevar and the first Palayakkars war: Most of the Palayakkars on certain pretexts did not pay the *kist*(tribute) and *peshcush*(tax). The first British military expedition in the Palayakkars region was undertaken by Captain Cope in 1751 and was defeated by the Kallars of Natham. Mahfooz Khan, the elder brother of the Nawab and Governor of Tirunelveli Prince with the help of the British Army under Col.Heron undertook a military expedition in March 1755. Puli Thevar other Marava Poligars opposed Col. Heron who failed in his attempts. In the meantime Puli Thevar consolidated other Marava Palayakkars and formed a confederacy. He even tried for an alliance with Haider Ali of Mysore and the French against the British. The British insisted the native princes' to not support Puli Thevar . The rebellion of Puli Thevar broke out in 1755 and Madurai was captured. With the help of the king of Travancore, Yusuf Khan(Khan Sahib) entrusted with the task of suppressing this rebellion recaptured Madurai and won battles against Puli Thevar . Puli Thevar escaped and died in exile.

Even though Puli Thevar failed in his attempt, he organised a Western Palayakkar League successfully and valiantly opposed the British. It was the first Palayakkar and Puli Thevar is hence called "first freedom fighter" and his struggle as "the first war of independence".

Kattabomman and Second Palayakkars War: Jagavira Pandya Kattabomman became the Palayakkar of *Panjalamkurichi* in 1760. He was succeeded by Vira Pandya Kattabomman. In 1783, Col. Fullarton launched a military expedition to Panjalamkurichi for collecting tax. He won and also seized a copy of the treaty which the Palayakkars had made with the Dutch who were ruling in Ceylon. When the East India Company came to an agreement with the Nawab of Arcot in 1792,whereby the rights over the southern Palayakkar were surrendered, Vira Pandya Kattabomman was the Palayakkar of Panjalamkurichi. He refused payment of taxes to the Britishers, a conflict which started in 1792 and prolonged endlessly till 1798.

Kattabomman was influenced by the confederacy of Marudhu brothers and the Fourth Mysore war led by Tipu Sultan. In 1798, Kattabomman tried to establish influence in Sivagiri, a tributary Palayakkar of the Company...(to be continued)