

# APPOLLO STUDY CENTRE

## TNPSC GROUP I MAIN - 2023 CURRENT AFFAIRS TEST - III SOURCE MATERIAL Paper - I Unit - I - Modern History of India and Indian Culture

### 1. Lalit Kala Akademi

#### Introduction:

The Government of India established the National Academy of Art, also known as the Lalit Kala Akademi, in 1954 with the primary purpose of promoting fine arts in India. The academy is a self-governing organization supported by the Ministry of Culture which promotes the appreciation and knowledge of beautiful arts.

#### About Lalit Kala Akademi:

- Maulana Abul Kalam Azad inaugurated the **Lalit Kala Akademi** in New Delhi on August 5th, **1954**.
- It is an autonomous organization under **the Ministry of Culture**.
- The Lalit Kala Akademi, the newest of the three Akademies formed by the Indian government, was founded to fulfill the desire of Pandit Jawaharlal Nehru, India's first Prime Minister, for a cultural and national identity.
  - As a result, the Lalit Kala Akademi arose as one of three such national organizations.
- It was the first organization to concentrate its efforts on visual arts activities.

#### Objectives:

- Encourage and promote study and research in creative arts sectors such as painting, sculpture, and graphics, among others;
- Encourage and coordinate the work of regional art groups and state Lalit Kala Akademies;
- To encourage collaboration among artists and art societies, as well as the growth of such organizations;
- Encourage the creation of Regional Art Centers, if needed;
- To promote the exchange of ideas between various schools of art by organizing conferences, seminars, exhibitions, and other events across India.
- To publish and promote art-related literature, such as monographs, journals, and other publications.
- The academy is a self-governing organization supported by the **Ministry of Culture**.
- Despite the fact that they deal with both national and foreign art, they are **primarily concerned with the promotion and preservation of Indian art**.
- They have regional centers in Chennai, Kolkata, Lucknow, Shimla, Shillong, and Bhubaneswar, in addition to its **headquarters in Delhi**.
- They put on national and international exhibits and events to showcase the work of the Lalit Kala Akademi's patrons.

- The **National Exhibition of Art, the International Triennale of India**, and others are notable exhibits. They also have the responsibility of preserving India's great legacy of visual arts.

#### **Lalit Kala Akademi Awards:**

- The National Lalit Kala Akademi awards are **conferred to recognize individuals for their outstanding work in the field of art**. The awardees are selected by an esteemed panel of judges, nominated by the Akademi.

#### **Conclusion:**

Lalit Kala Akademi plays an important role in defining and redefining the sensibility of an entire culture falling under the visual arts spectrum. It is an institution that has rendered service to the arts in the nation long before the world woke up to the global impact of Indian art.

## **2. Sangeet Natak Akademi**

### **Introduction:**

The Government of India established the Sangeet Natak Akademi (SNA) in 1952 as the first national academy for the arts. Its main goal was to establish a setting for Indian music, theatre, and dances. It also had the difficult duty of promoting India's vast intangible legacy, which was manifested in the forms of music, dance, and theatre.

### **Sangeet Natak Akademi (SNA)**

- The Sangeet Natak Akademi under the aegis of the **Ministry of Culture** was established on **May 31, 1952**, and it began operations the following year with the appointment of its **first chairman, Dr. P. V. Rajamannar**.
- Its main goal was to **establish a setting for Indian music, theatre, and dances**.
- It also had the difficult duty of **promoting India's vast intangible legacy**, which was manifested in the forms of music, dance, and theatre.
- It is not only meant to be the primary agency in charge of overseeing the preservation of our cultural heritage, but they also have to work with state and union territory governments to conserve and promote their cultures on a national level.
- The Sangeet Natak Akademi also oversees several institutes that specialize in dance, music, or theatre.
- Sangeet Natak Akademi established the **National School of Drama (NSD) in 1959** to focus on dramatics in India.
- NSD became a **separate agency under the Ministry of Culture in 1975**.
- SNA also **works with international organizations** like UNESCO to preserve India's cultural legacy.

#### **The objectives of Sangeet Natak Akademi are:**

- To foster study and performances in the disciplines of music, dance, and theatre, among other things.
- To promote teaching acting, stagecraft, play production, and direction, and to support the construction of theatrical centers, particularly for provincial theatres.

- Organize and promote Indian music, dance, and theatre literature. The creation of handbooks and illustrated dictionaries that clarify technical jargon should be prioritized.
- To resurrect, promote, and preserve folk music, dance, and theatre.
- To promote cultural exchanges in the disciplines of dance, music, and theatre with the international community.

### Sangeet Natak Akademi Awards:

- The awards are given to the artists from the field of Music, Dance, Theatre, Traditional/Folk/Tribal Music/Dance/Theatre, Puppetry and Overall contribution/scholarship in the Performing Arts etc.
- The Akademi Awards carries purse money of Rs. 1.00 lakh, a Tamrapatra and an Angavastram.

### Conclusion:

Since its inception, the Akademi has been functioning as the apex body in the field of performing arts in the country, preserving and promoting the vast intangible heritage of India's diverse culture expressed in forms of music, dance and drama.

## 3. Sahitya Academy

### Introduction:

In 1954, the Indian government formed the "National Academy of Letters," or Sahitya Akademi. The major purpose of this organization was to serve as a national organization dedicated to promoting literary culture in India, as well as to cultivate and coordinate literature in all Indian languages and to promote the country's general national unity.

### Sahitya Akademi

- The Sahitya Akademi, India's National Academy of Letters, is the country's premier organization for literary discourse, publication, and promotion, and the only one that does so in 24 Indian languages, including **English**.
- Long before India's independence, the British government considered establishing a National Academy of Letters in the nation.
- In 1944, the Indian government agreed in principle to the **Royal Asiatic Society of Bengal's** request to establish a National Cultural Trust to promote cultural activities in all sectors.
- **On March 12, 1954**, the Government of India formally launched the Sahitya Akademi in independent India.
- After a year of investigation, discussion, and selection, Akademi grants 24 prizes each year to literary works in the languages it has recognized, as well as an equal number of awards to literary translations from and into Indian languages.
- The Sahitya Akademi has recognized **English and Rajasthani** as languages in which its curriculum can be executed, in addition to the 22 languages listed in the Indian Constitution.
- The Sahitya Akademi's headquarters is in **New Delhi**.

Their combined attention has switched in recent years to the preservation of oral and tribal literature. Our historic society and traditional wisdom were passed down down the years as oral information, which must be maintained for future generations. It has also attempted

to attract a larger audience by hosting literary events such as Samvad, Meet the Author, Kathasandi, Mulakat, Asmita, and others.

5 categories - Sahitya Akademy Awards

1. Sahitya Akademi Main Award
2. Sahitya Akademi Translation Prize
3. Sahitya Akademi Bhasha Samman
4. Yuva Puraskar
5. Bal Sahitya Puraskar

### Conclusion

The Akademi, as India's leading literary institution, awards, scholarships, grants, publications, literary programs, workshops, and exhibits to preserve and develop literature in the twenty-four Indian languages it recognizes. The Akademi also organizes literary exchange programs with other nations throughout the world in order to promote Indian literature outside of India's borders.

## Unit – II – Social Issues in India and Tamil Nadu

### 1. Right to Health Bill 2023

#### Introduction:

- Rajasthan has become the **first state** to pass in Assembly the Right to Health Bill.

#### Key Features of the Bill

- The Bill provides the **right to health** and access to healthcare for people in the state. This includes **free health care services** at any clinical establishment to residents of the state.
- The Bill sets **certain obligations** on the state government to ensure the right to health and maintain public health.
- Health Authorities will be set up at the **state and district level**. These bodies will formulate, implement, monitor, and develop mechanisms for quality healthcare and management of public health emergencies.

#### Need for the Bill in Rajasthan

- **Share in Population:** Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Chhattisgarh, Odisha and Rajasthan--account for about **47% of India's population**; they are **more rural and socioeconomically backward** compared to the rest of the country.
  - They are also high focus states under the National Rural Health Mission (NRHM), in view of their **relatively higher fertility and mortality indicators**.
- **Post COVID:** The COVID pandemic has exposed the **incompetence of the health care system** and refutation of basic health amenities.
  - Simple functions of health care such as testing, contact tracing or even changing the behaviour of citizens required the intervention and undivided attention of the district administration.

- During the pandemic, even non-COVID patients were denied treatment and still they were unable to give adequate treatment to all the COVID affected patients.
- **Demand for Right to Health:** It's also been nearly a decade since various civil organisations have been demanding and persuading different governments to propose laws that make health a public right.
- **Political Will:** It was only in the election manifestos of a couple of political parties that this issue was highlighted and political commitment was visible. However, that went to the gallows as they never came near to being in power or having any say as such in government decision making.

## 2. Thiranari Thervu Thittam

### Introduction:

The Government of Tamil Nadu has launched Thiranari Thervu Thittam Scheme. The government is going to choose 1000 students under this scheme who will receive guidance in premier institutions such as the Indian Institute of Technology Madras. These students will also be eligible to get a stipend of Rs 1000.

Only students belonging to government schools studying in classes 9th to 12th will be able to benefit from this scheme. The government is training 252 teachers as a part of this initiative who will train 1 lakh students. Those students who are interested in pursuing a career in electronics will be able to benefit from this scheme. The amount of financial assistance will be directly transferred into the bank account of the beneficiary through the direct benefit transfer method.

<b>Name of Scheme</b>	Thiranari Thervu Thittam Scheme
<b>Beneficiary</b>	Students of Tamil Nadu
<b>Benefit</b>	To offer financial assistance for education
<b>Monthly Stipend</b>	1000/- Rupees Per Month

### Objective of Thiranari Thervu Thittam Scheme

- The main objective of the Thiranari Thervu Thittam Scheme is to provide financial assistance to students for their higher education.
- Through this scheme, students from government, schools will be provided financial assistance to pursue their career.
- Under the scheme the Indian Institute of Technology Madras is training 252 students who are going to train students from rural areas.
- Students will be able to get the benefit of this scheme.
- This scheme is going to improve the quality of education.
- Other than that students will be motivated to pursue higher education.

### Features and Benefits of the Thiranari Thervu Thittam Scheme

Some of the key features and benefits of the scheme are as follows:

- The Thiranari Thervu Thittam Program would help students in the state of Tamil Nadu.
- The government will give students financial aid through this program so they can continue their education.
- This program will encourage female students to pursue higher education.
- The students' futures will be bright thanks to the Thiranari Thervu Thittam Program.
- The entire state has been the target of this strategy.

- The students will be encouraged to use this program by it.
- Beneficiaries who meet the requirements and are eligible will receive benefits under the program.

### 3. Social Protection Schemes of Government of India

#### Introduction:

Social protection systems help individuals and families, especially the poor and vulnerable, cope with crises and shocks, find jobs, improve productivity, invest in the health and education of their children, and protect the aging population.

#### Social Protection Schemes:

- Pradhan Mantri Vaya Vandana Yojana (PMVVY):** PMVVY is offered by the Life Insurance Corporation of India and supported by the Government of India, to provide senior citizens of age 60 years or more an assured minimum pension for a term of 10 years, linked to the price at which they purchase the pension policy.
- Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJY):** The Scheme is available to people in the age group of 18 to 50 years and provides risk coverage of Rs.2 lakh in case of death of the insured, due to any reason, at an annual premium of Rs.436/
- Pradhan Mantri Suraksha Bima Yojana (PMSBY):** The Scheme is available to people in the age group 18 to 70 years providing a risk coverage of Rs.2 lakh in case of accidental death or total permanent disability and Rs. 1 lakh for partial permanent disability due to accident at a premium of Rs. 20 per annum
- Pradhan Mantri Shram Yogi Maan-Dhan Yojana (PM-SYMDY):** Launched in March 2019, the PM-SYMDY is a voluntary and contributory pension scheme for providing a monthly minimum assured pension of Rs.3,000 upon attaining the age of 60 years. The workers in the age group of 18 to 40 years having a monthly income of Rs.15,000 or less and not a member of EPFO/ ESIC/ NPS (Govt. funded) can join the scheme.
- PM Street Vendor's Atmanirbhar Nidhi Scheme (PM SVANidhi):** This is a Central Sector Scheme launched on 1 June 2020, to empower street vendors by extending working capital loans of up to Rs.10,000 with a one-year tenure and free onboarding of beneficiaries on digital payment platforms. Beneficiaries are also eligible for the second tranche of loan up to Rs.20,000 with 18 months tenure after timely repayment of the first tranche.

## UNIT – I: India Polity and emerging political trends across the world affecting India

### 1. Human Rights Issue

#### Introduction:

- Human rights are **rights** that we have simply because we **exist as human beings**.
- These are **universal rights** inherent to all of us, regardless of nationality, sex, national or ethnic origin, color, religion, language or any other status.

- They range from the most fundamental, the **right to life** to those that make **life worth living**, such as the **rights to food, education, work, health, and liberty**.
- **World Human Rights Day** is observed by the international community every **year on 10<sup>th</sup> December**.

**Issues:**

### **Custodial Torture**

IPS officer broke our teeth using a stone': TN cop accused of custodial torture.

Three men from Ambasamudram in Tirunelveli district of Tamil Nadu have alleged that they were subjected to custodial torture and their teeth were knocked out by Assistant Superintendent of Police, Balveer Singh IPS. In a video, one of the men can be heard saying that he and his brothers had gone to confront a group of people who hit their friend. But the police arrested six of them and three others from the opposite group and took them to the police station. Chellappa said, "At the police station, Balveer Singh was wearing white gloves. I did not know why but he called me in and while the other police officers held my hand, he knocked out my teeth with a stone. My lips and gums were also injured."

### **Vengaivasal**

The National Commission for Scheduled Castes (NCSC) has directed Pudukkottai Collector and Superintendent of Police to submit the action taken report in connection with Vengaivayal village incident.

The shocking incident of human excreta found dumped in the overhead water tank that supplies potable water to the people of Dalit colony in the panchayat made headlines across nation. The incident came to light in the third week of December last year after the government doctors advised the residents of the colony to check water contamination as many of them fell sick.

Acting on the complaint petition from Ullamurugu Muthu, executive president of Ambedkar People Movement, the Commission has decided to investigate into the matter in pursuance of the power conferred upon it under Article 338 of the Constitution, a communique from the Commission issued to the Collector and SP read.

They have been asked to submit the action taken report within 15 days from the date of receiving the communication. The Commission sought details such as date of occurrence of the incident, victims' names and names of perpetrators, copy of first information reported registered and charge sheet and details of compensation extended to the victims.

### **Anbu Jyothi Shelter Home**

Inmates disappear from a rehabilitation home and owners and staff members are accused of illegal detention, torture, sexual assault, and interstate human trafficking. While one might assume it's the plot of a crime thriller, this is, as per police records, the story of an ashram in Tamil Nadu.

Anbu Jothi Ashram, a home for the mentally challenged, disabled, and destitute women, was a horror house for the illfated, Tamil Nadu Police have found. The shelter home has been functioning at Kundalpuliyur in Villupuram district since 2005.

However, the home was shut down in February 2023 after Gingee Police of Villupuram, Tamil Nadu informed the Madras High Court that inmates were administered illegal drugs, sexually abused, and physically assaulted by the ashram staff.

## 2. Police Reforms

### Introduction:

TN home department on Wednesday notified the Tamil Nadu Police (Reforms) Rules, 2022, based on the Tamil Nadu Police (Reforms) Act, 2013. As per these rules, several police committees would be formed. A State Security Commission will be formed and it will meet at least once a year. A Police Establishment Board will also be formed and it will meet at least once every in three months.

### State Police Establishment Committee:

A State Police Establishment Committee will be formed with ADGP (Administration), ADGP (L&O) and ADGP (Intelligence) as its members. Apart from the State committee, zonal police establishment committees will be formed with the zonal IG, range DIG and commissioners of police as members. A zonal committee for armed police will also be formed with ADGP (Armed Police) and IGP/DIG (Armed Police) as members. And, there will be a zonal committee for every special unit with the head of the special unit, IGP/DIG in the special unit, SPs in the special unit (not more than two) as members.

### Range Police Establishment Committees:

There will also be Range Police Establishment Committees with range DIG and DSPs. Also, there will be range committees for the armed police. There will be a Chennai City Police Establishment Committee with all additional commissioners of police in Chennai and the JC of the Intelligence section as members. There will be sub-committees to recommend transfers within the Armed Reserve, Control Room, Intelligence Section and City Crime Branch.

Apart from this, there will be Zonal Police Establishment Committees For Chennai, with the JC as its chairperson and convenor and DCs of the zone as members. Also, there will be a zonal committee for each traffic zone in Chennai city.

### District Police Establishment Committees:

There will be District Police Establishment Committees, for Chennai in each police district. The DC will be the chairperson and convenor while the AC will be the member. This committee will meet every three months. As for cities other than Chennai, there will be a City Police Establishment Committee with the Police commissioner and all DCs as its members. The commissioner will be the chairperson.

In the case of districts, there will be District Police Establishment Committees. The members of the committee will be the district SP, ADSP (Headquarters) and the senior Sub-divisional officer. There will be a district committee for armed police battalions with the commandant, deputy commandant and senior assistant commandant as members.



### Police Complaints Division:

There will be a Police Complaints Division. As per the rules, the Crime Branch CID Wing in the Police Department shall function as the Police Complaints Division under the administrative control of the Additional Director General of Police, Crime Branch CID, under the overall control of the Director-General of Police.

## 3. Tamil Nadu State Legislature – History and Significance

### Introduction:

The 17th century Tamil Nadu State Legislative Assembly chambers at Fort St. George will witness a historic event on August 2, as President Ram Nath Kovind inaugurates the centenary celebrations. The Legislative Assembly building built in the 17th century is a colonial-era icon, which has remained the central seat of power in the State until today.

For a State that boasts of three great empires—Cholas, Cheras and the Pandiyas, and is famous for having inscriptions detailing ancient constitutions, dating all the way back to 920 CE barely 90 km south of Chennai, the centenary celebrations on Aug 2, 2021, carries a significant meaning beyond the astounding fact that the legislature itself has completed 100 years of existence.

### Key milestones in Tamil Nadu Legislative Assembly history

**Women's suffrage:** In early 1927, Muthulakshmi Reddy, the well-known medical practitioner and social activist, became the first woman member of the Council and, in no time, became the Deputy President of the Council.

**Gopuram as an emblem:** The symbol features a 'gopuram' (temple tower) – characteristic of south Indian temples has been adopted as the state emblem.

**Change of name:** During the two-year rule of the DMK founder C.N. Annadurai, the Assembly, in July 1967, adopted a motion renaming Madras State as Tamil Nadu, which later got the approval of Parliament.

**Social reforms:** It has passed several landmark laws for the welfare of women, such as Devadasi abolition, equal rights to women in property and the constitution of the State Commission for Women.

**January 1921:** The State Assembly building when originally founded was called the Madras Legislative Council. It was inaugurated by Prince Arthur, Duke of Connaught, and uncle of George V, Emperor of England on January 12. It was a place of Governorship that housed important affairs of the Coast of Gingalee, the Kingdoms of Orissa, (Odisha) Bengala (Bengal), and Pattana (Patna), as well as parts of Malabar (Kerala) and Andhra Pradesh/Telangana as well, before its bifurcation.

**April 1921:** The Legislative Council adopted the removal of sex disqualification on women for the franchise, which removed the gender restriction on voting as well as enabling the possibility of women becoming elected members.

**July 1937:** Bi-cameral legislature formed with the Legislative Assembly having 215 members and the Legislative Councils having 56 seats. It frequently met at the Senate House in the Chepauk campus of the University of Madras and Banqueting Hall (Rajaji Hall) in the Government Estate Hill until October 1939, before switching back to Fort St. George.

**July 1947:** The National Flag of India which was designed by Pingali Venkayya was first adopted in its present form during a meeting of the Constituent Assembly held on July 22, 1947, barely one month before India's independence from the British on August 15, 1947. The first-ever flag flown after the independence is also stored in the third floor of a museum premises inside the Fort complex.

**March 1952:** Madras Presidency's first Assembly was constituted after independence with 375 seats with 243 single-member constituencies and 66 double-member constituencies. The Legislative Council's strength rose to 72 members, including 1w nominated members.

**April 1957:** Following the reorganisation of States based on languages, the Legislative Assembly's strength dropped to 205, which is when Fort St. George yet again became the venue of deliberations until 2010.

**March 1967-1968:** The Legislative Assembly's strength rose to 234 after it adopted a unicameral legislature, this number remains the same even today.

**November 1986:** The Tamil Nadu Legislative Council (Abolition) Bill, 1986 was passed by both houses of the Parliament and received the assent of the President and eventually abolished the same year.

## UNIT – II: Role and Impact of Science and Technology in the development of India

### 1. Space Policy – Government of India

#### Introduction:

The Indian Space Policy 2023 **was approved by the Cabinet Committee on Security. The policy seeks to institutionalise private sector participation in the space sector, with ISRO focusing on research and development of advanced space technologies.**

#### Major Provisions of Indian Space Policy 2023:

##### About:

- The policy will pave the **way forward with much-required clarity in space reforms** and augment private industry participation to drive the space economy opportunity for the country.

##### Delineation of Roles:

- The policy delineates the roles and responsibilities of **Indian Space Research Organisation (ISRO), space sector PSU NewSpace India Limited (NSIL), and Indian National Space Promotion and Authorization Center (IN-SPACe).**

- **Strategic activities related to the space sector will be carried out by NSIL**, which will work in a demand-driven mode.
- **IN-SPACE** will be the interface between **ISRO** and **non-governmental entities**.
- **ISRO** will **focus its energies on developing new technologies**, new systems and research and development.
- The operational part of ISRO's missions will be moved to the **NewSpace India Limited**.

#### **Entry of Private Sector:**

- The policy will allow the **private sector to take part in end-to-end space activities** that include building satellites, rockets, and launch vehicles, data collection and dissemination.
- The **private sector can use ISRO facilities** for a small charge and is encouraged to invest in creating new infrastructure for the sector.

#### **Impact:**

- The policy will help India increase its share in the global space economy substantially from less than **2% to 10% in the future**.

What is the Current Status of India's Space Sector?

#### **About:**

- The **Indian Space Sector has been globally recognised for building cost-effective satellites**, and now India is even taking foreign satellites to space.
- As part of **India's commitment to the Geneva Conference on Disarmament**, the country continues to advocate peaceful and civilian use of outer space and oppose any weaponization of space capabilities or programs.
- ISRO is the **6<sup>th</sup> largest space agency in the world** and holds an exceptional success rate.
  - With over **400 private space companies**, India ranks fifth globally in no. of space companies.

#### **Recent Developments in India's Space Sector:**

- **Defence Space Agency:** India has recently set up its **Defence Space Agency (DSA)** supported by the **Defence Space Research Organisation (DSRO)** that has the mandate to create weapons to "**degrade, disrupt, destroy or deceive an adversary's space capability**".
  - Also, the Indian Prime Minister launched the **Defence Space Mission** at the Defence Expo 2022, Gandhinagar.
- **Expanding Satellite Manufacturing Capabilities:** India's satellite-manufacturing opportunity will reach **USD 3.2 billion by the year 2025** (in 2020 it was USD 2.1 billion)
- **SAMVAD Program:** To encourage and nurture space research among young minds, ISRO launched its **Student Outreach Program called SAMVAD** at its Bengaluru facility.

What are Current Major Challenges Related to the Space Sector?

- **Lack of Regulations on Commercialisation:** The **commercialization of outer space** is accelerating due to the development of private satellite expeditions for **Internet services (Starlink-SpaceX) and for space tourism.**
- It is possible that if **no regulatory framework is put in place**, rising **commercialisation may lead to monopolisation in the future.**
- **Rising Space Debris:** As outer space expeditions increase, **more space debris will accumulate.** Because objects orbit Earth at such high speeds, **even a small piece of space debris can damage a spacecraft.**
- **China's Space Leap:** Compared to other countries, the Chinese space industry has grown rapidly. It has **successfully launched its own navigation system, BeiDou.**
- It is very likely that China's Belt Road Initiative (BRI) members will contribute to or join the Chinese space sector, **solidifying China's global position and may lead to weaponization of outer space.**
- **Increasing Global Trust Deficit:** An arms race for **weaponization of outer space** is creating an **environment of suspicion, competition, and aggressiveness** across the globe, potentially leading to conflict.
- It would also **put at risk the entire range of satellites as well as those involved in scientific explorations** and communication services.

#### Way Forward

- **Defending India's Space Assets:** In order to effectively defend its space assets, including **debris and spacecraft**, India needs **reliable and accurate tracking capabilities.**
- **Project NETRA**, an **early warning system** in space to detect debris and other hazards to Indian satellites is a good step in this direction.
- **Permanent Seat in Space:** India should take the **initiative to cooperate with international bodies** and plan for a **planetary defense program and joint space missions in the long term.**
- Also, with the **Gaganyaan mission**, **ISRO has begun to focus on manned space flight** as part of its rethinking of India's space presence.
- **Replicating Space4Women in India:** **Space4Women** is a **United Nations Office for Outer Space Affairs (UNOOSA)** project that promotes gender equality and women's empowerment in the space sector.
- It would be beneficial to **initiate space awareness programmes at the rural level in India**, and **College-ISRO Internship corridors can be built specially for female students** to introduce them to the possibility of stretching their wagon beyond earth.
- **AzaadiSAT, made by 750 schoolgirls** from India is a firm step in this direction.
- **Technological Intervention for Cleaner Space:** Technologies like **self-eating rockets, self-vanishing satellites and robotic arms** to catch space debris can make India an explorer cum problem solver in the space arena.

## 2. Ethanol blending policy of Tamil Nadu

### Introduction:

Tamil Nadu, one of India's leading states in agriculture and industry, has launched a new ethanol blending policy to promote sustainable and cost-effective green fuel. The state government aims to attract investments worth Rs 5,000 crore in molasses or grain-based ethanol production capacity to meet the increasing petrol requirement and reduce GHG emissions from the transportation sector. The new ethanol blending policy of Tamil Nadu is a step towards sustainable energy and agriculture, promoting cost-effective green fuel, reducing GHG emissions, reviving the sugar industry, improving farmer income, and maximising value addition to the state's natural resources. The policy is a significant contribution to the national biofuels policy of achieving 20% blending of ethanol in petrol by 2025.

### Reducing GHG Emissions and Mitigating Climate Change

With transportation accounting for nearly one-fourth of GHG emissions and the projected growth of the state's vehicular fleet, there is an immediate need to transition to alternate cost-effective green fuel that mitigates climate change.

### Some of the key benefits of the policy are:

- Meet the estimated ethanol blending requirement of 130 crore litres over a period of time
- Reduce dependence on fossil fuels and enhance import substitution through indigenous sourcing and production of fuel grade ethanol
- Reduce air pollution arising from fossil fuels and mitigate climate change risks

### Reviving the Sugar Industry and Improving Farmer Income

The policy also seeks to improve farmer income through price realisation and expansion in opportunities due to ethanol blending. It aims to revive the sugar industry in Tamil Nadu through improved utilisation of existing mills and diversification to dual feedstock.

- Encourage diversification of feedstock to encourage low water consuming and versatile crops like maize, sorghum and tapioca
- Utilisation of damaged rice for ethanol production
- Expansion of grain-based distilleries and creation of new molasses and sugar/syrup-based distilleries

### Maximising Value Addition to the State's Natural Resources

Tamil Nadu has a natural advantage with a total cropped area of 6.63 million hectares from a diversified range of crops such as sugarcane, paddy, maize, tapioca, and sweet sorghum. The coverage of irrigated area is higher than the national average, providing an ideal ecosystem for ethanol production. The new policy provides an opportunity for Tamil Nadu to maximise its value addition to the state's natural resources by promoting indigenous ethanol production based on existing locally available agrocentric resources, expansion of these resources as well as utilisation of surplus and damaged produce.

### Roadmap for Ethanol Blending in India 2020-25

The "Roadmap for Ethanol Blending in India 2020-25" lays out an annual plan to increase domestic ethanol production in line with target of the amended National Policy on Biofuels

(2018) as well as with its Ethanol Blended Petrol (EBP) Programme to reach a blending of 20% of ethanol in petrol (E20) by 2025/26.

### 3. Biomass Energy

#### National Bio Energy Programme

##### Introduction

- **Biomass** is simply organic matter, which means it is derived from anything that is or has been alive, such as animal waste, crop waste, garden waste, and so on.
- India has an abundance of renewable energy resources, which should be promoted in any way possible.
- Animal waste, kitchen leftovers, crop residue, market waste, and faecal sludge are all examples of bio-waste generated in rural India.
- Biogas is an environmentally friendly fuel, and its use helps to reduce carbon emissions and pollution.

##### About National Bioenergy Programme:

- The **Ministry of New and Renewable Energy** has announced the implementation of the **National Bioenergy Programme** in November 2022.
- MNRE has extended the National Bioenergy Programme from **FY 2021-22 to FY 2025-26**.
- The program's implementation has been recommended in two stages:
- The first phase of the programme has been approved, with a budget of Rs. 858 crores.

**The following sub-schemes will be included in the National Bioenergy Programme:**

##### Waste to Energy Initiative

- It is a **Program on Energy** from Urban, Industrial, and Agricultural Wastes/Residues designed to assist in the establishment of large Biogas, BioCNG, and Power plants.
- The programme will be implemented by the **Indian Renewable Energy Development Agency (IREDA)**.

##### Biogas Initiative

- To assist in the establishment of small and medium-sized biogas plants in rural areas.

##### Bioenergy's Benefits:

- It contributes to **clean cooking** by using biogas.
- **Co-firing in thermal power plants** using biomass pellets and briquettes, as well as BioCNG for transportation.
- Establishment of biogas plants for clean cooking fuel, lighting, and meeting users' thermal and **small power needs**, resulting in GHG reduction, improved sanitation, **women empowerment**, and rural job creation.
- **Organically enhanced Bio-manure:** The digested slurry from biogas plants is a rich source of manure that farmers can use to supplement or reduce their use of chemical fertilisers.
- **It is carbon neutral:** As a byproduct of photosynthesis, biomass fuels emit the same amount of carbon into the atmosphere as plants absorb during their life cycle.

- **It reduces reliance on fossil fuels:** Not only are fossil fuels limited in supply, but they also have environmental consequences, such as the release of large amounts of carbon dioxide into the atmosphere and the pollutants produced during extraction, transportation, and production.
- **Less costly than fossil fuels:** While fossil fuel production requires a significant investment in equipment such as oil drills, gas pipelines, and fuel collection, biomass technology is significantly less expensive. Manufacturers and producers can generate higher profits with less output.

#### Other advantages include:

- Support for national commitments to meet climate change targets
- Imports of natural gas and crude oil will be reduced.
- Protect yourself from fluctuations in the price of crude oil and natural gas.

#### Bioenergy's Drawbacks

- **Biomass energy is inefficient compared to fossil fuels:** Some biofuels, such as ethanol, are inefficient when compared to gasoline. To increase its efficiency, it must be fortified with fossil fuels.

#### Initiative by the government

- The Government of India launched **GOBAR-Dhan in 2018** as part of the **Biodegradable Waste Management component of the Swachh Bharat Mission (Grameen) (SMB-G)** to improve village cleanliness and generate wealth and energy from cattle and organic waste.
- **SATAT** is a development initiative that aims to provide a Sustainable Alternative to Affordable Transportation for both vehicle users and farmers and entrepreneurs.
- This initiative has a lot of potential for improving municipal solid waste management and addressing the problem of polluted urban air caused

#### The Way Forward

- **Rural household:** The benefits of using surplus biomass should be passed on to rural households in the form of an additional source of income for farmers.
- The additional push in the form of a 20% higher standard **CFA (central financial assistance)** pattern for the north-eastern region and Gaushala/shelter was required at the time to create inclusiveness in a practical manner.

## UNIT – III: Tamil Society – Its Culture and Heritage

### 1. International Institute of Tamil Studies

#### Genesis

Hon'ble Former Chief Minister of Tamil Nadu Perarignar Anna expressed his wish at the Second World Tamil Conference held at Chennai during January 1968 to establish an exclusive Institute for Tamil Higher Studies on par with French Academy. Accordingly, International Institute of Tamil Studies was established in the year 1970 by the then Hon'ble Chief Minister of Tamil Nadu Muthamizh Arignar Kalaignar under Societies Registration Act.

## Objectives

- Creating a conducive environment for Research works
- Imparting training to Researchers as per the need of the hour
- Sharing Information related to Tamil studies with Foreign Tamil Aficionados.
- Carrying out the work of Tamil Higher researches in association with other educational institutions, Government organizations, Foreign Associations, Private institutions and individuals who satisfy the objectives of the International Institute of Tamil Studies.
- Upgrading the Library of Higher Studies and utilizing the same optimally.

## Faculties

The following faculties are functioning in the International Institute of Tamil Studies, namely,

1. Tamil Literature and Manuscriptology
2. Tamil Language and Linguistics
3. Sociology, Arts and Culture and
4. Overseas Tamils

## Teaching Tamil Language to Foreigners and people of other states who are unfamiliar with Tamil

### Tirukkural Art Gallery

### Tirukkural Drawing Competition

### A Centre for Preserving Palm Leaf Manuscripts.

### Ancient Tamil Art Gallery

### Publication of Books

## Tamilology

Xavior Thaninayagam Adigal, the great scholar, was the pioneer for the emergence of International Institute for Tamil Studies. He was the one who started the English journal called *Journal of Tamil Studies* (JOTS). This bilingual (Tamil & English) journal is now published quarterly as „Tamizhiyal“.

## Activities of the Institution

National Library day (23rd April) was celebrated in the Institute on 28.04.2022 with the Tamilnadu Government's financial assistance of Rs. 20,000/.

## 2. Chennai Literary Festival

### 1. Hon' ble Chief Minister opens Chennai literary festival

At the outset I extend my hearty welcome to all of you.

First of all, I extend my welcome to Thiru. Paul Zacharia, one of the leading writers of Kerala.



Thiru. Zacharia uses art not only for the sake of art, but also for the sake of people. He has extended his greetings for our various efforts and we take those greetings as impetus and work more vigorously. Similarly, I would like to express my heartfelt thanks to writers and creators, who have assembled here in large numbers.

Tamil is known for its sweetness; it is equal to our very life. That is how Tamil is portrayed by Poet Bharathidasan. We have gathered here for the sake of the Tamil language.

It is most appropriate that the conference is being held in the Anna Centenary Library, which has been named after our great leader Perarignar Anna. There is no other place which is more apt for conducting this conference than this place.

I am really elated to participate in this conference attended by great creative writers, authors, film directors and people belonging to the drama field.

I am really proud to inaugurate the conference not only as the Chief Minister of the State, but also as an individual whose mother tongue is Tamil.

DMK rule in Tamil Nadu is synonymous with Tamil rule. The rule of the DMK is the rule of the Tamil literary movement.

- We have named the State 'Tamil Nadu', which has a history of over 2,000 years.
- No one can forget that it is our leader Muthamizharignar Thalaivar Kalaignar, who got the classical language status for the Tamil Language.
- The name 'Madras' was changed to Chennai.
- Sri and Srimathi were replaced legally by Thiru and Thirumathi.
- We set up Valluvar Kottam in the capital and a 133 feet Thiruvalluvar statue at Kanniyakumari.
- We propagated Thirukkural on all fronts.
- We made people say, Tamil Vazhga.
- We have set up Poompuhar Kottam showing the greatness of Silappadhikaram. We established the right to worship in Tamil in temples.
- Tamil was made the official language of the State.
- Through the Tamil Nadu Textbook Corporation ah subjects were translated into Tamil and more than 1,000 books were published.
- We made Tamil as the computer language.

- We laid the foundation for Tamil as a medium of instruction, which made students to study in Tamil in schools and colleges.
- We organized the World Tamil Conference.
- We organised the World Tamil Classical conference.
- We funded Dravidian University.
- We hosted International TamilNet conference in 1999.
- We made Tamizh Thai Vaazhthu compulsory in all functions.
- We have installed the statues of Avvaiyar, Kannagi, Kambar, Veeramamunivar, G.U.Pope, V.O.C, Bharathiyar and Bharathidasan on the Marina Beach.
- Tholkappiar Poonga was set up during DMK's rule.
- It was the DMK that declared the day after the Pongal festival as Thiruvalluvar day with Government holiday.

We can go on listing our achievements. That is the reason why DMK rule is called Tamil rule. We have been taking various measures during the last one-and-a-half years for the development of the language.

Books of Tamil scholars have been nationalized, Meetings are organized on the birth anniversaries of Tamil writers, Sangam Literature classics are sold at subsidized prices,

a Dravidian Encyclopedia, the Kalaignar Ezhuthukol award to Journalists, Rs. 2.50 crore has been contributed for setting up a Tamil Chair in Houston University in the USA, Rs .25 crore was donated to Cologne University in Germany for the continuation of the Tamil Department, Rs. 5 crore for starting separate department of Tamil Literary Studies at JNU in New Delhi, Little magazines for libraries. Lakkiya Maamani Award. Houses for award- v. inning Tamil writers, Thisaithorum Dravidam project, Kural award, Muthamizharignar Translation Scheme and 'Theerakaadhil Thirukkural' events are some of the measures implemented by the Government of Tamil Nadu for protecting and promoting Tamil.

As a crown to all these measures, this literary festival is being organized now. I would like to congratulate and thank the Ministers who are responsible for this. I appreciate the work done by the School Education Minister Anbil Mahesh for his commendable work.

Likewise, the Directorate of Public Libraries is doing exceptionally well and so also the Tamil Nadu Textbook Corporation.

The School Education Department, Directorate of Public Libraries and the Tamil Nadu Text Book Corporation are jointly organizing the Literary Festival.

We conducted Porunai Festival in Nellai, Cauvery Festival in Thanjavur, Siruvani Festival in Coimbatore, Vaigai Festival in Madurai and are now celebrating the main festival in the Capital.

Many renowned writers are here to address the festival. The sum total of these five festivals can be said to be the Tamil Nadu Tamil festival conference.

At this conference, I am happy to release 100 books with your support. This conference is being organized in a grand manner.

The School Education Department, Tamil Development Department, Information Department and Tamil Virtual Academy, all part of the Government of Tamil Nadu, are vying with one another to publish books that can compete with the big publishers. In the last one year, a number of new publications have been released.

- In this conference, the English translation by senior journalist Vijayshankar of the book, 'A Grand Tamil Dream' on Arignar Anna, published by Tamil Thisai Pathippagam has been released.
- An American researcher called Robert Hardgrave wrote a book in English in 1965 on the Dravidian Movement. It was a book written even before the party had come to power. We have published the book after getting permission.
- An anthology featuring Inamana Perasiriyar is to be released soon.
- Pathuppattu has been released.
- The Kalai Kalanjiyam encyclopedia is to be published as an archival edition.
- Books on medicine have been published in Tamil.

All these books portray the greatness of Tamil, its richness, the political and social history of Tamil Nadu, Tamil culture and Tamil Nadu and they are all educative to the present younger generation. I congratulate everyone who planned, executed, created and published these books.

49 years ago on January 16, 1974, the then Chief Minister, Muthamizharignar Kalaignar spoke after releasing 176 college books on behalf of the Tamil Nadu Textbook Corporation.

"Studying Tamil is different from studying in Tamil. We must clearly understand the difference between the two.

Studying Tamil means studying sangam literature, epics, poems and our ancient works. Studying Tamil is required.

Studying Tamil means studying History, studying Geography, studying Economics. It is necessary to study various fields. Studying Tamil is required, but more than that, it is very necessary to study in Tamil. They spoke about the need to increase the wealth of knowledge in Tamil language as it is necessary for all kinds of future development in Tamil Nadu. After

that, if you ask which is the biggest book release event in Tamil Nadu I think it will be this event.

Dr. Kalaingar also mentioned one thing in the conference. "Language should be respected".

That is what is needed today.

Language is the life of a race. Literature is the heart of a race. No one should forget it.

This is the race where youths sacrificed their lives to protect the language. Though the Dravidian Movement is a political movement, right from the beginning it has been functioning as a movement to preserve the language.

### **Theena Muna Kaana**

No political party in the country or in any State flowered as a literary movement. DMK has grown in this manner. 'Theena Muna Kaana, Thirukkural Munnetra Kazhagam' sang actor N.S.K. in one of his films.

Though Kalaingar was a political leader, his Kuraloviyam and Sangathamizh will be remembered as long as Tamil lives.

Valluvar Kottam in Chennai and 133 feet Thiruvalluvar statue in Kumari are timeless and majestic icons today.

I am saying this because a language cannot grow only by attachment to it. The language should be developed only by feeling and knowledge. That is why we conduct such literary festivals.

Today's younger generation should be nourished with the Tamil spirit and the spirit of Tamil literature. Literature is what makes a man cultured.

- When religion and casteism divide people, Thiruvalluvar's single line, 'Pirappokkum Ella Uyirkkum' unites all human beings.
- The line 'Yaadum Oorey Yaavarum Keir' will remove all differences in human society.
- Vallalar's line, I was saddened whenever I saw a withering crop' will melt the heart even of an unfeeling person.
- Can there be anything more conducive to self-confidence than the Kural which says that efforts will definitely pay!

I need not tell you about all the personalities of contemporary Tamil cinema. You know it already.

All the world famous books are translated here and Tamil works are translated and published in many languages of the world.

Sorting this year, we are going to hold the International Book Fair here. All classic Tamil works are going to be translated into world languages.

Tamil works should be read more by Tamils. For that, the student community has to develop an insatiable interest in Tamil and Tamil literature right from their youth.

Such festivals which are organized in a very elaborate manner like creative stage, culture workshop, children's literature theatre and performing artist will help create interest in literature.

Our mentor Arignar Anna, before going to hospital for surgery, requested doctors to delay the operation as he wanted to complete the book he was reading.

Maveeran Bhagat Singh was reading even while going to the gallows. Only those who know history can create history.

Only those who study literature can understand our society. Literature is not a pastime or entertainment. It should be our aim and character.

Literature should become a great movement.

Just like book fairs are held in the Districts, literary festivals too should also be organized in the Districts.

This should not just be an event for which people meet and then disperse. This should be a meeting that brings productive results. That is my desire. Once again I wish the festival my heartfelt good wishes, and conclude my speech.

### 3. Chennai Sangamam – Namma Ooru Thiruvizha

#### Introduction:

The Hon'ble Chief Minister Tamil Nadu Thiru. M.K.Stalin declared open the 'Chennai Sangamam - Namma Ooru Thiruvizha', organized by the Department of Art and Culture, at the Island Grounds on 13.01.2023. The Hon'ble Chief Minister also witnessed the show, where 40 varieties of arts were performed.

#### About:

The festival was held in 18 places in Chennai Corporation; Island Grounds; Corporation Playground, Kolathur; Murasoli Maran Flyover Park, Perambur South; Robinson Playground, Royapuram; Nageswara Rao Park and Semmozhi Park, Mylapore; Corporation Boys Higher Secondary School, Nungambakkam; Corporation Playground, Chintadripet; Corporation Ground Natesan Park (opposite), T.Nagar; Elliots Beach. Thiruvanmiyur Beach, BesantNagar; Corporation Boys Higher Secondary School ground, Saidapet; Sivan Park, K.K.Nagar; Kalaingar playground, Ramakrishna Nagar, Valasaravakkam; Tower Park, Annanagar; Jainagar Park, Koyambedu; S.V.Playground, Ambattur and Government Museum, Egmore; The festival was held between 6 p.m and 9 p.m from 14.01.2023 to 17.01.2023.

In the festival, 40 varieties of traditional arts were held, including Naiyandi Melam, Karagattam, Paraiyattam, Puraviattam, Kaavadiattam, Puliattam, Thodar Nadanam, Mayilattam, Silambattam, Villupattu and folk songs (Naattuppura Paattu).

Addressing the gathering after inaugurating the festival, the Hon'ble Chief Minister said, "First of all I extend my Pongal Greetings to all of you. I am really proud to inaugurate the Chennai Sangamam in which the arts of Tamil Nadu and artists converge on the State Capital- Chennai. I thank all those who created an opportunity for me to participate in this function. People who participate in the 'Chennai Sangamam' feel great happiness; they are like people who attend a thiruvizha (festival).

I was very eager to participate in the festival despite being busy with the Assembly session, Government functions, departmental reviews, and various other engagements. But having come here, I don't know how the past hour passed so fast. You too would have had the same experience. Namakkal Kavignar Ramalinganar wrote that there is a race called the Tamil race and that it has special qualities. These were not mere words but an assertion of pride in a culture of thousands of years which has all been documented.

The heart-stirring Silappadhikaram can well be considered an epic as it glorifies the three forms of Tamil - Prose, Music and Drama (Iyal, Isai and Natakam).

Muthamizharignar Dr. Kalaignar had said that it was drama that came first, followed by music and then prose. It is the Dravidian Movement that completely changed the status of the arts and brought it to the doorstep of marginalized people. Till then, it was the entertainment of the well-to-do people. It was the Dravidian Movement that changed the notion that art is the prerogative of certain people belonging to the upper class. The Dravidian Movement changed art into an entertainment for all people, thereby hammering the superstitious habits of some people, who tried to bury equality through castes and creeds. It is the Dravidian Movement that addressed the pain of common people through various art forms. It was the Dravidian Movement that spoke the language of the common people. The Dravidian Movement nurtured the arts and was nurtured by the arts.

We utilized drama, cinema and the folk arts for addressing the people. We have been implementing countless schemes for the development of the arts and to make the life of artists bloom. This Government follows the path laid down by Dr.Kalaignar and it is a Government for the welfare of artists.

That is why, in the 2022-2023 Budget, we allotted Rs. 48 crore for the Art and Culture Department, the highest ever so far and made many announcements. Our Government generously allotted funds for the Department to provide many opportunities to the artists for upgrading their living standards, developed the infrastructure of the art schools and provided gadgets for improving the standard of art education.

If art is to grow, artists should not live in penury. For that, they should be given opportunities.

At the time of Corona, artists did not have opportunities. The Government extended many kinds of welfare assistance to them.

- 160 art shows are conducted under the title Kalai Sangamam in all Districts in the State in places where people gather in large numbers and for that Rs. 1 crore has been allotted.
- 500 folk artists have been paid financial assistance of Rs. 10,000 per artist for purchase of musical instruments and other dress materials and for this purpose the Government has allotted Rs.50 lakh.
- For senior Kalaimamani award winners who are in poverty, the 'Porkizhi' amount has been raised from Rs.50,000 to Rs. 1 lakh.
- To encourage skilled artists, the number of District Kalai Mandram Awards will be increased to 15 from 5.
- Rs. 50 lakh has been allotted for organizing Pongal Art Festival in Chennai and 10 Districts on behalf of the Tamil Nadu Iyal, Isai and Nataka Mandram.

To enable more artists get the welfare assistance through the Tamil Nadu Iyal, Isai and Nataka Mandram, the grant-in aid for the Mandram has been increased to Rs. 3 crore.

### **Speech of the Hon'ble Chief Minister about 'Chennai Sangamam, Namma Ooru Thiruvizha**

**I extend my greetings to all of you.**

Tamils lived with a unique identity of their art, culture and literature. But in later days, they fell prey to ethnic enemies and forgot their identity. It is the Dravidian Movement that retrieved the forgotten identity through Reason and achieved the ethnic upliftment of Tamils. Chennai Sangamam - Namma Ooru Thiruvizha is yet another attempt to restore Tamil Culture.

The flame of art and literature was lit by our leader, Dr.Kalaingar and the Chennai Sangamam - Namma Ooru Thiruvizha is an attempt to protect that flame. The Festival will be held on behalf of the State Government in various places in Chennai from January 13 to 17.

I am launching the Chennai Sangamam - 2023 on January 13 - Friday, at Island Grounds, Chennai. The function will be held in 18 places, where more than 60 performances will be conducted, bringing together over 600 artists from various places for the Chennai Sangamam. Our traditional arts such as Paraiattam, Karagattam and performance by hill tribes will be on show at the Chennai Sangamam. Special foods of various places in the State will also be available. Literary festivals are also to be held. The DMK Government is proud to bring to you these arts which speak of the people and their stories.

There is a race called the Tamils; they have a unique identity. They are experts in the arts and are learned. I appeal to all of you to attend the festival. Let us all meet at the Festival.

To top it all, in Chennai and in Kancheepuram, Tiruchi, Coimbatore, Salem, Thanjavur, Madurai and Tirunelveli, the Divisional Headquarters of the Art and Cultural Department, and in all District headquarters, 'Namma Ooru Thiruvizha' will be conducted. For this Rs. 9.84 crore has been allotted. This Chennai Sangamam-Namma Ooru Thiruvizha, will be organized as a big festival. This festival will be held in 18 places in Chennai Corporation.

In this festival, folk artists, classical artists, artists from other States and thousands of other artists will be participating. The daily honorarium of every artist who shows his skills is to be increased from Rs. 2,000 to Rs.5,000.

Along with the art festival, which is a treat for our eyes, a food festival has also been arranged. Signature dishes from various Districts will be supplied to the participants.

Similarly, 'Vazhukkumaram' (greasy pole) and 'Uriyadi' (Breaking the pot) games have been arranged for the people. For Tamil enthusiasts, Kaviarangam and symposiums have been arranged.

Of late, people prefer to live in isolation. This attitude should change.

Our arts are the stuff of real entertainment. They not only entertain us but also elevate us and refine us.

## UNIT – I: Geography of India with special reference to Tamil Nadu

### 1. Vibrant Village Programme

#### About:

- It is a **Centrally sponsored scheme**, announced in the **Union Budget 2022-23 (to 2025-26)** for development of villages on the **northern border, thus improving the quality of life of people living** in identified border villages.
- It will cover the border areas of **Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim and Ladakh**.
- It will cover 2,963 villages with 663 of them to be covered in the first phase.
- Vibrant Village Action Plans will be created by the district administration with the help of Gram Panchayats.
- There will **not be overlap with Border Area Development Programme**.

#### Objective:

- The scheme aids to identify and develop the economic drivers based on local, natural, human and other resources of the border villages on the northern border;
- Development of growth centres on '**hub and spoke model**' through promotion of social entrepreneurship, empowerment of youth and women through skill development and entrepreneurship;



- Leveraging the **tourism potential through promotion of local**, cultural, traditional knowledge and heritage;
- Development of **sustainable eco-agri businesses** on the concept of '**one village-one product**' through community-based organisations, cooperatives, NGOs.

### In News:

Recently, the Union Cabinet has approved raising of **seven new ITBP (Indo-Tibetan Border Police) battalions** and allocated Rs 4,800 crore under the **Vibrant Villages Programme (VVP)** to bolster the social and security framework along the China border.

- The Cabinet has also cleared a 4.1-km Shinku-La tunnel on the Manali-Darcha-Padum-Nimmu axis to allow **all-weather connectivity to Ladakh**.

What is the Significance?

- It is aimed at **strengthening the security grid on the Line of Actual Control (LAC)**. It will also provide a window for the ITBP to rest, recuperate and train its personnel.
- The decision to raise additional battalions was taken keeping an eye **on the need for effective monitoring in the border areas and the battalion**.
- The government's decision to approve a financial package for border villages and upgrade security comes at a time **when issues with China are still to be resolved along the LAC** in Ladakh. PLA troops are still squatting in the Depsang Plains and Demchok. China is also upgrading its infrastructure along the LAC.

What are the Key Points of the Shinku-La tunnel?

- It is a 4.1-km tunnel on the **Nimu-Padam-Darcha Road link** to provide all-weather connectivity to the **border areas of Ladakh**.
- The tunnel will be completed by December 2025.
- It is very important as far as the security and safety of the country is concerned.
- It will also help in the movement of security forces in that region.

## 2. Importance of Census

### What is Census?

The entire process of collecting, compiling, evaluating, and disseminating demographic, economic, and social data regarding, at a specific time, all people in a country or a clearly defined region of a country is known as a population census. It provides information as of a specific date and includes demographic, social, and economic statistics.

The Indian Census is one of the world's largest administrative activities.

### Constitutional Support for Census

The Census Act of 1948's provisions governs how the census is carried out.

According to **Article 246** of the Indian Constitution, **The census of the population is a Union subject.**

It is stated in the **Seventh Schedule** of the constitution.

### **What is the Purpose of the Census?**

To collect information for the Central and State Governments' planning and policy making.

It aids in the government's decision-making about the allocation of cash and assistance to cities and states.

Numerous national and international organisations, academics, businesspeople, manufacturers, and others make extensive use of census data.

### **What makes the Census significant?**

Conducting periodic census is significant for the following reasons:

#### **Provides the Most Reliable Source of Information**

Information on Scheduled Castes and Scheduled Tribes, Language, Religion, Migration, Disability, Economic Activity, Literacy, Housing & Household Amenities, Urbanization, Fertility and Mortality, and many other socio-cultural and demographic data are provided by this most reliable information source.

#### **Constituency Reservation and Delimitation**

The delimitation and reservation of Parliamentary, Assembly, Panchayat, and other local bodies' constituencies are also done in accordance with the demographic information provided by the Census.

#### **Administration Purpose**

The census serves as the foundation for evaluating the nation's progress over the previous ten years and keeping track of the Government's continuing Schemes.

#### **Effective Governance**

The government uses census data for management, planning, and policy-making, as well as for managing and evaluating a variety of programmes.

#### **Detailed Accounts**

Even the best sample surveys can't compete with a census since it promises to count every Indian. When the state links to every person during a census, it will find it difficult to evade or avoid the data.

## Grants

Based on population figures obtained from the Census data, the Finance Commission awards grants to the states.

## Welfare Schemes

Census is the key to building identification and confirming it over time by identifying the actual beneficiaries. Census statistics provide for easy, cross-temporal comparison.

## Improved Access for Businesses

Business houses and industries can utilise the census data to develop and strengthen their operations so that they can expand into previously untapped markets.

## Census in India so far

In India, census activities were **first conducted** under **The Maurya dynasty**, which was long ago.

It was organised from 1865 to 1872, but it has been running continuously since 1881, making it a reliable source of information.

From 1881 until 2011, India consistently conducted decadal censuses despite epidemics, wars, Partition, and other unrest, with COVID-19 being the sole exception.

The 2011 Census is the country's fifteenth national census.

According to the census, the Total Fertility Rate (TFR) is rapidly declining and is headed toward stabilisation.

The 2011 Census also disproved the idea that divorce rates in urban and rural India differed. The divorce rate in urban areas (0.89%) is approximately the same as that in rural areas (0.82%).

## Why was the Census of 2021 Delayed Indefinitely?

Because of the **Covid-19 pandemic outbreak**, the census 2021 has been delayed.

However, it will be the **first digital Census** and will include a self-enumeration option.

## 3. Tribal welfare initiatives of Government of India

### Introduction:

This Ministry of Tribal Affairs has been implementing various schemes relating to education, health, economic empowerment etc in the Scheduled Tribe dominated areas of the country. The receipt of Annual Proposals under these schemes is a continuous process which is considered by this Ministry as per schematic norms. The details of these schemes are as under:

1. **Eklavya Model Residential School (EMRS):** It is a central sector scheme introduced in the year 1997-98 to provide quality education to Scheduled Tribes (ST) students (Class 6th to 12th) in remote areas through residential schools. As on date, 684 schools have been sanctioned by the Ministry, out of which 378 are reported to be functional.
2. **Grants under Article 275(1) of the Constitution of India:** Under this scheme, funds are released to States to enable them to meet the cost of such schemes of development as may be undertaken by the State for the purpose of promoting welfare of Scheduled Tribes in that State or raising the level of administration of Scheduled Areas therein to that of the administration of the rest of the areas of that State.
3. **Pradhan Mantri Adi Adarsh Gram Yojna (PMAAGY):** 'Pradhan Mantri Adi Adarsh Gram Yojna (PMAAGY)', aims at providing Basic Infrastructure in 36428 villages with significant tribal population having at least 50% tribal population and 500 STs in convergence with Central STC and State TSP funds.
4. **National Fellowship and Scholarship for Higher Education of ST Students:** The scheme provides financial assistance or pursuing MPhil and PhD in Universities and for perusing graduate and post graduate courses in top 246 Institutes like IIT/ AIIMS etc .
5. **National Overseas Scholarship (NOS) to the ST Students for Studies Abroad:** Under the Scheme, financial assistance is provided to 20 ST students every year for pursuing higher studies abroad.
6. **Aid to Voluntary Organizations working for the welfare of Scheduled Tribes:** Ministry has been funding Voluntary Organizations (VOs) including Non-Governmental Voluntary Organizations (NGOs) working in tribal Hilly, remote and border areas for projects in Education, Health and Livelihood.
7. **Venture Capital Fund (VCF) for Scheduled Tribes:** From the year 2021-22, the scheme of 'Venture Capital Fund for Scheduled Tribes' (VCF-ST) has been taken up by the Ministry with a corpus fund of ₹50.00 crore for a period of five years for promoting entrepreneurship/ start-up projects by ST youth.
8. **Pradhan Mantri Jan Jatiya Vikas Mission (PMJVM):** This scheme has been conceptualized with the merger of two schemes i.e. (i) 'Mechanism for Marketing of Minor Forest Produce through Minimum Support Price and Development of Value Chain for MFP (MSP for MFP)' and (ii) 'Institutional Support for Development and Marketing of Tribal Products'. PMJVM seeks to achieve livelihood driven tribal development through quality input, technology, credit and better marketing access etc.
9. **Pre- Matric Scholarship:** Pre-Matric Scholarship Scheme is a Centrally Sponsored Scheme under which financial assistance is provided to ST students studying in classes IX and X.
10. **Post Matric Scholarship:** Post-Matric Scholarship Scheme is a Centrally Sponsored Scheme under which financial assistance is provided to ST students studying beyond class X.
11. **Support to Tribal Research Institute (TRI):** This scheme aims to strengthen TRIs to carry out research, documentation, training and capacity building activities and serve as a

knowledge hub catering to overall tribal development. Tribal museums are also established under this scheme.

12. **Development of Particularly Vulnerable Tribal Groups (PVTGs):** This scheme adopts a habitat level development approach to improve the quality of life through intervention in housing, drinking water, education and health services, livelihood support, and cultural aspects.

## UNIT - II: Environment, Bio Diversity and Disaster Management

### 1. Project Tiger, Tiger Census

#### Introduction:

- Recently, Bandipur completed 50 years as Project Tiger Reserve.

#### About

- Bandipur was **among the first nine reserves** to be brought under the flagship programme of **Project Tiger in 1973**, it included most areas that were already a protected area as **Venugopal Wildlife Park**.
- It is situated in **two contiguous districts (Mysore and Chamarajanagar)** of Karnataka and is located at the tri-junction area of the States Karnataka, Tamil Nadu and Kerala.
- The Bandipur Tiger Reserve is an important component of the country's first biosphere reserve - **Nilgiri Biosphere Reserve and the landscape spanning Bandipur, Nagarahole, Mudumalai, and Wayanad complex** is home not only to the large **number of tigers in the country but is also to the largest Asian Elephant population**.
- It lies in one of the richest biodiversity areas of the country. It is surrounded by
  - **Mudumalai Tiger Reserve (Tamil Nadu) in the South,**
  - **Wayanad Wildlife Sanctuary (Kerala) in the South-west &**
  - **The Kabini Reservoir separates the Bandipur and Nagarahole Tiger Reserve on the North-west.**

#### Project Tiger :

- The government passed the Wildlife Protection Act in 1972 for the protection and preservation of different species of flora and fauna.
- The Project Tiger was launched by the Indira Gandhi government in 1973 from the Jim Corbett National Park in Uttarakhand with an ambitious aim of increasing the population of the tiger in the country.
- The initial reserves covered under Project Tiger were the Jim Corbett, Manas, Ranthambore, Simlipal, Bandipur, Palamau, Sundarbans, Melghat and Kanha national parks.

#### Tiger reserves:

- From **9 tiger reserves** since its formative years, the Project Tiger coverage has increased to **54 at present, spread out in 18 of our tiger range states**.
- The tiger reserves are constituted on a core/buffer strategy.
  - Core areas have the legal status of a national park or a sanctuary.

- Whereas, buffer or peripheral areas are a mix of forest and non-forest land, managed as a multiple use area.

### **Indian Initiatives:**

- The government has set up a Tiger Protection Force to combat poachers and funded relocation of villagers to minimise human-tiger conflicts.
- **National Tiger Conservation Authority was established in 2005** following a recommendation of the Tiger Task Force, to reorganise management of Project Tiger and the many Tiger Reserves in India. It is the overarching body for conservation of tigers in India.
- Various Centrally Sponsored Schemes, such as **Project Tiger and Integrated Development of Wildlife Habitats**, provide financial and technical assistance to states.
- 54 Tiger Reserves in India generate approximately 4.3 million man-days of employment, and funds from the **Compensatory Afforestation Fund Management and Planning Authority (CAMPA)** are being used to promote voluntary village resettlement from core areas of the Tiger Reserves.
- Increased punishment for offences involving a tiger reserve or its core area.
- Increased anti-poaching activity, including a special strategy for monsoon patrolling.
- **State-level steering committees** chaired by Chief Ministers, as well as the establishment of the Tiger Conservation Foundation.

Findings of the Tiger Census:

India's tiger population rose by 200 from 2,967 in 2018 to 3,167 in 2022.

This is around 6.7% higher than the previous estimate of 2018.

As per the report- some areas like the Shivalik and Gangetic floodplains, Central Indian and Eastern Ghats landscapes have recorded a "substantial" increase in minimum tiger populations, while others like the Western Ghats landscape and northeastern hills, Brahmaputra plains have witnessed a decline.

There has been local extinction of tigers in some areas such as Kawal Tiger Reserve in Telangana.

## **2. Circular Economy**

**Introduction:**

- A circular economy is an alternative to a traditional linear economy (make, use, dispose).
- It is the economy in which people keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life
- CE is fundamentally a prescription for creation of a highly resource efficient economy where carbon footprint will get automatically reduced.
- As for metals, CE prescription is that when products reach their end of life, they should be productively used again by way of recirculation and recycling.

- CE goes beyond end-of-life metal products recycling to the use of by-products such as steel slag for cement making and laying of roads and pavements.

### **Benefits of the Circular Economy**

- Environmental protection: By reducing emissions, using fewer natural resources, and creating less garbage.
- Benefits for the local economy include promoting business models that utilise recycled garbage from the area as a source of raw materials.
- Promotes the development of a new, imaginative, and competitive industrial model, which has a positive impact on the economy and increases jobs.
- In the next 5-7 years, the circular economy has the potential to produce 1-4 crore employment and lakhs of new businesses says NITI Aayog.
- Encourages the independent use of resources by reducing the need for imported raw materials.
- Increased Potential for Economic Growth: According to the UNCTAD, India could adopt circular principles in just three industries – cities and construction, food and agriculture, and mobility and vehicle manufacturing – to generate an additional \$200+ billion in economic value by 2030 and \$ 600+ billion by 2050.
- Reduced Negative Externalities: Consumers will also receive items that are more inventive and long-lasting, which will improve their quality of life and save them money over time.

### **India's Initiatives to Promote Circular Economy:**

- The 2022-23 Budget recognised the importance of sustainable growth and in sync with a circular economy, the government formulated:
  - Battery Waste Management Rules 2022.
  - Plastic Waste Management (Amendment) Rules 2022.
  - e-Waste Management Rules 2022.
- These rules set out target waste disposal standards for manufacturers, producers, importers, and bulk consumers, along with enabling transactions among stakeholders for Extended Producer Responsibility (EPR) certificates.
- Action plans were also formulated across 10 sectors including e-waste, lithium-ion batteries, end-of-life vehicles, scrap metal, municipal solid waste, etc. emphasising the importance of reusing secondary materials

### 3. Vallalar Biodiversity Shelters

#### Introduction:

The Hon'ble Chief Minister of Tamil Nadu Thiru. K.Stalin, on the occasion of the 200th birth anniversary of Vallalar inaugurated the Vallalar Biodiversity Shelters Scheme, on behalf of the Animal Husbandry and Dairying Department at a function in Valluvar Kottam on 16.01.2023.

#### Purpose:

The purpose of the scheme is to provide financial assistance to non-Government institutions and AWOs which maintain injured, abandoned and stray animals, including domesticated animals. The Government has allotted Rs. 20 crore for the Scheme.

#### Biodiversity Shelters Scheme:

The life of animals and domesticated animals depends on their owners. Under these circumstances, for various reasons these animals are abandoned by their owners and such animals are forced to fend for themselves. These abandoned animals, during their search for food and shelter get injured and sometimes contract infectious diseases and other ailments due to eating noxious and stale food items.

To protect these abandoned animals, the Government of Tamil Nadu in its 2022-2023 Budget announced that a Biodiversity Shelters Scheme will be launched to provide financial support to the non-Government institutions that protects the abandoned and injured animals, including domesticated animals on the occasion of the 200th birth anniversary of Vallalar. For the scheme, the Government has sanctioned Rs. 20 crore in the current financial year.

Under the scheme, to ensure food, medical assistance and emergency treatment to the animals which are injured and affected by diseases, financial assistance will be provided to the Society for Prevention of Cruelty to Animals (SPCA), Animal Welfare Organizations (AWOs) and NGOs connected with the welfare of animals for purchase of animal ambulances, constructing home for the abandoned and injured animals, to control increase of stray dogs through birth control measures and administering Rabies vaccine to dogs.

To provide food and medical assistance to animals, for construction of homes and for purchase of ambulances, the India Project for Animal Fund Nature, Nilgiris; Animal Care Trust - Chennai; Madras Animal Rescue Society - Chennai; Prithvi Animal Welfare Society-Chennai and Bairawa Foundation - Chennai, Rs. 2.14 crore has been allotted and in the first phase cheques for Rs.88.05 lakh were handed over to the organization by the Hon' ble Chief Minister of Tamil Nadu.



## UNIT –III: Indian Economy – Current economic trends and impact of global economy on India

### 1. Schemes of Food Processing Ministry of Government of India

#### Introduction:

The food processing industry (FPI) is considered a sunrise sector that has gained prominence in recent years. The industry is of enormous significance because of the vital linkages and synergies that it promotes between the two pillars of our economy i.e. industry and agriculture. It has a lot of scope which can help in boosting economic growth and this has led Government to initiate many policy measures to boost food processing industries.

#### Scope of food processing industry in India:

1. As per an estimate, India's current food processing industry is estimated at USD 130 Billion and expected to attract huge domestic and foreign investment. Some of the key factors which are likely to increase the demand for processed food and consequently the food processing industry in the coming years are –
2. India is a country of over 1.25 billion population. With rising middle class having a considerable disposable income, the domestic market offers 1.25 billion opportunities for the sector.
3. India ranks no 1 in the world in the production of milk, ghee, ginger, bananas, guavas, papayas and mangoes. Further, India ranks no 2 in the world in the production of rice, wheat and several other vegetables & fruits.
4. Due to rapid urbanization, food habits are changing rapidly towards value-added foods. The change is accentuated by the fact that over 65% of India's population is 35 or under, who are inclined to have processed food.
5. As per an estimate, around 40 percent of total food production is wasted due to the inadequate facilities for transportation, storage, processing and marketing. If these deficiencies are addressed, there is a huge scope for the development of the sector.

#### Government has initiated the following measures for the development of the food processing sector:

1. **Pradhan Mantri Kisan Sampada Yojana (PMKSY):** It is an umbrella scheme that incorporates various ongoing schemes like Mega Food Parks, Integrated Cold Chain, Value Addition Infrastructure, Food Safety and Quality Assurance Infrastructure, Infrastructure for Agro-processing Clusters, Creation of Backward and Forward Linkages and Creation and Expansion of Food Processing and Preservation Capacities.

2. **Mega Food Parks Scheme:** It aims at providing a mechanism to link agricultural production to the market by bringing together farmers, processors and retailers to maximise value addition, minimising wastage, increasing farmers' income and creating employment opportunities particularly in the rural sector. A Mega Food Park entails an area of a minimum of 50 acres and works in a cluster based approach based on a hub and spokes model.
3. **Scheme of Cold Chain, Value Addition and Preservation Infrastructure:** The objective of the scheme is to provide integrated cold chain and preservation infrastructure facilities, without any break, from the farm gate to the consumer. It covers pre-cooling facilities at production sites, reefer vans, mobile cooling units as well as value addition centres.
4. **Modernisation of Abattoirs scheme:** The main objective of the Scheme is a creation of processing and preservation capacities and modernisation and expansion of existing food processing units with a view to increasing the level of processing, value addition leading to reduction of wastage.
5. **Make In India:** As part of the Make In India campaign, food processing sector was identified as one of the 25 focus areas. Accordingly, the policy ecosystem has been revamped to attract financial, technological and human resources into the sector. Allowing 100% FDI through automatic route into this sector is also a significant step in this direction.
6. **Food Processing Fund:** A special fund in the NABARD worth Rs. 2,000 crore, designated as the Food Processing Fund, was set up in the FY 2014-15 for providing affordable credit to food processing units in Mega & Designated Food Parks.

### **Conclusion:**

As per an estimate, India's food consumption is currently valued at USD 370 Billion and is expected to reach USD 1 trillion by 2025. This sector is also capable of addressing critical issues of food security, food inflation and providing wholesome, nutritious food to the masses.

## **2. PM VIKHAS Scheme**

### **PM - Vishwakarma Kaushal Samman**

#### **Introduction:**

Finance Minister Nirmala Sitharaman introduced the Pradhan Mantri Vishwakarma Kaushal Samman (PM-VIKAS) scheme during the Union Budget presentation. The scheme is developed to allow the nation's craftsmen to enhance the caliber, scope, and reach of their goods.

## About:

Indian Finance Minister Nirmala Sitharaman announced the PM Vishwakarma Kaushal Samman Yojana (PM-VIKAS) for the artisans and craftspeople of India. The scheme was announced during the annual Union Budget 2023 presentation before Parliament.

The newly announced PM-VIKAS scheme is developed to allow the nation's craftsmen to enhance the caliber, scope, and reach of their goods. They are also to be incorporated into the Micro, Small, and Medium-scale Enterprises (MSME) value chain.

The PM VIKAS aims to unlock the potential of thousands of artists and craftspeople around the nation, through the provision of skills training, technology, and the opening of credit lines to them. The "Vishwakarma" will contribute to India's growth story and grow into a significant part of the country's growth as they seize the prospects for progress.

## Important Factors:

Some of the primary factors of the Pradhan Mantri Vishwakarma Kaushal Samman are:

- Financial aid
- Advanced skill training
- Access to the latest technology
- Integration into the MSMEs
- Paperless payments
- Wider reach and introduction to a global market

Finance Minister Nirmala Sitharaman has said that artisans and craftsmen represent the true spirit of independent and self-reliant India. She added further that the scheme will greatly benefit women and the weaker sections of society.

## Conclusion:

In conclusion, the PM Vishwakarma Kaushal Samman is an important initiative aimed at promoting the skills and achievements of the Vishwakarmas. The scheme provides a way for the country's skilled workers to showcase their abilities and receive recognition for their hard work and dedication. It also provides an opportunity for the government to acknowledge and support the efforts of Indian artisans and craftsmen in contributing to the growth and development of the country.

## 3. Digital Public Infrastructure

### Why in News?

Public infrastructure has been a cornerstone of human progress, but it has plagued the previous generation, making it imperative for the third type of public infrastructure called **Digital Public Infrastructure (DPI)**, with more open and democratic principles built in it.

### What is DPI?

- Digital public infrastructure (DPI) refers to blocks or **platforms such as digital identification, payment infrastructure and data exchange solutions** that help countries

deliver essential services to their people, empowering citizens and improving lives by enabling digital inclusion.

- DPIs mediate the flow of people, money and information. First, the flow of people through a digital ID System. Second, the flow of money through a real-time fast payment system. And third, the **flow of personal information through a consent-based data** sharing system to actualize the benefits of DPIs and to empower the citizen with a real ability to control data.
- These three sets become the **foundation for developing** an effective DPI ecosystem.
- Each DPI layer fills a **clear need and generates considerable value** across sectors.
- India, through **India Stack**, became the first country to develop **all three foundational DPIs, Digital identity (Aadhaar), Real-time fast payment (UPI) and Account Aggregator** built on the **Data Empowerment Protection Architecture (DEPA)**.
- DEPA creates a **digital framework that allows users to share their data** on their own terms through a third-party entity, who are known as Consent Mangers.

### What are the Pillars of India's DPI Ecosystem?

#### Aadhaar:

- Aadhaar is a strategic policy tool for **social and financial inclusion**, public sector delivery reforms, managing fiscal budgets, increasing convenience and promoting hassle-free people-centric governance.
- Aadhaar holders can voluntarily use their Aadhaar for private sector purposes, and private sector entities need not seek special permission for such usage.

#### DigiYatra:

- **DigiYatra** is a **Biometric Enabled Seamless Travel (BEST)** experience based on a **Facial Recognition System (FRS)**.
  - Air passenger traffic in India was estimated to be over 188 million in airports across India in the financial year 2022, out of whom over 22 million were international passengers.

#### DigiLocker:

- **DigiLocker** has 150 million users, six billion stored documents, and done with a tiny budget of RS 50 crore over seven years.
- The users can store their documents such as insurance, medical reports, PAN card, passport, marriage certificate, school certificate and other documents in the digital format.

#### UPI:

- **UPI (Unified Payment Interface)** has crossed **eight billion transactions per month** and transacts a value of USD 180 billion a month, or about a staggering 65% of India's GDP per annum.
- UPI is currently the biggest among the **National Payments Corporation of India (NPCI)** operated systems including National Automated Clearing House (NACH), Immediate Payment Service (IMPS), Aadhaar enabled Payment System (AePS), Bharat Bill Payment System (BBPS), RuPay etc.

How can DPI help Boost India's Digital Infrastructure?

- **Independent Steward Institutions:**
  - A multiparty governance process through independent DPI institutions will be accountable to a **broad range of stakeholders rather than be controlled by a single entity** or group.
- **Global Standards:**
  - There is a need to develop global standards through a multilateral dialogue led by India.
- **Sustainable Financing Models:**
  - There is a need to develop **sustainable financing models** for developing DPI for the world.
- **New Playbook for Digital Infrastructure:**
  - The world needs a new playbook for **digital infrastructure that mediates the flow of people, money and information.**

