



# PIB, YOJANA, KURUKSHETRA COMPILATION

APRIL 2022

# PIB

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# GENERAL STUDIES - I

**01**

## SAKHI-ONE STOP CENTRES

### Context

- One stop centre is a centrally sponsored scheme of **Ministry of Women and Child Development (MWCD)**, for addressing the problem of violence against women.

### About One Stop Centre

- The Government of India implements the One Stop Centre (OSC) Scheme with effect from 1st April, 2015.
- OSCs provide a range of integrated services under one roof including **police facilitation, medical aid, legal aid and counselling, psycho-social counselling and temporary shelter to women affected by violence or in distress.**
- The setting up of OSCs from the year 2015 onward, at district level, have provided a dedicated platform to women facing violence and who are in distress to get necessary help and assistance, which was not available earlier.
- As on date, 733 OSCs have been approved for 729 districts across the country, out of which 704 OSCs have been operationalized in 35 States/ UTs, which have assisted over 4.93 lakh women.

### Women safety and security

- The Central Government gives high priority to ensuring safety and security of women and has undertaken various steps for helping the victims of **sexual and gender-based violence** and supports and supplements the efforts of States / UTs in ensuring the safety and security of women and girls including the cases of sexual and gender-based violence.

### Components under the scheme

The schemes of One Stop Centres (OSCs) include:

- Universalisation of Women Helplines (WHL)
- Emergency Response Support System (ERSS) which is a pan-India single number (112)/ mobile app-based system for emergencies
- Cyber-crime reporting portal to report obscene content
- Training and skill development programs for Investigation Officers
- Prosecution Officers and Medical Officers
- Distribution of Sexual Assault Evidence Collection (SAEC) Kits to States/ UTs
- Establishment of state-of-the-art DNA Laboratory at CFSL, Chandigarh
- Setting up of 1023 Fast Track Special Courts (FTSCs) for speedy disposal of cases of rape and cases under POCSO Act
- Setting up/ strengthening of Anti Human Trafficking Units (AHTUs) in all districts of the country
- Strengthening of Women Help Desks (WHDs) at Police Stations etc

### Mental health support system

- Ministry of Women and Child Development has engaged the services of National Institute of Mental Health and Neuro Sciences (NIMHANS) for providing basic and advanced training under the project named 'Stree Manoraksha' to the staff of One Stop Centres (OSCs) across the country on handling psycho-social and mental health care needs to support the women facing violence and women in distress.

## 02 WELFARE SCHEME FOR WAR WIDOWS

### Context

- Recently, the Ministry of defence has reviewed welfare measures to **war widows/families in the Armed Forces**.

### Financial Assistance

- The scheme of 'Financial Assistance to 100% Disabled children of Ex-Servicemen (ESM)/widows' was applicable only up to the rank of Havildar (or equivalent of Navy and Air force) and below.
- The same is being extended up to the **Rank of Junior Commissioned Officers (JCOs) ESMs/widows** (and their equivalent of Navy and Air force).
- Additionally, the earlier grant of Rs 1000/- per month has now been increased to Rs 3000/- per month.

### Eligibility criteria

- The Service Headquarters also made suitable changes in their schemes with an aim to provide best possible support to the **families of deceased soldiers / War Widows**.
- The Indian Air Force (IAF) has made the following changes in the selection process for officers in the IAF:
- The ceiling for eligibility for widows of deceased defence personnel has been raised to a maximum of 35 years of age at the time of entry at pre-commissioning training institute(s), except for the flying branch for which Service Headquarters shall specify the age limit as per service requirements.
- Widows with children are accepted.

## GENERAL STUDIES - II

## 01 WHO GLOBAL CENTRE FOR TRADITIONAL MEDICINE

### Context

- The Prime Minister has laid the foundation stone of **WHO Global Centre for Traditional Medicine (GCTM) in Jamnagar, Gujarat** recently.
- The WHO Global Centre for Traditional Medicine, the first of its kind in the world.
- The PM stated that GCTM should establish a "global repository" of traditional medicine practices across the world.

### Aim

- The Centre aims to channel the **potential of traditional medicine**, by integrating it with technological advancements and evidence-based research.
- The WHO Global Centre for Traditional Medicine (GCTM) shall focus on four main strategic areas: **evidence and learning; data and analytics; sustainability and equity; and innovation and technology to optimise the contribution of traditional medicine to global health**.
- The GCTM seeks to set policies and standards on traditional medicine products and help countries create a **comprehensive, safe, and high-quality health system**.
- Global Ayush Investment and Innovation Summit is an initiative to strategize India's efforts in becoming a global hub of traditional products, practices, and related services.

### Five-point goals

The Prime Minister laid down five goals for the new centre.

- First, to create a database of traditional knowledge systems using technology
- Second, GCTM can create international standards for testing and certification of traditional medicines so that confidence in these medicines improves
- Third, GCTM should evolve as a platform where global experts of traditional medicines come together and share experiences.

- Fourth, GCTM should mobilise funding for research in the field of traditional medicines.
- Finally, GCTM should develop protocols for holistic treatment of specific diseases so that patients could benefit from both traditional and modern medicine.

### Turnover of the Indian Ayush industry

- According to the ministry of Union Ayush, the present turnover of the Indian Ayush industry is **\$18.1 billion, up from \$3 billion in 2014.**
- The growth will help the scientific community address “challenges such as antimicrobial resistance (AMR), growing incidence of age-related disorders, non-communicable diseases as well as to achieve the objective of a tuberculosis-free world.

### Recognition to India

- The WHO has established a new partnership with this centre of traditional medicine, which respects India’s potential and contribution.
- World leaders thank India for **WHO Global Centre for Traditional Medicine.**
- India takes this partnership as a huge responsibility for serving the entire humanity
- India gave the slogan ‘**One planet our health**’ WHO has promoted the Indian vision of ‘**One Earth, One Health**’
- India is taking this as a huge responsibility and will aid in giving better medical solutions to people of the world.”
- The year 2021 was declared the **International Millet Year.**
- The National Nutrition Mission has kept in mind India’s ancient teachings.
- India’s yoga has played an important role and is helping people worldwide to reduce mental stress and establish balance.

## 02

## SECURITY OF WI-FI CONNECTIONS IN PUBLIC PLACES

### Context

- Recently, the central government has taken adequate steps to **ensure security of Wi-Fi connections in public places.**

### Indian Telegraph Act

- As per the law established, intentionally damaging or tampering with telegraphs or unlawfully attempting to learn the contents of messages is a punishable offence as per the **Section 24, 25 & 26 of the Indian Telegraph Act.**
- Department of Telecommunications, Ministry of Communications has issued instructions in Feb 2009 to all Internet Service Providers regarding safeguards in provision of Wi-Fi Internet services in the delicensed frequency band for secure use of Wi-Fi services including those provided at public places.
- Further, a document on Security in Public Wi-Fi Implementations-Best Practices has been issued to Internet Service Providers (ISPs).

### PM-WANI scheme

- The scheme calls for setting up of public Wi-Fi networks and access points by local neighbourhood shops through **public data offices (PDO).**
- The Security related Guidelines by Government under **PM-WANI scheme.**
- Provisions of Public Data Office Aggregator (PDOA) for storage of user data for one year to ensure compliance with legal provisions as required.
- User data privacy is to be ensured by App Providers and PDOAs.
- Complete user data and usage logs are to be stored within India.
- Provisions by the App Provider, PDOA and Central Registry Provider to safeguard the privacy and confidentiality of any information about a third party to whom it provides the service.

## 03 RASHTRIYA GOKUL GRAM MISSION

### Context

- The centre has sanctioned funds under **Rashtriya Gokul Mission for setting up of 16 Gokul Grams as Integrated Cattle Development Centres.**
- The aim of conservation and development of **indigenous bovine breeds** in a scientific and holistic manner.

### Objectives of Gokul Gram

- To promote indigenous cattle rearing and conservation in a scientific manner.
- To enhance productivity of indigenous breeds and increase economic returns from animal products in a sustainable manner.
- To propagate high genetic merit bulls of indigenous breeds.
- To encourage appropriate technology for use of Draught Animal Power.
- To provide balanced nutrition and integrated animal health care.
- To optimise modern Farm Management practices and promote Common Resource Management.
- To promote Green Power and Eco technology

### Integrated Indigenous Cattle Centres

- The Integrated Indigenous Cattle Centres-Gokul Grams has been made viable and sustainable through sale of milk, value added milk products, sale of high genetic merit stock of indigenous breeds produced at Gokul Grams.
- The following facilities have been provided in the Integrated Indigenous Cattle Centres- Gokul Grams:
  - Cow and calf sheds
  - Bio Gas Plant
  - Agricultural equipment
  - Urine distillation plant
  - Compost and Vermicompost pits
  - Semen and liquid nitrogen and other essential infrastructure

## 04 CONTINUATION OF ATAL INNOVATION MISSION

### Context

- The centre has recently approved continuation of Atal Innovation Mission (AIM), till March 2023.
- The AIM shall work on its intended target of creating an innovation culture and entrepreneurial ecosystem in the country.
- This will be done by AIM via its various programs.

### Target set for Atal Innovation Mission

The intended targets that will be achieved by AIM are:

- Establishing 10000 Atal Tinkering Labs (ATLs),
- Establishing 101 Atal Incubation Centres (AICs),
- Establishing 50 Atal Community Innovation Centres (ACICs)
- Supporting 200 startups via the Atal New India Challenges

### Objective

- The objectives of the AIM are to create and promote an ecosystem of innovation and entrepreneurship across the country via interventions at school, university, research institutions, MSME and industry levels.
- The AIM has focused on both infrastructure creation and institution building.
- AIM has worked on integrating innovation ecosystem both nationally and globally:

## Bilateral engagement

- The AIM has created bilateral relations with various international agencies for building synergistic collaboration on innovation and entrepreneurship such as:
- AIM – SIRIUS Student Innovation exchange program with Russia
- AIM – ICDK (Innovation Centre Denmark) Water Challenge with Denmark
- IACE (India Australian Circular Economy Hackathon) with Australia.
- The AIMs played a pivotal role in the success of InSprenneur, an Innovation Startup Summit hosted between India and Singapore.

## Advantages of AIM in different sectors

- The AIM partnered with the Ministry of Defence to set up the Defence Innovation Organisation which is fostering innovation as well as procurement in the defence sector.
- Over the past years, the AIM has worked to provide an institutional mechanism to integrate innovation activities across the country.
- Through its programmes, it has brought innovation to lakhs of school children.
- The AIM supported startups have raised 2000+ Crores from the government and private equity investors and have created several thousand jobs.
- The AIM has also executed several innovation challenges on topics of national interest.

**Extension of Atal Innovation Mission**  
Cabinet approves continuation of Atal Innovation Mission till March 2023

**Targets to be achieved**

- 10000 Atal Tinkering Labs
- 101 Atal Incubation Centers
- 50 Atal Community Innovation Centers
- Supporting 200 startups via the Atal New India Challenges

**Total budgeted expenditure of over Rs.2000 crore**

CABINET DECISIONS: 08 APRIL 2022

# GENERAL STUDIES - III

## 01 DIGITAL INDIA RISC-V (DIR-V) PROGRAM

### Context

- Recently, the Minister of State for Electronics and Information Technology launched the Digital India RISC-V (DIR-V) Program for next generation Microprocessors

### About RISC-V (DIR-V) program

- DIR-V Will Catalyse India's Semiconductor Startups, it is a part of PM Mission of making India a Semiconductor Nation.
- It will see partnerships between Startups, Academia & Global Majors, and prove to be a RISC-V Talent Hub for World.

### Aim

- The Digital India RISC-V Microprocessor (DIR-V) Program aims to enable creation of Microprocessors for the future in India, for the world and achieve industry-grade silicon & Design wins by December 2023.
- The government has set a timeline to commercially roll out the first indigenous chipsets by 2023-24 and future generation of microprocessors under the programme to meet the surging demand in semiconductors in the automotive, mobility and computing segments.

02

## INDIA POST PAYMENTS BANK LAUNCHES 'FINCLUVATION'

### Context

- Recently, India Post Payments Bank (IPPB) has announced the launch of Fincluvation- a joint initiative to collaborate with the Fintech Startup community to co-create and innovate solutions for financial inclusion.
- India Post Payments Bank (IPPB), a 100% government owned entity under Department of Posts (DoP).

### About Fincluvation

- Fincluvation is a joint initiative to collaborate with the Fintech Start-ups to develop innovative solutions for financial inclusion.
- The initiative was announced by the India Post Payments Bank (IPPB) on the occasion of the 75th anniversary of Indian Independence and the ongoing Azadi ka Amrit Mahotsav.

### Objectives

- The main objective of the 'Fincluvation' initiative is to create a powerful platform to mobilise start-ups toward building significant financial products to promote financial inclusion.
- Fincluvation is a step in this direction, an Industry first initiative to create a powerful platform to mobilise the start-up community towards building meaningful financial products aimed at financial inclusion.
- Fincluvation will be a permanent platform of IPPB to co-create inclusive financial solutions with participating start-ups.
- Fincluvation invites startups to Participate, Ideate, Develop and Market intuitive and tailored products and services that can be taken to the customers.

### Promoting Startup

- Fincluvation will allow the start-ups to work with IPPB and DoP experts to develop solutions and conduct pilots using the postal network and IPPB's technology stack.
- Fincluvation mentors will work closely with the startups to tweak products to the customer needs and align the go-to-market strategies with operating models of IPPB and DoP.
- Under the new initiative, Start-ups will be encouraged to develop solutions related to-
  - **Creditization** - Develop Innovative & Inclusive credit products aligned with the use cases of target customers and take them to their doorsteps through Postal network.
  - **Digitization** - Bring convenience through convergence of traditional services with Digital Payment Technologies such as making the traditional Money Order service as Interoperable Banking service.

### About India Post Payments Bank

- India Post Payments Bank (IPPB) was established under the Department of Posts, Ministry of Communication with 100% equity owned by the Government of India on September 1, 2018.
- The bank has been set up with the vision to build the most accessible, affordable and trusted bank for the common man in India.
- IPPB's reach and its operating model is built on the key pillars of India Stack - enabling Paperless, Cashless and Presence-less banking in a simple and secure manner at the customers' doorstep, through a CBS-integrated smartphone and biometric device.
- IPPB is committed to provide a fillip to a less cash economy and contribute to the vision of Digital India.

03

## INTERNATIONAL FINANCIAL SERVICES CENTRES AUTHORITY (FUND MANAGEMENT) REGULATIONS, 2022

### Context

- Recently, the International Financial Services Centres Authority (IFSCA) has notified a comprehensive regulatory framework for Investment Funds.

### Features of regulations

The salient features of the regulations include:

- 1. Registering the Fund Management Entity:** A Fund Management Entity will be registered with IFSCA and will be able to manage different types of funds and schemes subject to meeting the eligibility criteria.
- 2. Green Channel:** Venture Capital Schemes or non-retail schemes soliciting money from accredited investors only shall qualify for a green channel i.e., the schemes filed can open for subscription by investors immediately upon filing with IFSCA.  
The requirements on scheme size, number of investors, permissible investments, etc. have been detailed in the regulations.
- 3. Exchange Traded Funds (ETFs):** The registered fund managers in IFSC shall be able to launch Index based ETFs, Active ETFs and Commodity based ETFs.
- 4. Stressed Assets:** Realising the important role of IFSC in the Government initiative of addressing the issue of NPAs faced by banks, a framework has been prescribed for special situation funds to be launched by fund managers in IFSC.
- 5. Environment Social Governance (ESG):** Growing number of investors expect fund managers to make ESG issues integral to their investment strategies.  
With the intent of making IFSC a hub for a host of activities related to sustainable finance, disclosures have been proposed to be mandated at the entity level and scheme level.
- 6. Family Office:** The framework to facilitate a self-managed investment fund of a family office has been provided in the regulations.

### Innovations support

- The regulations also provide support for various innovations in a controlled way:
- Fund Lab:** The fund managers may try new strategies in a controlled manner and build a track record for their fund.
- Special purpose vehicle (SPV) as a co-investment structure and leverage:** FME shall be permitted to create SPVs under the main scheme to enable undertaking co-investment or leverage along with the Fund/ scheme subject to certain conditions.
- Retail participation in private markets:** There has been a growing need to facilitate investors at large to invest in private markets. Accordingly, it is proposed to facilitate retail close ended schemes to invest in unlisted securities subject to certain conditions.

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## 04 ANTIBIOTIC RESIDUE IN MILK

### Context

- The Food Safety and Standards Authority of India (FSSAI) has informed that it has specified the standards of milk under Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

### About the regulations

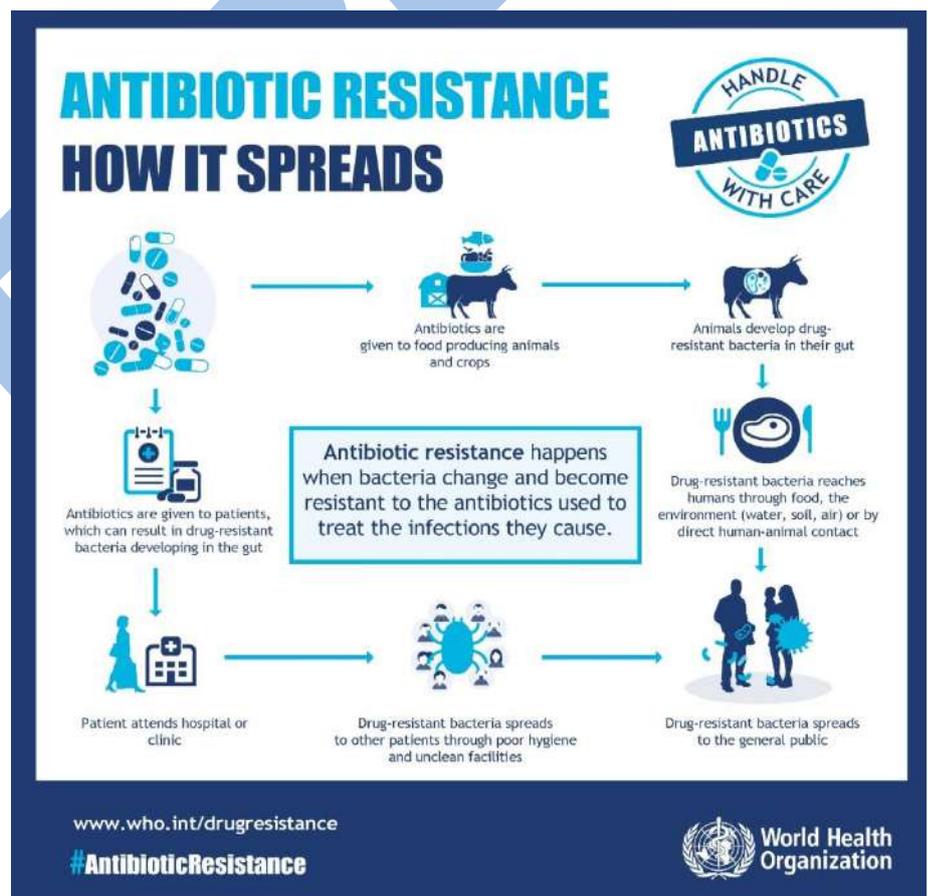
- The tolerance limits for various antibiotics and veterinary drugs in milk and other food products is specified in sub-regulation 2.3.2 of Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011 and amendments thereof.
- All Food Business Operators involved in **processing and sale of milk are required to adhere to the specified Regulations.**
- Implementation and enforcement of Food Safety and Standards Act, 2006 primarily lies with State/UT Governments.
- Commissioners of Food Safety of States/UTs conduct surveillance, sampling, inspection and enforcement drives through their food safety officials to ensure the quality and safety of milk and milk products conforms to specified standards.

### National Accreditation Board for Testing

- FSSAI has recognized and notified **240 National Accreditation Board for Testing and Calibration Laboratories (NABL) accredited food testing laboratories** across the country. Also, for on-the-spot testing of adulterants in milk and milk products, 173 mobile food testing laboratories equipped with rapid milk analyser have been sanctioned/ provided to the States/UTs.

### Advisory to all States and Union Territories

- The Department of Animal Husbandry and Dairying (DAHD), Government of India has informed that it had issued an advisory to all States and Union Territories regarding the judicious use of antibiotics for treatment of ailing food producing animals.
- Further, it was also advised that use of antibiotics should be discouraged, if not essential and development, production and use of alternative antibiotic free growth promoters should be encouraged.



05

## INTERNATIONAL AIR CONNECTIVITY SCHEME (IACS)

### Context

The Ministry of Civil Aviation has recently launched the International Air Connectivity Scheme (IACS) scheme (International UdeDesh ka Aam Nagrik (UDAN) to connect North Eastern States with selected international destinations.

### About the Scheme

- International Air Connectivity Scheme (IACS) endeavour to enhance air connectivity from certain States of the country with selected international destinations to promote socio-economic growth.
- This scheme is **supported by the State Governments**.
- The State Government of **Assam, Manipur and Tripura** have identified routes connecting **Guwahati, Imphal and Agartala** with selected international destinations viz. **Bangkok, Dhaka, Kathmandu, Yangon, Hanoi, Mandalay, Kunming & Chittagong**.

### Up-gradation of airports

- Development and up-gradation of airports to international standards is a continuous process and is undertaken by concerned airport operators from time to time depending upon commercial viability, traffic demand, availability of land etc.
- Presently, there are two international airports in the North-east Region at Guwahati and Imphal which are operated by Guwahati International Airport Limited (GIAL) and Airports Authority of India (AAI) respectively.
- GIAL and AAI both have undertaken construction of New Integrated Terminal Building (NITB) and other associated works at their respective airports to improve services including, increase in passenger handling capacity.

### Initiatives to boost international connectivity

The Airports Authority of India has taken up the following development works to boost international connectivity to/from North Eastern Region:

- The new terminal building at Agartala Airport has been designed as an integrated terminal keeping in view the future requirement for international operation.
- Construction of a New Integrated Terminal Building for 2.4 million Passengers Per Annum (MPPA), at a cost of around Rs.500 crore has been undertaken at Imphal Airport to augment passenger handling capacity, which has been declared as an international airport.



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**06****5G VERTICAL ENGAGEMENT AND PARTNERSHIP PROGRAM (VEPP) INITIATIVE****Context**

- Recently, the Department of Telecommunications invited Expression of Interest for **5G Vertical Engagement and Partnership Program (VEPP) initiative**.

**About**

- The 5G Vertical Engagement and Partnership Program is being offered to Industry verticals which have potential as testing cum breeding grounds for innovative 5G use cases, through an Expression of Interest (EoI) to enable close collaboration between User verticals.
- 5G Tech stakeholders (Service providers, Solution providers & partner OEMs), which can **trigger a multiplier effect to try & finetune 5G digital solutions in respective economic verticals**.

**Aim**

- The initiative aims to build strong collaboration partnerships across 5G Use-case ecosystem stakeholders with velocity and with an exclusive emphasis to address User/Vertical Industry needs.
- In order to multiply the 5G opportunities across the usage verticals, under the guidance of Secretary (Telecom), an Inter-Ministerial Committee chaired by Member (Technology), Digital Communications Commission is constituted with representatives from different ministries.

**About 5G Network**

- 5G is a new global wireless standard after 1G, 2G, 3G, and 4G networks.
- It is the latest upgrade in the long-term evolution (LTE) mobile broadband networks.
- It enables a new kind of network that is designed to connect virtually everyone and everything together including machines, objects, and devices.

**07****SEMICON INDIA CONFERENCE 2022****Context**

- Recently, the Ministry of Electronics & Information Technology has inaugurated the first ever Semicon India 2022 Conference under India Semiconductor Mission.

**About India Semiconductor Mission**

- The India Semiconductor Mission was launched in 2021 under the Ministry of Electronics and IT (MeitY).
- The programme aims to provide financial support to companies investing in semiconductors, display manufacturing and design ecosystem.
- The mission calls for the development of a sustainable semiconductor and display ecosystem in the country.

**More about the Conference**

- The conference is envisioned as the launch pad to kick start the country's ambition in becoming the global semiconductor hub and nurture the chip design and manufacturing ecosystem.
- The three-day conference is being organised to take forward the vision to make India a leader in the electronics manufacturing, semiconductor design, manufacturing and innovation.
- Eminent experts from industry associations, research organisations and academia will take part in this conference.

**India as investment destination for Semiconductor technologies**

- The Prime Minister while addressing the event has categorically underlined six reasons for India being an attractive investment destination for Semiconductor technologies.

- **First**, India is building a digital infrastructure to connect over 1.3 billion Indians and the government is using digital technology to transform lives in all sectors of governance from health and welfare to inclusion and empowerment.
- **Second**, connecting six hundred thousand villages with broadband investment in developing capabilities in 5G, IoT and clean energy technologies, India is paving the way to lead the next technology revolution.
- **Third**, India is headed for robust economic growth with the world's fastest-growing Startup Ecosystem.
- India's own consumption of Semiconductors is expected to cross 80 billion Dollars by 2026 and 110 billion Dollars by 2030.
- **Fourth**, India has undertaken wide-ranging reforms for improving the ease of doing business in India.
- **Fifth**, the heavy investment in skilling and training young Indians for the needs of the 21st century. Almost all of the top 25 semiconductor design companies have their design or R&D centres in our country.
- **Sixth**, India has undertaken several measures towards transforming the Indian manufacturing sector.
- The Production Linked Incentives" schemes that offer incentives of over 26 billion Dollars in 14 key sectors.
- The program aims to provide financial support to companies investing in semiconductors, display manufacturing and design ecosystems.

**08**

## ATAL NEW INDIA CHALLENGE 2.0 (ANIC 2.0)

### Context

- Recently, Atal Innovation Mission launched the phase 1 of the 2nd edition of the Atal New India Challenge (ANIC 2.0).

### About Atal New India Challenge

- Atal New India Challenge is a flagship program of Atal Innovation Mission, NITI Aayog. The program aims to **seek, select, support and nurture technology-based innovations that solve sectoral challenges of national importance and societal relevance.**

### Goals of ANIC

- One of the primary goals of the ANIC program is to support innovations in areas critical to India's development and growth - **Education, Health, Water and Sanitation, Agriculture, Food Processing, Housing, Energy, Mobility, Space Application etc.**
- The Atal New India Challenge aims to address the Commercialization Valley of Death - supporting innovators scale over the risks associated with access to resources for testing, piloting and market creation.

### List of Challenges

The 1st phase of ANIC 2.0 will see 18 challenges being thrown open from 7 sectors.

#### A. Sector: E-mobility

- Challenge 1: Electric Vehicles - Innovations in indigenous Electric Vehicle and EV component technology
- Challenge 2: EV charging Infrastructure - Solutions for easier and faster charging of EV batteries

#### B. Sector: Road Transportation (in partnership with Ministry of Road Transport and Highways)

- Challenge 1: Safe Transport - Innovations to improve rider / driver safety
- Challenge 2: Smart Mobility - Smart solutions to develop Intelligent Transport Systems
- Challenge 3: Sustainable Mobility - Sustainable innovations in mobility

#### C. Sector: Space Technology and Application (in partnership with Department of Space - Indian Space Research Organisation)

- Challenge 1: GIS Solution - GIS solutions across sectors - agriculture, water, forestry, urban affairs, road transport etc.
- Challenge 2: Propulsion - Innovations in green propellants, electric propulsion, advanced air-breathing.
- Challenge 3: Navigation - NavIC based navigation solution in IoT applications
- Challenge 4: AI/ML Modelling - AI/ML models for space applications

**D. Sector: Sanitation Technology (in partnership with Ministry of Social Justice and Empowerment)**

- Challenge 1: Preventing Human Intervention - Innovations to mechanize cleaning of septic tanks, drainages and manholes.
- Challenge 2: Protecting Humans Engaged in Sewage Cleaning - Protective gears, equipment and other solutions for ensuring the health and safety of humans engaged in sewage cleaning.

**E. Sector: Medical Devices and Equipment**

- Challenge 1: Portable point-of-care (POC) diagnostic or monitoring devices.
- Challenge 2: Low-cost Consumables & Implants.
- Challenge 3: Advanced Surgical and Non-Surgical Equipment.
- Challenge 4: Advanced Assistive and Rehabilitative Devices.

**F. Sector: Waste Management**

- Challenge 1: Municipal Solid Waste Management
- Challenge 2: E-waste Management

**G. Agriculture**

- Challenge 1: Climate Smart Agriculture

**About Atal Innovation Mission**

- AIM is Government of India's flagship initiative to promote a culture of innovation and entrepreneurship in the country.
- Its objective is to develop new programmes and policies for fostering innovation in different sectors of the economy, provide platform and collaboration opportunities for different stakeholders, create awareness and create an umbrella structure to oversee the innovation ecosystem of the country

## SHORT NEWS

**1. Temple 360 website**

- Recently, the Minister of State, Culture & External Affairs inaugurated the 'Temple 360' website.
- Temple 360 is a digital platform where anyone can visit or do darshan of 12 Jyotirlinga and Char Dham from any location.
- Through this platform people can see and participate in e-Darshan, e-Prashad and e-Aarti which make everyone's life convenient and also keeps people connected.
- The website also allows a devotee to perform e-aarti and several other services.

**2. Donate-a-Pension Programme**

- The Union Labour and Employment Ministry has recently launched the "donate a pension" scheme.
- The scheme allows any citizen to pay the premium amount on behalf of an unorganised worker in the age group of 18-40 years under the Pradhan Mantri Shram Yogi Maan-Dhan Scheme.
- The donor can pay a minimum of one year's contribution.

**3. State Energy and Climate Index**

Recently, NITI Aayog has released the State Energy and Climate Index-Round 1.

The State Energy and Climate Index (SECI) Round-1 aims to rank states and UTs on six parameters:

- **Discoms' Performance**
- **Access, Affordability and Reliability of Energy**
- **Clean Energy Initiatives**
- **Energy Efficiency**
- **Environmental Sustainability**
- **New Initiatives**

These parameters include a total of 27 indicators.

Based on the outcome of SECI Round-1 scores, states and union territories have been categorised into three groups: 'Front Runners', 'Achievers', and 'Aspirants'.

**Usage of Index**

- The index can be used by the states and UTs to benchmark their performance against their peers, analyse the potential challenges to develop better policy mechanisms, and efficiently manage their energy resources.

Score and ranking of Union Territories								
Rank	States/UTs	DISCOM's Performance	Access, affordability & reliability	Clean Energy Initiatives	Energy Efficiency	Env Sustainability	New Initiatives	SECI score
1	Chandigarh	65.6	58.7	69.2	16.2	62.5	14.1	55.7
2	Delhi	66.2	38.3	67.2	43.9	38.6	49.7	55.6
3	D&D and D&N	71.5	60.3	68.6	0	36	7.9	53.2
4	Puducherry	67.9	57.7	20.3	0.6	42.7	37.9	48.5
5	A&N	37.7	35	20.6	1.3	49.5	0	29.4
6	J&K*	31.2	51.4	11.6	9.9	51.8	4.5	29.3
7	Lakshadweep	42.9	25.9	33.6	0	7.1	0	26.9

Score and ranking of Smaller States								
Rank	States/UTs	DISCOM's Performance	Access, affordability & reliability	Clean Energy Initiatives	Energy Efficiency	Env Sustainability	New Initiatives	SECI score
1	Goa	63.4	59.6	62.4	16.6	43.7	12.4	51.4
2	Tripura	57.3	33.1	22.9	31.7	39.6	58.7	45.0
3	Manipur	57.6	34.1	4.7	22.1	41.3	7.3	36.0
4	Mizoram	51.7	39.3	18.9	29.7	38.2	1.1	35.9
5	Sikkim	43.2	37.6	13.8	33.3	52.2	0.6	33.3
6	Meghalaya	47.9	30.9	1.9	4	39.8	2.8	29.4
7	Nagaland	35.9	32.9	12.2	26.4	40	3.4	27.9
8	Arunachal Pradesh	31.1	43.2	5.8	19.8	49	1.1	27.0

Score and Ranking of Larger States								
Rank	States/UTs	DISCOM's Performance	Access, affordability & reliability	Clean Energy Initiatives	Energy Efficiency	Env Sustainability	New Initiatives	SECI score
1	Gujarat	72.7	52.4	39.2	40.1	35.1	5.5	50.1
2	Kerala	64.4	67.3	21.5	58	46.9	7.7	49.1
3	Punjab	77.1	46.8	26.1	35.1	37	2.3	48.6
4	Haryana	69.8	53.6	42.9	11.7	33.4	6.9	47.9
5	Uttarakhand	61.9	55.3	18.5	50.5	48.7	14.7	46.5
6	Maharashtra	57.7	51.2	34	75.7	36.2	10.4	46.0
7	Himachal Pradesh	57	56.3	14.3	20.1	52.1	38.1	45.4
8	Karnataka	56.8	45.5	27	57.2	41.7	14.5	43.8
9	Tamil Nadu	57.3	46.3	21.7	85.4	39.2	4	43.4
10	Assam	67.3	38.3	4.3	39	39.9	17.6	42.6
11	Telangana	55.1	60.4	18	64.7	34.6	0.4	41.9
12	Andhra Pradesh	65.1	42.6	16.9	40	35	0	41.6
13	Uttar Pradesh	59.9	37.8	12.6	42	30.9	27.4	41.0
14	West Bengal	55.3	52	8.5	27.7	40.9	9	38.9
15	Bihar	61.3	45	4.9	22.8	33.7	7.6	38.3
16	Odisha	59.0	57.4	4.8	21.8	22.6	0.9	37.1
17	Rajasthan	49.2	42.9	15.5	44	31.4	4.8	35.4
18	Jharkhand	58.3	46.5	2.9	17.2	19	9.3	35.2
19	Madhya Pradesh	53.7	42.7	6.2	8.3	24.1	3.3	32.6
20	Chhattisgarh	58.4	45.4	2.1	0	5.8	4.2	31.7

#### 4. Anti-Tank Guided Missile 'HELINA'

- Indigenously developed helicopter launched Anti-Tank Guided Missile 'HELINA' was recently successfully flight tested.
- HELINA (Helicopter based NAG) is a third-generation fire and forget class anti-tank guided missile (ATGM) system mounted on the Advanced Light Helicopter (ALH).
- The missile is guided by an Imaging Infra-Red (IIR) Seeker operating in the Lock on Before Launch mode.
- It has all-weather day and night capability and can defeat battle tanks with conventional armour as well as explosive reactive armour.
- It is one of the most advanced anti-tank weapons in the world.

#### 5. Pradhanmantri Sanghralaya

- Recently, the Prime Minister inaugurated the Pradhanmantri Sangrahalaya at Teen Murti Estate in New Delhi.
- The museum recalls the tenures of 14 Prime Ministers from Jawaharlal Nehru to Manmohan Singh, and the various challenges they navigated while leading the country.
- The idea of a museum dedicated to India's Prime Ministers was mooted in 2016.



#### 6. iDEX Initiatives

- Innovations for Defence Excellence (iDEX) framework was launched by the Government with the aim to **foster innovation and technology development in Defence and Aerospace Sector** by engaging Industries including **MSMEs, startups, individual innovators, R&D institutes and academia and promote self-reliance.**
- The Government has approved a central sector scheme for iDEX with budgetary support of Rs. 498.78 crore for the next 5 years from 2021-22 to 2025-26.

#### Objective of scheme

- The objective of the scheme is to provide financial support to nearly 300 Startups/ MSMEs/individual innovators and about 20 Partner incubators through **Defence Innovation Organisation (DIO).**
- It aims at empowering a culture of technology co-creation and co-innovation in the sector and boosts innovation among the start-ups and encourages them to be a part of the ecosystem.
- The scheme encourages the start-ups to contribute to the defence sector and develop aerospace setup in the country by providing:
  - Substantial grants
  - Easier and faster access to test facilities/infrastructure available with various Government agencies
  - Co-creation and co-innovation using smooth operating procedures and facilitating procurement

#### 7. ITU's Council Standing Committee on Administration and Management

- Recently, India has secured a leadership position in Council Standing Committee on Administration and Management of International Telecommunication Union (ITU) as an Indian official has been appointed as vice chairperson for the same.

- The International Telecommunication Union at Council meetings held at Geneva from 21st March till 31st March, 2022.
- The International Telecommunication Union (ITU) is the United Nations specialised agency for information and communication.
- The ITU is governed by the Plenipotentiary Conference and the Administrative Council.
- The Plenipotentiary Conference is the supreme organ of the Union.
- It is the decision-making body which determines the direction of the Union and its activities.

#### 8. India's first pure green hydrogen plant

- Oil India Limited (OIL) has taken the first significant step towards Green Hydrogen Economy in India with the commissioning of India's First 99.999% pure Green Hydrogen pilot plant, with an installed capacity of 10 kg per day at its Jorhat Pump Station in Assam.
- The plant produces Green Hydrogen from the electricity generated by the existing 500kW Solar plant using a 100 kW Anion Exchange Membrane (AEM) Electrolyser array.
- The use of AEM technology is being used for the first time in India.
- This plant is expected to increase its production of green hydrogen from 10 kg per day to 30 kg per day in future.

## BILATERAL AGREEMENTS AND SUMMITS

### 01 IndAus ECTA

#### Context

- India-Australia Economic Cooperation and Trade Agreement ("IndAus ECTA") was recently signed between India and Australia.
- The IndAus ECTA, encompassing trade in goods and services, is a balanced and equitable trade agreement, which will further cement the already deep, close and strategic relations between the India-Australia.

#### Significance of Agreement

- India-Australia Economic Cooperation and Trade Agreement ("IndAus ECTA" will significantly:
- Enhance the bilateral trade in goods and services
- Create new employment opportunities
- Raise living standards
- Improve the general welfare of the peoples of the two countries
- Contributing to the stability and strengthening relationship
- Increasing the resilience of supply chains
- Contributing to stability of the Indo-Pacific region

#### Global Ayush Investment and Innovation Summit 2022

- Recently, India's first Global Ayush Investment and Innovation Summit 2022 was held in Gandhinagar, Gujarat.
- This is the first ever mega event of this scale in Ayush sector facilitated agreements with international and national institutions and various other sectors, fuelling financial considerations, mutual research and increasing Ayush reach globally.

#### Aim of the Summit

- The Global Ayush Investment and Innovation Summit offers a world of possibilities with ample innovation, investment and growth opportunities in the upcoming sector by sharing new concepts, research outcomes and exciting engagement plans with stakeholders to build a continuum of result-oriented outcomes.

#### Objective

- Promote Investment in Ayush Services, Products, and Education Sectors
- Promote Medical Value Travel for NCDs, CDs, and for Rehabilitation
- Promote India as Global Wellbeing Destination

- Adopting Ayush way of life for a sustainable future
- Strengthening Ayush Drug Delivery System
- Exchange knowledge on best practices on nurturing startup ecosystems
- Promote Yoga as Therapy for Physical, Mental, and Spiritual Health
- Promote Yoga Sana as an international sport
- Catalysing entrepreneurs to innovate, to be unicorns
- Set-up roadmap to amplify the growth of Ayush sector
- Enhance exports of the Ayush sector
- Promote Post-COVID Rehabilitation through Ayush

### Raisina Dialogue 2022

- Recently, the seventh edition of the Raisina Dialogue was held in New Delhi.
- The Raisina Dialogue is India's premier conference on **geopolitics and geoeconomics** committed to addressing the most challenging issues facing the **global community**.
- The conference is hosted by the **Observer Research Foundation in partnership with the Ministry of External Affairs**, Government of India.

### Theme for the Conference

- The theme for the Conference was **'Terranova- Impassioned, Impatient, Imperilled'**.

### Thematic pillars

The Raisina Dialogue 2022 had six thematic pillars:

- Rethinking Democracy: trade, technology and ideology
- End of Multilateralism: a networked global order
- Water Caucuses: turbulent tides in the Indo-Pacific
- Communities Inc: first responders to health, development, and planet
- Achieving Green Transitions: common imperative, diverging realities
- Samson vs Goliath: the persistent and relentless technology wars.

## MILITARY EXERCISES IN NEWS

### Mission SAGAR

- Mission SAGAR is India's engagement with the countries in the Indian Ocean Region, in line with **'SAGAR – Security and Growth for All in the Region'**.
- Mission SAGAR is in line with India's role as the first responder in the region and builds on the excellent relations existing between these countries to battle the COVID-19 pandemic.
- As part of this Mission, INS Kesari successively visited Maldives, Mauritius, Madagascar, Comoros and Seychelles during May-June 2020 to deliver assistance to our maritime neighbours in dealing with the COVID crisis.
- As part of Mission SAGAR-II, Indian Naval Ship Airavat delivered food aid to **Sudan, South Sudan, Djibouti and Eritrea**.

### Exercise Varuna 2022

- The culmination of the 20th edition of the Indo-French bilateral Naval exercise 'Varuna-2022' took place recently.
- The exercise has expanded scope to cover a **broad spectrum of maritime operations**.
- The final phase of the exercise progressed with tapered **focus on advanced anti-submarine warfare (ASW) exercises**.
- The exercise was characterised by **Seamless coordination, precise execution of manoeuvres, and clockwork execution of complex anti-submarine warfare**.
- The exercise reflected high synergy and mutual understanding between the **Indian and French Navy**.

## YOJANA

### Table of Contents\*

#### GENERAL STUDIES - II

- Rural Banking and Financial Services
- Digital Identity
- Quality Education

#### GENERAL STUDIES - III

- Fintech Beyond Boundaries
- Fintech revolutions
- Artificial Intelligence in Financial Sector
- Inclusive Infrastructure
- Digital Currency

APTI PLUS

The table of content is segregated as per its relevance with Mains Syllabus of CSE Examination. The article mention under GS paper in table of content might be important for many other topics in GS Papers as well. The details relevance of each article/Topics with respect to GS syllabus has been mention at the starting of each article.

## 01 RURAL BANKING AND FINANCIAL SERVICES

### GS Syllabus Covered

**GS - II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

**GS - III:** Inclusive growth and issues arising from it.

### Introduction

- A rural bank can be defined as rural financial institution, cooperative bank or deposit taking financial institution that provides customised financial services to rural Communities.
- While financial services such as banking, insurance, and investment are often seen as domestic services that endeavour to stream the mass population to access to financial services.

### Background

- Rural banking has become integral to the Indian financial markets with a majority of Indian population still living in rural or semi-urban areas.
- The Government of India and the Reserve Bank of India have been continuously working to achieve complete financial inclusion.
- Rural banking in India began in earnest with the formation of the regional rural banks in 1975.
- Schemes such as JAM (Jan Dhan-Aadhaar-Mobile) Trinity and Digital India marked a watershed moment in the financial inclusion of rural India.

### Banking Correspondents

- Over the years, Banking Correspondents (BCs) have performed a central role in digitally empowering rural areas.
- They are agents of the bank who extend banking services beyond the physical reach of brick-and-mortar bank branches.
- By using digital means, BCs enable access and education of the digital financial ecosystem to rural citizens.
- The growth in digital financial services marks the landmark rise of the rural digital citizen.
- The rural Indian economy is primarily cash-driven.
- The non-agricultural sector now contributes two-thirds of agricultural income.

### Advantages of Digital banking and financial services

#### a) Benefits: Saving Time, Distance and Money

- Digital banking and financial services have many benefits for the common rural citizens.
- Access to digital banking services has promoted widespread usage of digital financial and banking services by rural citizens, especially at the time pandemic and lockdown when going to far-off places was next to impossible.
- As per the World Bank, India's rural areas have only 20% of the country's ATMs.
- The AEPS, i.e, Aadhaar Enabled Payment System makes it easy for people like him to manage all their financial transactions.

#### b) No Cash – No Theft

- Fear of theft is a widespread concern in rural India.
- This ranges from storing money at home to carrying large amounts on one's person while going to the market.

#### c) Convenience of Access

- Digital access enables people to access their money anytime and anywhere.
- Digital payments make it easier to pay exact amounts without worrying about change.
- Many BCs across States pointed out that one can easily purchase goods in the market even if they forgot to carry money or had to make an emergency purchase.

#### d) Making Budgeting Easier

- Net banking allows easy access to all bank statements transactions and budget expenses.
- Even digital payment apps linked to accounts make it easy to view account balance.
- Phones make personal financial management simpler for every household and foster digital financial citizenship.

**e) Enabling business and entrepreneurs**

- Digital payments promote the convenience of purchases and make it easier for entrepreneurs to receive payments without default.
- Most businessmen approach BCs to transfer larger amounts of money to their vendors, withdraw cash or deposit money.

**Challenges of Digital banking and financial services**

**a) Grievance redressal Mechanisms**

- Banking Correspondents (BCs) are commonly the first point of contact of aggrieved users.
- BCs and users call the toll-free helpline number of the bank to register their complaints.

**b) Victims of Fraud**

- The increasing use of digital payments has been accompanied by increased cases of online fraud.
- Criminals, posing as bank officials, obtain sensitive information from gullible and usually illiterate users.
- They withdraw large amounts of money or empty the victim’s bank account entirely.
- Most people are wary of technology and such instances only erode the trust further.



**c) Sustaining a Banking Correspondent**

- Operating a business is tough for many banking correspondents.

**d) “Phygital” Banking and Financial Services**

- Recently, the ministry of Finance urged the Indian Banks Association to increase the presence of banking services in rural India by deciding where they need to be physically present and where digital services can be extended.
- The World Economic Forum believes that a phygital strategy, which balances physical and digital interactions as an absolute necessity is the way forward in the new normal.

**Conclusion**

- With regards to Rural Banking and Financial Services, the formulation of new products and easing regulations for simplified product and service delivery is the need of the hour. Banks and private companies can invest in awareness and reorientation training, for BCs and users, to alleviate trust and digital literacy issues. A cohesive and collaborative effort that increasingly shifts the offline to online, while maintaining necessary aspects of the offline is required.

## 02 DIGITAL IDENTITY

### GS Syllabus Covered

**GS - II:** Important aspects of governance, transparency and accountability, e-governance applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.

**GS - II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

### Introduction

- India has emerged as a leader in building on its biometric digital ID (Aadhaar) to reform service and program delivery.
- Aadhaar is a unique, online verifiable digital identity that is the backbone of India's Digital revolution.
- Aadhaar is a 12-digit unique number issued by the Unique Identification Authority of India to every resident of the country.
- It was initiated in the year 2009 with the intent to provide universal identity to every individual, after taking the user's biometric details like iris scan and fingerprints, and demographic information.

### Financial Inclusion journey

- Financial inclusion is defined as the process of ensuring access to financial services and adequate credit by the weaker sections and low-income groups at an affordable cost.
- The Union Government has launched the Aadhaar project in 2009 with an ambitious attempt to create requisite technology infrastructure and reach more than 1.3 billion people living in India.
- In 2014, it was combined with the Jan-Dhan initiative, a financial inclusion to steam line those citizens who were not part of the banking system in India.
- Today, more than 80% of all Indians have a bank account up from half that level when the programme started.
- In its March 2019 report "Digital India," McKinsey Global Institute observed that "the public sector has been one strong catalyst for India's rapid digitisation."

### Aadhaar Payment Bridge

- The Aadhaar Payment Bridge (APB), the soft infrastructure developed by the National Payments Corporation of India (NPCI), is now the catalyst for most of India's social security and cash transfer programmes.
- Today, the Central Government uses APB-enabled direct benefit transfers for 314 programmes/schemes.
- Another 450 programmes of the different State Governments also use these digital rails.

### Efficacy in Expanding Financial Services

- Aadhaar has emerged as a preferred identity document because of its following features:

#### **a) Electronic KYC (e-KYC):**

- Aadhaar platform provides e-KYC service, with the consent of the resident, their demographic details along with photographs are shared digitally with a service provider.
- This has made the customer acquisition process far simpler and cheaper.

#### **b) Single source of Authentication:**

- The ease of authentication via Aadhaar has interested financial institutions to consider the number to onboard new customers and to help Indians embrace digital services.

#### **c) Aadhaar is 'Know Your Customer (KYC)'- compliant:**

- The RBI states that if the Officially Valid Document (OVD) submitted for opening a bank account has the requisite personal details and address, there is no need to submit any other documentary proof.

#### **d) Digital consumer base**

- India's digital consumer base is the second largest in the world, and the benefits of technology are being felt by all segments of people.

- India's rapid pace of digital adoption has been driven by the Government's commitment towards digitising key aspects of the economy, combined with private-sector innovation and investment to promote internet access and use.

**e) India digital Stack**

- India digital Stack refers to the universal biometric identity programme, Aadhaar, along with a suite of open APIs linked to it that has played a catalytic role in India's digital foundation and in the country's digital evolution.
- Fintech innovation has grown rapidly in the country.
- The Government has provided the right environment for private-sector innovation through policy labs, regulatory sandboxes, incubation centres, and other testbeds for new fintech and IoT-based applications.
- The Reserve Bank of India, which has outlined a possible framework adoption of Blockchain technologies in the financial sector.
- Micro-ATM with Aadhaar system is a well-stabilised system and many more applications can be built on this system.
- UIDAI is also exploring the opportunities on how we can leverage assisted mode for other new services related to insurance and investments by the residents.

**Direct Benefit Transfer (DBT) - Bringing transparency through Aadhaar**

- Aadhaar to identify and remove fake and duplicate beneficiaries
- 82.9% DBT beneficiaries seeded with Aadhaar
- 34.53 crore beneficiaries seeded with Aadhaar
- ₹68,815 crore of funds transferred using Aadhaar Bridge Payment

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**Way forward**

- Aadhaar infrastructure coupled with new technologies like Blockchains, IoT, etc, can deliver value, while staying within the boundaries of current and future laws of the land.
- Aadhaar is most likely the single-most important element in India's exponential growth in fintech services.
- UIDAI is also taking significant steps to introduce the fourth modality of identification – face.
- Currently, UIDAI validates citizens based on OTP, fingerprint, and iris.
- UIDAI is also working on various new technological fronts and adapting the changes and moving abreast with the industry partners to have a new and fast-paced economy in the country.

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**GS Syllabus Covered**

- GS - II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.
- GS - II:** Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

**Introduction**

- Education is the process of facilitating learning or the acquisition of knowledge, skills, values, beliefs and habits.
- Quality education specifically encompasses issues such as appropriate skills development, gender parity, provision of relevant school infrastructure, equipment, educational materials and resources and scholarships.

**Sustainable Development Goal**

- Sustainable Development Goal 4 aims at ensuring inclusive and equitable quality education and promotes lifelong learning opportunities for all.
- This goal ensures that all girls and boys complete free primary and secondary schooling by 2030.
- The education system in India is transforming itself from focusing on universalisation of access to education to access to quality education, in line with the Sustainable Development Goals - 4.

**Elementary education in India**

- India has made remarkable strides in recent years in attaining near-universal enrolment in elementary education through initiatives such as the Sarva Shiksha Abhiyan (now the Samagra Shiksha) and the Right to Education Act.
- As per the National Sample Survey, the literacy rate of persons of age 7 years and above at the All-India level stood at 77.7 per cent.
- The 2030 Agenda for Sustainable Development adopted by India in 2015- aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” by 2030.

**New Education Policy (NEP) 2020**

- The NEP 2020 is the first education policy of the 21st century.
- The policy is built on the foundational pillars of Access, Equity, Quality, Affordability and Accountability, this policy is aligned to the 2030 Agenda for Sustainable Development and aims to transform India into a vibrant knowledge society and global knowledge superpower by making both school and college education more holistic, flexible, multidisciplinary.
- The New Education Policy (NEP) 2020 stresses upon infrastructure development to ensure participation.
- The Experiential learning methods proposed under the NEP will increasingly be adopted, including hands-on learning, arts-integrated and sports-integrated education, story-telling-based pedagogy, and include explorations of relations among different subjects.

**Aim of the policy**

- The Policy also aims to provide quality textbooks at the lowest possible cost.
- NEP aims to establish school complexes/clusters, and the sharing of resources across complexes will have a number of other benefits as a consequence, such as improved support for children with disabilities, more topic-centred clubs, and academic/sports clubs.
- The Policy aims for universalization of education from preschool to secondary level with 100 % Gross Enrolment Ratio (GER) in school education by 2030.
- The new policy aims to pave way for transformational reforms in school and higher education systems in the country.

## School Education and Literacy

- The lockdown due to covid-19 pandemic has resulted in closure of schools and has led to a loss of almost two years of formal education.
- School children in rural areas, and those from Scheduled Castes and Scheduled Tribes, and other weaker sections, have comparatively been more affected due to lack of quality digital media enabled learning systems.

## Budgetary outlay

- The Union Budget 2022-23 has allocated Rs 63.449 crore to the Department of School Education and Literacy.
- The revised Budget 2021-22 of the Department of School Education and Literacy is around Rs 51.969 crore.

## Government programs and policy

- The Central government in its proactive role towards quality education has launched several key Relevant Schemes/Projects to achieve the aims and objectives of New Education Policy (NEP) 2020.

### a) Pradhan Mantri Poshan Shakti Nirman (PM POSHAN):

- PM POSHAN is a revamped version of the National Programme of Mid-Day Meals in School.
- It is one of the foremost rights-based Centrally Sponsored Schemes under the National Food Security Act, 2013 (NFSA).
- The primary objective of the Scheme is to improve the nutritional status of children studying in classes I-VI in eligible schools.

### b) New India Literacy Programme (NILP):

- NILP is Centrally Sponsored Scheme of Adult Education 'New India Literacy Programme' for Financial Years 2022-27 has been designed and developed by aligning with the recommendations on 'Adult Education and Lifelong Learning' of NEP 2020.

### c) Operation Digital Board (ODB):

- The Scheme of ODB provides class-centric digital intervention for teaching and learning and is proposed to be implemented for class IX to XII in all the government and aided schools in the country.

### d) ASPIRE (Accelerating State Education Program to Improve Results):

- ASPIRE, a Centrally Sponsored Scheme supported by Asian Development Bank.
- The scheme is proposed to be implemented in five States viz., Gujarat, Assam, Jharkhand, Tamil Nadu, and Uttarakhand with a total financial support of approx. 3700 crores over a period of six years.

### e) Pradhan Mantri Innovative Learning Programme (DHRUV):

- This Scheme is an initiative to provide guidance from renowned/prominent persons in their field to select talented students.

### f) Samagra Shiksha:

- The erstwhile Schemes of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA), and Strengthening of Teacher Training Institutions have been merged to form the Scheme of Samagra Shiksha.
- The merger intends to give a holistic and integrated approach to School Education in line with NEP 2020.

### g) Strengthening Teaching-Learning and Results for States (STARS):

- The STARS project seeks to support the States in developing, implementing, evaluating, and improving interventions with direct linkages to improved education outcomes and school to work transition strategies for improved labour market outcomes.

### h) Exemplar:

- The Scheme of Exemplar aims to prepare more than 15000 schools of excellence which will help showcase the implementation of the NEP 2020 and emerge as exemplars and schools of excellence over a period of time.
- They will provide leadership in their respective regions in providing high-quality education in an equitable and inclusive school environment.
- It helps participants to learn in their own learning process as per the vision of NEP 2020.

### i) One Class- One Channel:

- This is a special programme of PM eVIDYA was expanded from 12 to 200 TV channels and will enable all States to provide supplementary education in regional languages for classes 1-12.

## Way Forward

- A coherent model of synchronisation of funds for the education sector should be developed.

- The convergence of State and Central Government funds and educational schemes would be useful in many ways to achieve the objectives of NEP 2020.
- Quality improvement in education is strongly emphasised in the New Education Policy as an essential requirement for building a competitive workforce that is at par with global standards.

## 04 FINTECH BEYOND BOUNDARIES

### GS Syllabus Covered

**GS - II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

**GS - III:** Indian Economy and issues relating to planning, mobilization, of resources, growth and development.

### Introduction

- India has emerged as one of the fastest-growing FinTech hotspots in recent years.
- Presently, technology has paved the way for automation and transformation in the financial services industry in India.
- India is one of the largest and fastest-growing fintech markets in the world with more than 2,100 Fintechs and is the third largest fintech ecosystem in line after the US and China.
- The fintech segment alone is projected to grow to \$150-160 billion by 2025 and has enormous growth potential.

### Evolution of Fintech concept

- The concept of “Fintech Beyond Boundaries” was pioneered by “InFinity Forum”, a flagship financial technology and global thought leadership held in December 2021.
- The forum had witnessed the participation of the United Kingdom, Indonesia, and South Africa as partner countries to the event.
- The Forum provided a platform where pressing problems, progressive ideas, and innovative technologies from across the world get Discovered, Discussed, and Developed into Solutions.

### Key themes of InFinity Forum

The InFinity Forum focused on three key themes:

1. FinTech beyond boundaries with governments and businesses focusing beyond the geographical boundaries in the development of global stack to promote financial inclusiveness.
2. FinTech beyond Finance by having convergence with emerging areas such as Space Tech, Green Tech, and Agri Tech to drive sustainable development.
3. FinTech Beyond Next which focuses on how Quantum Computing could impact the nature of Fintech industry in the future and promote new opportunities.

### Four-pronged approach

The India Stack is based on a four-pronged approach.

1. Biometric identity in the form of Aadhaar for identification
2. Bank account access to everyone through Pradhan Mantri Jan- Dhan Yojana (PMJDY) and building financial inclusion
3. Building a scalable platform to Money transfer via IMPS, UPI, Bharat Bill Payment System etc
4. Allowing banks and fintechs also to access platforms like UPI, Goods and Services Tax Network (GSTN) & Digi Locker to innovate.

The idea of global stack was introduced by the IMF called Bali Fintech Agenda in 2018, and the concept of ‘Global Stack’ has the potential to take the agenda of “Fintech Beyond Boundaries” forward and upwards.

### Digital initiatives by the governments

- The Government has demonstrated to the world a unique model of Public-Private Partnership by building a strong public infrastructure in the India Stack that facilitates and enables private sector innovation. While transformational digital initiatives, the governments have helped fintechs to enhance the economic and social well-being of millions of people around the world.

**a) Digital Public Infrastructure**

- Digital Public Infrastructure (DPI) solutions can improve the lives of people around the world by enabling digital inclusion.
- Successful governments have been able to harness these digital tools to address urgent challenges facing nations.
- Digital public goods are helping DPI reach a global scale.
- Building meaningful Public-Private Partnerships is going to be instrumental in developing good DPI.

**b) Digital public goods**

- India has been a frontrunner in creating low-cost and scalable digital public goods which promote inclusive development.
- The CoWIN portal developed by India is an example of a digital public good.
- Another notable one is the Open Network for Digital Commerce (ONDC) which is expected to revolutionise the way the E-commerce industry is operating currently.



**Way forward**

- The success of India’s Fintech story can be attributed to the development of India Stack.
- Aadhaar has taken the centre stage in the international arena for countries that are charting their digital identity roadmap.
- The concept of Global Stack shall provide a useful framework for countries to assess their policy options in adapting and building a foundation for the digital economy suiting their own circumstances and priorities.
- India's emergence as a fintech ecosystem has been spectacular where fintech's financial institutions, regulators, and Governments have followed a collaborative approach to provide a comprehensive and continuous impetus to the growth of this sector.

**05 FINTECH REVOLUTIONS**

**GS Syllabus Covered**

**GS - III:** Indian Economy and issues relating to planning, mobilization, of resources, growth and development.  
**GS - III:** Inclusive growth and issues arising from it.

**Background**

- The term FinTech was first coined in the 21st century to describe the technology used in the back-end systems of established financial organisations.
- Currently FinTech spans various sectors and industries, including education, retail banking, non-profit fundraising, investment management, and much more.
- Through specialised software and algorithms, FinTech helps companies, business owners, and consumers manage their financial operations and processes.
- The objective of financial inclusion across will pave the way for the industry’s success, as well as our goal of a USD 5 trillion economy.

**Government interventions**

- The Government policies and regulations in the sector have followed the philosophy of inclusion and innovation.
- Years of effort have gone into the development of the fintech ecosystem, including the latest initiatives like:
- Jan-Dhan Yojana (the world’s largest financial inclusion initiative)
- c-RUPI (for cashless payments)
- India Stack (public digital infrastructure based on open APIs)
- FASTag, which became mandatory earlier last year and enables online toll collection, has already facilitated 192 million transactions.

- UMANG App which provides a one-stop platform for multiple government services has witnessed 1.7 billion transactions.

### Fintech in Pre-Pandemic India

- In India the term period prior to 2010 was known as Digital Payments 1.0.
- This was a period defined by the shift from cash to e-transfers.
- RTGS was introduced around the year 2003-04 and recorded 100 transactions in that year, while the number of retail e-payment transactions was 21.5 crore.
- By 2010, all digital payments combined saw almost double the increase that was primarily driven by business transactions.
- With the widespread use of 3G and 4G mobile technology post-2011, focus invariably shifted to the use of digital payments.
- This is the period of Digital Payments 2.0, which lasted till 2016.

### Post demonetisation

- With the demonetisation in late 2016, 86 percent of all cash in India was withdrawn from circulation.
- This disruption acted as a catalyst for further evolution in the industry and characterised Digital Payments 3.0, the 'network effect' era.
- During this era, India started exporting fintech solutions, rural internet use outgrew urban usage, there was a record-high number of Person-to-Merchant (P2M) transactions, and fintech entered the mobile-commerce age.

### Covid-19 and Digital Payments

- The year 2020 was a turning point for digital transformation and consumer behaviour in India.
- The disruption caused by Covid-19 has been one of the biggest humanitarian crises after the great recession.
- India already had the right infrastructure for digital payments on a large scale, which enabled it to reach a high of 411 crore monthly transactions by November 2020.
- As of December 2021, India had over 17 fintech startups that joined the Unicorn club, and the sector saw cumulative funding of around USD 27.6 billion.
- India is ahead of the US, UK and China combined when it comes to real-time online transactions, with 25.5 billion real-time payments recorded in 2020.

### Potential of Digital Payments 4.0

- The next stage of evolution, Digital Payments 4.0 will focus on reaching the masses with low-cost solutions.
- In India, the volume of digital payments is expected to reach 54,800 crores by 2025.
- However, to ensure sustained growth Policy support in the area of data security and fraud management is essential.
- The use of new technologies like Blockchain, geo-fencing or geotagging, or the implementation of a framework to prevent QR-code-based phishing attacks can be a step forward in ensuring a secure and stable digital financial ecosystem.

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**INDIA**  
SET FOR THE RISING TECHADE

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Industry Revenues Soar Past **\$200 Billion** Mark:  
**NASSCOM**

- 3<sup>rd</sup> largest tech start-up hub in the world
- 59% share in global sourcing market
- 5.1 Million industry workforce, 36% women

**INDIA**  
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मेरी सरकार

Industry Revenues Soar Past **\$200 Billion** Mark:  
**NASSCOM**

- ~ \$227 Billion revenue in FY 2022
- 15.5% growth in revenue
  - Highest-ever growth since 2011
- Double-digit growth across all sub-sectors in FY 2022
  - Added nearly 4.5 lakh jobs

### Way forward

- The Government initiatives along with India's strong startup and innovation ecosystem have laid a strong foundation for the growth and development of India's fintech maturity.
- In just two decades, the evolution of India's fintech ecosystem has been extraordinary, and the outlook for the future is promising.
- In the last seven and half decades, India has made a tremendous leap to become a robust digital economy.
- As India advances into the tech-decade – "Techade"; inclusive technologies, innovation ecosystem, human-centricity, and progressive policies will establish India's fintech revolution for the world.

**INDIA**  
SET FOR THE RISING TECHADE

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मेरी सरकार

Industry Revenues Soar Past **\$200 Billion** Mark:  
**NASSCOM**

- \$350-400 Billion** - Potential contribution to India's \$1 Trillion digital economy
- 125+** Potential high-impact solution areas companies plan to undertake by 2035
- 72% of Tech firms** indicate revenue growth of FY 2023 to be similar to FY 2022
- IT sector revenue** to hit \$350 Billion by FY 2026

## 06

## ARTIFICIAL INTELLIGENCE IN FINANCIAL SECTOR

**GS Syllabus Covered**

**GS - III:** Indian Economy and issues relating to planning, mobilization, of resources, growth and development.

**GS - III:** Achievements of Indians in science & technology; indigenization of technology and developing new technology.

**Introduction**

- Artificial Intelligence (AI) is a powerful tool that is widely deployed in financial services.
- AI has the potential to boost financial services and transform the way services are delivered to customers.
- India's success in the field of fintech is a result of various facets such as the rapid adoption of digital technology by banks and the establishment of a comprehensive system of digital payment modes.
- The system encompasses everything from Unified Payments Interface (UPI) to dozens of digital payment applications and cards like RuPay to micro-banking.

**Background**

- India has witnessed a tenfold increase in financial transactions between 2019 and 2021.
- Digital security systems are still in place at several stages in the financial system, and the consumer has also become more vigilant than before.

**Significance of Artificial Intelligence**

- Artificial Intelligence plays a vital role in the technologies that monitor and analyse customer behaviour and activities.
- The AI can be used to get the best results in economic, political, defence, and other such areas. It also applies to the financial sector, where banks can grow their business and reach good and safe customers by analysing such data.
- Predictive analysis is often mentioned in the field of data analysis.
- It can be predicted who may need a loan, who will want to transfer the loan taken from another location, and who will face this kind of need in the coming years.

**Challenges**

- The new-age challenges in the Financial Sector Continue to confront the capabilities of the existing security system.
- There is a need to find a safe haven in artificial intelligence, quantum computing, and blockchain.
- The role of technology in the financial sector is becoming increasingly intensive.

**Security solution via AI**

- Artificial Intelligence is capable of recognizing similar patterns of digital fraud taking place in the country.
- It can indicate what methods can prove effective to solve them.
- In the year 2020, various companies lost about USD 56 billion through online frauds.
- This amount is about 42 lakh crore rupees in Indian currency.
- Banks, financial institutions and companies, and governments are not entirely safe from this challenge.
- AI and data analytics can emerge as the backbone of our security solution systems.
- Even Quantum computers can play an important role in the future.

**Advantages of Digital financial ecosystem**

- With the advent of Aadhaar cards and mobile connections, many banking and financial sector processes have become more manageable, resulting in an increasing number of consumers in the financial sector.
- The procedures related to KYC (Know Your Customer) have become more effective.
- With the use of mobile and Aadhaar, it has become possible to authenticate the identity of the actual account holder on the spot.

## Status of digital transactions

- In recent times India has witnessed a wave of mobile applications used for money transactions.
- More than 60 percent of transactions are covered under the UPI, and more than 250 banks are members of it.
- Recently, RBI has started providing money transactions even on ordinary mobile phones without the internet facility, indicating the magnitude and totality of the whole development.
- According to a study, the situation will change further by 2026, when 44 per cent of the total financial transactions in India will come through payment gateways and aggregators, while 34 per cent will be done through QR codes.
- Not only this, 22 percent of the payments will be done through POS (Point of Sale) machines.

## Conclusion

- Artificial Intelligence, data analytics, cyber security, and quantum computing need to take the driving seat to focus on both the opportunities and challenges of the modern era.
- The big area is the ability to relate financial processes to people's backgrounds and behaviours, which can bring about a paradigm shift in the sector.
- Cyber security will ensure that the financial infrastructure remains secure, despite the enormous increase in the scope and volume of transactions, and variations in the financial sector.

# 07

## INCLUSIVE INFRASTRUCTURE

### GS Syllabus Covered

**GS - II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

**GS - III:** Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

## Introduction

- Inclusive Infrastructure is infrastructure development that enhances positive outcomes in social inclusivity, and ensures that no individual, community or social group is left behind or prevented from benefiting from improved infrastructure.
- In the recent past, the focus of the Indian economy has been on inclusive development with emphasis on social sector, employment generation, low carbon footprints, and technology innovation.

## New economic policy

The new economic policy has envisaged five important features:

- a) Delivering quality social sector development over quantitative outcomes
- b) Entitlement to entrepreneurship approaches to support widespread livelihood generation
- c) Localisation of development
- d) Achieving low-carbon trajectory in economic growth
- e) Leveraging digital and technological solutions

## Social infrastructure development

- The Government's sharp focus on social infrastructure development in the last couple of years is reflected in the fact that the total budget allocation for major centrally sponsored schemes in areas of rural roads, housing, drinking water, sustainable urbanisation and transportation, and infrastructure for healthcare went up from around 19 per cent in 2019-20 to almost 33 percent among all centrally sponsored schemes suggesting comprehensive perspective towards supporting inclusive recovery.

## Expanding Economic Opportunities

### a) Sunrise economic opportunities

- There are sunrise opportunities for Artificial Intelligence, Geospatial Systems and Drones, Semiconductor and its ecosystem, space economy, genomics and pharmaceuticals, green energy, and clean mobility systems which hold immense potential for assisting sustainable development at a large scale and modernising the country.

- These sectors also provide employment opportunities for youth, and make Indian industry more efficient and competitive.

**b) PM Awas Yojana**

- In India housing is an integral part of infrastructural development, it is expected that 80 lakh houses in 2022-23 would be completed for the identified eligible beneficiaries of PM Awas Yojana, both rural and urban.
- In this regard, the Central Government will work with the State Governments for reduction of time required for all land and construction-related approvals and promoting affordable housing for middle class and Economically Weaker Sections in urban areas.

**c) PM-DevINE**

- For comprehensive development in the North East, a new scheme namely Prime Minister's Development Initiative for North-Eastern region, PM-DevINE was introduced through the North-Eastern Council to fund infrastructure, in the spirit of PM GatiShakti, and social development projects based on felt needs of the North-East.

**d) New Vibrant Villages Programme**

- As border villages with sparse population, limited connectivity, and infrastructure often get left out from the development gains, such villages on the northern border would be covered under the new Vibrant Villages Programme.

**e) Urban capacity building**

- For urban capacity building, support would be provided to the States.
- The modernisation planning of building by-laws, Town Planning Schemes (TPS), and Transit Oriented Development (TOD) will be implemented.
- The Central Government's financial support for mass transit projects and AMRUT scheme will be leveraged for formulation of action plans and their implementation for facilitating TOD and TPS by the States.

**f) Skill Development initiatives**

- The budgetary allocation for the "Startup India Initiative in Higher Educational Institutions" within the Ministry of Education has been increased by 100 per cent from Rs 30 crores in 2021-22 to Rs 60 crore.
- To enhance the level of skill development and quality education, Startups will be promoted to facilitate 'Drone Shakti' through varied applications and for Drone-As-A-Service (DrAAS).

**h) High-quality e-content**

- The government has planned to develop high-quality e-content in all spoken languages for delivery via internet, mobile phones, TV, and radio through Digital Teachers for building a competitive mechanism for development of quality.

**MINISTRY OF EDUCATION**  
GOVERNMENT OF INDIA

**Webinar on**  
**One Class**  
**One Channel**  
Reaching Quality Education to the Farthest Corner

**Key Highlights**

- Inclusion of various innovations in pedagogy
- Importance of developing e-content in regional languages, divyang & gifted children
- Tele-schooling through satellite medium of Edusat network
- Importance of video tutorials on online laboratories
- Technical preparations for starting 200 PM-eVidya DTH TV channels

**i) National Skill Qualification Framework**

- The National Skill Qualification Framework will be aligned with dynamic industry needs.
- Digital Ecosystem for Skilling and Livelihood – the DESH-Stack e-portal was launched.
- This aims to empower citizens to skill, re-skill, or up-skill through on-line training.

**j) One Class-One Channel**

- To compensate the learning losses during Covid-19 lockdown particularly in the rural areas, and those from Scheduled Castes and Scheduled Tribes and other weaker sections the initiatives of 'One Class-One Channel' programme of PM eVIDYA was expanded from 12 to 200 TV channels for enabling all States to provide supplementary education for classes 1-12 in regional languages.

**Innovation in Health Sector**

- In the wake of the Covid-19, and in order to strengthen infrastructure in health and associated sectors, the Government has continued with the enhanced support that is necessary for these sectors.

**a) Ayushman Bharat Digital Mission**

- Under Ayushman Bharat Digital Mission, an open platform for the National Digital Health Ecosystem was rolled out.
- It consists of digital registries of health providers and health facilities, unique health identity, consent framework, and universal access to health facilities.

**b) National Digital Health Ecosystem**

- The National Digital Health Ecosystem is in the pipeline by the government which would consist of digital registries of health providers and health facilities, unique health identity, consent framework, and universal access to health facilities.

**c) National Tele Mental Health Programme**

- The pandemic due to Covid-19 has led to an increase in mental health problems of people of all ages.
- The National Tele Mental Health Programme is being planned with a network of 23 tele mental health Centres of Excellence.
- National Institute of Mental Health and Neurosciences (NIMHANS) will be the nodal centre and International Institute of Information Technology-Bangalore (IIITB) would provide technology support.

**08****DIGITAL CURRENCY****GS Syllabus Covered**

**GS - II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

**GS - III:** Indian Economy and issues relating to planning, mobilization, of resources, growth and development.

**Introduction**

- Digital currency is a form of currency that is available in digital or electronic form.
- In recent times, India has witnessed an increase in the availability of low-cost smartphones and low cost 4G data which has further deepened digitisation in India.

**Idea of cryptocurrency**

- Cryptocurrencies aspire to be a new, digital, encrypted, and decentralised form of currency.
- A crypto currency like bitcoin is a cryptography-based peer-to-peer electronic cash system, founded on blockchain allowing the transfer of values without any financial intermediary such as banks.
- At Present India is also inclined towards the idea of cryptocurrency as in this modern digital age, paper banknotes are gradually losing their role as a reference value in payment systems across the world.

**India's digital journey**

- The centre decision on the demonetisation in 2016 led to about a hundred-fold increase in digital payment transactions in India.
- India pioneered the digital transactions space with the creation of the vastly successful Unified Payments Interface (UPI) back in 2016 and the revolutionary Jan-Dhan Yojana.

- The current digital landscape of India makes a strong case for introducing a Central Bank Digital Currency (CBDC).
- The current digital landscape of India makes a strong case for introducing CBDC.

### Central Bank Digital Currency

- A Central Bank Digital Currency is a digital token, similar to but not the same as cryptocurrency, issued by a central bank of a country.
- The Union Budget 2022-23 proposed the introduction of a digital currency to be issued by the Reserve Bank of India in the coming financial year.
- The initiation of a Central Bank Digital Currency is aimed at enhancing the digital economy and providing an alternative to the private virtual currencies that have proliferated in recent times.
- The Central Bank Digital Currency (CBDC) is a digital version of the rupee, using blockchain and other technologies.



### Factors that led to introduction of CBDC

- Diverse range of virtual currencies being circulated and the market currently is extremely fragmented.
- The degree of pseudo-anonymity provided by private digital currencies discourages participation
- There are many technical and security concerns associated with its usage.

### Advantage of Digital currency

- Digital currency will help in promoting financial inclusion.
- It will ensure privacy, transferability, convenience, accessibility, and financial security.
- It also presents a way to advance India's sustainability motives.
- It is the foundation principle on strong standards of environmental sustainability.
- Digital currency can replace large cash transactions and reduce the costs that the central bank bears for printing, transporting, and managing cash.

### Implementation strategy CBDC

The RBI is currently working towards a phased implementation strategy. Some key issues under examination are:

- The scope of CBDCs to be used in retail payments or also in wholesale payments
- Whether it should be a distributed ledger or a centralised ledger
- Whether it is direct issuance by the RBI or through banks

### Role of RBI

- RBI had earlier proposed amendments to the Reserve Bank of India Act, 1934, which would enable it to launch the Central Bank Digital Currency (CBDC).
- Earlier this year, RBI also constituted a Fintech Department to facilitate innovation in fintech and supervise the current financial landscape in India.
- In this regard efforts to introduce CBDC are also gaining momentum across the world.

### Global Practice

- According to the Atlantic Council, 87 countries representing over 90% of global GDP are currently exploring a CBDC in contrast to May 2020, when only 35 countries were considering it. Moreover, there are nine launched digital currencies in the world and 56 digital currencies are under research or development.
- Jamaica has recently announced its sovereign digital currency to be released in 2022.
- Eastern Caribbean countries have also launched a digital currency.

### Way forward

- India has been at the forefront of innovating and adopting innovation since the launch of the Digital India campaign.
- CBDC will be a further push to e-commerce with the greater trust of the masses in digital transactions that are backed by the government.
- Digital currency will give a boost to the strong digital infrastructure for the country.

# KURUKSHETRA

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APTI PLUS

\* The table of content is segregated as per its relevance with Mains Syllabus of CSE Examination.

\* The article mention under GS paper in table of content might be important for many other topics in GS Papers as well.

\* The details relevance of each article/Topics with respect to GS syllabus has been mention at the starting of each article.

# GENERAL STUDIES - I

**01**

## RURAL WOMEN: INTEGRAL FOR ATMANIRBHAR BHARAT

### GS Syllabus Covered

**GS - I:** Role of women and women's organization, population and associated issues, poverty and developmental issues.

**GS - II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

### Introduction

- Women are the backbone of the society and have always played a positive role in shaping our society.
- Economic empowerment of women is the most viable solution to integrate women to the developmental goals of the nation and Atma Nirbhar Bharat.
- The empowerment and autonomy for rural women will help them to improve their political, social, economic and health status.

### Rural Women Participation in Agriculture and Allied Sector

- In 2011-12, workforce participation rate for urban male and urban female are 54.6 percent and 14.7 percent respectively whilst rural male and rural female are 54.3 percent and 24.8 percent, respectively (MoSP, 2017).
- In rural communities, agriculture and allied sector is the primary source of livelihood of 80 percent of all economically active rural women.
- Also, they are engaged in allied activities viz. management of livestock, milk collection, fish processing, collection of non timber forest produce (NTFP), etc.

### Mainstreaming Women Farmers

- The government has come up with the concept of 'Gender Mainstreaming in Agriculture' to encourage participation of rural women in agriculture.
- The mission was propagated to ensure access to ongoing women-oriented schemes and resources across rural setups.
- Beneficiary-oriented schemes with special provisions for rural women are approved by the Ministry of Agriculture and Farmers' Welfare.
- These special schemes provide for States and other implementing agencies to incur at least 30 percent expenditure on women farmers.

### Evolving Rural Setup for Women Empowerment

- The Union Budget 2022-23 has increased allocation to scale up these missions towards public health and well-being of people living in rural areas.
- The status of rural women is evolving since the inception of reforms in the area of rural development.
- The schemes like Prime Minister's Employment Generation Program (PMEGP), National Livelihoods Mission, Deen Dayal Upadhyay Grameen Kaushalya Yojana (DDUGKY), Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Beti Bachao Beti Padhao (BBBP), Pradhan Mantri Matru Vandana Yojana (PMMVY) etc. have made significant contributions in improving stature of rural women in India at the grassroots level.
- The setting up of Mahila Shakti Kendras (MSK) at district level has provided safety and security to rural women,
- The "Ease of living" led women empowerment initiatives have been undertaken by the Government of India to improve well-being, environment and lifestyle of rural women.
- The Pradhan Mantri Ujjwala Yojana was launched in May 2016 and aimed to provide clean energy fuel of Liquefied Petroleum Gas (LPG) to 80 million rural women in India.
- A flagship programme for providing tap water connectivity to rural households was implemented as Jal Jeevan Mission (JJM) under the Ministry of Jal Shakti.

## Mission Shakti

- To ensure safety, security and socio-economic parity for rural women empowerment, Mission Shakti, an umbrella scheme, is implemented by the Ministry of Women and In Child Development.
- This scheme includes setting up of National, State and District level Hubs for empowerment of women, women helplines, one stop centres, Sakhi Niwas or working women hostels, shakti sadan's or homes for destitute and troubled women, crèches, etc.
- The Anganwadi Services are set up in rural areas to provide health services and to raise awareness towards health and nutrition.

## Skill Development and for women

- Several inter-ministerial initiatives of Government of India are focused on promoting women farmers to enhance their livelihood, social and economic gains.
- Pradhan Mantri Kaushal Vikas Yojana (PMKVY) implemented by the Ministry of Skill Development and Entrepreneurship provides several short duration skill training programmes for rural youth and women to earn their livelihood.
- The Mahila Kisan Sashaktikaran Pariyojana (MKSP) is one of the major initiatives for skilling rural women farmers.
- Skill training courses in agriculture and allied areas are conducted for farmers including women farmers through National Training Institutes, State Agricultural Management and Extension Training (SAMETISs), Krishi Vigyan Kendras (KVKs) and State Agricultural Universities (SAUs), across the country.

## Entrepreneurship Opportunities for women

- Several projects aimed to generate entrepreneurship opportunities for rural women are being undertaken by the Government of India.
- The Start-Up Village Entrepreneurship Programme (SVEP), implemented under Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY NRLM) provides self-employment opportunities, financial assistance and training to create local community enterprises.
- The Mahila Shakti Kendra (MSK) developed by the Ministry of Women and Child development has empowered rural women through community participation and raising awareness on girl education, maternal care, health, etc.

## Financial Empowerment

- The financial inclusion and accessibility to banking through Pradhan Mantri Jan-Dhan Yojana (PMJDY) has boosted prospects of rural women participation in the formal sector.
- The Jan Dhan campaign has ensured access to financial services viz. banking, savings and deposit accounts, remittance, credit, insurance, pension, etc. in an affordable manner to rural women.
- This financial inclusion has helped the rural population to fight the crisis during COVID-19 pandemic outbreak with uninterrupted access to financial aid.
- Other initiatives like Pradhan Mantri MUDRA Yojana (PMMY), Stand-Up India Scheme, and Prime Minister's Employment Generation Programme (PMEGP) are additional supporting steps towards financial empowerment and entrepreneurship development of rural women.

## Conclusion

- The measures opted by the government have open avenues for access to education, productive resources, capacity building, skill development, healthcare facilities and diversified livelihood opportunities through beneficiary schemes.
- These development initiatives across rural ecosystems have given a fillip to rural women participation in economic activities and improved quality of life.
- Hence, empowering rural women is vital to boost economy, food security, poverty alleviation, reducing impact of climate change and support in achieving the UN- millennium goals by 2030.

## 02 WOMEN FARMERS

### GS Syllabus Covered

**GS - II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

**GS - III:** Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution System objectives, functioning, limitations, revamping; issues of buffer stocks and food security; Technology missions; economics of animal-rearing.

### Introduction

- Agriculture can be an important engine of growth and poverty reduction.
- Agriculture sector employs 80% of all economically active women in India and they comprise 33% of the agricultural labour force and 48% of the self-employed farmers.
- In India, 85% of rural women are engaged in agriculture, yet only about 13% own land.

### Deendayal Antyodaya Yojana

- Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM) was launched in the year 2011, the DAYNRLM aims to reach out to 9-10 crore rural poor households by 2023-24.
- The promotion of community institutions and their capacity building is one of the core components of DAY NRLM.

### Aim of mission

- The Mission provides long-term support to the community institutions and their members in such a way that they diversify their livelihoods, improve their incomes and quality of life.
- The Mission aims to mobilise one women member from each rural poor household into Self Help Groups (SHGs).
- The Mission has mobilised 8.17 crore women into 75 lakh SHGs so far.
- These community institutions provide a collective platform for the rural poor to overcome poverty through the access to financial, technical and marketing resources.

### Major interventions for women farmers

#### 1. Mahila KISAN sashaktikaran pariyojana (MKSP)

- DAY-NRLM started promoting farm livelihood intervention through MKSP.
- The MKSP was launched in the year 2010-11 with the primary objective to empower women in agriculture and allied sectors by making systematic investments to enhance their participation and productivity in agriculture-based livelihoods and building the capacity around sustainable harvesting, post harvesting techniques for NTFPs and value chain development through promotion of producer collectives.
- It also aims at ensuring nutrition for the poorest of the poor by securing and strengthening the primary livelihood basket of poor households.

#### Focus areas of MKSP

- The three broad focus programmatic areas of MKSP are:
  - Sustainable Agriculture
  - Non- Timber Forest Produce (NTFP)
  - Value Chain Development
- Livestock interventions are integrated with both Sustainable Agriculture and NTFP projects.

#### 2. Sustainable Agro-ecological Practices

The key objectives of the sub scheme are:

- to enhance the productive participation of women in agriculture
- to create sustainable agricultural livelihood opportunities for women in agriculture
- to improve the skills and capabilities of women in agriculture to support farm and non-farm-based activities
- to ensure food and nutrition security at the household and the community level

- to enable women to have better access to inputs and services of the government and other agencies and
- to enhance the managerial capacities of women in agriculture for better management of biodiversity.

### Value Chain Development Interventions

- Value Chain Development through Promotion of Producers Groups (PGs) and Producers Enterprises (PEs) is an important farm livelihood intervention which has a huge impact on the livelihoods of the rural women.
- The Producers Groups are informal organisations that support the small and marginal producers at village level through aggregation and marketing in nearby markets whereas the Producers Enterprises are formal organisations who support aggregation, processing, value addition, and forward marketing.
- The basic objective of this intervention is to support small and marginal rural producers to get better market access through aggregation, processing and marketing.

### Household Level Nutritional Security

- To promote supplemental food production among the underprivileged and poor people in the rural areas, DAY-NRLM promotes the small Nutrition Garden model with an aim to improve nutrition security and supplement household income.
- Nutrition Gardens provide an assorted mix of vegetables and fruits for a considerable stretch of the year to the rural resource-poor communities.
- This also provides them with a platform for innovations in supplemental food production as well as an opportunity to improve their livelihoods.
- This intervention is unique as it promotes nutritional security and round the year additional income to the family, optimally using the resources available to the poor farmer household.

### Custom Hiring Centre (CHC)/ Tool Banks

- A Custom Hiring Centre / ToolBank is a one-stop solution for farm equipment needs of constituent WSHG members.
- It offers agricultural equipment at an affordable rate on rent.
- A minimum rent is taken to ensure proper maintenance of the equipment.
- The Custom Hiring Centres are not uniform in composition across the country and are customised as per the local agricultural requirements of the fellow women farmers and the crops cultivated in the region.
- However, the fundamental objective is to provide equipment which is women farmer friendly, cost-effective, locally repairable and could be used by a large number of farmers.
- Till date, more than 23,800 Custom Hiring Centres/Tool Banks have been established.

**GeM**  
Government e Marketplace

**my GOV**  
मेरी सरकार

## GeM INCLUDES STITCHING & TAILORING SERVICES

*Empowering Women Entrepreneurs*

- New opportunities for Women SHGs in urban & rural areas
- Catering their capacity building & training needs
- Fulfilling the 3% procurement target set aside for women MSE entrepreneurs

Source: Ministry of Commerce & Industry

# GENERAL STUDIES - II

**01****NUTRITION AND HEALTH LINKED EMPOWERMENT****GS Syllabus Covered**

**GS - II:** Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

**GS - II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

**Background**

- Health is one of the basic needs and a fundamental right of each and every citizen which assumes a special significance in the case of women.
- Women have a significant role in the rural economy which makes the health and nutritional status is of paramount importance for the family as well as for the community and the nation.
- Women's poor health condition not only reduces their productivity and earning capacity but also hampers their ability to take care of the family.

**Women empowerment**

- Women empowerment is necessary for optimising infant and young child feeding as well as for improving the family's food basket by ensuring dietary diversity.
- Empowerment of women is central for enabling them to live a fulfilling life.
- It is also critical for improving household education, healthcare, and nutrition.
- When women are entrusted with greater participation in decision making, household finances and usage of time, their families as well as their own nutrition tend to improve.
- Empowerment can enhance women's contribution to food and nutrition security by increasing food production, income generation and child-care including care of the entire family.

**Issue of Food insecurity**

- Food insecurity is a global problem contributing to nutritional deficiencies and poor health.
- Inadequate or improper dietary intake by the women, particularly during their reproductive years, results in the deficiency of essential nutrients causing health related issues.
- Lack of nutrition related knowledge among women is an underlying cause for high rates of undernutrition and micronutrient deficiencies.
- Appropriate nutrition is prime for human development; nutritional status of the women can make or mar the entire generations, thereby creating a deep furrow in the nation's human resource pool.

**Essential Nutrition Linked Interventions for Women**

- a) Improving the quantity and quality of food consumption through an easy access to food/ ration through public distribution system as well as dignified access to supplementary nutrition to the eligible beneficiaries under the ICDS (Integrated Child Development Services) scheme.
- b) Generating awareness to improve household diets using local foods, increasing food production especially that of the fresh vegetables including green leafy vegetables, fruits and modifying dietary behaviours through effective nutrition and health education.
- c) Preventing micronutrient deficiencies including anaemia through folic acid (IFA) supplementation, deworming, pre-/ peri-conceptual folic acid supplementation, universal access to iodised salt, malaria prevention and treatment in malaria-endemic areas and calcium, iron and vitamin A supplementation during pregnancy along with appropriate knowledge and support to stop tobacco abuse, if any.

- d) Improving access to basic health, nutrition services and promoting early registration of pregnancy, providing quality antenatal check-up and monitoring weight gain during pregnancy along with screening and specialised care of at-risk mothers.

### Pradhan Mantri Mahila Kaushal Kendra (PMMKK)

- The Ministry of Skill Development and Entrepreneurship (MSDE) has launched Pradhan Mantri Kaushal Kendra.
- It is a state of the art, visible, aspirational model training centre in every district of India.
- PMKK are equipped to run industry-driven courses of high quality with focus on employability and create an aspirational value for skill development training.
- PMKK envisions transforming the short-term training ecosystem from a mandate driven delivery model to a sustainable institutional model.

### Government scheme

Recently, the Cabinet has approved MoWCD's three important umbrella schemes:

#### 1. Mission Poshan:

- Mission Poshan 2.0 is an integrated nutrition support programme which addresses the challenges of malnutrition in children, adolescent girls, pregnant women and nursing mothers by creating a convergent eco-system to develop and promote practices that nurture health, wellness and immunity.
- It is envisaged that Mission Poshan 2.0 will contribute to human capital development in the country; address malnutrition challenges; promote nutrition awareness and appropriate eating habits for sustainable health/well-being as well as address nutritional deficiencies through key strategies.

#### 2. Mission Shakti:

- It envisages a unified citizen centric lifecycle support for women through integrated care, safety, protection, rehabilitation and empowerment.
- It has two sub-schemes - Sambal and Samarthya.
  - Sambal is a sub scheme is for safety and security of women and comprises existing schemes – One Stop Centres (OSC), Women Helplines (181-WHL) and Beti Bachao Beti Padhao (BBBP) along with the new component of Nari Adalats for promoting alternative dispute resolution and gender justice within the families as well as society.
  - The Samarthya sub-scheme for empowerment of women comprises already existing schemes – Ujjwala, Swadhar Greh and Working Women Hostel (for safe and secure accommodation to working women); and National Creche Scheme for children of working mothers and the Pradhan Mantri Matru Vandana Yojana (PMMVY), which had been under umbrella ICDS Scheme.

#### 3. Mission Vatsalya:

- The mission aims to secure healthy and happy childhood for children; foster a sensitive, supportive and synchronised ecosystem for optimising child development; assist States/UTs in delivering the mandate of Juvenile Justice Act 2015 for achieving the SDG goals.

### Conclusion

- Nutrition and health related empowerment, particularly that of the rural women, can go a long way in improving household dietary patterns and diversification of diets; and thus, achieving improved health and nutrition outcomes of women, children, family and the nation as a whole.
- A holistic approach towards women's health and nutrition needs to be adopted with a special focus on the needs of women at all stages of life cycle.
- The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) adopted by the world in 2015, provide the roadmap for a sustainable progress that 'leaves no one behind'.



**GS Syllabus Covered**

**GS - II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

**GS - III:** Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

**Introductions**

- The increasing presence of women as entrepreneurs has led to the change in the demographic characteristics of business and economic growth of the country.
- Women-owned businesses enterprises are playing a prominent role in society inspiring others and generating more employment opportunities in the country.
- Women have been at the pivot of this entire empowerment discussion, irrespective of the geography.

**Women Entrepreneurship**

- Women Entrepreneurship is essential to any country's inclusive and sustainable economic development.
- They are recognised as the new engines of growth.
- The Sixth Economic Census is the most cited data in the literature on Women Entrepreneurship in India.
- It reveals that out of the 58.5 million businesses, only 8.05 million were owned by women, which is a mere 13.76 percent of women among the total number of entrepreneurs in India.

**Women's economic empowerment**

- A Recent report published in March 2022 by the World Bank, "Women, Business and the Law 2022", focuses explicitly on women's economic empowerment and involvement in the business.
- According to this report, "nearly 2.4 billion women of working age worldwide still are not afforded equal economic opportunities.
- Just 12 economies score 100 indicating that women are of equal legal standing with men across all areas.
- The most persistent gaps remain in the areas of Pay and Parenthood, demonstrating that many economies have yet to remove restrictions or introduce the good-practice legal rights and benefits identified.

**Gender equality**

- In India, gender equality is enshrined in the constitution and grants equality and empowers the state to adopt measures in favour of women.
- The Government and its policies have had the empowerment of women at the core since its fifth five-year plan 1974-79, considering the role women entrepreneurs can play in the development of the economy of the country.

**Three tier boosts**

The Women Entrepreneurship in India is receiving a three tier boost today, which can be mainly characterised in the following:

1. Self Help Groups
2. Women-Led Enterprises
3. Women-Led Start-ups

**Self Help Groups:** In Self-Help Groups, rural women are engaged in small scale entrepreneurship programmes.

- They are usually voluntary groups with similar backgrounds and purposes.
- The members typically use savings, credit, or social involvement to support their entrepreneurial ventures.
- Through these efforts, the self-confidence level of women is increased.
- So far, microenterprise has proven to be the best tool for rural women.
- It enables them to add to the family income and provide family members with a better lifestyle, including education for the children and improvement of family health.

**Women-Led Enterprises:** In women-led enterprises, the support from the government has been enormous as well.

- The Government of India has also initiated various flagship programmes to facilitate women entrepreneurs, such as Stand-up India.
- The Stand-up India scheme aims at promoting entrepreneurship among women and SC and ST communities.
- Another initiative by the government to provide marketing support to Women Entrepreneurs is Mahila e-Haat, an online marketing platform to support women entrepreneurs.
- The platform offers an opportunity for women entrepreneurs to leverage technology for showcasing products manufactured by them.

**Women-Led Start-ups:**

- Pradhan Mantri MUDRA Yojana is another scheme of the Government of India, which provides access to institutional finance to micro/ small businesses.
- The scheme allows female entrepreneurs to avail funds of up to Rs. 10 lakh to start a small or micro-enterprise.
- **WE Hub**, an initiative of the Telangana Government, is India's first State led Incubator to promote and foster women's entrepreneurship.
- It is one of the most successful incubators focusing on women within Telangana and across India.

### Women Entrepreneurship Platform

- NITI Aayog has launched the Women Entrepreneurship Platform (WEP), a platform to bring together various resources to facilitate the ease of entrepreneurial journey for women.
- The portal is a common platform for women to nurture an ecosystem through collaboration and partnerships.
- The entire platform is built on three pillars:
  - Ichha Shakti represents motivating aspiring entrepreneurs to start their businesses
  - Gyaan Shakti provides knowledge and ecosystem support to women entrepreneurs to foster entrepreneurship
  - Karma Shakti means providing hands-on support to entrepreneurs in setting and scaling up businesses.

### Challenges in Entrepreneurship

- Entrepreneurship comes with its own set of challenges for both genders.
- However, the challenges for women are more significant.
- They are confronted with societal pressures in most regions in India and globally.

### Way forward

- As the country progresses economically and targets a USD 5 trillion economy by 2024-25, the need to push women entrepreneurship in the country and bridging the rural-urban divide through these enterprises become necessary.
- This would help the economy run on the double engine and

## Commitment to Social Justice

### Promoting Entrepreneurship for Socio-Economic Empowerment



Lending target under Mudra enhanced to ₹3 lakh cr for FY 2018-19



Of the total loan accounts, **76%** are of women and over **50%** are SCs, STs and OBCs



Furthering Self-reliance

**54,733** loans sanctioned by the banks to SC, ST and Women borrowers (Feb 2018)

₹ **239.12** crores for SC Entrepreneurs (May 2018)

A New Venture Capital Fund for OBCs to be launched with an initial corpus of ₹ **200** crore

\*As on 23rd Aug, 2018

achieve desired results.

- There is a need for sustainable growth of women entrepreneurs, to promote a balanced growth in the country.
- Even the Startup India is committed to strengthening the women entrepreneurship ecosystem, through policies and initiatives, and creation of enabling networks.

## GENERAL STUDIES - II

**01**

### FINANCIAL EMPOWERMENT OF WOMEN

#### GS Syllabus Covered

**GS - I:** Role of women and women's organization, population and associated issues, poverty and developmental issues.

**GS - II:** Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

**GS - III:** Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

#### Introduction

- Financial Inclusion is considered to be an indicator for development and well-being of the society around the globe.
- Women's financial empowerment is a prerequisite for sustainable development, pro-poor growth and the achievement of all the SDGs.
- According to UN Women, the United Nations entity dedicated to gender equality and the empowerment of women,
- Rural women are key agents for achieving the transformational economic, environmental and social changes required for sustainable development.

#### Empowering rural women

- Empowering rural women is a key not only to the well-being of individuals, families and rural communities, but also to overall economic productivity.
- UN Women says that gender equality is not only a basic human right, but its achievement has enormous socio-economic ramifications.

#### Economical and social condition women

- As per the Global Gender Gap Index Report 2020 published by the World Economic Forum, India ranks 112 out of 153 countries with a score of 0.668 out of 1.
- India ranked 108 out of 149 countries with a score of 0.665 as per the Global Gender Gap Index Report 2018.
- India's performance has marginally improved from 0.665 in 2018 to 0.668 in 2020.

#### Dimension of GGGI

Global Gender Gap Index (GGGI) consists of four dimensions:

- 1) Political empowerment
- 2) Educational attainment
- 3) Health and survival
- 4) Economic participation and opportunity

#### Financial empowerment through financial inclusion

- The Government of India has been running various schemes for financial empowerment for rural women.

- Financial empowerment through financial inclusion of rural women has been one of the significant achievements of Prime Minister Jan Dhan Yojana (PMJDY).
- By August 2021, seven years since its inception, there were 43.04 crore PMJDY accounts.
- PMJDY was announced by the Prime Minister in his Independence Day address on 15 August 2014.
- Pradhan Mantri Jan Dhan Yojana (PMJDY) has been one of the most far reaching initiatives towards financial inclusion not only in India but in the world.

### Major Government Initiatives

1. **Beti Bachao Beti Padhao (BBBP)** to ensure the protection, survival and education of the girl child.
  - The Scheme for Adolescent Girls aims to empower girls in the age group 11-18 and to improve their social status through nutrition, life skills, home skills and vocational training.
2. **Mahila Shakti Kendra (MSK)** aims to empower rural women with opportunities for skill development and employment.
3. **Mahila Police Volunteers (MPV)** envisages engagement of Mahila Police Volunteers in States/UTs who act as a link between police and community and facilitates women in distress.
4. **Rashtriya Mahila Kosh (RMK)** is an apex microfinance organisation that provides microcredit at concessional terms to poor women for various livelihood and income generating activities.
5. **The National Creche Scheme** ensures that women take up gainful employment through providing a safe, secure and stimulating environment to the children.
6. **Pradhan Mantri Matru Vandna Yojana** aims to provide maternity benefits to pregnant and lactating mothers.
7. **Pradhan Mantri Awaas Yojana** aims to provide housing under the name of the women also.
8. **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** aims to enable a large number of Indian youth including women to take up industry-relevant skill training in securing a better livelihood.
9. **Pradhan Mantri Ujjwala Yojana** empowers women and protects their health by providing LPG cylinders free of cost.
10. **Sukanya Samridhi Yojana(SSY) scheme** has empowered many girls economically by opening their bank accounts.

### Female Entrepreneurship

- To promote female entrepreneurship, the government has initiated Programmes like Stand-Up India and Mahila e-Haat (online marketing platform to support women entrepreneurs/ SHGs/NGOQOs), Entrepreneurship and Skill Development Programme (ESSDP).
- Pradhan Mantri Mudra Yojana (PMMY) provides access to institutional finance to micro and small businesses.

### Prime Minister's Employment Generation Programme

- Prime Minister's Employment Generation Programme (PMEGP) is a major credit-linked subsidy scheme launched by merging two schemes namely Prime Minister's Rojgar Yojana (PMRY) and Rural Employment Generation Programme (REGP) for generating employment opportunities by establishing micro-enterprises in urban and rural areas in the non-farm sector.
- Under the scheme, women entrepreneurs are covered under a special category and are entitled to 25 percent and 35 percent subsidies for the project set up in urban and rural areas respectively.

### Challenges faced by women

- Limited access to credit
- Inadequate healthcare and education among rural women
- Global food and economic crises and climate change
- Lack access to decent work and gender wage gaps.
- Denied access to basic education and healthcare.
- Violence and discrimination
- Underrepresented in political and economic decision-making processes

### Conclusion

- The economic empowerment of rural women is a priority for the overall development of Indian society.
- Financially empowered rural women are key to the success of families, communities and national economies.

- In recent years, the government of India has given major impetus in this direction and the results of its efforts have been unprecedented.

## 02 TECHNOLOGY AND DEVELOPMENTS

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### Introduction

- Technological advances are a driving force for development.
- Technological upgradation and inclusive growth have been focal development points in rural India.
- Higher and better productivity, socioeconomic equality, harmonising modern technology, and sustainable growth can be considered the pillars for a nation's progress.
- Digital literacy and connectivity have strengthened the labour market, provided a platform to people in rural areas and helped them become financially independent.

### Agriculture

- Rural India is home to 65 percent of the total population of our country.
- As per the Center for Monitoring Indian Economy (CMIE) data from the consumer pyramid household survey shows the share of agriculture in total employment has gone up from 35.3 percent in 2017-18 to 36.1 percent in the year 2018-19 and further to 38 percent in 2019-20.

### Government measure for agriculture

#### a) **National Agriculture Market:**

- In April 2016, the Government of India launched e-NAM (National Agriculture Market), an online platform for farmers that integrates agricultural markets pan-India with a theme of one nation, one market.
- The platform aids farmers and traders to view all Agriculture Produce Market Committee (APMC) related information, commodity arrivals, and buy and sell trade offers thus helping farmers bid for the best prices across markets.
- The objective was to promote uniformity in agricultural marketing and remove the information asymmetry between the buyers and sellers.

b) **National Aquifer Mapping and Management Programme:** The National Aquifer Mapping and Management Programme (NAQUIM) aims at 3D mapping of the aquifers and characterising them in terms of quantity, quality, and spatial and temporal distribution of water level and resources in them.

c) **Jal Shakti Abhiyan:** The Jal Shakti Abhiyan primarily focuses on saving and conserving rainwater for creating appropriate rainwater harvesting structures in urban and rural areas of all the districts in the country.

d) **Digital technologies and drones:** The Union Budget of 2022 has also pushed for an array of digital technologies and drones to propel growth in the farm sector.

e) The **promotion of drones** to monitor the produce and spray insecticides will help scale up precision farming massively.

### Alternate Sources and Sustainable Livelihoods

- To effectively realise the positive impact of the fourth industrial revolution, it is essential to use technology to bridge the gap between skilled and unskilled labour.
- Digitalisation can provide new opportunities for growth and better and more diverse occupations in rural areas.
- Technological advancements can lower trade expenses, allowing rural areas to tap into new markets.
- In rural economies, new technology can help to improve the entrepreneurial business environment. Small and medium-sized enterprises (SMEs) in rural areas benefit from technological advancements.

## Financial Inclusion

- Over the last few years, the financial inclusivity in the country has gained pace.
  - The economic development of a country relies heavily on the accessibility of the citizens to various financial goods and services.
  - Technological efforts and innovations have played a significant role in this regard.
- a) **Direct Benefit Transfer:** The Direct Benefit Transfer (DBT) programme aims at initiating a direct transfer of benefits across the country.
- This platform, accompanied by the unique Aadhaar ID programme, has eliminated duplications and frauds.
  - The platform has further been instrumental in increasing transparency and accountability in financial transactions, including benefit transfers to pension owners and other beneficiaries of various schemes.
- b) **Pradhan Mantri Jan-Dhan Yojana:** The Pradhan Mantri Jan-Dhan Yojana (PMJDY) has made significant strides in channelling all government benefits from the centre, state and local bodies to the beneficiary accounts and furthering the Direct Benefit Transfer (DBT) scheme of the government.
- c) **PM Garib Kalyan Yojana:** The PM Garib Kalyan Yojana, around 8 crore of PMJDY account holders have received direct benefit transfer (DBT) from the government under various welfare schemes across the several waves of the pandemic.
- d) **BHIM app:** The Bharat Interface for Money (BHIM) app has aimed at facilitating the growth of the cashless economy in the country.
- The BHIM users can also use QR codes, mobile numbers, and Virtual Payment Addresses (VPA) to facilitate the payment.
  - Moreover, the BHIM app also functions efficiently offline, addressing the challenges of poor internet connections and the inaccessibility of smart mobile phones.

## Education

- As part of the Atma Nirbhar Bharat Abhiyan, a comprehensive initiative called PM e-VIDYA was launched, which combines all-digital, online, and on-air education to offer multi-mode access to education.
  - The initiative encompasses the following:
- a) **DIKSHA (Digital Infrastructure for Knowledge Sharing and Sharing)** is a one-nation, onedigital- platform initiative. In states and union territories (UTs), the nation's digital infrastructure delivers high-quality e-content for education.
- b) **SWAYAM (Study Webs of Active Learning for Young Aspiring Minds)** is a Government of India initiative to achieve the three cardinal principles of education policy: access, equity, and quality.
- This target provides the best teaching-learning tools available to everyone, particularly the most disadvantaged.
  - SWAYAM aims to bridge the digital divide.

## Government Schemes for Technology Enabled Rural Development

### 1. Technological Advancement for Rural Areas (TARA)

- This scheme under the Skill Enhancement Education and Development Program (SEED) is critical in providing long-term core support to science-based voluntary organisations and field institutions in rural and other disadvantaged areas to promote and nurture them as "S&T Incubators" and "Active Field Laboratories" to work and provide technological solutions and effective delivery of technologies for livelihood generation and societal benefits.

### 2. Ayushman Bharat Digital Mission

- The Ayushman Bharat Digital Mission (ABDM) aims to develop the infrastructure necessary to support India's integrated digital healthcare infrastructure.

### 3. Ayushman Bharat Health Account (ABHA)

- A digitally secure ABHA permits health data access and sharing with participating healthcare providers and payers.
- People are identified, authenticated, and their health records are threaded across many systems and stakeholders.

### 4. E-Shram

- e-Shram is a platform designed by the Ministry of Labour and Employment to benefit unorganised workers who are not Employees' State Insurance (EPFQ) or Employees' State Insurance (ESIC) members.
- The government's acceptance of social security measures will also assist workers,

**5. National Optical Fibre Network (NOFN)**

- National Optical Fibre Network (NOFN) was launched in October 2011 and was renamed as Bharat Net Project in 2015.
- All state capitals, districts, and headquarters have OFC connectivity down to the block level.
- The gram panchayats will benefit from the increased bandwidth created by the dark fibre network.

**6. Common Service Centres (CSC)**

- CSCs serve as the access points for essential public utility services, social welfare programmes, healthcare, finance, education, agriculture services, and a variety of business-to consumer (B2C) services to citizens living in rural and distant areas of the country.

**7. Digital India Programme**

- Digital India is India's flagship initiative to transform the country into a knowledge based economy and a digitally empowered society.
- Digital India covers three essential areas: digital infrastructure as a utility for all citizens, governance and on-demand services, and citizen empowerment through digital technology.

**8. Digital India Land Records Modernisation Programme (DILRMP)**

- A central sector scheme aims to leverage existing commonalities in land records to develop an appropriate Integrated Land Information Management System (ILIMS).
- The main aims of DILRMP are to usher in a system of updated land records, automated and automatic mutation, integration between textual and spatial records, inter-connectivity between revenue and registration.



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