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Budget For Rural India 2023-24

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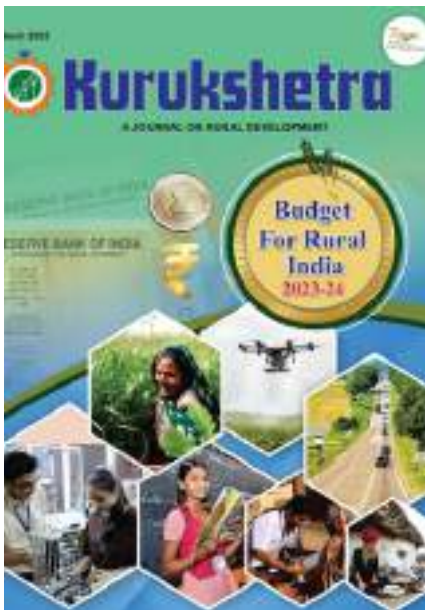
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1) Post-Pandemic Health

(GS2: Issues Relating to Development and Management of Social Sector/Services relating to Health, Education, Human Resources)

Context

- Health is an integral part of a prosperous society. India aims to become a US$ 5 trillion economy; therefore, it needs to take care of the health of every citizen.
- Therefore, it is logical to reflect on the priorities of the health sector for India at 100 in 2047.

Priorities of the Health Sector

- First, **effective, timely and science-based communication** is integral to health services. The Covid-19 pandemic has reminded us that **misinformation** is a major challenge for the health sector.
    - **Vaccine hesitancy and refusal** and **resulting lower vaccine coverage** in some sections of the population has been some of the outcomes of misinformation. **Mechanisms must be established** to dispel any health misinformation in real time.
- Second, Covid-19 has reminded us that vaccination is not just for children but also for adolescents and adults. Apart from Covid, a few other vaccines such as **hepatitis-B, meningococcal and pneumococcal vaccines** can reduce diseases in adults.
    - India now has an **indigenously developed and low cost HPV (Human Papilloma Virus) vaccine** which can protect adolescent age groups from **cervical cancer** and other conditions.

- Third, Covid-19 has emphasised the **importance of stronger health services and well-functioning primary health care services (PHC).** The PHC services should be built around the people, where it is not just the treatment of disease but attention is on **preventive and promotive services** as well.
- Fourth, India has **11 diseases** that are considered **'neglected tropical diseases',** such as **filariasis, kala-azar, snake bites, etc.** which need higher policy and programmatic attention. It is time, sufficient investment is made in programmatic interventions, vaccines and medicine research and focus on public health interventions to tackle these diseases.
- Fifth, **improve the health data quality and availability.** Such data is useful for health decision making and for dispelling the myths and rumors.
- Sixth, India has assumed the **Presidency of the G20** for the year 2023. The country needs to play leadership in bringing and sustaining attention to the **challenge of Antimicrobial Resistance,** the **coordinated global response to epidemics and pandemics, neglected tropical diseases** and **focus on 'one health'** (health of humans, animals and the environment is related to each other).
- Seventh, it is time to move towards **stronger health systems**, building upon the **Ayushman Bharat Programme,** and **health and wellness centers initiatives**.
- Eighth, it is the time for a **re-examination of the role of federalism in health policy.** Health is a **State subject** in India, but there are many central policies

and schemes that deal with various aspects of public health. It is time to deliberate in what ways cooperative federalism can be strengthened in the matter of public health.

- Ninth, in the post-pandemic period **health workforce availability and equitable distribution** has to be the priority. **90% of the doctors are in the private sector and only one in ten doctors in the government sector.** These have implications on the capacity of the government sector to deliver health services.
- Tenth, the **disease surveillance systems and public health measures** need to be sustained.
- Eleventh, **malnutrition and anemia in women and children** continue to be challenges. The **National Family Health Survey-5 (NFHS-5)** shows that despite decades of implementation of a range of schemes for women and children, **malnutrition and anemia rates remain high**, and the **rate of improvement is very low.**
- Twelfth, the **Mental Health** and **post and long Covid** are two urgent post-pandemic health issues to be catered to. The **National Mental Health Survey 2015-16** reported that **one in every eight persons in India needed one or other form of mental health services.**
  - o However, the issue was not recognized because of the **stigma associated.** Health services also need attention from the government for the post and long-covid especially through **primary healthcare systems**.
- Thirteenth, **India being a pharmacy to the world** needs to

assume responsibility and the government has to step-up investment in **research and development on vaccines and therapeutics.**
  - o This has become especially important for emerging and re-emerging diseases and many neglected tropical diseases, which affect low- and middle-income countries and are not a research priority for high income countries.

2) MSME Sector on Growth Trajectory
(GS3: Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment)

Context
- India's manufacturing sector is largely dominated by micro and small enterprises which play a critical role in achieving the objectives of faster and more inclusive growth in India due to its vast employment potential and its contribution to total industrial output and exports.

Contribution of the MSME Sector
- According to the Economic Survey 2022-23, the **contribution of the MSME sector to overall Gross Value Added (GVA)** increased from 29.3 per cent in 2018-19 to **30.5 per cent** in 2019-20. But, due to the economic impact of the **pandemic,** the sector's share fell to **26.8 per cent** in 2020-21.
- The MSME sector accounts for **over 90 per cent of industrial units, 40 per cent of the total manufacturing output and nearly 35 per cent of India's exports.**
- Moreover, a significantly large proportion of the MSME sector operates in **rural areas** and **after**

agriculture, this sector is the **biggest employment provider in rural areas** and hence crucial for socio-economic wellbeing of rural populace.

Challenges

- However, the MSME sector continues to grapple with various challenges such as
  - low level of technology-in-use,
  - limited access to inputs and credits,
  - unfavourable market environment,
  - falling outside the ambit of formal business and
  - labour regulations.

Key Provisions under the Union Budget 2023-24

- One of the key highlights of this budget is the **revamping of the MSME credit guarantee scheme.** The budget made a provision of infusing **Rs. 9,000 crore** in the corpus of the **Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE),** which will enable additional **collateral free credit of Rs. 2 lakh crore to MSMEs.**
- A **National Financial Information Registry** has been announced which will serve as the central repository of financial and ancillary information and enable an **efficient flow of credit**.
- The five-year rollout of the Rs. 6,000 crore **World Bank-assisted Raising and Accelerating MSME Performance (RAMP) programme** was announced in the budget to help the MSME sector become more resilient, competitive and efficient. About 6.35 lakh MSMEs are likely to benefit from **better access to market, finance and credit** under the scheme.

- To ease the access to **government data on registration of MSMEs, unorganised workers, availability of skilled workforce,** etc. **four portals** viz., **Udyam** (an online system for registering MSMEs), **e-Shram** (creating national database of unorganised workers), **National Career Service** (catering to employment-related services like job search, job matching, career counselling, etc), and **Atmanirbhar Skilled Employee-Employer Mapping** (**ASEEM** - matching supply of skilled workforce with the market demand) will be **interlinked.**
- A **special package for traditional artisans and craftsmen** under the **PM Vishwa Karma Kaushal Samman** was announced to integrate them with the MSME value chain and enable them to improve quality, scale and reach of their products.
- The setting up of **Entity DigiLocker for MSMEs** will allow storing and sharing documents online securely, whenever needed, with various authorities, regulators, banks, and business entities.

Way Forward

- Due to inadequate and poor extension machinery, especially in the rural areas, a majority of MSME entrepreneurs are not aware of various announcements and provisions made in the budget.
- A **robust mechanism** should be designed to aggressively sensitise these entrepreneurs about budgetary provisions which are meant for them and how they can access these provisions.
- **Special Gram Sabhas** may be conducted at panchayat level to sensitise both existing and aspiring

entrepreneurs about budgetary provisions and announcements.

3) India's fight against Tuberculosis (TB)

(GS2: Issues Relating to Development and Management of Social Sector/Services relating to Health, Education, Human Resources)

Context

- **World TB Day** was observed on **24th March** with the theme of **'Yes! We can end TB'**.
- TB is caused by **bacterium Mycobacterium tuberculosis**. It spreads in the **air via droplets** and is highly **contagious**. It mostly affects the lungs and also other parts of the body.

Issues associated with TB management

- Most Indians believe that TB is unlikely to happen to them as a result of **critical failure in addressing information gaps** that exist around TB.
- Most Indians still do not know the symptoms of TB, most doctors rarely order enough TB tests, and a staggering **one million cases remain unreported** in India.
- **Reliable and affordable diagnostics** for both drug-sensitive and drug-resistant TB remain **inaccessible** to most.
- Gaps in implementation and **inadequate financial support of the Nikshay Poshan Yojana (NPY).**
  - NPY aims to support every TB Patient by providing a Direct Benefit Transfer (DBT) of Rs 500 per month for nutritional needs.
- TB is **highly stigmatized** within communities, families, and patients routinely face discrimination within the health system.

- The largest number of TB cases are diagnosed and treated in India's unmonitored **private sector** where the **quality of care is unreliable**, and **diagnosis and treatment are expensive and often inaccurate.**

Way Forward

- **Normalizing and destigmatising TB testing:** By organizing large-scale socially relevant campaigns targeted both the population and India's healthcare providers.
  - TB survivors can play a critical role in helping design such communication and community support strategies that actually work.
- **Ensuring accessible and affordable diagnostics:** India needs to urgently invest in diagnostics, focusing on the scale-up of new diagnostic tests and offering universal drug-susceptibility testing (DST) to all TB patients and also ensure every Indian seeking care can easily access accurate TB tests for free.
- **Implementing best available treatment:** The universal implementation of the shortest and best available TB regimens for TB prevention, drug-sensitive TB and drug-resistant TB is needed. If cost is an obstacle, options such as compulsory licensing have to be considered.
- **Addressing implementation gaps in NPY:** The amount for NPY needs to be increased to at least Rs 2,500 for the TB-affected.
- **Adequate provision for treatment:** Providing both patient and family counseling, information and support to help mitigate mental health impact and reduce stigma is needed.

- **Stigma reduction measures:** India needs to launch a national campaign for stigma reduction and provide counseling and mental health support to TB-affected individuals particularly women, trans individuals and the LGBTQIA++ community.
- **Public private partnerships:** An innovative and well-thought-out people-centred private sector engagement strategy is needed for which successful examples of public-private partnerships can be considered and incorporated into our national plans.
- **Invest in research:** India needs to rapidly invest in TB-related research.

Conclusion

- Innovation, rethinking current strategies and putting people at the center of our efforts can help achieve **India's target of eradicating TB by 2025.**

4) A study on Microplastics
(GS3: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment)
Context

- According to a study published recently in the journal PLoS ONE, an **estimated 170 trillion plastic particles weighing about 2 million metric tons are currently afloat in the oceans** across the world.
- The study cautions that if no urgent action is taken then this number **could nearly triple by 2040.**

Findings of the Study

- A vast majority of these plastic particles found on the ocean's surface are **microplastics**.
- Between 1990 and 2005, the number of plastic particles more or less fluctuated due to

International conventions like **MARPOL** that enforced laws against dumping trash at sea.
- Since 2005 more than 5,000,000 tons of new plastic have been produced into the world.
- If the world fails to take any drastic action about the issue, there will be a **2.6-fold increase in plastic flowing into aquatic environments by 2040.**

About Microplastics

- Microplastics are tiny plastic particles that measure **less than 5mm in diameter.**
- **Adverse effects of microplastics:**
  o Microplastics are particularly **harmful to the oceans** as they **don't readily break down** into harmless molecules.
  o They **adversely affect the health of marine organisms,** which mistake plastic for food.
    ▪ **Ingestion of microplastics** by marine organisms, from phytoplankton to whales and dolphins, can cause problems, such as lacerations and blockages to internal systems.
    ▪ Microplastics absorb many **hydrophobic compounds,** like DDT and other industrial chemicals, and evidence shows they can be **released when ingested.**

- o Microplastics can also **disrupt the carbon cycle** of the oceans.
- o They can **trigger loss of biodiversity** and threaten ecosystem balance.

Way Forward

- There is an **urgent need to implement a global resolution** to limit the production of single-use, throwaway plastic.
- We must ensure that cities are responsible for waste management and reduce the amount of chemical additives in new plastic products.
- Industries have to legally be required to put at least 75% recycled plastic in any new product.

5) Preventive Health Care

(GS2: Issues Relating to Development and Management of Social Sector/Services relating to Health, Education, Human Resources)

Context

- This article discusses the right steps towards **prevention to beat Non Communicable Diseases** and propel India to its full potential.

NCDs and the Economic Burden

- Over the past three decades, NCDs have become the **leading cause of death** and suffering, contributing **71% of global deaths.**
- In **India,** NCDs have contributed to **66% of all deaths** in 2019 (**up from 25%** in 1990).
- **Heart diseases, cancer, chronic respiratory diseases and diabetes** account for more than half of these deaths.
- WHO predicts **1 in 4 Indians has a risk of dying** from an NCD before reaching 70.

- The **economic burden** on India due to NCDs is expected to be about **₹511 lakh crores by 2030.** Overweight conditions and obesity alone plague nearly 17% of our population, annually costing the country ₹2.8 lakh crore, over 1% of its GDP.
- If steps are not taken to curb the spread of just this condition, **India will suffer a loss of nearly 2.5% of its GDP, in 2060.**

Role of Preventive Health Care

- Preventive healthcare consists of measures taken for the purposes of disease prevention.
- Advantages of preventive health care are
  - o **Reduces the incidence** of diseases
  - o **Lowers the burden** on the healthcare system
  - o **Improves the quality of life.**

Measures Required

- Mortality from NCDs is **preventable through various interventions** like adult vaccinations, regular health analysis, healthy lifestyle choices and early screening for diseases.
- Need of the hour is to understand and **adopt the right 'prevention-first' behaviour.**
  - o Our everyday habits need to be designed to put us on a healing path, to live long and truly prosper.
- **Investing in preventive healthcare** measures will significantly minimize expense in fighting diseases in the long run.
- **Better Healthcare infrastructure and medical professionals** have to create systems, products and the motivation that enables more and more individuals to adopt preventive solutions.

- o By making **routine health monitoring or inspections more personalized.**
- o By leveraging **technological advancements** to integrate more predictive analysis into diagnosis.
- The healthcare industry must shift its focus from **curative to preventive care** and encourage every individual to adopt this.

Government Measures in this Regard

- The **National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Disease and Stroke (NPCDCS)** is helping increase awareness, setting up infrastructure (like community health centers, NCD clinics, cardiac care units), and already carrying out opportunistic screening at primary health levels.
- There are also initiatives in place to **reduce household use of solid fuel as well as tobacco use by 2025.**

Conclusion

- While the present efforts of the government will contribute significantly to fight against NCDs, **preventive care solutions are needed to build a truly resilient and formidable India**.
- A national movement on prevention can inculcate healthier habits, create a safer environment and better medical decision-making.

6) SMART PDS scheme

(GS3: Public Distribution System-Objectives, Functioning, Limitations, Revamping; Issues of Buffer Stocks and Food Security)

Context

- This article discusses the benefits of the recently launched SMART PDS scheme which is beyond just ration distribution.

About SMART PDS

- The SMART-PDS is an initiative of the **Department of Food and Public Distribution (DFPD) under the Ministry of Consumer Affairs, Food and Public Distribution.**
- This scheme aims to **strengthen the PDS technology components** by standardization of its operation and implementing data-driven decision-making through data analytics.
- It is a system where **smart ration cards** are issued to beneficiaries of the public distribution system, and ration is given through fair price shops on the production of the smart ration card by any member of the beneficiary family.
- SMART PDS stands for **Scheme for Modernisation and Reforms through Technology in Public Distribution System (SMART-PDS)** and it aims to
  - o **Prevent leakage** of foodgrains;
  - o **Increase the efficiency** of the distribution chain;
  - o **Ensures the availability** of such provisions for migrants.

How will SMART PDS benefit us?

- Convergence and integration with the use of **Artificial Intelligence** can really be a game changer for people as well as governments in bringing **accountability** across all programmes.
- **Data Analytics on the TPDS** ecosystem is allowing us to generate **critical information** about the beneficiaries, their food

security needs and patterns of migration.

- Usage of data analytics and other ICT tools and technologies brings **standardization of the PDS operation.**
- Data can be **leveraged for the delivery of many other central schemes** and welfare programmes.
- Technology-led reforms are expected to overcome the **state-level technological limitations** of PDS operations.
- This will also **institutionalize an integrated central system** for all PDS-related operations across all states/UTs.

Other Digital Initiatives

- **Aadhar authentication and ePOS devices:**
  - Nearly **93 per cent** of the total monthly allocated foodgrains are distributed through the **Aadhaar authentication mode using electronic Point of Sale (ePoS)** devices.
  - This dividend is directly attributed to the **100 per cent digitisation of ration cards**, **online management** of beneficiaries' data, **computerisation** of foodgrains' allocation and supply chain management systems in all states/UTs, and the **installation of ePoS devices** in almost the entire country.
- **Integrated Management of Public Distribution System (IM-PDS).**
  - The government has launched a Central Sector Scheme – Integrated Management of Public Distribution System (IM-

PDS). Its main objectives are:

  - Implementation of **One Nation One Ration Card** (nation-wide portability),
  - Creation of a **national-level data repository** for de-duplication of beneficiary/ration cards data;
  - Creation of **integrated data infrastructure/systems across ration card management**; allocation, supply chain of foodgrains and FPS automation among Centre and all states.

Outcome of these Initiatives

- The One Nation One Ration Card plan is seamlessly **functional in all 36 States/UTs** and is consistently recording **over 3.5 crore monthly portable transactions.**
- The data generated during this process has now become a **tool for many other central ministries and state governments.**
  - For instance, it serves as a tool for transfer of benefits for the e-Shram Portal, Ayushman Bharat, and PM-Street Vendors AtmaNirbhar Nidhi (PM-SVANidhi) Yojana.

7) Under representation of Women in Politics and bureaucracy
(GS1: Role of Women and Women's Organization, Population and

Associated Issues, Poverty and Developmental issues, Urbanization, their problems and their remedies)

Context

- India is predicted to be the **third-largest economy** in the world by 2030. Despite its economic growth, women's participation in the country's economy, polity and society has not kept pace.

Status of Women in Bureaucracy

- As per Indian Administrative Services (IAS) data and the central government's employment census of 2011, **less than 11 per cent of its total employees were women. In 2020,** this reached **13 per cent.**
- Out of a total of 11,569 IAS officers entering service between 1951 and 2020, only 1,527 were women. Only **14 percent of Secretaries** in the IAS were women in 2022. There are **only three women chief secretaries** across Indian states and union territories.
- India has **never had a woman cabinet secretary** and also there have been no women Secretaries of Home, Finance, Defence and Personnel, either.
- As per the latest official data of the Union Public Services Commission (UPSC), in 2019, the **number of women candidates who applied and qualified was far less than the number of male candidates.**

Reasons for Underrepresentation

- The factors that lead women to opt out of the civil services include:
  - **Service conditions** involving postings in distant cadres;
  - **Patriarchal conditioning;**
  - Balancing **family commitments;**
  - Women candidates are more likely than men to seek **voluntary retirement from service;**
  - General perception that women should be **preferred for "soft" ministries** like Social Welfare, Culture, Women and Child Development.

Status of Women in Politics

- The **female voter turnout has increased** in the country. However, the increasing proportion of women voters seen in local, state and general elections has **not translated into more women contesting elections.**
- As per data compiled by the Inter-Parliamentary Union (IPU), in India, women make up **14.44 per cent of the Lok Sabha.**
- According to a report of the Election Commission of India (ECI), **women represent 10.5 per cent of all Members of Parliament** as of October 2021.
- **Female MLAs' representation** stands at an **average of 9 percent** for all the state assemblies.
- India's ranking in this regard is **behind Pakistan (20 percent), Bangladesh (21 percent) and Nepal (34 percent).**

Status of Women in Other Sectors

- **Only 20.37 per cent of MSME owners are women**, **10 percent of start-ups are founded by females**, and **23.3 percent of women are in the labour force.**
- Most of the available statistics on India's female labor rate **do not incorporate the unpaid work that females do.**

Conclusion
- Gender equality is, first and foremost, a human right. A woman is entitled to live in dignity and freedom.
- Empowering women is an indispensable tool for advancing development and reducing poverty.

8) The ideal track to run India's logistics system

(GS3: Infrastructure: Energy, Ports, Roads, Airports, Railways etc)

Context
- The Union Budget 2023 has doubled the PM Gati Shakti National Master Plan to States from ₹5,000 crore to ₹10,000 crore, and has announced an outlay of ₹2.4 lakh crore for the Indian Railways.
- The plan is a **transformative approach** for **economic growth and sustainable development** dependent on the engines of roads, railways, airports, ports, mass transport, waterways and logistics infrastructure.
- The Railways offer an **efficient and economic mode of logistics movement** given their **pan-India network**, and can play an important role in enabling a coordinated and integrated logistics system.
- With a **target of increasing the share of the railways in freight movement** from **27% to 45%** and **increasing freight movement** from **1.2 billion tonnes to 3.3 billion tonnes**, by 2030, PM Gati Shakti provides the right platform to address the infrastructural challenges that have hampered the movement of freight by rail.

Convenience over Cost
- Currently, the **modal mix** in terms of **freight movement** is **skewed** by a considerable extent **towards road transport**, with **65% of freight movement by road.**
- The effect is an **increased burden on roads**, and, therefore, significant **congestion**, **increased pollution**, and **resultant logistics cost escalations.**
- The **increased adoption of the railways** as a mode for cargo movement is crucial to **improve India's logistics competitiveness.**
- A look at the comparable costs of different forms of transportation suggests that **freight movement cost is the highest in the road sector — nearly twice the rail cost.**
- However, the convenience of road transport has taken precedence over cost, and the railways in India have been losing freight share to other more flexible modes.

Challenges
- The national transporter faces several **infrastructural, operational and connectivity challenges**, in turn leading to a **shift of freight traffic to roads**.
- The **increased transit time** by rail and pre-movement and post-movement **procedural delays** such as wagon placement, loading and unloading operations, multi-modal handling, etc., hamper freight movement by rail.
- The **lack of necessary terminal infrastructure**, **maintenance of good sheds** and **warehouses**, and **uncertain supply of wagons** are some of the infrastructural challenges that customers face.
- This results in **high network congestion**, **lower service levels,** and **increased transit time**.
- The **absence of integrated first and last-mile connectivity** by rail increases the **chances of damage** due to **multiple handling** and also

increases the inventory holding cost.

Way Forward

- The upcoming **Dedicated Freight Corridors** along India's eastern and western corridors and **multimodal logistics parks** will ease the oversaturated line capacity constraints and improve the timing of trains.
- The Indian Railways need to **improve infrastructure** that is backed by **adequate policy tools** and also **encourage private participation** in the operation and management of terminals, containers, and warehouses to efficiently utilise resources.
- Establishing a **special entity under the railways** to handle intermodal logistics in partnership with the private sector will help in addressing the first and last-mile issue faced by the railways. The entity could function as a **single window for customers** for cargo movement and payment transactions.
- An **integrated logistics infrastructure** with first and last-mile connectivity is essential to make rail movement competitive with roads, and facilitate exports by rail to neighbouring countries such as Nepal and Bangladesh.

9) The wide disparities in human development

(GS2: Issues Relating to Development and Management of Social Sector/Services relating to Health, Education, Human Resources)

Context

- India is now one of the fastest-growing economies globally. However, this growth has not resulted in a corresponding increase in its Human Development Index (HDI).

About HDI

- The HDI is a **composite statistical measure** created by the **United Nations Development Programme** to evaluate and compare the level of human development in different regions around the world.
- It was introduced in **1990** as an **alternative** to conventional economic measures such as **Gross Domestic Product (GDP),** which do not consider the broader aspects of human development.
- The HDI is calculated using four indicators: **life expectancy** at birth, **mean years of schooling**, **expected years of schooling**, and **Gross National Income (GNI) per capita.**
- According to the **Human Development Report of 2021-22**, **India ranks 132 out of 191** countries, behind Bangladesh (129) and Sri Lanka (73).
- Given India's size and large population, it is **critical to address the subnational or State-wise disparities** in human development which will help India realise its demographic dividend.

HDI at State level

- HDI scores range from **0 to 1,** with **higher values** indicating **higher levels of human development**.
- The **subnational HDI** shows that while **some States** have made **considerable progress**, others **continue to struggle. Delhi occupies the top spot** and **Bihar** occupies the **bottom spot**.
- The **five States** with the **highest HDI scores** are **Delhi, Goa, Kerala, Sikkim, and Chandigarh. Delhi and Goa** have HDI scores **above 0.799,** which makes them **equivalent** to countries in **Eastern Europe** with a **very high level of human development**.

- **Nineteen States**, including Kerala, Maharashtra, Tamil Nadu, Haryana, Punjab, Telangana, Gujarat, and Andhra Pradesh, have scores ranging between **0.7 and 0.799** and are classified as **high human development States.**
- The **bottom five States** are **Bihar, Uttar Pradesh, Madhya Pradesh, Jharkhand, and Assam,** with **medium levels of human development**. The scores of these **low-performing States** resemble those of **African countries** such as Congo, Kenya, Ghana, and Namibia.
- Despite having the **highest SGDP per capita** among larger States, **Gujarat and Haryana** have **failed** to translate this advantage into **human development** and rank 21 and 10, respectively.
- It is worth noting that the **impact of COVID-19** on subnational HDI is **not captured** here. The full impact of COVID-19 on human development will be known when post-pandemic estimates are available.

Reasons for Discrepancies
- One of the **main reasons for this discrepancy** is that economic growth has been **unevenly distributed**. The **top 10%** of the Indian population holds over **77% of the wealth.**
- This has resulted in significant disparities in access to basic amenities, healthcare and education.
- Another reason is that while India has made **significant progress in reducing poverty and increasing access to healthcare and education**, the **quality of such services** remains a **concern**.

Way Forward
- Governments must **prioritise human development alongside economic growth** to ensure that the benefits of growth are more **evenly distributed**.
- This requires a **multi-faceted approach** that addresses income inequality and gender inequality; improves access to quality social services; addresses environmental challenges; and provides for greater investment in social infrastructure such as healthcare, education, and basic household amenities including access to clean water, improved sanitation facility, clean fuel, electricity and Internet in underdeveloped States.
- The country must **prioritise investments in human development and job creation**, particularly for its youth.

10) On reservation for women in politics
(GS1: Role of Women and Women's Organization, Population and Associated Issues, Poverty and Developmental issues, Urbanization, their problems and their remedies)

Context
- Leaders of popular political parties in the country recently launched hunger strikes seeking early passage of the long-pending Women's Reservation Bill.

History of Political Reservation for Women
- The issue of women's reservation came up in **Constituent Assembly** debates, but it was **rejected** as being unnecessary. It was assumed that a **democracy** would **accord representation to all groups**.
- However, in the following decades, it became clear that this was not to be the case. As a consequence, women's reservation became a recurrent theme in policy debates. For instance, the **Committee of the Status of Women** in India, set up in **1971**, commented on the **declining**

political representation of women in India.

- Though a majority within the Committee continued to be **against reservation for women in legislative bodies**, all of them **supported reservation for women in local bodies**. Slowly, many State governments began announcing reservations for women in local bodies.
- The **National Perspective Plan for Women** recommended in **1988** that **reservation** be provided to women right from the **level of the panchayat to that of Parliament**.

73rd & 74th Constitutional Amendment

- These recommendations paved the way for the historic enactment of the **73rd and 74th amendments** to the Constitution which **mandates all State governments** to reserve **one-third of the seats for women** in **Panchayati Raj Institutions** and **one-third** of the offices of the **chairperson** at **all levels** of the Panchayati Raj Institutions, and in urban local bodies, respectively.
- Within these seats, **one-third is reserved for Scheduled Caste/Scheduled Tribe women**. Many States such as Maharashtra, Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand and Kerala have made legal provisions to ensure **50% reservation for women** in local bodies.

What is the Women's Reservation Bill?

- The Women's Reservation Bill proposes to **reserve 33% of seats in the Lok Sabha** and **State Legislative Assemblies for women**.
- It was first introduced in the Lok Sabha as the **81st Amendment Bill** in September **1996**. The Bill failed to get the approval of the House

and was referred to a joint parliamentary committee which submitted its report to the Lok Sabha in December 1996. But the Bill **lapsed** with the dissolution of the Lok Sabha.

- The Bill was **reintroduced in 1998, 1999, 2002 and 2003.** Even though there was support for it within multiple parties, the Bill **failed to receive majority votes**.
- In **2008**, the Union Government tabled the Bill in the **Rajya Sabha** and it was **passed with 186-1 votes**. However, the Bill was **never taken up for consideration in the Lok Sabha** and lapsed with the dissolution of the 15th Lok Sabha.

What are the arguments for the Bill?

- Proponents of the Bill argue that **affirmative action is imperative to better the condition of women** since **political parties** are **inherently patriarchal.**
- Despite the hopes of the leaders of the national movement, **women are still under-represented in Parliament**.
- Reservations will ensure that **women form a strong lobby** in Parliament to fight for issues that are often ignored.
- There is now evidence that **women as panchayat leaders** have **shattered social myths**, been **more accessible than men**, controlled the stranglehold of liquor, **invested substantially in public goods** such as drinking water, **helped other women** express themselves better, **reduced corruption**, **prioritised nutrition outcomes,** and **changed the development agenda at the grassroots level.**
- Studies have shown that in States such as West Bengal and Rajasthan, while women leaders were often **rubber stamps** of their husbands

or fathers, they were **more likely to invest in goods** that were important to the **interests of women**.

- Today, India has a **high percentage of crimes against women, low participation of women in the workforce, low nutrition levels and a skewed sex ratio**. To address all these challenges, it is argued, we need **more women in decision-making.**

- The discussion is not about a Bill alone, but about **changing powerful, entrenched interests in India's polity.**

What are arguments against the Bill?

- The idea runs **counter to the principle of equality** enshrined in the Constitution. Opponents of the bill say that women will **not be competing on merit** if there is reservation, which could **lower their status in society.**

- **Women are unlike**, say, a **caste group**, which means that they are **not a homogenous community**. Therefore, the same arguments made for caste-based reservation cannot be made for women.

- Women's interests **cannot be isolated** from other **social, economic and political strata**.

- Some argue that reservation of seats in Parliament would **restrict the choice of voters to women candidates**.

- This has led to suggestions of alternate methods including **reservation for women in political parties and dual member constituencies** (where constituencies will have two MPs, one of them being a woman).

- But some parties have pointed out that even these may not work as **parties may field women** candidates in **unwinnable seats**, or women **may contest the elections**

but **not get voted to power**, or they may get relegated to a **secondary role**.

How many women are in Parliament?

- Only about **14%** of the **members** in Indian Parliament are **women**, the highest so far.

- According to the Inter-Parliamentary Union, India has a **fewer percentage of women** in the **lower House than its neighbours** such as Nepal, Pakistan, Sri Lanka and Bangladesh — a dismal record.

Conclusion

- Women's political participation is a fundamental prerequisite for **gender equality and genuine democracy.** It facilitates women's direct engagement in public decision-making and is a means of ensuring better accountability to women.

11) A shared G20 vision for the ocean commons
(GS3: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment)

Context

- The oceans are **reservoirs of global biodiversity**, **critical regulators of the global weather and climate**, and **support the economic well-being** of billions of people in coastal areas.

- India's G20 presidency is expected to play an important role in promoting individual and collective actions to facilitate the transition towards a **sustainable blue economy.**

Blue Economy

- The term '**blue economy**' includes not only **ocean-dependent economic development**, but also **inclusive social development** and **environmental and ecological security**.

- Recognising the contribution of the ocean economy for sustainable development, Prime Minister Narendra Modi said, "To me, the **blue chakra** in India's flag represents the potential of the **ocean economy**."

A Host of Initiatives

- The Government of India has launched bold initiatives to promote the development of a blue economy.
- The **Sagarmala** initiative promotes **port-led development**.
- The **Pradhan Mantri Matsya Sampada Yojana** is actively engendering a **'blue revolution'** through sustainable and responsible development of the fisheries sector.
- The **Sagar Manthan dashboard** of the **Ministry of Ports, Shipping, and Waterways tracks vessels** in real-time.
- The **Deep Ocean Mission** explores deep-sea resources in the exclusive economic zones (EEZs) and continental shelf as well as development of technology for harnessing them.
- In 2022, India introduced an amendment to the **Plastic Waste Management Rules banning select single-use plastic items** and introduced policies for **extended producer responsibility** in waste management in order to combat plastic pollution, including in the marine environment.

Related Issues

- Over the last decade, the G20 forum has discussed some **specific ocean-related issues**. These include the **G20 Action Plan on Marine Litter**, the **Osaka Blue Ocean Vision**, and the **Coral Research and Development Accelerator Platform**.

- The ambitious efforts by countries to expand their blue economies are being threatened by intensifying **extreme weather events**, **ocean acidification**, and **sea level rise**.
- Growing **marine pollution**, **over-extraction of resources**, and **unplanned urbanisation** also pose significant threats to the ocean, coastal and marine ecosystems, and biodiversity.
- The inherent **inter-connectedness of oceans** implies that activities occurring in one part of the world could have **ripple effects** across the globe.
- Therefore, the **responsibility** of their protection, conservation and sustainable utilisation **lies with all nations.**

An Important Role

- In this context, India's G20 presidency would play an important role in promoting individual and collective actions to facilitate the transition towards a sustainable blue economy.
- The **G20 countries** together account for around **45%** of the **world's coastlines** and over **21%** of the **exclusive economic zones (EEZs)**.
- This forum presents an excellent opportunity to build **effective communication** with all stakeholders to **share best practices**, **foster collaborations** for advancements in science and technology, **promote public-private partnerships**, and **create novel blue finance mechanisms.**
- The **outcomes of this forum must further inform other international negotiations** under the United Nations Framework Convention on Climate Change, the Convention on Biological Diversity, the Intergovernmental Negotiating Committee on Plastic Pollution, the

United Nations Convention on the Law of the Sea, etc., that are closely interlinked.

Conclusion

- The stewardship of oceans is an investment that will sustain future generations. The spirit of **'One Earth, One Family, One Future'** must unite the global community for the well-being of our ocean commons.

12) How to become a green hydrogen superpower

(GS3: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment)

Context

- The 2023 Union Budget has allocated ₹19,700 crore for the National Green Hydrogen Mission.
- This will set in motion a programme that can position India as a green hydrogen (super)power.

Why is this important and what will it take?

- India has committed to **50% electricity capacity from non-fossil sources by 2030.** But an **energy transition in industry** is needed at the same time.
- Most **industrial greenhouse gas emissions** in India come from **steel, cement, fertilizers** and **petrochemicals**.
- Green hydrogen holds the promise of **fuelling industrial growth** while **simultaneously reducing industrial emissions.**
- **Splitting water into hydrogen and oxygen** is **energy-intensive**. When this energy comes from renewable/non-fossil sources, we get **green hydrogen**. It can serve as an **energy source** (heavy industry, long-distance mobility, aviation, and power storage) and an **energy carrier** (as green ammonia or blended with natural gas).

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- With **abundant sunshine and significant wind energy resources**, India is geographically blessed to become one of the **lowest-cost producers** of green hydrogen.

Five Priorities

- For the vision to convert into reality, government and industry must act in sync along **five priorities.**

First Priority - Domestic Demand:

- The Green Hydrogen Mission introduces a **Strategic Interventions for Green Hydrogen Transition (SIGHT) fund** for five years, with ₹**13,000 crore** as direct support to **consume green hydrogen**.
- This will encourage **heavy industries to increase demand**, offering economies of scale by which suppliers can reduce prices.
- **Blending mandates** for refineries can be another demand trigger.
- Another approach is to **leverage government procurement** which would push the demand further.

Second Priority - Investment Destination:

- India can be an **attractive destination** for domestic and foreign investment.
- Green hydrogen production projects announced/underway in India are far fewer compared to others.
- The mission envisions **green hydrogen hubs** to consolidate production, end use and exports. A **mission secretariat** can ensure project clearance is streamlined and reduce financial risks.

Third Priority - Electrolyser Technology:

- The SIGHT fund offers ₹**4,500 crore** to support **electrolyser manufacturing** under the

performance-linked incentive scheme.

- Currently, manufacturers are **importing stacks and assembling them**. We must become **more competitive** — with targeted public funding — in **manufacturing the most critical and high-value components of electrolysers** in India.
- Not targeting value addition would result in electrolyser technologies and production again **getting concentrated**. **China** could end up controlling 38% of electrolyser capacity by 2030.
- Electrolyser technology must be improved to **achieve higher efficiency goals**, be **able to use non-freshwater,** and **substitute critical minerals**.

Fourth Priority - Supply Chains:

- Establishing **bilateral partnerships** to develop **resilient supply chains** is crucial.
- Using **yen- or euro-denominated loans** for **sales** to Japan or to the EU, respectively, could reduce the cost of capital and help us become **export competitive**.
- India must cooperate with like-minded countries on trade, value chains, research and development, and standards.
- The Green Hydrogen Mission allocates **₹400 crore for R&D**, which can be leveraged to **crowd in private capital** into technology **co-development.**

Fifth Priority - Global Framework:

- India must coordinate with major economies to **develop rules** for a **global green hydrogen economy.**
- In the absence of common global frameworks, attempts for rules and standards are being **driven by collectives of private corporations** rather than through

structured intergovernmental processes.

- There are already signs of **conflicting regulations and protectionist measures** in major markets. These put India's ambitions at risk.

Conclusion

- India's G20 presidency is an **opportunity to craft rules** for a global green hydrogen economy.
- These rules must **address operational threats**, **industrial competitiveness** and **strategic threats**.
- India should promote a **global network on green hydrogen** via which companies could collaborate.

13) Women Rising

(GS1: Role of Women and Women's Organization, Population and Associated Issues, Poverty and Developmental issues, Urbanization, their problems and their remedies)

Context

- Self-help groups bring about socio-economic empowerment of women by providing access to income-generating opportunities.

Potential of Self Help Groups (SHGs) in India

- An **SHG** is a **community led and run initiative**, whose basic tenet is to **ensure economic opportunities** for its members, which in turn can lead to their **social** and **political upliftment.**
- India has around **12 million SHGs**, **88 percent** of which have **only women members**.
- The **Deendayal Antyodaya Yojana National Rural Livelihoods Mission (DAY-NRLM)** was launched by the **Union Ministry of Rural Development** in **2011** with the mandate that **at least one woman from each poor rural**

household is associated with an SHG.

- The potential of SHGs was evident during the **Covid-19** when SHG members were making **Covid protective equipment, masks and sanitisers, educating people about the importance of vaccination, etc.**

SHGs in Various Sectors

- From making unique handicrafts and handlooms to pickles, papads, and other products, women members of SHGs have been silently **contributing to rural economic growth**, despite facing challenges in market access, marketing and quality checks.
- At the same time, SHGs have empowered them by providing **access to property or by mobilising finance.**
- These groups are emerging as **small microfinance institutions** where women can bank on each other for lending and saving. SHGs are also providing women with **opportunities to diversify their livelihoods for improved incomes and socio-economic growth**.
- The *rani mistris* **(women masons) of Jharkhand**, who built toilets to help the state become open defecation free under the Swachh Bharat mission, are a case study of how occupational stereotypes have been broken through SHGs.
- Recognising this, in 2021, the Union rural development ministry envisaged a target of creating *"lakhpati SHGs"* to **enable rural women members of the SHGs earn at least Rs 1 lakh per year.**
- Economic Survey 2022-23 points to the empowerment of nearly 0.4 million SHG members through **training programmes** to

transform them into **community resource persons** such as **bank sakhis, pashu sakhis, poshan sakhis and take up other such roles.**

- o **Bank sakhis** are **women in-charge of an SHG's banking and bookkeeping activities.**
- o SHG members are trained on **best practices for livestock rearing and advising other farmers** on the same. They are then appointed as **pashu sakhis.**
- o Similarly, to **facilitate food and nutrition security and seed sovereignty**, rural areas have **poshan sakhis** that are critical in implementing the Union Ministry of Women and Child Development's Saksham Anganwadi and Poshan 2.0 Mission, which aims to address problems of malnutrition among girls and women.

Conclusion

- Over and above their **economic empowerment**, SHG members also contribute to **strong social networks and stronger local institutions**, thus **contributing to social capital.**
- SHG workspaces provide **important community spaces for women** to interact, work together and provide each other support, thus building a spirit of trust, a stronger sense of identity, organic solidarity, reciprocity and mutual learning.
- Overall socio-economic empowerment also facilitates SHGs to help **meet national targets,** such as those under the **UN's 17 Sustainable Development Goals (SDGs).**

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o **SDG 5** (gender equality), **SDG 16** (peace, justice and strong institutions) and **SDG 17** (partnerships for the goals) are some of the goals to which the women-led SHGs contribute.

14) Western Disturbances & their Impacts

(GS1: Important Geophysical Phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc., geographical features and their location-changes in critical geographical features and in flora and fauna and the effects of such changes)

Context

- India has not experienced a normal winter in three years. It has remained **unusually dry and hot.**
- In this winter, for instance, the country experienced its **hottest ever December,** as per the India Meteorological Department (IMD). The **northwest region**, which receives almost 30 per cent of its annual rainfall in the season, saw an **83 per cent rainfall deficit.**
- Then, after a near-normal January, **February** broke all records to become the **hottest since 1901.**
- The reason for the abnormal winter seasons since 2020-21 lies in the **changing character of the Western Disturbances.**

Western Disturbances

- They are a series of **cyclonic storms** that **originate in the Mediterranean region,** and travel over 9,000 km to **bring winter rains to northwest India.**
- A Western Disturbance is in the **shape of a spiral** with a **narrow mouth at the bottom** (formed at a height of about 5,500 metres above sea level) and a **wide mouth at the top** (formed at a height of more than 9,000 metres above sea level).

- The low-pressure storm systems **help farmers in India grow their rabi crop, bring snow to the Himalayas** and **maintain the flow of the northern rivers.**
- They reach the country riding on a wind system called the **subtropical westerly jet stream** that circles the Earth throughout the year. During its journey, a Western Disturbance **collects moisture from the Mediterranean Sea, Black Sea and Caspian Sea** and traverses over Iran and Afghanistan before hitting the western Himalayas.

Impacts

- Strong Western Disturbances reach the **central and eastern Himalayas** and **cause rain and snow in Nepal and northeast India.**
- Since 2019, the arrival of the storm systems has **either been delayed or weakened.**
- On an average, India receives **four to six intense Western Disturbances a month** between December and March, or **16 to 24 such events** in the entire period. This winter season, the country has received **only three** intense Western Disturbances: two in January and one in March. December and February passed without a single intense Western Disturbance.
- A migrating Western Disturbance is **preceded by warm, moist air,** and is **followed by cold, dry air.** This **keeps the temperatures warm** in the peak winter months of December and January and **stops the temperature from rising in February and March.**
- One of the reasons for the abnormally hot February was the **formation of a high pressure area** near the land surface, which

caused the **air to descend, compress and heat up.** A **strong Western Disturbance would have dissipated the high pressure**.

Other Impacts

- Western Disturbances are also the **primary source of snowfall** that replenishes the Himalayan glaciers during winter. These glaciers **feed major Himalayan rivers** like the Ganga, Indus and Yamuna as well as myriad mountain springs and rivulets.
- However, not everything that the Western Disturbances bring is good. They are **responsible for hailstorms** that damage standing crops, **fog events** that interrupt air, rail and road services and **cloud bursts** that result in flash floods.

Reasons for weakening of Western Disturbances

- For the past three years, the world has been in a **La Niña phase**, which refers to the **cooling of ocean surface temperature in the Pacific Ocean**. It **weakens the temperature gradient** for the formation of Western Disturbances as it reduces the temperature of the hot tropical air.
- They are generally **weaker during the La Niña phase** of the El Niño-Southern Oscillation, which produces a drier winter. During **El Niño**, they are **more intense.**
- Western Disturbances are also influenced by the **North Atlantic Oscillation,** a random fluctuation of air pressure over the North Atlantic Ocean due to a high pressure region above the Azores Islands in the central North Atlantic and a low pressure region over Iceland.
- The weather system is currently in a **negative phase,** as both low and high pressure systems are weak, and it **makes Western**

Disturbances 20 per cent less frequent and 7 per cent less intense than a positive phase.

15) India's solar push augurs a looming waste management challenge

(GS3: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment)

Context

- There has in the last few years been a concerted push from policymakers in India to **transition to a circular economy** to enable **effective waste management.** However, **waste management in the solar photovoltaic sector still lacks clear directives.**

What is the issue?

- Globally, **India stands fourth in solar photovoltaic deployment.** India's **solar power installed capacity** had reached nearly **62 GW** by 2022.
- While this is certainly encouraging, it also augurs a **colossal amount of solar photovoltaic waste** in future. According to a report by the **International Renewable Energy Agency**, India is expected to become **one of the top five leading photovoltaic waste producers** globally by 2045-2050.
- India's solar photovoltaic installations are dominated by **crystalline silicon (c-Si) technology.** A typical **photovoltaic panel** is made up of **93% of c-Si modules and 7% of cadmium telluride (CdTe)** thin film modules. The metals used to manufacture c-Si modules are **silver, tin, and lead**. The CdTe thin film module is made of **glass, encapsulant, and compound semiconductor.**

Challenges in Recycling

- India's challenge is the **growing informal handling of photovoltaic waste.** Only about **20% of the waste is recovered** in general; the **rest is treated informally.**
- As a result, the waste often **accumulates at landfills**. Landfill disposal in turn causes **acidification**, **leaching of toxic metals** (such as lead and cadmium) into the soil, and **contaminates the local water**.
- **Gradual incineration** of the panel encapsulant also releases **sulphur dioxide, hydrogen fluoride, and hydrogen cyanide** into the atmosphere.
- Further, the **market to repurpose or reuse recycled photovoltaic waste is minuscule** in India because of a **lack of suitable incentives and schemes** in which businesses can invest.
- The **absence of a body** to measure, monitor, and report solar photovoltaic waste isn't helping either.

How have other countries responded?

- Many Western and Asian economies have **well-established regulatory guidelines for photovoltaic waste management** and are actively investing in **building awareness** on effective waste management practices.
- For example, the **European Union's 'Waste Electrical and Electronic Equipment Directive'** makes producers responsible for safely and responsibly disposing of end-of-life photovoltaic panels.
- In **the U.S., states have the freedom** to establish their **own solar photovoltaic regulatory standards**.

- Manufacturers in **Japan** are responsible for developing **environment-friendly recycling technologies** through public-private partnerships and launching **awareness campaigns** about their benefits.

Measures Required

- India should formulate and implement **provisions specific to photovoltaic waste treatment** within the ambit of the e-waste guidelines.
- The government should also build a **legislative framework to enforce the Extended Producer Responsibility Rules.**
- And a **Central insurance or a regulatory body** should be set up to protect against financial losses incurred in waste collection and treatment.
- The **waste generated** from photovoltaic modules and their components is classified as **'hazardous waste' in India.** To further drive home the necessity of this label, **pan-India sensitisation drives and awareness programmes** on photovoltaic waste management will be beneficial.
- **Clear recycling targets and recycling rates** in the photovoltaic waste management policy directive will be good as well.
- The **domestic development of photovoltaic waste recycling technologies** must be **promoted** through suitable regulatory incentives, recycling programmes, appropriate infrastructure facilities, and adequate funding.

Conclusion

- Now is the right time for India to install clear policy directives, well-established recycling strategies, and greater collaboration, so that it

doesn't find itself neck-deep in a new problem in future.

16) Next generation technology-6G

(GS3: Science and Technology-Developments and their Applications and Effects in Everyday Life)

Context

- Recently, the Government of India unveiled the **"Bharat 6G Vision Statement".**
- India is set to **commit resources to the development of 6G technologies** with the release of the vision document and the inauguration of a 6G test-bed for research & development (R&D).

Why should India act early to roll out 6G?

- India will be the **largest cellular market** in the world in terms of both users and data consumption by **2030** and taking early steps could give India the leverage to mold 6G standards in advantageous ways.
- This would also **help India to generate intellectual property (IP)** that could make it a world leader as 6G evolves.
- The early birds in the process of developing and involved in research and development of every 'G' from '2G' have received patents worth trillions.
- India has been **late in terms of network roll-outs** including 5G due to complex telecom policy and the resulting litigation and it has to ensure that doesn't happen again with 6G.
- India possesses both an **enormous domestic market and a large base of engineers** who could contribute materially to R&D and setting standards.
- Like every "G" iteration has led to enormous improvements in

network performance, 6G promises that it will be **100 times faster than 5G** and that would make barely imaginable applications possible. For example,

- o A 6G network **could enable a host of autonomous cars** to talk to one another in real time as they navigate crowded urban landscapes.
- o **Virtual reality without lags** could become a reality.
- 6G aims to be more **energy-efficient** and better at using whatever spectrum is available for the network.

India's plan in this regard

- India will set up **six technology-innovation groups** to explore the possibilities and drive R&D into possible directions that 6G could go.
- The groups will **identify priority areas** for research involving industry, academia, and service providers in this process.
- The R&D would encompass all areas from mmWave and Terahertz communications, to fibre-broadband, remote operations, multi-sensor man-machine interfaces and devices leveraging edge cloud computing.
- The policy will encompass ways to find the **necessary resources to fund** these ambitious R&D plans.

Conclusion

- Getting early into the 6G must be followed through with **robust policy implementation**. By creating IP and by contribution to global standards forums, India could become a world leader at 6G.

Model Questions

1. Discuss the areas that India should prioritize to fulfil the commitment of "Health for All".

2. Discuss the recent measures initiated by the Government of India to unleash the true potential of MSMEs.

3. What are the challenges associated with the management of communicable diseases like tuberculosis. Suggest measures to overcome these challenges.

4. What are microplastics? Discuss the adverse effects of microplastics on marine ecosystems.

5. Highlight the importance of shifting from curative to preventive healthcare in the backdrop of increasing incidence of non-communicable diseases in India.

6. How do you think that the SMART-PDS scheme will be a game changer for people as well as governments in bringing accountability across various programmes?

7. Explain the various reasons for under-representation of women in politics and bureaucracy with relevant facts.

8. Railways are seeing dynamic change with respect to logistics. In this context discuss the challenges it faces and initiatives taken by Government to address the challenges.

9. Human Development Index (HDI) is an indicator for the development of a country and is used universally. Analyse the reasons for huge disparities between states of India with respect to HDI.

10. Women reservation in parliament is a long dream for many. Analyse the arguments in favour of and against of it.

11. India's ascendency to G20 presidency has a lot of scope for improvement in the global world order. In the light of above statement analyse the initiatives and challenges posed to India in the area of Blue economy.

12. Green hydrogen is the fuel of the future and the Government of India is acting according to it. Critically analyse the priority areas that the government should focus to make India a global leader of green hydrogen.

13. SHGs in India have the potential of becoming "National help groups". Discuss.

14. What are the impacts of weakening of western disturbances on the Indian subcontinent?

15. Suggest measures to deal with the looming challenge of waste management in the solar photovoltaic sector in India.

16. Instead of playing catch up in 6G, India seeks to be actively involved from the early stages of roll out. Discuss.

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