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MULTIDIMENSIONAL POVERTY IN INDIA

Context

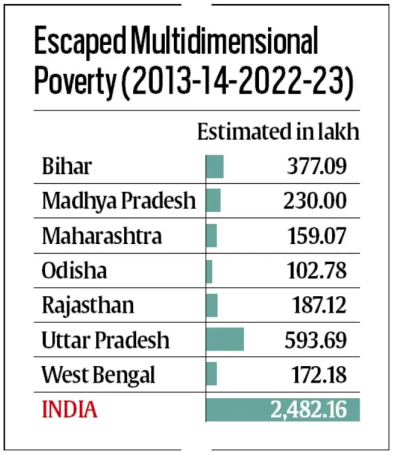
- Recently, the Union Finance Minister informed that nearly 25 crore people have been raised from multi-dimensional poverty in the last 10 years.

About the Poverty

- It is a **state or condition** in which a person or community lacks the financial resources and essentials for a minimum standard of living, such as housing, clean water, healthy food, and medical attention.
- Traditionally, poverty is calculated based either on **income levels** or, if income data are not available, on **expenditure levels**.
  - The **'poverty lines'** are actually expenditure levels that are considered minimum enough for someone to be called poor.
- A person who is poor can **suffer multiple disadvantages** like poor health or malnutrition, a lack of clean water or electricity, poor quality of work or little schooling.
  - Focusing on one factor alone, such as income, is not enough to capture the true reality of poverty.

What is the Multidimensional Poverty Index (MPI)?

- Globally, the MPI uses 10 indicators covering three main areas:
  - **Health** includes nutrition and child & adolescent mortality indicators.
  - **Education** includes years of schooling and school attendance indicators.
  - **Standard of living** includes six household-specific indicators: housing, household assets, type of cooking fuel, access to sanitation, drinking water, and electricity.
- The **Indian MPI has two additional indicators**:
  - **Maternal Health** (under the health dimension) and;



  - **Bank Accounts** (under the standard of living dimension).

Multidimensional Poverty in India Since 2005-06:

- It is published by **NITI Aayog** with technical inputs from the United Nations Development Programme (UNDP) and the Oxford Policy and Human Development Initiative (OPHI).
- It uses indicators covering three main areas: **health, education, and standard of living**.
- It was found to **decline from 29.17% in 2013-14 to 11.28% in 2022-23** with about 24.82 crore people escaping poverty during this period.
  - At the States' level, **Uttar Pradesh topped the list** with 5.94 crore people escaping poverty **followed by Bihar at 3.77 crore and Madhya Pradesh** at 2.30 crore.
  - However, the largest number of poor people in the world — 228.9 million — lived in India in 2020.

Related Data

- **The NFHS-5 (2019-21):** About **14.96% of India's population** are multidimensionally poor compared to 24.85% of the population that was multidimensionally poor based on the 2015-16 (NFHS-4).
  - It shows that nearly 135 million individuals escaped poverty during the 5-year period.
- **A UNDP** study highlighted that **415 million Indians** came out of multidimensional poverty in the **last 15 years.**
- According to the **IMF**, the **'extreme poverty'** was as below **1% in 202**0 due to the **Pradhan Mantri Garib Kalyan Ann Yojana (PMGKY)**.

Reason for Poverty in India

- **Economic Slowdown and Policy Decisions:** The economy has been slowing for nine quarters prior to the outbreak of the novel coronavirus pandemic.
  - Unemployment had reached a 45-year high in 2017-18.
- **Child Malnutrition:** India's poor score comes almost entirely from the **child stunting and wasting** parameters.
  - Almost 35% of Indian children are stunted, and although this is much better than the 54.2% rate of 2000, it is still among the world's worst.
  - Almost 17.3% of Indian children under five are wasted, which is the highest prevalence of child wasting in the world.
- **Pandemic Impact:** The pandemic led to a 'sudden increase in poverty'.
  - Over an eight month period (March to October 2020), average incomes of the bottom 10% of households were lower by Rs 15,700.
- **Homelessness:** Increasingly, a large number of persons are being rendered homeless across the world.
  - There are both natural as well as man-made reasons that are contributing to this crisis

Government Efforts

- **Interventions through Policies/Schemes:** The government has expanded the social security net through schemes like Pradhan Mantri Suraksha Bima Yojana (Accident Insurance), Atal Pension Yojana (Unorganized Sector), and Pradhan Mantri Jeevan Jyoti Yojana (Life Insurance).
  - The MUDRA Yojana has enabled about eight crore people to start new businesses.
- **Rural Development:** The **Ministry of Rural Development** has implemented various programs to increase livelihood opportunities, empower rural women, provide a social safety net, and improve infrastructure in rural areas.
  - The main focus is on increasing livelihood opportunities, empowering rural women, providing a social safety net, skilling rural youth, infrastructure development, increasing land productivity, etc.
- **Nutrition and Health:** Despite the progress in economic development, a significant portion of the Indian population cannot afford healthy food.
  - Initiatives like **Poshan Abhiyan and Anaemia Mukt Bharat** have been launched to address this issue.
- **State-Level Efforts:** States like Uttar Pradesh, Bihar, and Madhya Pradesh have recorded the largest decline in the number of multidimensionally poor people.

Various Committees

- There are various committees formed with the objective to estimate the number of people living in poverty in India. These are:
  - The Working Group of 1962;
  - V N Dandekar and N Rath in 1971;
  - Y K Alagh in 1979;
  - D T Lakdawala in 1993;
  - Suresh Tendulkar in 2009;
  - C Rangarajan in 2014.
- The **Lakdawala Committee** assumed that health and education is provided by the state.
  - Therefore, expenditure on these items was excluded from the consumption basket it proposed. Since **expenditure on health and education** rose significantly in the 1990s, the **Tendulkar Committee included them** in the basket.

A Way Forward

- Poverty eradication remains India's top priority, but there is still work to be done. Strategies such as increasing livelihood opportunities, empowering rural women, providing a social safety net, and skilling rural youth, infrastructure development, increasing land productivity, etc seem to be effective in reducing poverty.
- There is a need to address the inequalities of income, education, and opportunity that are all interconnected that can foster social cohesion and boost general well-being.
- It is essential that the government should provide education and health services free of cost for the deserving citizens and those from the socially oppressed classes.

Source: *IE*

INDIA-UAE: BILATERAL INVESTMENT TREATY

Context:

- Recently, the Union Cabinet approved the signing and ratification of a Bilateral Investment Treaty (BIT) with the United Arab Emirates (UAE) to significantly boost bilateral economic engagement, including Foreign Direct Investment (FDI).

About the Bilateral Investment Treaty (BIT):

- It is an **agreement between two countries** that sets the terms and conditions for private investment by nationals and companies of one state in another.
- It is a part of the **International Investment Agreements (IIAs)** under the United Nations Conference on Trade and Development **(UNCTAD)**.
- It is expected to improve investor confidence, increase foreign investments and overseas direct investment opportunities, and have a positive impact on employment generation.

India and BIT

- India has been actively negotiating Bilateral Investment Treaties (BITs) with various countries to boost foreign direct investment (FDI).
- **India's Position on BITs:** Recent Interim Budget highlighted that India is negotiating BITs with trade partners to boost FDI inflow.
  - It emphasised that these negotiations are being conducted from a position of strength.
- **India's Model BIT:** India adopted the model BIT in 2016.
  - The **objective** is to provide appropriate protection to foreign investors in India and Indian investors in the foreign country, while maintaining a balance between the investor's rights and the Government obligations.
- **India's Economic Integration with Western Nations:** India is pursuing economic integration with western nations such as the **United Kingdom (UK)** and the **European Union** through **Free Trade Agreements and investment treaties.**

Significances of BITs

- **Investor Confidence:** BITs can boost the confidence of investors by providing a level playing field and non-discrimination in all matters.
  - They provide an independent forum for dispute settlement by arbitration.
- **Foreign Direct Investment (FDI):** BITs can help increase the inflow of FDI.
  - For example, India is negotiating BITs with trade partners to improve its ease of enforcing contracts, which is currently a hurdle for FDI inflows.
    - The FDI inflow during 2014-23 was $596 billion.
- **Economic Growth:** By attracting foreign investment, BITs can contribute to economic growth and **employment generation** in the host country.
- **Legal Protection:** BITs offer legal protection to investors, which can be particularly important for investments in countries where the domestic legal framework is unpredictable or unstable.
  - BITs impose obligations under international law on host states to protect foreign investment from the other state.

Challenges associated with the BITs

- **Unequal Distribution of Rights and Obligations:** BITs often create an unequal distribution of rights and obligations between developed countries, which are the source of most foreign direct investment, and developing countries, which are mainly recipients.
- **Risk of Litigation:** BITs lead to an increased risk of litigation. Some developing countries have been sentenced by international arbitral tribunals to pay millions of dollars as a result of alleged violations to these treaties.
- **Ambiguous Legal Standards:** Most of these awards are based on expansive interpretations of ambiguous legal standards and concepts such as **'fair and equitable treatment' and 'indirect expropriation'.**
- **Limitations in Addressing Issues:** BITs can't address every problem that companies face abroad.
  - For example, American companies in China face challenges in protecting and enforcing their intellectual property rights (IPR).
- **Loss of Policy Space**: BITs can lead to a loss of policy space for the host country, limiting its ability to regulate in the public interest.

- **Treaty Shopping:** Investors might take advantage of the most favourable nation clause in BITs to sue a host country under a treaty to which it is not a party.

Conclusion and Way Forward

- Current trends in the world economy and global politics provide evidence that the global south is at 'normal capitalism', bringing with it new patterns of uneven development, inequality, and injustice.
- They are seen as a tool to boost the confidence of investors by assuring a level playing field and non-discrimination in all matters while providing for an independent forum for dispute settlement by arbitration.
- However, the negotiation and implementation of BITs can be complex and require careful balancing of interests.
- The challenges need for careful negotiation and implementation of BITs, balancing the interests of both the investing and host countries.

Source: TH

NATIONAL RESEARCH FOUNDATION (NRF)

Context

- Despite approving **a Bill to set up a National Research Foundation (NRF)**, the interim budget for 2024-25 was silent on allocation for the institution.

About

- The **Union Cabinet had approved the NRF Bill in June 2023,** paving the way for its establishment. However, the interim budget for 2024-25 skipped any mention of NRF.
- In the **Union budget for 2021-22,** the Centre had announced that it would set aside **Rs 50,000 crore for NRF over five years.**
  - However, the following year, it was allocated a budget of just Rs 1 lakh. Further in 2023-24, the Union budget allocated Rs 2,000 crore for the NRF, which was then revised to Rs 258.60 crore.

The National Research Foundation (NRF) Bill, 2023

- The approved Bill will pave the way **to establish NRF**, an apex body to provide **high-level strategic direction of scientific research in the country** as per recommendations of the **National Education Policy (NEP).**
- **The Department of Science and Technology (DST)** will be the administrative Department of NRF.

National Research Foundation (NRF)

- **Aim:** To seed, grow and promote Research and Development (R&D) and foster a culture of research and innovation throughout India's universities, colleges, research institutions, and R&D laboratories.
- **Governing Board**: NRF will be governed by a **Governing Board** consisting of eminent researchers and professionals across disciplines.
  - **Ex-officio President of the Board:** The Prime Minister
  - E**x-officio Vice-Presidents of the Board:** Union Minister of Science & Technology & Union Minister of Education
- **Executive Council:** NRF's functioning will be governed by an Executive Council chaired by the **Principal Scientific Adviser** to the Government of India.
- **Role:**
  - **Forge collaborations** among the industry, academia, and government departments and research institutions,
  - **Create an interface mechanism** for participation and contribution of industries and State governments in addition to the scientific and line ministries(specific governmental departments).
  - **Focus on creating a policy framework and putting in place regulatory processes** that can encourage collaboration and increased spending by the industry on R&D.
- **Repeal**: The bill will also repeal **the Science and Engineering Research Board (SERB)** established by an act of Parliament in 2008.

Benefits of the NRF:

- It will help to improve the **quality of research** in India.
- It will help to increase the **quantity of research** in India.
- It will help to **make India a more attractive destination** for foreign researchers.

- It will help to **create new jobs** in India.
- It will help to **improve the quality of life** for all Indians with the help of ensuing research.

Challenges:

- **Still in the planning phase:** The NRF does not yet have an administrative structure or direction.
- **Transparency**: The experts also highlighted a **lack of transparency in establishing the governance structure** of the proposed institution.
- **Opposite to the objective of NEP:** The NEP 2020 had mentioned that the NRF would be governed independently of the government, by a rotating board of governors consisting of the "very best researchers and innovators across fields".
  - However, in June 2023, the government stated that the governing board would be **presided over by the Prime Minister and the Union Minister of Science and Technology.**
- **Not an independent body:** Even the Executive Committee, which will govern the day-to-day functioning of the NRF, is to be headed by a **government-appointed person (the Principal Scientific Advisor).**
  - Though initially modeled around the **National Science Foundation**, an independent agency of the US federal government, the NRF now seems to be **dependent on the government.**
- **Insufficient funding:** Of the Rs 50,000 crore set aside for NRF over five years (2023-28), some **Rs 36,000 crore (72 per cent) was expected to come from the private sector.**
  - Thus, the government is envisaging spending only around Rs. **14,000 crore over five years, i.e., around 2,800 crore per year** which is insufficient considering the volume of research conducted in India.
  - This is much less than **Rs 7,931.05 crore allocated to the DST, Rs. 2,683.86 crore for the DBT, and Rs 5,746.51 crore allocated for the Department of Scientific and Industrial Research** during the Union budget for 2022-23.

Way Ahead:

- There is a **need to wait for the full Union Budget** that will be presented after the elections slated later this year.
- There is a need to move the proposed institution **from the planning phase and set up an administrative structure.**

Source: ***DTE***

SUNRISE TECHNOLOGIES

Context

- During the **Interim Budget 2024-25** presentation, the Finance Minister revealed a plan to create **a corpus of Rs 1 lakh crore for the sunrise technologies.**

About:

- The goal is **to encourage private investment** in sunrise technologies and usher in a "golden era for our tech savvy youth".
- The corpus will be created with a **fifty-year interest-free loan**, giving a financial boost to encourage innovation and research in emerging technology fields.
- The Finance Minister mentioned that **long-term financing with extended tenors and low or zero interest rates** will inspire the private sector to increase their focus on research and innovation in sunrise domains.
- Stressing the significance of research and innovation in India's growth she noted the shift from **"Jai Jawan Jai Kisan"** to **"Jai Jawan Jai Kisan Jai Vigyan and Jai Anusandhan"** underlining that innovation is the cornerstone of development.

Sunrise technologies

- Sunrise technologies is a category of industries with **high growth potential and expected to become significant** in the future.
- It's important to note that the **specific industries considered "sunrise" can change over time** depending on technological advancements, economic trends, and societal needs.

Characteristics

- **New or relatively new:** They are typically in their early stages of development, offering innovative solutions or catering to emerging needs.
- **Rapid growth:** They exhibit high growth rates, with significant increases in revenue, market share, and investment.
- **Future potential:** They are expected to have a major impact on the economy and society in the long term.

- **Innovation:** They often use cutting-edge technologies or disruptive business models.
- **Uncertainty:** Due to their early stage, their future success and long-term trajectory can be uncertain.

Examples of Potential Sunrise Technologies:

- **Renewable Energy:** Solar, wind, bioenergy, and other renewable energy sources are crucial for sustainable development and energy security.
- **Artificial Intelligence (AI) and Machine Learning (ML):** These technologies have the potential to revolutionize various sectors like healthcare, agriculture, manufacturing, and finance.
- **Electric Vehicles (EVs) and Battery Technology:** This industry holds immense potential for reducing emissions and promoting sustainable transportation.
- **Internet of Things (IoT) and Big Data:** Connecting devices and analyzing data can improve efficiency, decision-making, and innovation across various sectors.
- **Robotics and Automation:** Automation can enhance productivity, precision, and safety in manufacturing, healthcare, and other sectors.
- **Space Technology:** This sector offers opportunities in satellite communication, remote sensing, navigation, and space exploration
- **Genomics and Biotechnology:** Advances in these fields have applications in healthcare, agriculture, and other areas.

Challenges

- **Lack of infrastructure:** Inadequate infrastructure, particularly in areas like state-of-the-art research centres, can hinder growth.
- **Skilled workforce shortage:** Lack of skilled professionals in these emerging fields can hamper development and adoption of new technologies.
- **Funding and investment limitations:** Limited access to finance and investment can restrict expansion and innovation.
- **Regulatory hurdles:** Complex and outdated regulations can create operational challenges and hamper market growth.
- **Technological challenges:** Integrating and adapting cutting-edge technologies requires constant adaptation and innovation.

Measures

- **Government initiatives:** Policies promoting investment, infrastructure development, skill development, and research & development can create an enabling environment.
- **Public-private partnerships:** Collaboration between government and private sector can leverage strengths and resources for optimal development.
- **Focus on education and skill development:** Upskilling and reskilling programs can address the workforce shortage and prepare individuals for future jobs.
- **Promoting innovation and R&D:** Encouraging research and development in these fields is crucial for technological advancements and competitiveness.
- **Streamlining regulations:** Simplifying and updating regulations can facilitate ease of doing business and technological adoption.

Way Ahead:

- Overall, **addressing challenges and adopting supportive measures can unlock the full potential** of sunrise technologies and contribute significantly to India's economic growth and progress.
- It's important to note that the **dynamics of sunrise industries are constantly evolving**, and so India needs to adapt to face these dynamics.

Source: ***TOI***

NEWS IN SHORTS

CERVICAL CANCER

In Context

- The **Union Budget 2024-25** encourages **vaccination against cervical cancer.**

About

- The government will encourage vaccination for **girls in the age group of 9 to 14 years** for the prevention of cervical cancer.

About Cervical Cancer

- Cervical cancer develops in a **woman's cervix** (the entrance to the uterus from the vagina).

- **Spread:** Almost all cervical cancer cases (99%) are linked to **infection with high-risk human papillomaviruses (HPV),** an extremely common virus transmitted through sexual contact.
  - Although most infections with HPV resolve spontaneously and cause no symptoms, persistent infection can cause cervical cancer in women.
- **Prevalence:** Cervical cancer is the **fourth most common cancer** in women.
  - It is the **second most common type of cancer in India** for women.
- **Prevention:** Effective primary (HPV vaccination) and secondary prevention approaches (screening for, and treating precancerous lesions) will prevent most cervical cancer cases.
- **Treatment:** When diagnosed, cervical cancer is one of the most successfully treatable forms of cancer, as long as it is detected early and managed effectively.
  - Cancers diagnosed in late stages can also be controlled with appropriate treatment and palliative care.
- **Vaccination:** There are, at present, two vaccines available in the country against the human papillomavirus (HPV) which causes cervical cancer, namely Merck's Gardasil and Serum Institute of India's Cervavac.

Source: *DTE*

TECHNOLOGY DEVELOPMENT FUND SCHEME

Context:

- Recently, the Defence Research Development Organisation (DRDO) demonstrated a **green propulsion system**, developed under the **Technology Development Fund (TDF) Scheme**.

About Technology Development Fund (TDF) Scheme

- It is a flagship programme of the **Ministry of Defence executed by DRDO** under the 'Make in India' initiative for funding innovation in defence and aerospace, **especially to start-ups and MSMEs.**
  - It is executed to meet the requirements of the **Tri-Services, Defence Production and DRDO**.
- It encourages **participation of public/private industries** to create an ecosystem for enhancing cutting edge technology capability in the defence sector.

Focus Areas:

- Significant upgradation, improvements, developments in the existing products, processes, applications;
- Development of futuristic technologies, innovative products which can be useful for defence applications;
- Import substitution of components whose technologies do not exist in the Indian

Source: *TH*

ANIMAL HUSBANDRY INFRASTRUCTURE DEVELOPMENT FUND

Context:

- Recently, the Union Cabinet approved the continuation of the **Animal Husbandry Infrastructure Development Fund (AHIDF)** for another three years up to 2025-26.

Animal Husbandry Infrastructure Development Fund (AHIDF)

- **About:**
  - It is a scheme launched under the **Atma Nirbhar Bharat Abhiyan Stimulus package**, and has been approved for incentivizing investments by individual entrepreneurs, private companies, MSMEs, Farmers Producers Organizations (FPOs) etc.
  - It aims to **increase processing capacity by 2-4%** in the dairy, meat and animal feed sector.
- **Funding**:
  - 3% interest subvention for 8 years including two years of moratorium for loan up to 90% from the scheduled bank and National Cooperative Development Corporation (NCDC), NABARD and NDDB.
  - Credit guarantee to the MSME and Dairy Cooperatives up to the 25% of the credit borrowed from the Credit Guarantee Fund of Rs.750 crore.
    - It supports value-added dairy product manufacturing.

Source: *PIB*

MQ 9B DRONES

Context:

- The US recently gave the green signal to a **USD 3.99 billion deal** for India to acquire 31 latest armed versions of **Predator drone-MQ 9B.**

Predator drones-MQ-9B

- MQ-9B is a **High Altitude Long Endurance (HALE) Unmanned Aerial Vehicle(UAV)**.
- MQ-9B is designed to **fly over the horizon via satellite for up to 40 hours**, depending on configuration, **in all types of weather and safely integrate into civil airspace**.
- The SeaGuardian configuration of MQ-9B can include a **360-degree surface-search maritime radar, automatic identification system, sonobuoy monitoring system, and sonobuoy dispensers** for persistent anti-surface and anti-submarine warfare missions.
- The drone has an operational ceiling of **27000 feet** and can look down on the enemy from **nearly 50,000 feet** and destroy it.

Significance for India:

- According to General Atomics, the MQ-9B can provide roughly **80% of the capability of a large human-flown maritime patrol aircraft at about 20% of its cost per hour.**
- For the Army and Air Force, the MQ-9Bs can provide **round-the-clock surveillance looking far beyond the borders.**
  - **India's counter-terrorism capabilities** will also increase manifolds as intruders can be targeted without crossing the borders.
- It also **seamlessly integrates with other U.S.-origin platforms that India operates,** the P-8Is, AH-64 Apache attack helicopters, MH-60R multi-role helicopters among others expanding MQ-9B's multi-domain mission set.

Source: *HT*

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