

ENVIRONMENT AND CLIMATE CHANGE

CONTEXT: Adaptation gap report 2023; Need for Revamping Climate Financing to Promote Adaptability to Climate Changes.

Why in News?

- According to the UN Environment Programme's most recent edition of the Adaptation Gap Report, 2023, developing nations collectively will require at least USD 215 billion annually this decade in order to undertake significant adaptation work.
- Only roughly USD 21 billion, or 15% less than in prior years, was allocated to developing nations for adaptation projects in 2021.
- The availability of funding to carry out adaptation projects is the main topic of this year's report
- **What are the Key Highlights of the Adaptation Gap Report, 2023?**
- The disparity between projected adaptation financing needs and costs and finance flows is known as the "adaptation finance gap," and it has widened over time.
- The adaptation gap is at least 50% higher than previous range estimates and is probably 10–18 times larger than the current levels of international adaptation finance flows.
- The estimated annual cost of the current adaptation finance gap is between USD 194 and \$366 billion.

Parity of Gender in Financing:

- Just 2% of the international public finance for adaptation that has gender equality as a primary goal is deemed to be gender-responsive, and the remaining 24% is deemed to be gender-specific or integrative.

➤ **Strategies to Boost Funding:**

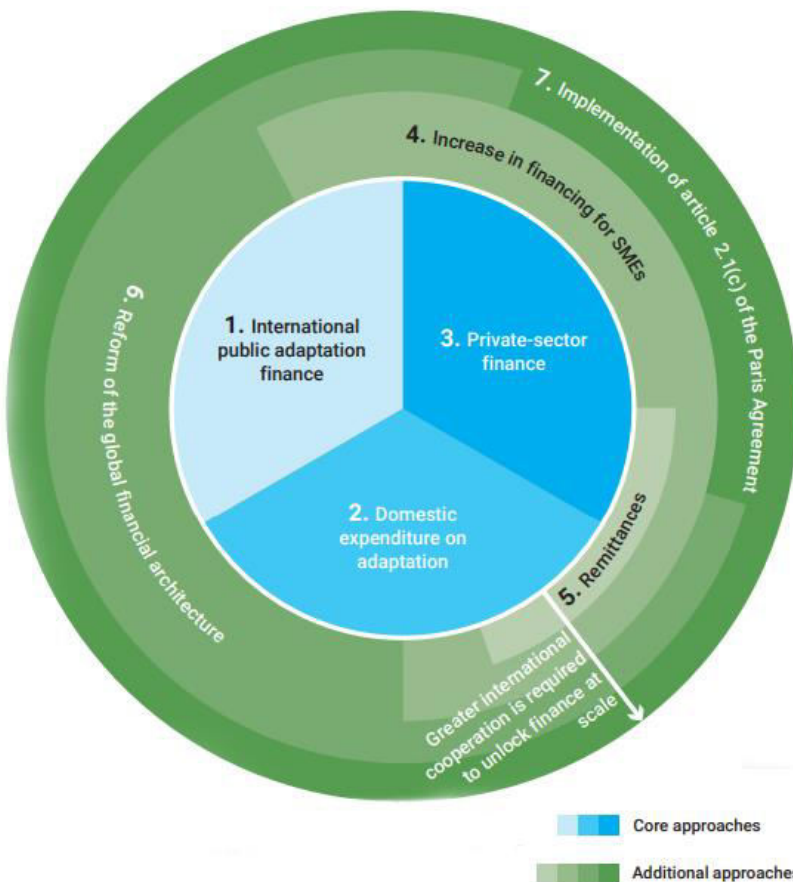
1. Private Financing:

- In many developing nations, domestic budgets are likely to be a significant source of funding for adaptation, ranging from 0.2% to over 5% of government budgets. Domestic expenditure and private finance are therefore potentially significant sources of adaptation finance.
- Additionally, there is inconsistent evidence that the private sector is increasingly involved in adaptation initiatives globally and in the majority of industries, including water, food, and agriculture; infrastructure and transportation; and tourism.

2. Internal Investments:

- Large corporations' "internal investments," financial institutions' funding of adaptation-related initiatives, and businesses' provision of adaptation-related goods and services are all desperately needed.
- In India, CSR options can also be investigated in order to meet objectives for financing and adapting to climate change.

Seven ways to bridge the adaptation finance gap



3. Restructuring the World Financial Architecture:

- The World Bank and the International Monetary Fund (IMF) are two multilateral agencies that provide financing for climate-related projects.
- The report emphasizes the need to reform the global financial architecture in light of the stark inadequacy of current levels of international financial flows toward combating climate change.

What Concerns Do Developing Countries Have Regarding Climate Financing?**Limited Capacity of Developing Countries:**

- Since there is no quick fix to stop the effects of climate change, adaptation is essential for protecting lives, livelihoods, and ecosystems, especially in vulnerable and developing nations with low resilience.
- Sufficient funding for climate change adaptation is necessary.

The viability of developing countries implementing adaptation measures:

- In order to help local populations better deal with rising temperatures and their effects, countries implement a variety of adaptation measures depending on their unique needs.
- These measures include securing water sources, building climate-resilient infrastructure, experimenting with heat-resistant crops, strengthening coastlines, and building seawalls in island nations.
- However, these adaptable measures impose financial obligations that are outside the purview of government budgets.

Proactiveness Deficit in Developed Nations:

- According to international climate agreements, developed nations have a duty to provide technology and financial support to help developing nations adapt to climate change.
- Rich nations have signed numerous conventions and treaties, but they have not been able to allocate the necessary funding.

The Need for Funds Exceeds the Amount of Funds Available:

- The majority of developing nations have included a list of adaptation needs in their Nationally Determined Contributions (NDCs), or climate action plans, which are meant to record each nation's share of the global effort to combat climate change.

The Efforts being made by Developed Countries

- Objective of USD 100 billion: Developed nations committed, back in 2009, to raise at least USD 100 billion in climate finance annually starting in 2020, but even after three years, that sum has not been reached.
- UNFCCC Platform: Through the United Nations Framework Convention on Climate Change (UNFCCC), efforts are being made to increase the financial flows for all types of climate needs, not just adaptation. This effort is collectively referred to as climate finance.
- However, the need for climate finance has increased dramatically and is currently estimated to require trillions of dollars annually.

Climate Conference in Glasgow:

- At the 2021 climate conference in Glasgow, the developed nations pledged to increase funding for adaptation by double.
- There is also a separate agreement that by 2025, a new climate financing target exceeding USD 100 billion annually will be established.

New Quantified Collective Objective:

- Closing the climate finance gap with the aid of developing countries will be made possible by the doubling of adaptation finance by 2025 and the new collective quantified goal for 2030 that is being discussed.

Conclusion:

Emission Gap Report Is an Annual Publication On Global Progress On Climate Action. The Aim of This Report Is to Reflect on the Trend of GHG Emissions to Keep a Track of the Paris Agreement to keep Global Warming Well below 2 Degree Celsius

SOCIAL JUSTICE

Context: The largest mobile phone nutrition monitoring system in global health history was launched by the Indian government with the Poshan Tracker. This will lead to India adopting a data-driven nutrition policy.

Other examples of app-based nutrition trackers around the world

UNICEF's Rapid SMS project in Malawi or a small project in nine primary health centres by university researchers in the Republic of Mauritius.

About Poshan Tracker App

- The Anganwadi Centre (child care centres), the services rendered by Anganwadi Workers, and the full beneficiary management for expectant mothers, nursing mothers, and children under six are all visible from a 360-degree perspective through this application.

- Additionally, it automates and digitizes the physical registers that employees use to help raise the calibre of their work.
- Smartphones purchased through the Government e-Market (GeM) are being given to Anganwadi workers in order to facilitate effective service delivery.
- Additionally, a nodal point has been designated to handle technical support and troubleshoot any issues pertaining to the download and operation of the new Poshan Tracker application in each state.
- According to the sources, any migrant worker who had registered in their home state could visit the closest Anganwadi in their new community to take advantage of the programs and services provided.
- The Ministry of Women and Child Development (MoWCD) introduced it.

Poshan Tracker app's advantages in India

- The Ministry of Women and Child Development recently released the Poshan 2.0 guidelines, which include the Poshan Tracker as a key component. This centralised ICT-enabled platform was created to encourage accountability and transparency in the last mile delivery of nutrition services.
- The most recent information available from the Poshan Tracker Dashboard indicates that 72 million children under five have had their weight and height recorded via the Poshan Tracker. (real-time observation of over 50% of the nation's children). Additionally, 94% of beneficiaries have had their Aadhar verified.)
- **The Poshan Tracker dashboard collects data on three sets of indicators at the national, state, and district levels in addition to beneficiary data.**
- The first is the Anganwadi infrastructure, which includes the quantity of Anganwadi centers constructed, whether or not they have running water or toilets, and if they are open for service delivery.
- Counting the number of recipients who were given hot meals and take-home rations—as opposed to raw rations is the second step.
- Thirdly, keeping an eye on nutritional results.
- By identifying children who are struggling at an early age, focusing on beneficiaries who are experiencing acute malnutrition, and keeping an eye on the efficient provision of ICDS services, the Poshan Tracker is intended to serve as a real-time feedback loop for frontline workers in the fight against malnutrition.

The Poshan tracker offers a number of modules, including

- Benefits include beneficiary registration, a dashboard for tracking key performance indicators of particular underperforming districts, a job aid module for daily tracking, a home visit scheduler for the anganwadi worker, growth monitoring (height/weight) in accordance with WHO standards, migration assistance for beneficiaries moving to another Anganwadi centre within or outside the state, and a portal for reporting community engagements on nutrition promotion.
- Additionally, distinct modules for AWCs in border and tribal areas are being developed.
- **The Poshan Tracker app reduces the possibility of error when manually entering nutrition data, which improves data accuracy.**
- It automatically converts the child's statistics into different categories.
- Through the Poshan Tracker, decision-makers can access beneficiary-specific data for prompt and local action that is based on observations made on the ground rather than models developed by academics.
- Real-time data transmission to local, state, and federal offices is made possible by the Poshan Tracker, which eliminates the need for numerous registers and manual entries.
- Apart from the expeditious transfer of data to the government, the Poshan Tracker app facilitates more convenient retrieval of child-specific information compared to large paper-based registers, thereby freeing up more time for nutritional promotion at the AWC level of care.
- The fact that Anganwadi workers in India are overworked must be taken into account, and great care must be taken to make sure that the Poshan Tracker is regularly updated based on their feedback to improve user-friendliness.

Conclusion

The Poshan Tracker's data can thus catalyse concrete and actionable outcomes at the grassroots level in order to achieve the goals outlined in the Poshan 2.0 guidelines.

PRELIM FACTS

1.State Of Climate Services report for 2023

Context: World Metrological Organisation (WMO) Releases State of Climate Services report for 2023

The yearly report this year focuses on health.

Key highlights

- Climate change may undermine decades of progress toward better health, particularly in the most vulnerable areas.

- Air pollution financing gap: Air pollution is the fourth leading cause of death by health risk factor, although it receives only 2% of international climate funding pledges.
- Climate information is underutilized: Climate knowledge improves public health prevention tactics and preparation to save lives.
 - 74% of National Meteorological and Hydrological Services provide climate data to health actors, but utilization of these data remains limited.
- Health-related climate services: It entails partner collaboration to find, access, develop, and apply credible climate knowledge for better health decisions.
 - Such services face the following challenges:
 - research and knowledge gaps,
 - lack of access to sufficient local meteorological observations
 - insufficient human and institutional capacity, etc.

Recommendation:

There is a need for tailored climate information and services to support the health sector.

This can be achieved through:

- Developing in-country capacities to improve local knowledge.
- Policy mandates for health and meteorological actors to collaborate.
- Raising.
- Awareness about the importance of climate information

2.Court in Hague rejects Indian govt plea against compensation to Devas investors

Context: The UN Commission on International Trade Law (UNCITRAL) panel awarded Mauritius investors of Devas Multimedia \$111 million in compensation for a failed 2005 contract with Antrix Corp.

- The agreement called for ISRO to lease two communication satellites to Devas Multimedia for a period of 12 years.
- In 2011, the cabinet terminated the arrangement for security reasons.
- ISRO's commercial arm is Antrix.
- Indian government approached the district court of Hague for cancellation of the UNCITRAL award citing a 2022 Indian Supreme Court (SC) order.
 - SC ruled for the liquidation of Devas Multimedia on the charge of fraud.
- An award made under UNCITRAL Arbitration Rules is binding on all parties to the proceeding

Arbitration laws in India

- India's Arbitration and Conciliation Act 1996 (last amended in 2021) has been modeled on lines of the UNCITRAL framework of laws.
 - It aims to modernize Indian arbitration law and bring it in line with the best global practices and also make India a global hub for arbitration.
- New Delhi International Arbitration Centre Act, 2019 established the New Delhi International Arbitration Centre later renamed India International Arbitration Centre

3.Lysionotus namchoonii

- Lysionotus namchoonii is a new species of epiphytic plant (which grows upon another plant) discovered by Scientists of Botanical Survey of India (BSI).
 - Native range of the genus Lysionotus is the Himalayas, Japan and Indo-China.
- New Species bears thick leaves and attractive purple flowers.
 - It is named in honour of late Chau Phunkyoo Nomchoon, a social reformer from Arunachal Pradesh's Khapti community.
- BSI established in 1890, is the apex research organization under the Ministry of Environment Forest and Climate Change.
 - It carries out taxonomic studies on wild plant resources of country.

4.Enabling Communications on Real-time Environment (ENCORE)

- Election Commission of India (ECI) designed in-house software for complete Candidate and election management through 'ENCORE'.
- It is an end-to-end application for returning officers to digitize the votes polled, tabulate the round-wise data, and then take out various statutory reports of counting.
- Another application called the ENCORE Scrutiny Application allows Returning Officers to scrutinize the nominations filed by the candidates online.
- Through the ENCORE Nodal App, various departments like fire, education, police, environment, etc give 'no objection' certificates for holding rallies, road shows, etc to political parties or candidates

5.Common Research and Technology Development Hubs (CRTDHs)

Context: DSIR-Common Research and Technology Development Hubs (CRTDHs) Conclave-2023 Inaugurated at Indian Institute of Technology, Gandhinagar

About CRTDHs

- Department of Scientific and Industrial Research (DSIR) has been implementing a program known as “Common Research and Technology Development Hubs (CRTDHs)”
- It aims to encourage Micro, Small, and Medium Enterprises (MSMEs) for conducting industrial R&D/innovation activities and strengthening R&D infrastructure in Public Funded Research Institutions (PFRIs).
- It recognizes the importance of MSMEs in the overall economy of India and therefore focuses on the creation of R&D infrastructure in driving scientific advancements, technological innovations and socio-economic development.
- Initiated in the year 2014-15, has now entered the 10th year of successful implementation with 18 CRTDHs across the country.
- These CRTDHs have notable achievements along with success stories of some of the stakeholders associated with them which are truly forwarding the vision of “Atma Nirbhar Bharat” and strengthening the momentum for “Vocal for Local”.

ANSWER WRITING

Examining the obstacles and effects of communalism on national development and social cohesion, talk about how state policies can combat communalism.

Introduction

It is an ideology that prioritizes a religious group's unique identity in relation to other groups and has a propensity to advance that group's interests at the expense of others. It is frequently employed as a tool of political propaganda in order to support vote-bank politics.

Challenges and Implications of Communalism:

Social Disparities and Estrangement

- Communalism creates a sense of "us vs. them" between various religious or ethnic groups. Communities that are divided as a result frequently experience alienation, mistrust, and isolation.

Violence and Conflict

- Tensions within the community have the potential to turn violent and result in the loss of life and property.

Financial Inequalities

- Economic inequality can result from communalism because some groups are discriminated against in the workplace and in business opportunities. This could obstruct the nation's economic development.

Instability in politics

- These differences can be taken advantage of by communal politics, which can result in instability and poor governance.

➤ **State Policies' Role in Combating Communalism**

Reforms in Education

- Encourage nonreligious education that promotes respect and understanding between various communities.
- Incorporate curricula that honour diversity and encourage unity among all Americans.

Lawful Structures

- Enforce stringent anti-discrimination legislation to safeguard each community's rights.
- Make sure cases of communal violence receive prompt, equitable justice.
- The National Commission for Communal Harmony, Justice, and Reparation was established by the Ministry of Home Affairs to address and prevent communal violence.

Community Engaged

- Promote cooperation and communication across religious and ethnic divides.
- Encourage neighbourhood-based initiatives that advance social cohesion.
- The Hamari Dharohar program was started by the Ministry of Minority Affairs in order to protect the rich cultural legacy of India's minority communities.

Media Control

- Control the media to stop hate speech and false information from spreading, as these things can heighten tensions within communities.
- Encourage impartial reporting that emphasizes diversity and cohesion.

Financial Integration

- Adopt affirmative action measures to guarantee marginalized communities equitable access to the economy.
- Invest in development initiatives in regions where there has been a history of intercommunal strife.
- The Prime Minister's New 15 Point Programme for the Welfare of Minorities has been put into effect by the Ministry of Minority Affairs.

Reforms in Politics

- Urge political parties to refrain from using racial divisions as a means of gaining electoral advantage.
- Encourage representative and inclusive governance frameworks.
- Guidelines have been released by the Election Commission of India (ECI) to stop the exploitation of caste and religion for political advantage.

Conclusion

A nation's overall development and social cohesion are seriously hampered by communalism. Governments have the power to foster an atmosphere that supports the advancement and sustainable development of all citizens by tackling the underlying causes of communalism and encouraging unity. Prioritizing these policies is essential for nations to guarantee a more promising and united future.

MCQs

- With reference to River Dolphins, consider the following statements:
 - Amazon river dolphin is also known as the pink river dolphin or boto.
 - Ganges river dolphin is the largest river dolphin.
 - The population of the Indus River dolphin has experienced a significant decline in recent times.
 How many of the above statements are correct?
 - Only one
 - Only two
 - Only three
 - None
- With reference to China's Population Policy, consider the following statements:
 - China embarked upon its one-child policy in 1980, when the country's population was approaching one billion.
 - From 2010, the Government of China adopted a two child policy— a policy change that significantly helped to arrest the rapid fall in population growth.
 - The Three Child Policy was announced after China's 2020 census data which showed that the country's rate of population growth is falling rapidly.
 How many of the statements given above are correct?
 - Only one
 - Only two
 - All three
 - None
- Consider the following statements regarding Commando Battalions for Resolute Action (CoBRA):
 - It is a specialized unit of the Indian Army specifically trained in guerilla warfare.
 - It was originally established to counter the left wing extremism.
 Which of the statements given above is/are correct?
 - 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
- Consider the following statements regarding Tellurium:
 - It has properties of both metals and non-metals.
 - It is found combined with metals in minerals.
 Which of the statements given above is/are correct?
 - 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
- Consider the following statements regarding the Vitrimers plastic:
 - It can be reshaped numerous times when exposed to higher temperatures.
 - It is biodegradable plastic.
 Which of the statements given above is/are correct?
 - 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
- With reference to the H.pylori, consider the following statements:
 - It is a virus that affects human nervous system.
 - It usually infects a person during his childhood.
 - It is treated with combination of antibiotics and a proton-pump inhibitor.
 How many of the above statements are correct?
 - Only one
 - Only two
 - All three
 - None
- The NASA's Kepler Space Telescope was launched to:
 - Explore black holes in distant galaxies
 - Study the formation of comets within our solar system
 - Determine the abundance of Earth-sized planets and their orbits**
 - Measure the atmospheric composition of gas giants
- The Adaptation Gap Report, sometimes seen in the news, is published by:
 - United Nations Environment Programme**
 - World Economic Forum
 - United Nations Development Programme
 - World Bank
- Consider the following statements regarding the Taurid meteor shower:
 - These are debris from the periodic Comet 2P/Encke.
 - These are caused by the gravitational pull of Neptune.
 Which of the statements given above is/are correct?
 - 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
- The Enabling Communications on Real-time Environment (ENCORE) software is developed by:
 - Indian Space Research Organisation
 - NITI Aayog
 - National Medical Commission
 - Election Commission of India**