

NATIONAL SOCIAL ISSUES- WOMEN, POPULATION, URBANISATION, EMPOWERMENT ETC**Composite Water Management Index 2.0**

NITI Aayog in association with Ministry of JAL Shakti and Ministry of Rural Development has released Composite Water Management Index 2.0.

Background to CWMI: India is experiencing a very significant water challenge, approximately 820 million people of India - living in twelve river basins across the country have per capita water availability close to or lower than 1000m³ – the official threshold for water scarcity as per the Falkenmark Index.

About the Report

- NITI Aayog first launched and conceptualized the Composite Water Management Index in 2018 as a tool to instil a sense of cooperative and competitive federalism among the states.
- It provided actionable guidance to States on where they were doing well absolutely and relatively and what they needed to focus on to secure their water
- The index comprises 9 themes.

Key Findings

- CWMI 2.0 ranks various states for the reference year 2017-18 as against the base year 2016-17.
- Gujarat (continues to hold on to its rank one in the reference year (2017-18), followed by Andhra Pradesh, Madhya Pradesh, Goa, Karnataka and Tamil Nadu.
- In North-Eastern and the Himalayan States, Himachal Pradesh has been awarded rank 1 in 2017-18 followed by Uttarakhand, Tripura and Assam.
- For the first time, Union Territories have submitted their data and Puducherry has been declared the top performer.
- 80% of the states have shown improvement in their water management scores over the last three years.

INTERNATIONAL AFFAIRS- BILATERAL, GROUPINGS, ORGANISATIONS**Greenland**

U.S. President Donald Trump wanted to buy Greenland, an autonomous province of Denmark. Upon being told that Greenland was not, in fact, for sale, Trump promptly cancelled a planned state visit to Denmark for what he termed the Danish PM's "nasty" remarks.

About:

- Location: Greenland, an autonomous province of Denmark, is located to the north east of Canada.
- Demography: Most of its inhabitants are Inuit whose ancestors migrated from Canada.
- Capital: Nuuk.
- Governance: The autonomous Danish dependent territory has limited self-government and its own parliament. While its government decides on domestic matters, foreign and security policy is handled by Denmark.
- Economy: Denmark contributes two thirds of Greenland's budget revenue, the rest coming mainly from fishing.
- Significance:
 - The US President wants to buy the Danish territory as it is in a crucial strategic location in case tensions with Russia rise - but admits it's not a No1 priority.
 - Potential oil, gas and rare earth mineral reserves have also attracted prospecting firms.
- Legal Obstacles To Sale: Any sale would require a change to Greenland's legal status through an amendment to Denmark's constitution. Since 2009 Greenland has held the right to declare independence from Denmark. If Greenland do so, it could choose to become associated with the United States. But few Greenlanders see independence as viable given their economic dependence on Denmark, part of the affluent European Union.

Territories earlier purchased by USA

- In 1803, the US struck a land deal with France to buy 827,000 square miles of land called the Louisiana Purchase. It massively expanded the US' territory.

- In 1819, the US bought Florida from Spain.
- The US bought Alaska from Russia for \$7.2m in 1867.

India France

India's Prime Minister on his two-day visit to France is supposed to participate in G-7 meeting scheduled to be held in France as a non-member country on the invitation of France for the first time. He had a discussion on a spectrum of issues with France President. The followings are key takeaways of recently concluded visit:

- **Terror:** France backed the PM's proposal to hold a global conference on terrorism. The two leaders asked UN countries to support organising new "No Money for Terror" International Conference on Fighting Terrorist Financing in Melbourne.
 - Two countries agreed to enhance their operational cooperation and launch fresh efforts to fight radicalisation, especially Online Radicalisation.
 - The two leaders reaffirmed their support for the implementation of the Christchurch Call to Action to eliminate terrorist and violent extremist online content adopted in Paris last May.
- **Defence:** Both countries showed satisfaction towards the progress in implementation of agreements signed and reaffirmed their commitment to further strengthen cooperation in defence industry field in the spirit of "Make in India" and for the mutual benefit of both countries.
 - The first of the 36 Rafale aircraft is likely to be delivered in the third week of September.
- **Nuclear:** Both countries expressed satisfaction with the progress in negotiations between NPCIL and EDF since the conclusion of the Industrial Way Forward Agreement between the two parties in 2018 for construction of six nuclear power reactors in Jaitapur, Maharashtra.
- **Space:** Both have decided to deepen space cooperation to meet new challenges together, whether it concerns planetary exploration or human spaceflight.
 - They took the decision to train medical support personnel for Indian astronauts, who will be part of India's manned space mission by 2022.
- **Cyber:** Both countries adopted a cybersecurity and digital technology roadmap aimed at expanding Indo-French bilateral cooperation, particularly in the strategic sectors of high-performance computing and Artificial Intelligence, with the target of bringing start-up ecosystems closer to each other.
- **Maritime:** Based on a shared commitment to maintaining the freedom of navigation, particularly in the Indo-Pacific zone.
 - France and India reviewed the swift implementation of the conclusions of the Joint Strategic Vision of India-France Cooperation in the Indian Ocean Region, adopted during the last visit of France president.
 - For the implementation of the White Shipping agreement, India and France agreed on the appointment of a French liaison officer at the Information Fusion Centre – Indian Ocean Region (IFC-IOR) in Gurgaon.
 - They signed an Implementing Arrangement for the establishment of a framework for the realisation of joint maritime domain awareness mission. This is to keep an eye on Chinese assertive moves in the Indian Ocean region.
- **Economic engagement:** The two sides decided to have an appropriate framework to find ways to further promote bilateral trade and investment
- **Issue of Afghanistan:** The two sides decided to cooperate actively for international peace and security. They supported an inclusive peace and reconciliation process in Afghanistan which is Afghan-led, Afghan-owned and Afghan-controlled, leading to a lasting political solution based on preservation of the gains, including the constitutional order, human rights, particularly women's rights, and liberties gained over the past 18 years.
 - They called for the timely holding of Presidential elections; cessation of terrorist violence; and an end to terrorist safe havens for enduring and sustainable peace, security and stability in Afghanistan.

World Youth Conference For Kindness

The first-ever World Youth Conference for Kindness was organised by the UNESCO's Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP) and Ministry of Human Resource (MHRD) at New Delhi.

About Conference

- The theme of the conference was 'Vasudhaiva Kutumbakam: Gandhi for the Contemporary World: Celebrating the 150th birth anniversary of Mahatma Gandhi.'
- The main purpose of the conference was to impart critical competencies (i.e. empathy, compassion, mindfulness and critical inquiry) in global youth to inspire, empower and enable them to transform themselves and build long-lasting peace in their communities.

The conference comprises of following:

- intensive youth-led capacity building workshops to enhance the capacities of youth on social and emotional learning skills and competencies such as empathy, mindfulness, compassion, kindness and critical inquiry through the prism of identity and global issues.
- a platform to celebrate inspiring acts of kindness that are effecting change in the world and action programming for youth agency.
- a generative space consisting of experts panels and TAGe plenary for youth and experts to share and critically engage with the concept of peace through kindness and nonviolence.

Akademik Lomonosov

Akademik Lomonosov, a Russian ship that has floating nuclear units, started its first journey from the Russian port of Murmansk to the arctic town of Pevek despite opposition from environmental groups. It the world's only floating power unit and the world's northernmost nuclear installation.

Significance of a floating nuclear plant.

- It is suited for powering remote areas and island states that require stable, green sources of energy.
- It will power the extraction of natural resources in the Arctic region.
- The portable nuclear plants will help to reduce emissions of carbon dioxide, thus help in mitigating climate change.
- China and the US are also working on sea-based nuclear power plants, and France has explored the possibility.
- However, the environmental group Greenpeace has called the plan "Chernobyl on Ice".
 - Chernobyl accident is the 1986 nuclear power plant meltdown in erstwhile USSR, which released large levels of nuclear radiation into the atmosphere, forced thousands to flee their homes and sparked long-term fears of health and environmental repercussions.

FATF may Blacklist Pakistan

Recently, the Asia Pacific Group of the Financial Action Task Force (APG) has placed Pakistan in the Enhanced Expedited Follow-up List (or APG's Black List) for failure to meet its standards.

- Pakistan has been found non-compliant on 32 of the 40 compliance parameters of terror financing and money laundering.
- Earlier also, the FATF had placed Pakistan in grey list and warned that its failure to complete its action plan on terror financing could possibly lead to the country getting blacklisted.
- This listing of Pakistan by APG, have further raised problems for Pakistan, as the 15-month timeline of FATF's 27-point action plan ends in October 2019.
- If Pakistan fails to take the required steps, it may get into FATF's blacklist in October 2019.
- The APG is one of nine regional affiliates of the FATF.
- India is a member of both the APG and the FATF consultations and is represented by a team of officials from the Ministries of Finance, External Affairs and Home Affairs.

INDIAN ECONOMY**Development Finance Institution to Fund Infrastructure**

The government has proposed to set up a Development Financial Institution (DFI) to solve the infrastructure financing needs of the country.

- The establishment of such an institution is considered as a positive step as banks do not have the long-term funds to finance such projects.
- Banks cannot afford to lend for such projects because that would shrink their lending capacity as the funds get locked up in such projects for that time period.

Why India needs DFIs to Fund Infrastructure?

- To boost economic growth which would increase capital flows and energise capital markets.
- To improve long term finances.
- To provide credit enhancement for infrastructure and housing projects
- As India does not have a development bank, DFI would fulfil the need for us to have an institutional mechanism.
- Debt flow towards infrastructure projects would be improved.

The RBI had also specified in 2017 that specialised banks could cater to the wholesale and long-term financing needs of the growing economy and possibly fill the gap in long-term financing. Thus, it would be wise to revive the concept of DFI if the government wishes to keep societal, cultural, regional, rural and environmental concerns intact.

Decriminalisation of CSR Violation

Finance Minister has announced that corporate social responsibility (CSR) violations would not be treated as criminal offences and would instead be a civil liability.

- The imprisonment of up to 3 years for officials of companies that fail to comply with the specified corporate social responsibility (CSR) expenditure has been rolled back.
- Recently, Injeti Srinivas panel had been set up to study CSR expenditure.
- Implications of decriminalisation of CSR Violations:
 - It will allow the corporations to think and employ their CSR funds in an effective way.
 - Freedom to decide and choose the field of CSR related work for corporations.
- Recently, Parliament passed amendments to the Companies Act, 2013 which includes:
 - Unspent CSR funds by companies should be transferred into an escrow account called Unspent Corporate Social Responsibility Account.
 - The transferred funds needs to be utilised within three years of transfer.
 - Any unspent annual CSR funds must be transferred to one of the funds under Schedule 7 of the Companies Act like Prime Minister's Relief Fund within six months of the financial-year end.

Corporate Social Responsibility: Under the Companies Act, 2013, certain classes of profitable entities are required to spend at least two per cent of their three-year annual average net profit towards Corporate Social Responsibility (CSR) in a particular financial year.

ENVIRONMENT- CONSERVATION, BIO-DIVERSITY AND ISSUES

Amazon Fires

Over the last several days, the Amazon rainforest has been burning – mostly caused by farmers clearing land – at a rate that has alarmed environmentalists and governments worldwide.

Trend this year:

- There have been more than 72,800 fires in Brazil this year, with more than half in the Amazon region -- an 80% increase compared with the same period last year -- according to the country's National Institute for Space Research (INPE).
- Brazil's Amazon has lost more than 344,500 hectares (1,330 square miles) of forest cover between January and June, according to INPE.

Reason:

- Forest fires are common in the Amazon during the dry season, which runs from July to October. They can be caused by naturally occurring events, such as by lightning strikes, but also by farmers and loggers clearing land for crops or grazing.
- However activists also blame Brazil's far-right president, Jair Bolsonaro, who has encouraged such tree-clearing activities for agriculture and mining.

Concern:

- The Amazon, the world's largest rainforest, is roughly half the size of the United States and produces 20 per cent of the oxygen in the Earth's atmosphere.

- It is a repository of rich biodiversity and is also home to indigenous communities whose live is now under threat.
- Carbon intake by the Amazon basin matches the emissions released by nations in the basin. The burning of forests, therefore, implies additional carbon emissions.
- Amazon rainforest influences the water cycle not only on a regional scale, but also on a global scale. The rain produced by the Amazon travels through the region and even reaches the Andes mountain range.

Clouded Leopard

A recent research paper published on clouded leopards by over 20 researchers from across the globe has helped understanding the habitats, migration corridors and laid out the conservation strategies.

About:

- Sub Species: Classically considered a single species, the Clouded Leopard has recently been split into two species.
 - Neofelis Nebulosi: It is restricted to mainland Southeast Asia.
 - Neofelis Diardi: It is found on the islands of Sumatra and Borneo.
- Physical description:
- Clouds: It is named after the distinctive 'clouds' on its coat - ellipses partially edged in black, with the insides a darker colour than the background colour of the pelt.
- Range: Historically, their range covered most of Southeast Asia from Nepal and southern China through Thailand, Indonesia, and Borneo. It is regionally extinct in Singapore and Taiwan.'
- In India, it occurs in north-east and West Bengal. It is the state animal of Meghalaya.
- Dampa tiger reserve in Mizoram has one of the highest population densities.
- Habitat: Subtropical/Tropical Moist Forests.
- Conservation status: Both the species are listed as Vulnerable in IUCN red list.
- In 2018, India added clouded leopards to its Recovery Programme for Critically Endangered Species to aid more research and strengthen conservation efforts.

Mesovelgia

Scientists of the Zoological Survey of India have discovered seven species of water treaders, semi-aquatic insects that can walk or run on the surface of water.

About:

- The newly described species belong to the genus Mesovelgia whose size ranges from 1.5 mm to 4.5 mm and are equipped with hydrophobic setae (bristles) on their legs. The combination of hydrophobic setae and water surface tension prevents them from sinking.
- These bugs are hemimetabolous insects without having larval stage i.e., they go from egg to nymph to adult.
- They are found on freshwater bodies such as ponds, lakes, pools, streams, rocks with moss and sometimes on estuaries.
- There are 12 species of genus Mesovelgia found in the country.

Mesovelgia vs water striders:

- Other than the size, there are morphological features that make these pond-weed insects different from water striders.
- The claws of Mesovelgia are placed apically (tip or extreme end of legs), whereas in water striders, they arise from the pre-apex (just before the tip) of legs.

QUOTE OF THE DAY

You get in life what you have the courage to ask for.

DAILY ANSWER WRITING PRACTICE

Qns: Discuss the causes and impact of the Forest Fires in Indian perspective? Discuss India's preparedness to prevent such calamities.

Ans:

While aiming to expand the forest cover in the country, it is equally important to improve the state and quality of existing forests and protect them against various threats and drivers of degradation. Forest fires are a major cause of degradation of India's forests.

Fires in forest are not unnatural. It has been a natural part of the ecosystem since origin of forest on this planet. Most of the fires are very useful and for good natural forest development and regeneration. Throughout historic time-forest fires have been ignited and burned naturally through the forest. These low intensity fires in past kept the forest floor free from the natural annual build up of the litter i.e. tree needles, dead grass, senescent leaves & twigs, thick brush, and dead trees. As a result, fire -has shaped vegetation patterns and wildlife distributions in the Forests. The normal fire season in India is from the month of February to mid June. Fire effects on all forests are not equal. While same fire, beneficial for one ecosystem, may be for the other, depending upon the climatic conditions, and type of vegetation.

Tropical rain forests choked in fog and continuously drenched by mists and downpours are least susceptible to fires. In deciduous forests of temperate region, as a result of heavy rainfall and dampness and relatively high humidity, fire is very occasional and less damaging.

Evergreen forests with broad leaves of dry areas and conifer forests are more susceptible to fire in general.

But now about 90% of the forest fires in India are created by humans.

People for some personal gain of rivalry with forest department cause intentional forest fire. Examples are:

- Shifting Cultivation
- To get good grass/fodder crop
- To promote better flush for tendu leaves
- For concealing the illicit felling
- For cleaning forest paths by the villagers
- To settle scores

Some Accidental or Unintentional Causes of forest fire are:

- Collection of Non Timber Forest Produce (NTFP)
- Burning farm residue
- Protecting crops from the Wild animals
- Careless throwing of cigarettes, bidi stubs, match sticks by grazers/travellers
- Negligence in camp fires and working operations near camping ground and fairs
- Sparks from transformers or vehicles passing through the forest
- Uncontrolled prescribed burning
- Resin tapping
- Charcoal Making and wine extracting in the forest
- Sparks from the house kitchen near the forest
- Heating coal tar for road construction
- Hunting by tribal

Impact of Fire

- Fire severely affects the survival and establishment of many shrub species.
- Soil heating due to fire changes its chemical, physical and microbial properties.
- The increase in ammonium and nitrate concentrations in many ecosystems has also been reported as a result of fire incidences.

- The most damaging impact of forest fire on ecosystem is very evident in the Himalayas, where hill existing between the heights of 1000 to 1800 meters are dominated by pine forests and seems to be more fire prone.
- Degradation of water catchments areas resulting into loss of water.
- Loss of wildlife habitat and depletion of wildlife.
- Loss of natural vegetation and reduction of forest cover.
- Global warming.
- Micro-climate change.
- Soil erosion.
- Deteriorating Biological Environment.
- Adverse impact on Health System.
- Socio-economic impact due to loss of valuable timber resources and associated cultural wealth.
- Carbon sequestration potential gets adversely affected.
- Threat to Life and Property.
- Reducing Tourism Values.

Forest Fire Management

The Government of India took number of the progressive steps for protection, preservation and management of forests, including:

- The Indian Forest Service was revived in 1966 to ensure coordinated professional management of Forests. The purpose of establishing this cadre of officers has been safety and protection of environment and taking care of national interest.
- The subject 'Forest' was transferred from the State List to the Concurrent List of the Constitution of India in 1976 to ensure uniform policy and management throughout the nation. '
- The Ministry of Environment and Forests & Climate Change, Government of India, has prepared a National Master Plan for Forest Fire Control. This plan proposes to introduce a well-coordinated and integrated fire-management programme that includes the following components:
 - Prevention of human-caused fires through education and environmental modification. It will include silvicultural activities, engineering works, people participation, and education and enforcement. It is proposed that more emphasis be given to people participation through Joint Forest Fire Management for fire prevention.
 - Prompt detection of fires through a well coordinated network of observation points, efficient ground patrolling, and communication networks. Remote sensing technology is to be given due importance in fire detection. For successful fire management and administration, a National Fire Danger Rating System (NFDRS) and Fire Forecasting System are to be developed in the country.
 - Fast initial attack measures.
 - Vigorous follow up action.
 - Introducing a forest fuel modification system at strategic points.
 - Firefighting resources.
 - Integrated forest protection: The main objective of this scheme to control forest fires and strengthen the forest protection. The works like fire-line clearing, assistance to Joint Forest Management committees, creating water bodies, purchase of vehicles and communication equipments, purchase of fire fighting tools, etc., are being undertaken under this.

Each of the above components plays an important role in the success of the entire system of fire management. Special emphasis is to be given to research, training, and development

DAILY CURRENT AFFAIRS MCQ

1. With reference to water management in India, consider the following statements:
 1. Composite Water Management Index is prepared and released by the NITI Aayog in association with Ministry of JAL Shakti and Ministry of Rural Development.
 2. Among the Union Territories, Puducherry was ranked first in the Composite Water Management Index 2.0.
 3. Introduction of crops like millets, pulses and oilseeds in the Mid-Day Meal Scheme (MDM) can address the issue of water scarcity in India.

Select the correct answer using codes given below:

(a) 1 and 2 (b) 1 and 3
(c) 1 only (d) **1, 2 and 3**
2. Recently in news, 'Falkenmark Index' is related to?
 - (a) Green House Gases
 - (b) **Water Scarcity**
 - (c) Transfat
 - (d) None of the above
3. Which of the following pairs is/are correctly matched?

Indigenous people	Country
1. Inuit	Greenland
2. Basques	Chile
3. Sami	South Africa

Select the correct answer using the code given below:

(a) **1 only** (b) 1 and 2
(c) 2 and 3 (d) 1, 2 and 3
4. With reference to the Asia/Pacific Group On Money Laundering, consider the following statements:
 1. It is a Non-Governmental Organization which implements the international standards against money laundering and terrorist financing.
 2. It was established in 1997 with its secretariat located at Sydney, Australia.

Which of the statements given above is/are correct?

(a) 1 only
(b) **2 only**
(c) Both 1 and 2
(d) Neither 1 nor 2
5. What is Akademik Lomonosov, recently seen in news?
 - (a) Anti-tank missile developed by Russia.
 - (b) **World's first floating nuclear reactor launched by Russia.**
 - (c) Composite volcano in the northern region of Siberia.
 - (d) World's southernmost city.
6. Consider the following statements:
 1. Recently the Union Government has proposed to set up India's first Development Financial Institution (DFI) to solve the infrastructure financing needs of the country.
 2. National Housing Bank is a type of DFI established to provide financial support to Housing projects.

Which of the statements given above is/are correct?

(a) 1 Only
(b) **2 Only**
(c) Both 1 and 2
(d) Neither 1 nor 2
7. Which of the following is the world's largest rainforest?
 - (a) **Amazon Rainforest**
 - (b) Congo Rainforest
 - (c) Valdivian Temperate Rainforest
 - (d) Southeast Asian Rainforest
8. With reference to the Mesovelia, consider the following statements:
 1. Recently Scientists of the Zoological Survey of India have discovered seven species of water treaders, semi- aquatic insects - belonging to the genus Mesovelia - that can walk or run on the surface of water.
 2. The combination of hydrophobic setae and water surface tension prevents them from sinking.

Which of the statements given above is/are correct?.

(a) 1 only
(b) 2 only
(c) **Both 1 and 2**
(d) Neither 1 nor 2
9. With reference to the Clouded Leopard, consider the following statements:
 1. In 2018, India added clouded leopards to its Recovery Programme for Critically Endangered Species to aid more research and strengthen conservation efforts.
 2. Periyar tiger reserve in Kerala has one of the highest population densities of Clouded Leopard.

Which of the statements given above is/are correct?

(a) **1 only**
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2