

CONSTITUTION AND POLITY**Removal of Judges**

Months after an in-house panel found an Allahabad High Court judge, Justice S.N. Shukla, guilty of misconduct, Chief Justice of India Ranjan Gogoi has written to Prime Minister Narendra Modi to initiate a motion for his removal.

Removal of Judges:

- Article 124(4) and the Judges Inquiry Act 1968 determine the procedure of removal of the judges:
- A motion of impeachment addressed to the President is to be signed by at least 100 members of the Lok Sabha or 50 members of the Rajya Sabha and then delivered to the Speaker of Lok Sabha or the Chairman of Rajya Sabha.
- The motion is to be investigated by a Committee of 3 judges of the Supreme Court and a distinguished jurist.
- If the Committee finds the judge guilty of misbehavior or that he suffers from incapacity, the motion along with the report of the committee is taken up for consideration in the House where motion was moved.
- The judge is then removed by the requisite majority, i.e. majority of total and 2/3 of its members present and voting.

Key facts:

- A member of the higher judiciary, which means the Judges and Chief Justices of the Supreme Court of India and the state High Courts, can be removed from service only through the process of impeachment under Article 124 (4) of the Constitution.
- A judge is removable from his office, only on the grounds of proved misbehavior or incapacity.
- Parliament is empowered to regulate the procedure for the investigation and proof of such misbehavior or incapacity.
- A judge may be removed from his office only by an order of the president.

Issues present and the need for reforms:

- Method pursued by the legislature in the Act of 1968 falls abysmally short of the mark as the same makes judges susceptible to a political process of voting which may or may not impeach judges despite a 3-member committee holding the Judge guilty. Such an event is a travesty of natural justice as there is propensity for a 'guilty' judge to be let off on the whims of a political process of voting.
- Entire process concerns of a possibility of harming judicial independence. This stems from a possibility of Judges being harassed to toe the ideology of a party in majority or face their wrath in an impending motion of impeachment.
- The words "misbehaviour" or "incapacity" have neither been defined nor clarified in the Constitution.
- The process of removing a judge is too elaborate and somewhat cumbersome.

INTERNATIONAL AFFAIRS- BILATERAL, GROUPINGS, ORGANISATIONS**Saudi Arabia becomes 1st Arab country to get FATF membership**

Saudi Arabia has become the first Arab country to be granted full membership of the Financial Action Task Force (FATF) following the group's annual general meeting in the US.

The kingdom's accession came as the global money laundering watchdog celebrated the 30th anniversary of its first meeting held in Paris in 1989.

Saudi Arabia had received an invitation from the FATF at the beginning of 2015 to join as an "observer member".

About FATF:

- The Financial Action Task Force (FATF) is an inter-governmental body established in 1989 on the initiative of the G7. It is a "policy-making body" which works to generate the necessary political will to bring about national legislative and regulatory reforms in various areas. The FATF Secretariat is housed at the OECD headquarters in Paris.
- Objectives: The objectives of the FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system.
- Functions: The FATF monitors the progress of its members in implementing necessary measures, reviews money laundering and terrorist financing techniques and counter-measures and promotes the adoption and implementation of appropriate measures globally. In collaboration with other

international stakeholders, the FATF works to identify national-level vulnerabilities with the aim of protecting the international financial system from misuse.

- FATF maintains two different lists of countries: those that have deficiencies in their AML/CTF regimes, but they commit to an action plan to address these loopholes, and those that do not end up doing enough. The former is commonly known as grey list and latter as blacklist.
- Once a country is blacklisted, FATF calls on other countries to apply enhanced due diligence and counter measures, increasing the cost of doing business with the country and in some cases severing it altogether.

India out of GSP programme

The US has announced its intention to “terminate” India’s designation as a beneficiary of its Generalized System of Preferences (GSP) duty concession programme.

Why such move?

- Under the programme, certain products can enter the US duty-free if beneficiary developing countries meet the eligibility criteria established by its Congress.
- US said that India had failed to provide assurances to the US for “equitable and reasonable” access to its markets in numerous sectors.
- US’s refers to India as a “very-high tariff nation” and demands for a “reciprocal tax” on goods from India.

What is GSP?

- The GSP is a US trade preference programme designed to promote economic development by allowing duty-free entry for thousands of products from designated beneficiary countries.
- The concept of GSP is very different from the concept of MFN as it provides equal treatment in the case of tariff being imposed by a nation.
- But in case of GSP, differential tariff could be imposed by a nation on various country whether it is a developed country or a developing country.
- Both the rules comes under the purview of WTO.
- GSP provides tariff reduction for least developed countries but MFN is only for not discriminating among WTO members.

India and GSP

- India has been the biggest beneficiary of the GSP regime and accounted for over a quarter of the goods that got duty-free access into the US in 2017.
- Exports to the US from India under GSP — at \$5.58 billion — were over 12 per cent of India’s total goods exports of \$45.2 billion to the US that year.
- The US goods trade deficit with India was \$22.9 billion in 2017.
- With India exporting \$6.3 billion worth of goods to the US under GSP in 2018 and availing duty concession to the tune of only \$240 million last year.

Impact of GSP withdrawal

- Even after US withdrawal of GSP, India continues to enjoy tariff preference from many countries including Australia, Russia and Japan, as well as the European Union (EU), among others.
- Indian exports to these countries was nearly five times the total exports to the US in 2018.
- Within the group of countries that provided GSP benefit to India, exports to EU nations were highest, followed by the US, Japan, Russia and Australia, respectively.
- As exports under GSP accounted for over 11 per cent of India’s total goods exports of \$54.4 billion to the US last calendar year, the withdrawal could affect India’s competitiveness in exports.
- Indian exports from US included organic chemicals, raw materials, iron, steel, furniture, aluminium and electrical machinery.

DISASTER MANAGEMENT

Flood Hazard Zonation Atlas for Odisha

Odisha has come out with a unique flood hazard atlas on the basis of historic flood inundation captured through satellite imagery over the period from 2001 to 2018. It is expected to help the State manage floods more efficiently.

Flood Hazard Zonation Atlas

- The National Remote Sensing Centre (NRSC) of the ISRO had taken the study on flood hazard Zonation for Odisha.
- A large number of satellite images acquired over 18 years (2001-2018) were used. All satellite data sets were analysed and flood layers were extracted.

- All the flood layers corresponding to a year are combined as one inundation layer, so that this layer represents the maximum flooded area in one year.
- The NRSC analysis says about 8.96% (13.96 lakh hectares) of land in Odisha was affected by floods during 2001-2018. Out of total flood-affected area (13.96 lakh hectares), about 2.81 lakh hectares of land falls under high (inundated seven-nine times) to very high (inundated 10-14 times) flood hazard categories.
- Eight out of 30 districts such as Bhadrak, Kendrapara, Jagatsinghapur, Balasore, Puri, Jajpur, Khordha and Cuttack districts are more flood-affected districts.
- As high as 77% of Bhadrak and 70% of the Kendrapara district have been categorised as flood hazard.

Why Odisha?

- Vast areas of the State are inundated when there is flooding every year in major rivers, namely, the Mahanadi, Brahmani, Baitarani, Subarnarekha and Rushikulya.
- Some of the rivers like, the Vamsadhara and Budhabalanga, also cause flash floods due to instant run-off from their hilly catchments.
- Damages due to floods are caused mainly by the Mahanadi, the Brahmani and the Baitarani, which have a common delta where floodwaters intermingle, and, when in spate simultaneously, wreak considerable havoc.
- The entire coastal belt is prone to storm surges, which is usually accompanied by heavy rainfall, thus making the estuary region vulnerable to both storm surges and river flooding.

A useful resource

- All such combined flood layers for 18 years were integrated into flood hazard layer representing the observed flood-inundated areas with different frequencies.
- This layer was integrated with the digital database layers of Odisha.
- The atlas would serve as a useful resource of information for policy makers, planners and civil society groups.

Chennai Running dry

After a dry spell of almost 200 days, Chennai received monsoon showers last week. But this has not mitigated the water crisis in Tamil Nadu's capital.

Background:

Clashes over water have been reported from different parts of the city and firms in Chennai's Information Technology Park have asked employees to either work from home or bring their own water. The state government and the city's municipality have blamed the crisis on the deficient Northeast Monsoon in October-November last year. They are not completely wrong. However, the fact also is that in the past five years, Chennai's water supply has consistently fallen short of the city's requirement. The Chennai Metropolitan Water Supply and Sewerage Board has been able to supply only 830 million litres a day (mld) as against the demand of about 1,200 mld. This year, the agency's water supply dipped to 550 mld.

The water crisis in Chennai

- Chennai is a rain-shadow city.
- It gets more than 80 per cent of its water from the Northeast Monsoon.
- In the past, this water was stored in ponds, canals and lakes which would minimise the run-off — that a coastal city is susceptible to — and recharge groundwater.
- Besides, according to a study by researchers at the geology department of Chennai's Anna University, the city had more than 60 large water bodies at the turn of the 20th century.
- Three major waterways — the Buckingham canal and the rivers, Adyar and Cooum — crisscrossed Chennai.
- But Tamil Nadu's capital today has only 28 water bodies, large or small, notes the Anna University study.
- The Pallikaranai marshland which used to sprawl over more than 6,000 hectares has shrunk to about 650 hectares.
- A growing body of literature has shown that urban planners gave short shrift to the imperatives of Chennai's hydrology to meet the city's infrastructural demands.
- A parliamentary panel that enquired into the causes of the Chennai floods in 2015, for example, reported that that real estate business had "usurped" the city's water bodies.

- Today, Chennai gets its water from four reservoirs, which have gone dry after the retreating monsoon failed last year. Chennai's desalination plants can barely supply a fifth of the city's water requirements.

Conclusion

- Chennai is amongst the 21 Indian cities which the Niti Aayog fears will run out of groundwater by 2020.
- The city's water crisis bares a critical challenge for the new Jal Shakti ministry.
- It has to play a leading role in resolving the tension in India's current urban planning paradigm between the developmental needs of people and water security imperatives.
- The new ministry should start by coordinating with local authorities in Chennai to rejuvenate the city's aquifers.

ENVIRONMENT- CONSERVATION, BIO-DIVERSITY AND ISSUES

Normalized Difference Vegetation Index (NDVI)

A field study by researchers from Bengaluru shows that a popularly used index that remotely estimates density of vegetation does not yield a reliable estimate of food abundance for elephants in tropical forests. In fact, researchers show that this index has a negative correlation with graminoids (grassy food – grasses, sedges and rushes – preferentially consumed by elephants) in tropical forests.

Normalized Difference Vegetation Index (NDVI)

- For both academic and practical purposes, there is the practice of remotely monitoring vegetation in an area and representing it in terms of maps and parameters.
- One such parameter used is the normalized difference vegetation index (NDVI) which is measured remotely from satellite data.
- The NDVI is a simple indicator which tells how much of the ground is covered with vegetation.
- It basically calculates the difference between the red and near infrared (NIR) components of light reflected by objects, from, say, a satellite.
- Since healthy vegetation strongly absorbs red and reflects near infrared light, this difference can indicate the presence of healthy vegetation and map it into a colour code.

Using NDVI

- NDVI always ranges from -1 to +1. But there isn't a distinct boundary for each type of land cover.
- For example, when you have negative values, it's highly likely that it's water. On the other hand, if you have a NDVI value close to +1, there's a high possibility that it's dense green leaves.
- But when NDVI is close to zero, there aren't green leaves and it could even be an urbanized area.

Why NDVI isn't a good measure of vegetation cover?

- NDVI was negatively correlated to grasses. This means grass abundance tends to be low in locations where NDVI is high and vice-versa.
- While canopy cover and shrub abundance contribute positively to NDVI, they negatively affect grass abundance.
- Because of the poor correlation, NDVI cannot be reliably used as a measure of forage abundance in a multi-storied forest with a low proportional abundance of food species.
- Grasses form a large component of food of elephants and also ungulates (hoofed animals) like deer, sambar and gaur.

Misleading Elephants data

- This has been used to estimate the amount of food abundance available to herbivorous animals, for example, elephants.
- The NDVI is used, for instance, in attempts to track the presence of elephants using the vegetation they consume.
- However, this work clearly establishes that this can be misleading, and field-based studies are the ones which can yield definitive results.
- Researchers in India have found that the abundance of food plants is not correlated with NDVI.

QUOTE OF THE DAY

Don't be pushed by your problems rather be led by your dreams.

DAILY ANSWER WRITING PRACTICE

What are the causes and consequences of the Water Crisis that India is facing today? Suggest measures for the crisis management.

Ans: Water scarcity is the lack of sufficient available water resources to meet the demands of water usage within a region. Water scarcity is being driven by two converging phenomena: growing freshwater use and depletion of usable freshwater resources.

Causes for water scarcity

- Inefficient use of water for agriculture. India is among the top growers of agricultural produce in the world and therefore the consumption of water for irrigation is amongst the highest (80 % of the water). Traditional techniques of irrigation causes maximum water loss due to evaporation, drainage, percolation, water conveyance, and excess use of groundwater
- Policies like several states giving free electricity to farmers or giving financial support for groundwater extraction -- borewells and tube wells -- results in uncontrolled exploitation and wastage of resource.
- Reduction in traditional water recharging areas. Rapid construction is ignoring traditional water bodies that have also acted as ground water recharging mechanism.
- Water is not valued in India. It is very cheap commodity in India. People think that if they own the land, they own the water. India as a country extracts the highest amount of groundwater in the world.
- Sewage and wastewater drainage into traditional water bodies.
- Lack of on-time de-silting operations in large water bodies that can enhance water storage capacity during monsoon.
- Lack of efficient water management and distribution of water between urban consumers, the agriculture sector and industry.
- Non-existent pricing of water. State governments have control over water-related policies, and the lack of legislation for groundwater extraction and the inability to price water for every home due to political constraints has led to a paralysis in the formation of a sustainable framework.

Consequences of water scarcity: According to a report by Niti Aayog:

- Six hundred million people are dealing with high to extreme water shortage. An average of 200,000 Indian lives is lost every year due to inadequate supply or contamination of water.
- India does not have an adequate number of sewage treatment plants, so untreated urban wastewater is often added to water flowing downstream -- the same contaminated water used in rural areas for drinking. Three-quarters of the Indian population is affected by contaminated water, and 20% of the country's disease is thought to directly correlate.
- 21 major cities are expected to run out of groundwater as soon as 2020, affecting around 100 million people
- About 75% of households do not have drinking water at home, 84% rural households do not have piped water access, and 70% of India's water is contaminated, with the country currently ranked 120 among 122 in the water quality index.
- The crisis is going to get worse. By 2030, the country's water demand is projected to be twice the available supply, implying severe water scarcity for hundreds of millions and an eventual loss of around 6% of the country's GDP.
- Droughts are becoming more frequent, creating severe problems, especially because approximately 53% of agriculture in India is rainfed. Interstate disagreements over water are on the rise, with seven major disputes raging right now.

Suggestions:

- There should be restrictions to cut off the access to groundwater in areas identified as "critical" and "dark zones", where the water table is overused or very low.
- There is a need to treat water as common resource rather than private property to prevent its overexploitation
- Problems and issues such as water logging, salinity, agricultural toxins, and industrial effluents, all need to be properly looked into.
- Research and scientific evaluations should be done before forming any policy.
- Water depletion can be controlled by reducing electricity subsidies.
- Another way of efficiently using groundwater is by encouraging farmers to adopt micro-irrigation techniques such as drip irrigation and micro-sprinklers. Government has initiated schemes like DRIP programme, more drop per crop, Krishi Sinchai Yojana to ensure economical water use practices in agriculture.
- Bottom-up approach by empowering the local community to become active participants in managing groundwater.
- Creating regulatory options at the community level such as panchayat is also one among the feasible solutions.
- Traditional methods of water conservation should be encouraged to minimize the depletion of water resources.
- Technology should be used extensively for determining the relationship between surface hydrological units and hydrological units below the ground, identification of groundwater recharge areas, mapping of groundwater etc.
- Artificial recharge of tube wells, water reuse, afforestation, scientific methods of agriculture should also be done.
- Imparting key hydrogeological skills to nonprofits and rural practitioners to improve decentralised water management in India.

DAILY CURRENT AFFAIR BASED MCQ

1. Which among the following statements is incorrect about the procedure to remove the judge of a Supreme Court of India?
 1. The judge of the Supreme Court may be removed from his current office by an order of the President
 2. There are only two grounds of removal : incapacity or proved misbehavior
 3. So far, no judge of the Supreme Court has been removed by impeachment
 4. The procedure for the removal of the judges is regulated by the Judges Enquiry Act (1968)Select the correct answer from the codes given below:
 - (a) 1 and 3
 - (b) 1, 2 and 4
 - (c) 2 and 4
 - (d) 1, 2, 3 and 4**
2. Consider the following statements w.r.t the Financial Action Task Force.
 1. It is an inter-governmental body established in 1989 on the initiative of the G20.
 2. The FATF Secretariat is housed at the OECD headquarters in New York.
 3. It sets standard measures to prevent money laundering, terror financing.Which of the statements are correct?
 - (a) 1 and 3
 - (b) 2 and 3
 - (c) 3 only**
 - (d) 1, 2 and 3
3. Consider the following statements w.r.t the General System of Preferences of the USA.
 1. It is a trade preference programme designed to promote economic development by allowing duty-free entry for thousands of products from designated beneficiary countries.
 2. India has been one of the biggest beneficiaries of the system
 3. It doesn't come under the purview of the WTO.Which of the statements are correct?
 - (a) 1 and 2
 - (b) 1 and 3
 - (c) 2 and 3
 - (d) 1, 2 and 3
4. Which of the following statements is/are correct about the Flood Hazard Zonation Atlas?
 1. It is published by the IMD
 2. Recently Kerala has adopted this Atlas on the backdrop of the severe flood.Select the correct answer from the codes given below:
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2**
5. Consider the following statements w.r t the Normalized Difference Vegetation Index (NDVI).
 1. It is published by the UNEP.
 2. It is an indicator which tells how much of the ground is covered with vegetation.Select the correct answer from the codes given below:
 - (a) 1 only
 - (b) 2 only**
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2