

GEOGRAPHY- PHYSICAL AND ECONOMIC**Madden-Julian Oscillation (MJO)**

A study by a team of Indian and U.S. researchers has found that Global warming has altered a key weather system and that may be whetting cyclones in the Bay of Bengal, decreasing winter rain in north India and altering global rainfall patterns.

About:

- The Madden-Julian Oscillation (MJO) is a moving band of rain clouds that travels around the globe spanning 12,000–20,000 km across the tropical oceans.
- According to the recent study, MJO, in its journey, interacts with surface waters of the Indo-Pacific ocean, the largest pool of warm water in the globe, and due to this the lifecycle of the MJO gets affected.
- The MJO clouds on average are spending only 15 days, instead of 19, over the Indian Ocean. Over the west Pacific, it increased by five days (from an average 16 days to 23 days).
- This change in the residence time of MJO clouds that has altered the weather patterns across the globe.
- The changes in MJO behaviour have increased the rainfall over northern Australia, west Pacific, Amazon basin, southwest Africa and southeast Asia.
- This has also brought a decline in rainfall over central Pacific, along the west and east coast of U.S. (e.g., California), north India, east Africa and the Yangtze basin in China.
- The frequent California fires, droughts in Africa and East Asian floods and cyclones in the Bay of Bengal may be linked to these changes in global weather.

CONSTITUTION AND POLITY**Right To A Fair Trial**

The Supreme Court (SC), in a recent verdict, has held that the routine practice of investigating agencies of producing documents in sealed covers and the judges reproducing them as judicial findings of their own will affect the right to a fair trial of accused.

Routine Practice:

- The apex court reacted sharply to the recent trend of agencies like the CBI and the Enforcement Directorate presenting documents in sealed covers to the courts, as evidence collected against the accused in the course of investigation.
- The situation is made worse when judges convert the findings of the investigative agencies in these documents into their own judicial findings and reproduce them in orders, refusing the accused bail.

Verdict

- The Supreme Court in the specific case held that though it was open for a judge to receive the materials/documents collected during the investigation in order to either “satisfy its conscience that the investigation is proceeding on the right lines” or to grant bail, the judge cannot reproduce the material as his own findings in a judicial order.
- It would be against the concept of a fair trial if in every case the prosecution presents documents in sealed cover and the findings on the same are recorded as if the offence is committed and the same is treated as having a bearing for denial or grant of bail.
- The merits of a case should be left for the trial where the accused can defend himself.

Rights of an Accused under Indian Constitution

- Article 22 of the Indian Constitution confers the following rights on a person who is arrested or detained under an ordinary law:
 - Right to be informed of the grounds of arrest.
 - Right to consult and be defended by a legal practitioner.
 - Right to be produced before a magistrate within 24 hours, excluding the journey time.
 - Right to be released after 24 hours unless the magistrate authorises further detention.
- It needs to be noted that the above safeguards are not available to an enemy alien or a person arrested or detained under a preventive detention law.

GOVERNANCE- WELFARE SCHEMES, E-GOVERNANCE, SERVICES ETC.**Fit India School Grading System**

Prime Minister Narendra Modi launched the Fit India School grading system in schools across the country.

About:

- The Fit India School rankings have been divided into three categories -- The Fit India Schools, which is the first level of ranking, Fit India School (3 star) and Fit India School (5 star).
- In the Fit India Movement, schedules have been drawn for ranking schools in accordance with fitness. The level of ranking will depend on how much importance the school gives to inculcating fitness among its students and teachers, besides facilities available for fitness activities.
- The schools that achieve this ranking will also be able to use the Fit India logo and flag.
- Schools can declare themselves as fit by visiting the Fit India portal.

INTERNATIONAL AFFAIRS- BILATERAL, GROUPINGS, ORGANISATIONS

World Malaria Report 2019

World Malaria Report 2019 was released by the World Health Organization (WHO).

Global scenario:

- Globally, there were 228 million cases of malaria in 2018, down from 251 million cases in 2010.
- WHO region-wise, the highest estimated cases of all malaria forms were in Africa, at 93% of the cases (213 million) followed by South-East Asia (7.9 million).
- Nigeria had the highest burden of all malaria cases, at 24%.

Deaths:

- In 2018 there were 4,05,000 deaths from malaria globally, compared to 4,16,000 in 2017 and 5,85,000 in 2010.
- More than 85% of the global malaria deaths in 2018 were concentrated in the 20 countries of WHO's African region and India.
- Africa had the highest number of deaths due to malaria in 2018, at 3,80,000.

Indian scenario:

- Incidence of P vivax malaria (the second most common form of the disease) was the highest in India, which accounts for 47% of all cases in 2018, or roughly 3.5 million. India had more than four times as many cases as Afghanistan, the next highest at 11%.
- Seven states account for about 90% of the burden of malaria cases in India. These are Uttar Pradesh, Jharkhand, Chhattisgarh, West Bengal, Gujarat, Odisha and Madhya Pradesh.
- Compared to 2017, India reported 2.6 million fewer cases in 2018. This makes India the country with the largest absolute reductions among the countries that share 85% of the malaria burden.

How is a new country formed?

Across the world, various territories are agitating for independence — Bougainville, an island in the Pacific, Catalonia in Spain, Kurdistan in Iraq, Tibet in China. New countries are suddenly in high demand.

Who can declare itself a country?

- There is no law barring regions from declaring independence.
- In June 1945, the right of "self-determination" was included in the UN charter. This means that a population has the right to decide how and by whom it wants to be governed.
- Kosovo in Serbia declared independence in 2008, and only a few other countries recognise it.
- What criteria must a nation-hopeful meet? According to 1933's Montevideo Convention, a country-hopeful must have a defined territory, people, government, and the ability to form relationships with other countries.

How does a territory become a new country?

- A region's quest for nationhood mainly depends on how many countries and international organisations recognise it as a country.
- The biggest sanction of nationhood is the United Nations recognising a territory as a country. UN recognition means a new country has access to the World Bank, the IMF, etc. Its currency is recognised, which allows it to trade.

India Maldives Relations

Prime Minister Narendra Modi and Maldivian President Ibrahim Mohamed Solih jointly inaugurated four key development projects covering a wide range of sectors through video conferencing.

These included:

- gifting of Made in India Fast Interceptor Coast Guard Ship Kaamiyaab to Maldives,
- launch of RuPay card in Maldives to further ease the travel of Indian to the Maldives.
- lighting up of Male using LED lights,
- Inauguration of three fish processing plants

Related Info:

- The Union Cabinet has also approved the proposal of the Election Commission of India (ECI) to enter into the MoU with the Election Commission of Maldives on cooperation in the field of electoral management and administration.
- India's Neighbourhood First Policy and Maldives' India first Policy has strengthened the bilateral cooperation in all sectors.
- Government is working on building a cancer hospital and cricket stadium in Hulhulmale while work on the water and sanitation project in 34 islands will begin soon.

INDIAN ECONOMY

Bharat Bond Exchange Traded Fund (ETF)

The Cabinet Committee on Economic Affairs (CCEA) has given its approval for creation and launch of Bharat Bond Exchange Traded Fund (ETF).

About:

- Bharat Bond ETF would be the first corporate Bond ETF in the country.
- Objective: Bharat Bond ETF will create an additional source of funding for Central Public Sector Undertakings (CPSUs) Central Public Sector Enterprises (CPSEs), Central Public Financial Institutions (CPFIs) and other Government organizations.
- Features of Bharat Bond ETF: ETF will be a basket of bonds issued by CPSE/CPSU/CPFI/any other Government organization Bonds (Initially, all AAA rated bonds) With following features –
 - Tradable on exchange
 - Small unit size Rs 1,000
 - Transparent NAV (Periodic live NAV during the day)
 - Transparent Portfolio (Daily disclosure on website)
 - Low cost (0.0005%)

Bharat Bond ETF Structure:

- Each ETF will have a fixed maturity date
- The ETF will track the underlying Index on risk replication basis, i.e. matching Credit Quality and Average Maturity of the Index
- Will invest in a portfolio of bonds of CPSE, CPSU, CPFI or any other Government organizations that matures on or before the maturity date of the ETF
- As of now, it will have 2 maturity series - 3 and 10 years. Each series will have a separate index of the same maturity series.

Index Methodology:

- Index will be constructed by an independent index provider – National Stock Exchange
- Different indices tracking specific maturity years - 3 and 10 years

ENVIRONMENT- CONSERVATION, BIO-DIVERSITY AND ISSUES

Global Carbon Budget 2019

Global Carbon Budget 2019 released the Global Carbon Budget for the year 2019.

Key highlights of the report:

- Global CO₂ emissions from fossil fuels and industry have increased every decade from an average of 11.4 GtCO₂ in the 1960s to an average of 34.7±2 yr-
- In 2018, global CO₂ emissions were dominated by emissions from China (28%), the USA (15%), the EU (28-member states; 9%) and India (7%).
- Growth rates of these countries from 2017 to 2018 were +2.3% for China, +2.8% for the USA, -2.1% for the EU28, and +8.0% for India.
- Net CO₂ emissions from deforestation and other land-use change were 5±2.7 GtCO₂ on average during 2009-2018, accounting for about 14% of all emissions from human activity (fossil fuel, industry, land use change).
- CO₂ removals by natural sinks: Of the total emissions from human activities during the period 2009-2018, about 45% accumulated in the atmosphere, 23% in the ocean and 29% on land.
- Atmospheric CO₂ concentration in 2019 are 47% above pre-industrial levels.
- The cumulative carbon emissions are the sum of the total CO₂ emitted during a given period of time. Total cumulative emissions from 1850 to 2019 were 1649 GtCO₂ from fossil fuels and industry, and 751 GtCO₂ from land use change.

The Global Carbon Project:

- Bodies Involved: The Global Carbon Project is an organization and a Global Research Project of Future Earth and a research partner of the World Climate Research Programme.
- Established in:
- Mandate: The main object of the group has been to fully understand the carbon cycle. Its projects include global budgets for three dominant greenhouse gases — carbon dioxide, methane, and nitrous oxide. It publishes Global Carbon Budget and Global Carbon Atlas.

Global Climate Risk Index 2020

The international environmental think tank 'Germanwatch' has recently released the Global Climate Risk Index 2019. The index analyses the extent to which countries and regions have been affected by the impacts of weather-related loss events (storms, floods, heat waves etc.).

Key Findings

- Worst affected in 2018: Japan, Philippines and Germany
- Worst affected between 1999-2018 (long-term index): Puerto Rico, Myanmar and Haiti
- Deaths and financial loss between 1999-2018: Altogether, about 5 lakh people died as a direct result of more than 12 000 extreme weather events globally. Losses amounted to around US\$ 3.54 trillion (in purchasing power parities).
- Poor countries had to face much higher impacts: Of the ten most affected countries and territories in the period 1999-2018, seven were developing countries in the low income or lower-middle income country group, two were classified as upper-middle income countries (Thailand and Dominica) and one was an advanced economy generating high income (Puerto Rico).
- Link between climate change and the frequency & severity of extreme heat: Heatwaves were one major cause of damage in 2018.
 - Of the ten most affected countries in 2018, Germany, Japan and India were suffering from extended periods of heat.
 - Across Europe, extreme heat spells are now up to 100 times more likely than a century ago.
 - Impact of heatwaves on African countries may be under-represented due to a lack of data.

India

- India, which suffered water shortages, crop failures and worst flooding, holds the 5th position. It has fallen from its 14th rank of countries hit most by climate change-induced weather phenomena in 2017.
 - India has also recorded the highest number of fatalities due to climate change and the second-highest monetary losses from its impact in 2018.

Suggestions

- The 2019 Climate Summit in Madrid needs to address the lack of additional climate finance to help the poorest people and countries to address loss and damage.
- These countries are more vulnerable to the damaging effects of a hazard but have lower coping capacity.
- The climate summit needs to result in:
 - a decision on how the need for support for vulnerable countries concerning future loss and damage is to be determined on an ongoing basis
 - the necessary steps to generate and make available financial resources to meet these needs
 - strengthening the implementation of measures for adapting to climate change

DEFENCE AND SECURITY

Navy Day

The Indian Navy Day is celebrated on December 4 every year to commemorate Operation Trident. The Navy also organises a Beating Retreat ceremony at Gateway of India in Mumbai on the eve of the Navy Day.

Operation Trident

- It was a counter-attack by Indian Navy on the Karachi harbour during the Indo-Pakistan war in 1971.
- India used anti-ship missiles for the first time during this operation and destroyed the Pakistani destroyer ship PNS Khaibar.

- The Indian Navy's three warships - INS Nipat, INS Nirghat and INS Veer - played an important role in the attack.

Indian Navy

- It is headed by the President of India as its Supreme Commander.
- Indian Navy's Motto is - Sam no Varunah (शं नो वरुणः) that means that the God of water, Varuna, should be auspicious unto us.
- Some of the earliest operations of the Indian Navy include its contribution in liberating Goa from Portugal in 1961.
- The Navy has developed as an admirable force with the making of the nuclear-powered ballistic missile submarine INS Arihant and several other ships.
- Indian Navy currently has one aircraft carrier, the INS Vikramaditya which was a former Russian ship that was commissioned into service in 2013.
- It operates three classes of submarines: Chakra (it has the nuclear-powered INS Chakra), Sindughosh, and Shishumar.
- Marine Commandos or MARCOS is the special force unit of the Indian Navy, trained to conduct amphibious warfare, counter-terrorism, special reconnaissance, hostage rescue and asymmetric warfare.
 - They were the first to respond to the 26/11 Mumbai terror attacks.

PRELIMS SPECIFIC FACTS- INDICES, DAYS, EVENTS, AWARDS ETC

World Soil Day

World Soil Day (WSD) is held annually on 5 December to highlight the importance of healthy soil and to advocate for the sustainable management of soil resources. The theme for WSD 2019 is 'Stop Soil Erosion, Save Our Future'.

Key Points

- It was recommended by the International Union of Soil Sciences (IUSS) in 2002. Food and Agriculture Organisation (FAO) has supported the formal establishment of WSD as a global awareness-raising platform under the leadership of the Kingdom of Thailand within the framework of the Global Soil Partnership.
- 5 December 2014 was designated as the first official World Soil Day by the UN General Assembly (UNGA).
- The date of 5 December was chosen because it corresponds with the official birthday of H.M. King Bhumibol Adulyadej, the King of Thailand, who officially sanctioned the event.
- FAO gives two awards in line with this day-
- The King Bhumibol World Soil Day Award- an annual award that honours individuals, communities, organizations and countries that organized remarkable and engaging World Soil Day activities or campaigns in the previous year.
- The Glinka World Soil Prize- an annual award for dynamic change-makers dedicated to solving one of our world's most pressing environmental issue: soil degradation. It honours individuals and organizations whose leadership and activities have contributed, or are still contributing to the promotion of sustainable soil management and the protection of soil resources.

ODISHA DEVELOPMENT

KALIA, PM-KISAN To Be Merged

According to the Ministry of Agriculture, Odisha, the famed KALIA scheme will converge with the Centre's PM-KISAN Yojana for the benefit of farmers. He also said even though Krushak Assistance for Livelihood and Income Augmentation (KALIA) scheme will be converged with the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN), the KALIA scheme will continue for the farmers..

- As per the plan, instead of Rs 10,000 under the KALIA scheme, the state government will now give Rs 4,000 to farmers while the remaining Rs 6,000 will be given to farmers under the PM-KISAN yojana, sources added.
- Since PM-KISAN has no provision for the landless farmers, the state government will continue to pay Rs 12,000 per year under the KALIA scheme.
- Meanwhile, Navnirman Krushak Sangathan (NNKS) said the state government has cheated the farmers with the proposed merger of KALIA and PM-KISAN.

DAILY ANSWER WRITING PRACTICE

Qns: Highlight the areas of cooperation and conflict between India and Maldives.

Ans:

India and Maldives share ethnic, linguistic, cultural, religious and commercial links and enjoy close, cordial and multi-dimensional relations. India was among the first to recognise Maldives after its independence in 1965 and to establish diplomatic relations with the country.

As per India's "Neighborhood First Policy," India "stands ready to fully support the Government of Maldives in its socio-economic development" and Maldivian government has reiterated its "India First" policy"e. to work closely with the government of India on all issues.

Areas of Cooperation between Maldives and India:

- Maldivian President once called India the island nation's "closest friend" and "reaffirmed his government's 'India-First' Policy", committing to working together closely with India.
- Both the countries have agreed to ensure that they would keep other's security interests in mind as they consolidate cooperation in the Indian Ocean Region (IOR). They have agreed to strengthen maritime security cooperation in the IOR through coordinated patrol and aerial surveillance, exchange of information and capacity building.
- Maldivian government's vision of a transparent and rules-based approach to growth and development has given a boost to investor confidence in the country.
- Both sides agreed to enhance bilateral cooperation on issues of common concern, including piracy, terrorism, organized crime, drugs and human trafficking. It was also agreed to intensify cooperation in the areas of training and capacity building of Maldives Police Service and Maldives National Defence Force.
- PM Modi also announced that India would provide 1,000 additional slots over next five years for training and capacity building in diverse fields.
- Areas such fisheries development, tourism, transportation, connectivity, health, education, new and renewable energy and communications were earmarked for enhancing bilateral cooperation.
- Maldivian government's decision to rejoin the Commonwealth has improved bilateral relations between both countries.
- Maldives has joined the Indian Ocean Rim Association as its newest member.
- The two sides also signed four agreements – for visa liberalization for segments such as Indian investors, cultural cooperation, IT and electronics cooperation, and improving the ecosystem for agriculture business.

Areas of Conflict:

- The Maldives had veered too close to China for India's comfort, welcoming Chinese money for major infrastructure projects and signing a controversial free trade agreement (FTA).
- GMR infrastructure contract was cancelled and it was given to Chinese companies.
- China's loans to the Maldives total at least \$1.3 billion, or a quarter of the island nation's gross domestic product.
- Faced with this crisis, the new Maldivian government is looking to India for more budgetary support to help meet its development goals and is also planning to revise the FTA with China.
- Terrorism and radicalization has increased as Maldives sent maximum number of terrorists per capita sent to ISIS. Maldives has good relations with Pakistan and Saudi Arabia.
- Maldives had asked India to withdraw 2 helicopters, that is, advanced light helicopters (ALH) operating in Maldives.
- Maldivian authority refused to extend visas of 26 Indian navy personnels. An estimated 2000 Indian applicants for job opportunities were denied visa by Maldives.

Way Forward:

- The Maldives is strategically important, given its geographical location in the Indian Ocean. India must deploy a lighter diplomatic touch that focuses on enhancing natural affinities, to deal with this important nation in its neighbourhood.
- The logic of geography dictates that India's role will be critical in determining the trajectory of political developments in the Maldives.
- India accords the highest importance to its relations with Maldives and wishes to see a democratic, stable, prosperous and peaceful Maldives. Recent changes have provided an opening for both sides to recalibrate ties.

Qns: A basic issue in international relations is how to reconcile one's interests with values one professes. Discuss. (GS-4)

Ans:

There are many ethical issues in the conduct of international relations by countries. A problematic issue in international politics is how to reconcile one's interests with values one professes.

Most nations including India claim their commitment to universal values and try their best to conform to them. On many occasions and situations, states find it difficult to conduct their behaviour as per their values and we see emergence of paradoxes. While most countries pledge their commitment to non-interference and peaceful conduct of foreign policy, in reality, their national interests are defined in realist terms that hurls them in the path of power maximisation and pits them against their co-aspirants.

In certain cases, some states are compelled to put aside their values in their quest for survival and dignity. One can see this reconciliation conflict even in Indian foreign policy. India's pursuit of nuclear power in spite of its commitment to non-violence and peace could be cited as an example here. Indian closeness to the USSR during the Non- Aligned movement or India warming-up to the USA in the post-Cold War era while arguing to follow a non-aligned path is another example. India's policy towards Israel provides yet another illustration; its values often favour the Palestinian cause but it finds that its national interests are also served by collaborating with Israel in defence and other sectors.

Conclusion: The balance-of-power politics around the world, born out of mutual distrust and sense of insecurity, often makes it difficult for nations to strictly adhere to the values they profess. There is no easy way out of this conflict and countries often put their national interest and welfare in perspective while deciding a course of action.

DAILY CURRENT AFFAIRS MCQs

1. Global Climate Risk Index is released by
 - (a) World Bank
 - (b) World Economic Forum
 - (c) **Germanwatch**
 - (d) UNDP
2. What is Operation Trident?
 - (a) **Indian Navy's counter-attack on the Karachi harbour during the Indo-Pakistan war**
 - (b) India's support to Bangladesh in its liberation
 - (c) A joint exercise between the Indian army, navy and air force
 - (d) An anti-maoist operation undertaken in Chattisgarh
3. With reference to the Madden-Julian Oscillation (MJO), consider the following statements:
 1. It is a moving band of rain clouds that travels around the globe spanning 12,000–20,000 km across the tropical oceans.
 2. According to a recent study the changes in MJO behaviour brought a decline in rainfall over northern Australia, west Pacific, Amazon basin, southwest Africa and southeast Asia.

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
4. With reference to the Fit India School grading system, consider the following statements:

1. The level of ranking will depend on how much importance the school gives to inculcating fitness among its students and teachers, besides facilities available for fitness activities.
 2. The schools that achieve this ranking will also be able to use the Fit India logo and flag.
- 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. Recently seen in news, India will be gifting Made in India Fast Interceptor Coast Guard Ship Kaamiyaab to which of the following countries?
 - (a) **Maldives**
 - (b) Sri Lanka
 - (c) Nepal
 - (d) Bhutan
 6. With reference to the formation of new countries, consider the following statements:
 1. In June 1945, the right of “self-determination” was included in the UN charter.
 2. According to 1933’s Montevideo Convention, a country-hopeful must have a defined territory, people, government, and the ability to form relationships with other countries.

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. With reference to the Global Carbon Budget 2019, consider the following statements:
 1. In 2018, global CO2 emissions were dominated by emissions from China and Germany.
 2. The Global Carbon Project is an organization and a Global Research Project of Future Earth and a research partner of the World Climate Research Programme.

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
 8. With reference to the World Malaria Report 2019, consider the following statements:
 1. It was released by the Lancet Medical Journal.
 2. India had the highest burden of all malaria cases.

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 Bharat Bond Exchange Traded Fund (ETF), consider the following statements:
 1. It would be the first corporate Bond ETF in the country.
 2. It will create an additional source of funding for Central Public Sector Undertakings (CPSUs) Central Public Sector Enterprises (CPSEs), Central Public Financial Institutions (CPFIs) and other Government organizations.

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